K&L GATES

October 4, 2018

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Public Utility Commission of Oregon
201 High Street SE
Suite 100
Salem, OR 97301

Re: Docket No. UM 1897- In the Matter of HYDRO ONE LIMITED, Application for Authority to Exercise Substantial Influence over the Policies and Actions of AVISTA CORPORATION

Attention: Oregon Commission Secretary:

Enclosed for filing with the Commission are an original and fifteen copies of pre-filed Rebuttal Testimony and Exhibits of:

- **Scott Morris**, Chairman of the Board and Chief Executive Officer of Avista;
- **Paul Dobson**, Acting Chief Executive Officer and Chief Financial Officer for Hydro One;
- **Thomas Woods**, Interim Chair of the Board of Directors for Hydro One;
- **James Scarlett**, Executive Vice President and Chief Legal Officer for Hydro One;
- **Christopher Lopez**, Senior Vice President, Finance of Hydro One, and;
- **John Reed**, President and Chief Executive Officer of Concentric Energy Advisors, Inc.

Please note that Exhibit 2601 has Highly-Confidential information and is being provided under separate cover.

If you have any questions, please do not hesitate to contact David Meyer on behalf of Avista Corporation at 509-495-4316 or david.meyer@avistacorp.com or Elizabeth Thomas on behalf of Hydro One Limited, at 206-370-7631 or liz.thomas@klgates.com or Kari Vander Stoep on behalf of Hydro One Limited, at 206-370-7804 or kari.vanderstoep@klgates.com.

RESPECTFULLY SUBMITTED this 4th day of October, 2018.

K&L GATES LLP on Behalf of Hydro One Limited and Olympus Equity LLC

BY: L. Thomas

Elizabeth Thomas, Partner (admitted pro hac vice)
Kari Vander Stoep, Partner (admitted pro hac vice)
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AVISTA CORPORATION

BY:

David J. Meyer, OSB No. 086383
Chief Counsel for Regulatory and Governmental Affairs
Avista Corporation
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David.meyer@avistacorp.com

cc: Parties

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the Rebuttal Testimony in Oregon regarding the Hydro One Limited request for an Order Authorizing Hydro One Limited to Exercise Substantial Influence over Avista Corporation (UM 1897) upon the parties listed below by mailing a copy thereof, postage prepaid and/or by electronic mail.

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I declare under penalty of perjury that the foregoing is true and correct.

Dated at Spokane, Washington this 4th day of October 2018.

Paul Kimball
Mgr. Compliance & Discovery

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM-1897

REBUTTAL TESTIMONY OF SCOTT L. MORRIS
REPRESENTING AVISTA CORPORATION

Rebuttal Testimony Regarding Recent Developments at Hydro One

I. INTRODUCTION

Q. Will you please state your name, business address, and position with Avista Corporation?

A. My name is Scott L. Morris and I am employed as the Chief Executive Officer of Avista Corporation ("Avista"), at 1411 East Mission Avenue, Spokane, Washington. I also serve as the Chairman of the Board of Avista.

Q. Are you the same Scott L. Morris who sponsored pre-filed direct and supplemental testimony, on behalf of Avista Corporation (Avista)?

A. Yes, I sponsored direct and supplemental testimony and exhibits.

Q. Are you sponsoring any exhibits in this reply testimony?

A. Yes, I am sponsoring Exhibit 2101, which is the notice to Hydro One of Avista's extension of the September 30, 2018 deadline for closing this transaction set forth in the merger agreement to March 29, 2019.

A table of contents for my testimony is as follows:

Q. Please summarize your Rebuttal Testimony.

A. In my Rebuttal testimony, I reiterate that I believe this merger is in the best interest of Avista customers. I will discuss the Hydro One Board's resolution acknowledging and affirming Hydro One's obligations under the Merger Agreement and with respect to the merger-related commitments, as well as highlighting Avista's continued commitment by extending the deadline for closing this transaction beyond the September 30, 2018 deadline set forth in the merger agreement.

II. CONTINUED COMMITMENT TO THE MERGER

Q. Do you still believe that this merger is in the best interest of customers?

A. Yes, I strongly believe so. This merger was never about who sits in the Chief Executive Officer ("CEO") chair at Hydro One nor who is on its Board of Directors. That will change from time to time – as each company refreshes its management team. The structural safeguards, in the form of multiple commitments negotiated with the parties, are meant to withstand the test of time and changes in management at both Hydro One and Avista, as well as changes in government. The underlying rationale for this merger remains the same: the need to preserve and enhance Avista's ability to provide cost-effective and reliable service to its customers, in a rapidly evolving industry, by partnering with an organization that shares Avista's values, while keeping Avista's autonomy intact.

Q. Therefore, knowing what you now know, would you still recommend that this merger take place?

A. Yes, without reservation.

Q. Has Hydro One, for its part, reaffirmed its commitment to this merger?

A. Yes, it has. As Hydro One witness Mr. Woods testifies, on September 19, 2018, the new Hydro One Board affirmed Hydro One's obligations under the Merger Agreement and the merger-related commitments to be performed by Hydro One and/or its subsidiaries if the Proposed Transaction is consummated pursuant to the Merger Agreement.

Q. To that end, has Avista extended the deadline for closing this transaction

beyond the September 30, 2018 deadline set forth in the merger agreement?

A. Yes, it has. Section 7.1 (b)(i) of the merger agreement (Appendix 2 to Joint Application) allows either party to extend the deadline for up to an additional six (6) months, if necessary to satisfy all of the conditions for closing. On September 19, 2018, Avista provided notice to Hydro One, extending the deadline to March 29, 2019. (See Exhibit No. 2101.)

Q. Do Avista and Hydro One still want to receive all regulatory approvals and close this transaction by year-end?

A. Yes. By mid-December, we will have a final order in Washington, as is required by statute, and the parties in Idaho have agreed upon a schedule that may allow for an Order in Idaho that would allow for a closing by year-end, if the Commission so chooses. A year-end closing would allow for better accounting and reporting than would a later closing reflecting a partial year (a "stub period") in the first quarter of 2019. Other than Oregon, those are the only two remaining regulatory jurisdictions that need to act on this merger.

III. MERGER PROTECTIONS

Q. Have Avista and Hydro One responded to other recent developments?

A. Yes. Avista and Hydro One have explained recent events in Ontario and how there are sufficient protections in place to protect Oregon customers. Additional discovery was made of the Companies, and through those responses, and by means of supplemental testimony, the Companies have squarely addressed those issues. Again, this demonstrates our willingness to listen and respond to concerns raised by the parties.

Q. Given recent events in the Province of Ontario surrounding the change in

leadership at Hydro One, how protected are Avista's Oregon customers?

A. Very protected. Our customers, community and employees will continue to see benefits over time – and that rationale has not changed. More to the point, those same customers are also protected from any risk of Provincial involvement in the affairs of Avista.

It makes sense to carefully distinguish between risks (political or otherwise) involving Hydro One's affairs and operations in Canada as contrasted with risks impacting Avista in its service territories.

My emphasis is on the potential risks of any Provincial interference, directly or indirectly, in the affairs of Avista. At the end of the day, it may not matter what happens in Ontario, if we have done our job right (and I think we have) in constructing commitments and safeguards, with the help of all parties, that protect customers and the communities we serve.

Q. How have the Oregon Parties achieved such protections and structural safeguards?

A. The building blocks of these protections assure that this Commission remains front and center in enforcing the merger commitments. For ease of reference, these consist of commitments that assure that:

1) Authority is reserved to the Commission with respect to interpretation and enforcement of all commitments:

> <u>Commitment No. 1 Application of Commitments in Oregon</u>: Unless otherwise stated, all commitments herein are binding upon Avista, Hydro One, and all companies in between in the post-close corporate organization chart (as those companies in between may change over time; but see commitments regarding ORS 757.511 and 757.480).

> <u>Commitment No. 2 No Amendment of Any Commitment Without Commission Approval</u>: Avista and Parent commit that no amendments, revisions, or modifications will be made to the any of the commitments herein

without prior Commission approval. Also see "Most Favored Nation" Commitment.

2) Avista and Hydro One will comply with all orders of the Commission:

Commitment No. 21 Compliance with Existing and Future ORS, OAR, and Commission Orders: Avista and Parent will comply with applicable Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), and Commission Orders. All existing Commission Orders with respect to Avista or its predecessor, Washington Water Power Co., will remain in effect until changed by the Commission including those regarding Avista's acquisition of AERC.

3) Commission retains full authority to enforce commitments:

Commitment No. 111 Commission Enforcement of Commitments: Avista and Parent understand and agree that the Commission has authority to enforce the commitments herein. If a commitment is violated, the Commission may impose such penalty as the Commission finds appropriate for the severity of the violation.

4) Agreement by Hydro One to submit to the jurisdiction of courts in Oregon, for purposes of compelling compliance with commitments:

Commitment No. 112 Submittal to State Court Jurisdiction for Enforcement of Commission Orders: Avista and Parent will file with the Commission prior to closing the Proposed Transaction an affidavit affirming that Avista and Parent will submit to the jurisdiction of Oregon courts for enforcement of violations of these commitments and subsequent Commission orders affecting Avista and Parent.

With these protections in place, we needn't speculate about all possible means of Provincial interference in the affairs of Avista, because, at the end of the day, this Commission (and the Commissions in the other states where Avista provides service) will have the final say – and they will exercise all powers to regulate in the public interest.

Q. Are these the only commitments that safeguard Avista customers?

A. No. As I discussed in my supplemental testimony (Exhibit No. 1700, page 9 – 10), there are multiple commitments that assure that Avista will continue to operate without outside interference, e.g., maintenance of corporate headquarters, existing management team and employees, a majority of independent directors on Avista's board. These are found in the express "delegation of authority" to Avista in the Merger Agreement and are embedded in the 115 commitments in the Stipulated Settlement ("Stipulated Commitments").

The purpose of highlighting the earlier commitments was to underscore the authority of this Commission to enforce (or modify if need be) the commitments that preserve its jurisdiction and regulate all matters in the public interest.

IV. MODIFICATION OF AND ADDITION TO STIPULATED COMMITMENTS

Q. Have all parties in the State of Washington recently re-affirmed their support of the merger, notwithstanding recent developments in Ontario?

A. Yes. The Parties[1] in the Washington merger Docket U-170970 filed testimony on October 4, 2018, that re-affirms their support for the merger. One of the parties in the Washington proceeding, the Alliance of Western Energy Consumers, is also a party in this docket.

Q. Did Avista and Hydro One offer additional commitments in Docket U-170970 to address the recent events in the Province of Ontario and the change in leadership of Hydro One?

[1] Hydro One Limited ("Hydro One"), acting through Olympus Equity LLC an indirect, wholly-owned subsidiary, and Avista Corporation ("Avista"), the Staff of the Washington Utilities and Transportation Commission ("Staff"), the Public Counsel Unit of the Washington Office of Attorney General ("Public Counsel"), Alliance of Western Energy Consumers ("AWEC"), The Energy Project, Northwest Energy Coalition ("NWEC"), Renewable Northwest ("RNW"), Natural Resources Defense Council ("NRDC"), Sierra Club, and Washington and Northern Idaho District Council of Laborers ("WNIDCL"), jointly referred to as "Parties".

A. Yes. In Washington Docket U-170970, all Parties have agreed on additional commitments to address the concerns raised by recent events. Hydro One and Avista would propose the following <u>new</u> commitment in Oregon that recognizes that this Commission has ongoing jurisdiction over this merger, and may, at any time, for good cause, entertain a request to change or modify the commitments, if necessary to afford Oregon customers sufficient protection. This ongoing oversight, together with required ongoing reporting to the Commission over time of significant developments in Canada that may impact Avista, will assure that the opportunity exists for this Commission to take any necessary action in the future to protect its customers. This will assure that this Commission will not be caught off guard and can respond accordingly (including modifying commitments if need be). A new Oregon Commitment No. 116, as set forth below, mirrors the new commitment recently agreed to in Washington.

<u>Commitment No. 116</u>

In the event of the enactment or adoption of any legislation, rule, policy, or directive by government at any level or by any governmental entity or official in Canada (a "Legislative Action") that affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, <u>any of the parties to this proceeding may petition the Commission at any time to consider whether the Commission should amend its final order, and neither Hydro One nor any of its subsidiaries, including Avista, will oppose initiation of such a proceeding. Hydro One will report to the Commission any such Legislative Action in Canada that, in Hydro One's reasonable judgement, affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, as soon as practicable after it is publicly announced as being effective by the government or governmental entity or official.</u> Nothing in this Commitment 116 shall be interpreted to limit the positions or arguments that Avista or Hydro One may take or advance in any such proceeding, including the right to argue that a petition presents insufficient grounds or evidence. Prior to filing a petition with the Commission under this Commitment 116, a party must provide Hydro One and Avista at least 30 days advance written notice and an opportunity to meet and confer about resolutions other than filing with the Commission under this commitment. Nothing in this commitment is intended to restrict the rights of the parties to petition the Commission concerning its order(s) in this docket, or to limit the authority of the Commission. (emphasis added)

And finally, this Commission, of course, always retains its ability under existing statutes, to require the Companies to appear and "show cause" why the Companies are not in full compliance with its commitments, or whether additional assurances are necessary.

Q. Did Avista and Hydro One offer any other revisions to specific stipulated commitments in the Washington Docket U-170970 that it would propose to carry over to Oregon?

A. Yes. In Washington Docket U-170970, all Parties have agreed to a revision to the comparable commitment that appears as No. 5 in Oregon. The corresponding changes to Oregon Commitment No. 5 are set forth below, with additional language underscored:

Commitment No. 5 - Avista Board of Directors (BOD)

Avista and Hydro One agree that after closing of the Proposed Transaction, Avista will have a separate board of directors from Hydro One that consists of nine (9) members, determined as follows:

Five Hydro One Designated Directors:

Two executives of Hydro One or any of its subsidiaries, and Three Independent Directors who are residents of the Pacific Northwest Region.

Four Avista Designated Directors:
Three directors who as of immediately prior to the closing of the Proposed Transaction are members of the Board of Directors of Avista, including the Chairman of Avista's Pre-Merger Board of Directors (if such person is different from the Chief Executive Officer of Avista), and

Avista's Chief Executive Officer.

At least two of the Avista directors must be Independent Directors.

Avista and Hydro One shall consult with each other prior to the designation of any Independent Directors.

> The initial Chairman of Avista's post-closing Board of Directors shall be the Chief Executive Officer of Avista as of the time immediately prior to closing for a one year term. If any Avista designee resigns, retires or otherwise ceases to serve as a director of Avista for any reason, the remaining Avista designees shall have the sole right to nominate a replacement director to fill such vacancy, and such person shall thereafter become an Avista designee.
>
> Hydro One shall have the unfettered right to designate, remove and replace the Hydro One designees as directors of the Avista Board with or without cause or notice at its sole discretion, subject to the requirement that:
>
> (i) two of such directors are executives of Parent or any of its subsidiaries; and
>
> (ii) three of such directors are Independent Directors who are residents of the Pacific Northwest region, while such requirement is in effect (subject in the case of clause (ii) hereof to Hydro One determining, in good faith, that it is not able to appoint an Independent Director who is a resident of the Pacific Northwest region in a timely manner, in which case Hydro One may replace any such director with any person, including an employee or executive of Hydro One or any of its subsidiaries on an interim basis, not exceeding six months, provided that Hydro One designees who are employees or executives of Hydro One or any of its subsidiaries shall in no case constitute a majority of the directors of Avista, after which time Hydro One shall replace any such interim director with an Independent Director who is a resident of the Pacific Northwest region). If, at any time a circumstance arises, and during the pendency of any such circumstance, whereby the Province of Ontario ("Ontario") exercises its rights as a shareholder of Hydro One, uses legislative authority or acts in any other manner whatsoever, that results, or would result, in Ontario appointing nominees to the board of directors of Hydro One that constitute, or would constitute a majority of the directors of such board, then Hydro One's authority to replace an Independent Director with an employee or executive on an interim basis is suspended for the pendency of such circumstance.

Hydro One witness Mr. Scarlett will discuss the purpose of those revisions in his rebuttal testimony. As Mr. Scarlett explains, these revisions suspend Hydro One's right to remove and replace Hydro One's three Independent Director Designees on the post-merger Avista board for six months with Hydro One employees if the Province takes certain actions to control the Hydro One board. Hydro One will retain its right to replace its Independent

Director Designees for a six-month period with Hydro One employees, so long as Hydro One employee-directors never make up a majority of Avista's post-merger board and so long as Hydro One's right to replace its Independent Director Designees for a six-month period is suspended if the Province takes an action to control a majority of the seats of Hydro One's board.

Q. Do you have any concluding thoughts?

A. By way of summary, and as noted by Avista's and Hydro One's witness John Reed, the parties have arrived at a set of robust commitments that are "state of the art," based on his review of other mergers. We have been responsive to all concerns and are eager to get on with the business of partnering with Hydro One to best service the need of our customers.

Q. Does this conclude your Rebuttal Testimony?

A. Yes.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM-1897

SCOTT L. MORRIS
Exhibit No. 2101

Notice of Deadline Extension for Closing Transaction

AVISTA

September 19, 2018

Hydro One Limited
483 Bay Street
South Tower, 8th Floor
Toronto, Ontario M5G 2P5
Attention: James Scarlett, EVP and Chief Legal Officer

RE: Extension of End Date

Dear Jamie:

This is with reference to that certain Agreement and Plan of Merger, dated as of July 19, 2017 (the "Merger Agreement"), by and among Hydro One Limited, a corporation organized under the laws of the Province of Ontario ("Parent"), Olympus Holding Corp., a Delaware corporation ("US Parent"), Olympus Corp., a Washington corporation ("Merger Sub"), and Avista Corporation, a Washington corporation (the "Company"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Merger Agreement.

Pursuant to Section 7.1(b) of the Merger Agreement, the Company hereby notifies each of Parent, US Parent and Merger Sub that the Company has elected to extend the End Date to March 29, 2019. Except as expressly modified by the immediately preceding sentence, the Merger Agreement shall remain unchanged and in full force and effect in accordance with its terms.

Sincerely,

AVISTA CORPORATION

By: Scott L. Morris
Name: Scott L. Morris
Title: Chairman and CEO

CC: John G. Klauberg
Frederick J. Lark
Elena V. Rubinov
(Bracewell LLP)

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

REBUTTAL TESTIMONY OF PAUL M. DOBSON
REPRESENTING HYDRO ONE

Need for Permanent CEO; Hydro One's Commitment to the Merger; Meeting with Oregon Commissioners and Parties

I. INTRODUCTION

Q. Please state your name, business address and present position with Hydro One Limited.

A. My name is Paul M. Dobson, and my business address is 483 Bay Street, South Tower, 8th Floor, Toronto, Ontario M5G 2P5. I am the acting President and Chief Executive Officer ("CEO") for Hydro One Limited ("Hydro One").

Q. Have you previously filed testimony in this proceeding?

A. Yes. On August 30, 2018, I filed supplemental testimony introducing myself as Hydro One's Chief Financial Officer ("CFO") and acting CEO and reiterating Hydro One's commitment to the merger. *See* Hydro One Exhs. 1400 and 1401.

Q. Are you sponsoring any exhibits that accompany your rebuttal testimony?

A. Yes. Attached to my testimony is:

- Exhibit 2201 - Hydro One News Release, dated September 7, 2018, announcing that Paul Dobson will continue in his role as the company's Acting President and Chief Executive Officer.

A table of contents for my testimony is as follows:

<u>Summary of Testimony</u>

Q. Please summarize your testimony.

A. My testimony responds to statements made in the reply testimonies of Mr. Muldoon, on behalf of Oregon Public Utility Commission ("OPUC") Staff, and Mr. Mullins, on behalf of the Alliance of Western Energy Consumers ("AWEC"), suggesting that a permanent CEO is necessary for this matter to proceed. It is not necessary for a permanent CEO to be in place because, as acting CEO, I have expressed and affirmed Hydro One's commitment to the merger and the new Hydro One Board has also affirmed Hydro One's obligations in the merger agreement and with respect to the merger-related commitments. I am responsible to and take direction from the Hydro One Board, as will the new CEO, once selected. Finally, I am supportive of a meeting between Hydro One's new leadership and the Oregon Commissioners and parties.

II. <u>HYDRO ONE'S COMMITMENT TO THE MERGER</u>

Q. Do you believe it is necessary for Hydro One to finish its search for a permanent CEO before proceeding in this matter (Staff Exh. 600 at 2–4, 7; AWEC Exh. 100 at 1)?

A. No. I do not believe that is necessary.

Q. Why do you believe this matter can proceed without Hydro One having first selected a permanent CEO?

A. I believe this matter can proceed because, since being named acting CEO on July 11, 2018, I have clearly expressed Hydro One's commitment to the merger. For example, during Hydro One's August 14, 2018 earnings call I stated that Hydro One is committed to the merger. In addition, on September 19, 2018, the new Hydro One Board passed a resolution affirming Hydro One's obligations in the merger agreement and with respect to the merger-related commitments. In short, Hydro One remains committed to the merger and the strategic rationale for the merger remains.

Q. As acting CEO, to whom do you report and from whom do you take direction?

A. I was named as acting CEO on July 11, 2018, and affirmed as acting CEO by the Hydro One Board as announced on September 7, 2018.[1] As acting CEO, I am responsible to and take my directions from the Hydro One Board, who, as stated, passed a resolution affirming Hydro One's obligations in the merger agreement and merger-related commitments on September 19, 2018.

Q. Will the new CEO also be responsible to and take direction from the Hydro One Board?

A. Yes. The new CEO, once appointed, will be responsible to and take direction from the Hydro One Board, who, as previously stated, passed a resolution affirming Hydro One's obligations in the merger agreement and with respect to the merger-related commitments.

[1] *See* Hydro One Exh. 2201.

III. MEETING WITH OREGON COMMISSIONERS AND PARTIES

Q. In reply testimony, Mr. Muldoon recommends that Hydro One leadership, including yourself, meet with the Oregon Commissioners and parties (Staff Exh. 600 at 8). Are you willing to participate in such a meeting?

A. Yes, absolutely. I think Mr. Muldoon's suggestion is a good idea. It is understandable for the Commissioners and parties to want to meet the new leadership. I am happy to meet with them in Oregon at a mutually convenient time.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

PAUL DOBSON
Exhibit No. 2201

Hydro One Press Release

EX-99.2 3 d596159dex992.htm EX-99.2

Exhibit 99.2

news release

hydro One

Hydro One announces appointment of Acting Chief Financial Officer

TORONTO, September 7, 2018 – Hydro One Limited (“Hydro One”), Ontario’s largest electricity transmission and distribution company, is pleased to announce the appointment of Chris Lopez as Acting Chief Financial Officer effective September 6, 2018. Paul Dobson will continue in his role as the company’s Acting President and Chief Executive Officer.

Mr. Lopez was most recently the Senior Vice President of Finance at Hydro One with responsibility for accounting, treasury, business planning and tax. Mr. Lopez has 19 years of experience in the utilities industry in Canada and Australia. Before joining Hydro One in 2016, Mr. Lopez held executive roles at TransAlta Corporation.

“Chris has significant financial and utilities experience and a proven track record for delivering financial success,” said Paul Dobson, Acting President and CEO, Hydro One. “Over the past two years, Chris has distinguished himself as a leader who has been instrumental in securing financing at favourable rates and delivering successful productivity programs.”

More information about Hydro One’s leadership can be found here.

About Hydro One:

We are Ontario’s largest electricity transmission and distribution provider with more than 1.3 million valued customers, over C$25 billion in assets and 2017 annual revenues of nearly C$6 billion. Our team of over 7,400 skilled and dedicated regular and non-regular employees proudly and safely serves suburban, rural and remote communities across Ontario through our 30,000 circuit km of high-voltage transmission and 123,000 circuit km of primary distribution networks. We are one of only six utility companies in Canada to achieve the Sustainable Electricity Company designation from the Canadian Electricity Association. We also provide advanced broadband telecommunications services on a wholesale basis utilizing our extensive fibre optic network through Hydro One Telecom Inc. Hydro One Limited’s common shares are listed on the Toronto Stock Exchange (TSX: H). For more information about everything Hydro One, please visit www.HydroOne.com.

Forward-Looking Statements and Information:

This press release may contain “forward-looking information” within the meaning of applicable securities laws. Words such as “expect,” “anticipate,” “intend,” “attempt,” “may,” “plan,” “will”, “can”, “believe,” “seek,” “estimate,” and variations of such words and similar expressions are intended to identify such forward-looking information. These statements are not guarantees of future performance or actions and involve assumptions and risks and uncertainties that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed, implied or forecasted in such forward-looking information. Some of the factors that could cause actual results or outcomes to differ materially from the results expressed, implied or forecasted by such forward-looking information, including some of the assumptions used in making such statements, are discussed more fully in Hydro One’s filings with the securities regulatory authorities in Canada, which are available on SEDAR at www.sedar.com. Hydro One does not intend, and it disclaims any obligation, to update any forward-looking information, except as required by law.

For further information:

Investors:
Omar Javed, Vice President, Investor Relations
investor.relations@hydroone.com, 416-345-5943

Media:
Jay Armitage, Director, Corporate Communications
media.relations@hydroone.com, 416-345-6868

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

REBUTTAL TESTIMONY OF THOMAS D. WOODS
REPRESENTING HYDRO ONE

Commitment to Merger; New Hydro One Board; Hydro One CEO Search;

Executive Compensation

I. INTRODUCTION

Q. Please state your name, business address and present position with Hydro One Limited.

A. My name is Thomas D. (Tom) Woods, and my business address is 483 Bay Street, South Tower, 8th Floor, Toronto, Ontario M5G 2P5. I am the Chair of the Board of Directors ("Board") for Hydro One Limited ("Hydro One").

Q. Have you filed testimony in this proceeding?

A. Yes. On August 30, 2018, I filed supplemental testimony introducing Hydro One's new Board of Directors, including myself, and describing the timeline and selection process for Hydro One's new Chief Executive Officer ("CEO"). *See* Hydro One Exhs. 1500 and 1501.

Q. Are you sponsoring any exhibits that accompany your testimony?

A. Yes. Attached to my testimony is:

- Exhibit 2301 - Hydro One News Release, dated September 7, 2018, Tom Woods Announced as Chair of Hydro One Board of Directors.

A table of contents for my testimony is as follows:

Description **Page**

Summary of Testimony

Q. Please summarize your testimony.

A. My testimony describes (i) a resolution passed by the Hydro One Board on September 19, 2018, acknowledging and affirming Hydro One's obligations under the Merger Agreement and with respect to the merger-related commitments, (ii) the independence of Hydro One's Board, (iii) the Board's CEO search, and (iv) executive compensation and the Hydro One Accountability Act.

II. HYDRO ONE'S COMMITMENT TO THE MERGER

Q. In reply testimony, Mr. Muldoon and Mr. Mullins express a desire for Hydro One's leadership, and you in particular, to communicate to credit rating agencies, market analysts, and stakeholders that Hydro One remains committed to the merger and merger commitments (Staff Exh. 600 at 4, 9; AWEC Exh. 100 at 1). Can you speak to Hydro One's commitment to the merger?

A. Yes, I can and I will. Simply put, Hydro One remains committed to the merger. This is most clearly evidenced by the fact that on September 19, 2018, the Hydro One Board unanimously passed a resolution acknowledging and affirming, for and on behalf of Hydro One: (i) Hydro One's obligations under the Merger Agreement and with respect to the merger-related commitments to be performed by Hydro One and/or its subsidiaries if the Proposed Transaction is consummated pursuant to the Merger Agreement; and (ii) Hydro One's intention to consummate the Merger; in each case in accordance with the terms of, and subject to the conditions set out in, the Merger Agreement and the merger-related commitments.

III. THE PROVINCE OF ONTARIO'S COMMITMENT TO THE MERGER

Q. In reply testimony, Mr. Muldoon and Mr. Jenks and Mr. Gehrke express a desire for the Province of Ontario ("Province") to communicate to credit rating agencies, market analysts, and stakeholders that the Province is committed to the merger and merger commitments (Staff Exh. 600 at 4; Staff Exh. 601 at 15–18; CUB Exh. 200 at 12). Do you believe it is necessary for the Province to communicate its commitment to the merger to these parties?

A. In short, no. The Province is a shareholder, albeit the largest shareholder, of Hydro One. It is not the manager of Hydro One and it does not make strategic business decisions for Hydro One. All of Hydro One's strategic business decisions—for example, decisions relating to negotiating, entering into and completing merger transactions—are made by the Hydro One Board, not the Province. As such, the Province does not communicate with credit rating agencies, market analysts, or stakeholders regarding Hydro One's strategy and business decisions. A statement regarding the Province's commitment to the merger is thus not necessary, realistic, or appropriate.

Q. Why do you say that the Board, and not the Province, is responsible for making strategic and business decisions for Hydro One?

A. The Governance Agreement between Hydro One and the Province establishes separate roles for the Hydro One Board and the Province as Hydro One's largest shareholder. Under Section 2.1.2, the Hydro One Board is responsible for managing Hydro One. Section 2.1.3 provides that the Province will be involved in Hydro One as an investor, and not as a manager. Pursuant to these provisions of the Governance Agreement, Hydro One's Board—not its shareholders (inclusive of the Province)—makes strategic and business decisions for

Hydro One. Consistent with its authority to make strategic business decisions for Hydro One, on September 19, 2018, the Hydro One Board unanimously passed a resolution acknowledging and affirming Hydro One's obligations under the Merger Agreements and with respect to the merger-related commitments.

Q. Is the Governance Agreement still in effect?

A. Yes. On July 11, 2018, Hydro One and the Province of Ontario entered into an agreement for the purpose of the orderly replacement of the board of directors of Hydro One and Hydro One Inc. and the retirement of Mayo Schmidt as the chief executive officer (the "July 2018 Letter Agreement"). The July 2018 Letter Agreement between Hydro One and the Province (available at Hydro One Exh. 1601) affirms the Governance Agreement. Pursuant to Section 16 of the July 2018 Letter Agreement, the Province ratified and reaffirmed its commitment to the Governance Agreement:

> 16. <u>Reaffirmation</u>: By entering into this Agreement, the Province ratifies and reaffirms its obligations under the Governance Agreement and agrees that, except as specifically set out in this Agreement with respect to the subject matter hereof, (i) the execution, delivery and effectiveness of this Agreement or any other documents delivered in connection herewith shall not amend, modify or operate as a waiver or forbearance of any right, power, obligation, remedy or provision under the Governance Agreement, and (ii) such agreement shall continue in full force and effect.

Hydro One Exh. 1601, § 16. Thus the Governance Agreement remains in full force and effect, and the Hydro One Board retains the sole authority to make strategic and business decisions for Hydro One.

IV. <u>THE NEW HYDRO ONE BOARD</u>

Q. In reply testimony, Mr. Muldoon and Ms. Anderson suggest that the new Hydro One Board, and you as the Chair of the Board in particular, are beholden to the

Province and will "implement" and "reflect" Provincial policy (Staff Exh. 601 at 5–6; Staff Exh. 700 at 5–6). Do you agree with Mr. Muldoon's and Ms. Anderson's characterizations?

A. No, I do not agree with their characterizations. The new Board members, myself included, are not beholden to the Province.

First, the Board members, whether selected by the Province or the Ad Hoc Nominating Committee pursuant to Section 4.7 of the Governance Agreement, have a fiduciary duty under Canadian law to act in the best interests of the corporation, which means all its stakeholders and not a single shareholder above all others. While directors may consider various stakeholder interests in determining whether they are acting in the best interests of the company, including the interests of shareholders, this fiduciary duty requires the entire Board, and each Board member individually, to act in the best interests of Hydro One. The Board takes this legal responsibility very seriously and will not be beholden to any shareholder, including the Province.

Second, as described in my prior testimony, at Hydro One Exh. 1500 at 5–11, the new Hydro One Board comprises a group of experienced and successful individuals with extensive experience in serving as board members for a wide variety of corporations. The directors' resumes speak for themselves and demonstrate that none of them will be beholden to the Province, or any other shareholder for that matter. I am sure that each director feels honored to have been selected to serve on the Hydro One Board, by either the Province or the Ad Hoc Nominating Committee, but that does not mean the Board will be beholden to a shareholder in the same way one might be to his or her employer. In addition to the fiduciary duty I described in my answer to the prior question, each new director has many opportunities outside of Hydro One, as evidenced by their resumes. For that reason, no single director will be motivated to act in a certain way, whether at the behest of the Province or another shareholder, for fear of losing her or his Board position—especially if doing so would be contrary to Hydro One's bests interests and the Board member's fiduciary responsibilities.

Third, Section 4.2 of the Governance Agreement prevents the selection of Hydro One Board members that would be beholden to the Province. Under Section 4.2, all individuals on the Hydro One Board must meet certain criteria. We are all independent of Hydro One and the Province, as required by Sections 4.2.2 and 4.2.3 of the Governance Agreement. We meet the requirements of Section 4.2.1 of the Governance Agreement, which provide that Hydro One directors must have: (i) significant experience and expertise in business or that is applicable to business, (ii) served in a senior executive or leadership position, (iii) broad exposure to and understanding of the Canadian or international business community, (iv) skills for directing the management of a company, and (v) motivation and availability, in each case to the extent requisite for a business of the complexity, size and scale of the business of Hydro One and on a basis consistent with the highest standards for directors of leading Canadian publicly listed companies. Finally, each director meets the requirements of applicable securities and other laws and the requirements of the Toronto Stock Exchange, as required by Section 4.2.4 of the Governance Agreement.

In short, the new Board members were selected pursuant to the Governance Agreement, which requires independence, and, consistent with their fiduciary duties under Canadian corporate law, will act in the bests interests of Hydro One. The Board members will not be at the beck-and-call of the Province, or any other shareholder, and it is far-fetched to think they would do so in order to retain a position on the Hydro One Board. Rather, the

Board will provide an independent perspective and manage Hydro One in a way that prioritizes and serves the interests of the corporation. We will make strategic business decisions that we believe will result in the best outcomes for Hydro One as a whole.

Q. Ms. Anderson also concludes that because Hydro One's Board members are selected by the Province and/or can be removed by the Province at any time, they will take direction from the Province in selecting Hydro One's five Avista Board members, including the three independent directors that will be appointed by Hydro One (Staff Exh. 700 at 5–6). Do you agree?

A. No. My fellow Board members and I will not take direction from the Province when selecting and appointing members to the Avista Board. For clarity, it will be the management of Hydro One who will lead the effort to select Hydro One nominees for the Avista Board. The Board of Hydro One will provide its perspective to management of Hydro One, but it will be the responsibility of management to select high-caliber individuals to serve on Avista's Board.

Q. Mr. Muldoon indicates that the Province nominated you to serve as the Chair of the Hydro Board (Staff Exh. 600 at 6; Staff Exh. 601 at 13). Is this true?

A. No. It is true that I was one of four provincial nominees to serve on the new Hydro One Board. I was then selected as Interim Board Chair following an agreement reached between the Province and the Ad Hoc Nominating Committee. On September 7, 2018, Hydro One announced that the new Board—three of whom were selected by the Province and six of whom were not—voted unanimously to appoint me as Board Chair. *See* Hydro One Exh. 2301.

Q. Mr. Muldoon also states that Hydro One will be more vulnerable to provincial influence and control moving forward because the CEO of Hydro One will no longer also serve as the Chair of the Hydro One Board (Staff Exh. 600 at 6; Staff Exh. 601 at 5–6). Is this true?

A. No. That is an incorrect statement of Hydro One's prior practice. Hydro One's CEO has never simultaneously served as the Chair of Hydro One's board. With respect to this transaction in particular, Hydro One's prior CEO Mayo Schmidt was the President and CEO of Hydro One, but not the Board Chair, though Mr. Schmidt did serve as a board Director.[1] David Dennison was the Chair of Hydro One's board.[2]

Further, in Canada, it is accepted as a best governance practice to separate the role of CEO and Chair of the Board. This practice is near universal in Canada; but in cases where the CEO also serves as Chair, a board appoints a lead independent director to reinforce Board independence from management. Consistent with this governance practice, Section 3.2.4 of the Governance Agreement provides that the CEO shall not be the Chair of the Board.

V. UPDATE ON CEO SEARCH

Q. Can you provide an update on Hydro One's search for a new CEO?

A. Yes, I can. Pursuant to Section 3.3 of the Governance Agreement, the Hydro One Board will select Hydro One's new CEO. The Board has established a CEO Selection Committee, which will work with the executive recruiting firm, Egon Zehnder, to identify

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[1] *See* Hydro One Exh. 800 at 1.

[2] *See* Hydro One Exh. 1601 at 1, 8.

internal and external candidates and select the best candidate to serve as Hydro One's new CEO. After the preferred candidate is selected, negotiations with that individual will take place in an effort to enter into an agreement to be appointed CEO.

Q. Can you predict when the Board will announce the new CEO?

A. At this time, I cannot predict when this announcement will be made. As with any CEO search for a corporation the size of Hydro One, the search and negotiations with the finalist may take several months.

Q. Do you believe it is necessary for Hydro One to finish its search for a new CEO before proceeding in this matter (Staff Exh. 600 at 2–4 and 7; AWEC Exh. 100 at 1)?

A. No, I do not.

Q. Why do you believe it is not necessary for Hydro One to finish its search for a new CEO before proceeding in this matter?

A. It is not necessary because Hydro One's current leadership has expressed Hydro One's continuing commitment to the merger. On August 14, 2018, during Hydro One's earnings call, Hydro One's acting CEO, Paul Dobson, stated that Hydro One remains committed to the merger with Avista. Subsequently, as announced on September 7, 2018, the new Hydro One Board passed a resolution affirming Mr. Dobson's continued service as acting CEO.[3] Finally, and as I stated previously, on September 19, 2018, the new Hydro One Board passed a resolution acknowledging and affirming Hydro One's obligations in the merger agreement and with respect to the merger commitments. Both Mr. Dobson and the new CEO

[3] *See* Hydro One Exh. 2201.

will be responsible to and take direction from the Hydro One Board, which has affirmed Hydro One's obligations. Thus a new CEO is not necessary to proceed in this merger docket.

Q. Are the interests of Hydro One's customers, employees, or investors at risk during the search for a CEO?

A. Absolutely not. As stated in my supplemental testimony, I have the greatest respect for Mr. Dobson and believe he will manage Hydro One as its acting CEO with the utmost integrity and skill during the Board's CEO search and selection process. The Hydro One Board should not rush its selection process, and it has no need to do so with the continuing leadership of Mr. Dobson and the other executives and managers who have continued to serve Hydro One's customers, employees, and investors since July 11.

Q. In reply testimony, Mr. Muldoon includes the following quote from Premier Doug Ford, "[Tom Woods] will recruit a new long-term senior management team for the company, a team that will respect the people of Ontario," and interprets that quote as "a powerful statement enacting change through a designated Provincial agent." (Staff Exh. 600 at 21–22 and Exh. 603 at 3.) Do agree with Mr. Muldoon's interpretation of that quote?

A. No. The fact remains that I, as well as the entire Board, have a fiduciary duty to Hydro One itself to make strategic business decisions that are in the best interests of Hydro One, including in the recruitment and retention of senior executives and managers.

As discussed, while I am one of four provincial nominees to serve on the new Hydro One Board, the Province did not appoint me to serve as Board Chair. I was unanimously appointed by the new Board, a majority of whom were not selected by the Province.

Further, the Board has instituted a CEO Selection Committee comprised of Board members including one Provincial nominee and four non-Provincial nominees, that will work with the independent executive recruiting firm, Egon Zehnder, to identify and select the best and most highly qualified individual to serve as Hydro One's new CEO. It is important to emphasize that the Province will not be selecting the new CEO. I will not be selecting the new CEO. The new CEO will be selected by the Hydro One Board, which consists of four provincial nominees (including myself) and six Ad Hoc Nominating Committee nominees, only after the preferred candidate is vetted by the CEO Selection Committee with the assistance of the executive recruiting firm.

VI. <u>EXECUTIVE COMPENSATION</u>

Q. Will the Province set the pay for Hydro One executives, including the CEO, under the *Hydro One Accountability Act, 2018* (Staff Exh. 600 at 23)?

A. No, the Province will not set pay for Hydro One's executives, including the CEO. Section 2(1) of the *Hydro One Accountability Act* states that the Hydro One Board of Directors will establish a new compensation framework for the Board, CEO, and other executives in consultation with the Province and Hydro One's other five largest shareholders.[4] In addition to its right to consult with the Board on the compensation structure, Section 3 of the *Hydro One Accountability Act* provides the Management Board of Cabinet some regulatory oversight with respect to the compensation structure.[5] While the Board will consult

[4] *See* Hydro One Exh. 1602, § 2(1).

[5] *See* Hydro One Exh. 1602, § 3.

the Province and the Province may provide regulatory oversight to the Board in instituting a new compensation structure, the Hydro One Board will set the pay for Hydro One's CEO and executives, not the Province.

Q. Do you believe the *Hydro One Accountability Act, 2018* will impair Hydro One's ability to attract top-notch talent to serve as the CEO and in other executive positions at Hydro One (Staff Exh. 600 at 3, 23; CUB Exh. 200 at 12)?

A. No, I do not. The Board is still in charge of Hydro One's compensation structure and will ensure that executive pay is as competitive as necessary to attract high-quality talent and personnel to serve the best interests of Hydro One and its stakeholders.

Q. Does the *Hydro One Accountability Act, 2018* apply to Avista?

A. No, it does not. The definition of "subsidiary" in the *Hydro One Accountability Act* expressly excludes "a subsidiary incorporated in a jurisdiction outside of Canada." In addition, Hydro One and Avista have offered a commitment that the Avista board will be solely responsible for setting compensation levels for the Avista CEO and executives.[6]

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

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[6] *See* Hydro One Exh. 1600 at 31.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

THOMAS WOODS
Exhibit No. 2301

Hydro One News Release

EX-99.1 2 d596159dex991.htm EX-99.1

Exhibit 99.1

news release

Tom Woods announced as Chair of Hydro One Board of Directors

TORONTO, September 7, 2018 – Hydro One Limited ("Hydro One"), Ontario's largest electricity transmission and distribution company, today announced that Tom Woods has been appointed as the new Chair in a unanimous vote by the company's Board of Directors. Mr. Woods had served as interim Chair since August 14 until the company's Directors convened to appoint a Chair.

"I am honoured to serve as Chair of a great company with tremendous opportunity," said Tom Woods, Chair of the Board, Hydro One. "The Board and I are completely aligned in our support of a strong and vibrant Hydro One with a focus on system reliability and a commitment to continuous improvement for the benefit of customers, employees, shareholders and the communities we serve. We look forward to enabling the company to reach its full potential."

Mr. Woods spent his entire career at CIBC where he served as Chief Financial Officer, Chief Risk Officer and Vice Chairman. He is a Director on the Boards of Bank of America Corporation and AIMCo and is the Chair of the Board at Providence St. Joseph's St. Michael's Health Care.

"On behalf of the thousands of skilled and dedicated Hydro One employees across the province, I welcome Tom as Chair of our Board of Directors," said Paul Dobson, Acting President and CEO, Hydro One. "As a highly-regarded business leader, Hydro One and the Board will benefit from Tom's depth of experience in both management and corporate directorship."

More information about Hydro One's leadership and Board of Directors can be found here.

About Hydro One:

We are Ontario's largest electricity transmission and distribution provider with more than 1.3 million valued customers, over C$25 billion in assets and 2017 annual revenues of nearly C$6 billion. Our team of over 7,400 skilled and dedicated regular and non-regular employees proudly and safely serves suburban, rural and remote communities across Ontario through our 30,000 circuit km of high-voltage transmission and 123,000 circuit km of primary distribution networks. We are one of only six utility companies in Canada to achieve the Sustainable Electricity Company designation from the Canadian Electricity Association. We also provide advanced broadband telecommunications services on a wholesale basis utilizing our extensive fibre optic network through Hydro One Telecom Inc. Hydro One Limited's common shares are listed on the Toronto Stock Exchange (TSX: H). For more information about everything Hydro One, please visit www.HydroOne.com.

Forward-Looking Statements and Information:

This press release may contain "forward-looking information" within the meaning of applicable securities laws. Words such as "expect," "anticipate," "intend," "attempt," "may," "plan," "will", "can", "believe," "seek," "estimate," and variations of such words and similar expressions are intended to identify such forward-looking information. These statements are not guarantees of future performance or actions and involve assumptions and risks and uncertainties that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed, implied or forecasted in such forward-looking information. Some of the factors that could cause actual results or outcomes to differ materially from the results expressed, implied or forecasted by such forward-looking information, including some of the assumptions used in making such statements, are discussed more fully in Hydro One's filings with the securities regulatory authorities in Canada, which are available on SEDAR at www.sedar.com. Hydro One does not intend, and it disclaims any obligation, to update any forward-looking information, except as required by law.

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BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

REBUTTAL TESTIMONY OF JAMES D. SCARLETT
REPRESENTING HYDRO ONE

Impacts of Ontario Election on Hydro One; the Governance Agreement Between Hydro One and the Province of Ontario; Assessment of Existing Merger Commitments and Proposed New Commitments

I. INTRODUCTION

Q. Please state your name, business address and present position with Hydro One Limited.

A. My name is James D. ("Jamie") Scarlett, and my business address is 483 Bay Street, South Tower, 8th Floor, Toronto, Ontario M5G 2P5. I am Executive Vice President and Chief Legal Officer for Hydro One Limited ("Hydro One").

Q. Have you filed testimony in this proceeding?

A. On August 30, 2018, I filed supplemental testimony in this proceeding.

Q. Are you sponsoring any exhibits that accompany your testimony?

A. No.

A table of contents for my testimony is as follows:

Summary of Testimony

Q. Please summarize your testimony.

A. My rebuttal testimony addresses the following topics: (i) the impact of the June 7, 2018 Ontario Election on Hydro One; (ii) the future of the Governance Agreement between Hydro One and the Province of Ontario (the "Province"); (iii) Hydro One's views on how the Oregon Public Utility Commission (the "Commission") should review the Proposed Transaction in light of the June 7, 2018 Ontario Election and the timeline for that review; and (iv) Hydro One's assessment of the protections provided by the existing merger commitments and the new commitments proposed by Hydro One/Avista and the Citizens' Utility Board ("CUB"), Commission Staff, and the Alliance of Western Energy Consumers ("AWEC").

II. EVENTS IMPACTING HYDRO ONE AFTER JUNE 7, 2018 ONTARIO ELECTION

Q. Commission Staff's reply testimony expresses surprise at the "Province's ability to swiftly and [un]equivocally remove the entire Hydro One Board …especially given assurances of political separation between the Province and Hydro One in the record"[1] and the Province's "ability to remove the Board of Hydro One in one fell swoop."[2] Does the Governance Agreement provide the Province the right to call for the replacement of the Hydro One Board?

A. Yes. The Governance Agreement between Hydro One and Her Majesty the Queen in Right of Ontario dated November 5, 2015 (the "Governance Agreement") includes Section 4.7 that sets out a process for the Province to call for the removal of Hydro One's entire Board, with the exception of the CEO, and at the Province's sole discretion, the Chair, which I described in my supplemental testimony filed in this docket.[3] This process has been available to the Province since the Governance Agreement was executed on November 5, 2015. The Governance Agreement was

[1] UM 1897 - Staff/600/Muldoon/2/Lines 16-19.

[2] UM 1897 - Staff/700/Anderson/4/Lines 12-13.

[3] UM 1897 - Hydro One/1600/Scarlett/4/Lines 4-6.

Exhibit 803 to former Hydro One CEO Mayo Schmidt's Rebuttal Testimony and was filed in this docket on March 29, 2018.

Q. Do you agree with Commission Staff's[4] and CUB's[5] conclusions that the removal and replacement of the Hydro One Board through the July 2018 Letter Agreement did not comply with Section 4.7 of the Governance Agreement?

A. No. The removal and replacement of the Hydro One Board through the July 2018 letter agreement[6] (the "July 2018 Letter Agreement") complied with the process outlined in Section 4.7 of the Governance Agreement, with just one exception. Pursuant to the Province's and Hydro One's authority to amend the Governance Agreement with mutual consent (Section 26 of the Governance Agreement), the July 2018 Letter Agreement dropped the step of convening a shareholders' meeting (Sections 4.7.4 - 4.7.7 of the Governance Agreement). The Province and Hydro One complied with the spirit and intent of Section 4.7 of the Governance Agreement, but in order to serve the best interests of the company, the Province and Hydro One agreed to forego the requirement to hold a shareholders' meeting, which would have added approximately 60 days to the Board replacement process. Hydro One concluded it was in its best interests to expedite the replacement process and reduce uncertainty, particularly since the Province holds a sufficient number of shares to determine the outcome of a shareholder vote under Section 4.7 of the Governance Agreement. As noted throughout its testimony, Commission Staff recognizes the value of minimizing uncertainty.[7]

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[4] UM 1897 - Staff/600/Muldoon/2/Lines 8-12.

[5] UM 1897 - CUB/200/Gehrke-Jenks/9/Lines 3-9.

[6] UM 1897 - Hydro One Exh. 1601 ("July 2018 Letter Agreement").

[7] *See, e.g.*, Staff/600/Muldoon/14/Line 21.

Q. Do you agree with Commission Staff's[8] and CUB's[9] conclusions that the Province removed former CEO Mayo Schmidt in violation of Section 2.3 of the Governance Agreement?

A. Commission Staff and CUB assert that former CEO Mayo Schmidt's retirement was in violation of Section 2.3 of the Governance Agreement, which gives the Hydro One Board the sole authority to appoint and terminate the CEO. Commission Staff and CUB perceive Mr. Schmidt's retirement as forced by the Province due to the Progressive Conservative Party's campaign pledges to remove Mr. Schmidt. This situation is more nuanced than assumed by Commission Staff and CUB.

The Province has the authority to call for the removal and replacement of the entire Hydro One Board, with the exception of the CEO, and at the Province's sole discretion, the Chair, pursuant to Section 4.7 of the Governance Agreement. Furthermore, Section 3.3.2 of the Governance Agreement requires that the Hydro One Board annually confirm the continued service of the CEO through a two-thirds affirmative vote in a Special Board Resolution at the Annual Confirmation Meeting. Rather than wait to see if Hydro One's new Board would confirm his continued service pursuant to Section 3.3.2 of the Governance Agreement, Mr. Schmidt chose to retire in the best interests of Hydro One and its shareholders. The intersection of Sections 4.7 and 3.3.2 of the Governance Agreement would have made Mr. Schmidt a lame duck CEO, and he wisely chose to retire under those circumstances to the benefit of Hydro One and its shareholders -- rather than await his fate at the Annual Confirmation Meeting.

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[8] UM 1897 - Staff/700/Anderson/4-5.

[9] UM 1897 - CUB/200/Gehrke-Jenks/7-8.

In light of the events outlined above and the anticipated difficulty of attempting to carry out his duties as CEO without the support of Hydro One's single largest shareholder, Mr. Schmidt retired from his positions, having determined that it would be in the best interests of Hydro One and its stakeholders to do so.

Q. Commission Staff[10] and CUB[11] conclude that the removal and replacement of the Hydro One Board and the retirement of Hydro One's former CEO indicate that the Commission cannot rely on the Governance Agreement to define the relationship between the Province and Hydro One. Do you agree with this conclusion?

A. No. As described above, the removal and replacement of the Hydro One Board followed the process outlined in Section 4.7 of the Governance Agreement, with the exception of the shareholders' meeting, and Mr. Schmidt, looking at the intersection of Sections 4.7 and 3.3.2 of the Governance Agreement, decided to retire. The Commission should not conclude that these events undermine the Governance Agreement.

To the contrary, the Province made clear in Section 16 of the July 2018 Letter Agreement that the Governance Agreement remains in full force and effect:

> 16. Reaffirmation: By entering into this Agreement, the Province ratifies and reaffirms its obligations under the Governance Agreement and agrees that, except as specifically set out in this Agreement with respect to the subject matter hereof, (i) the execution, delivery and effectiveness of this Agreement or any other documents delivered in connection herewith shall not amend, modify or operate as a waiver or forbearance of any right, power, obligation, remedy or provision under the Governance Agreement, and (ii) such agreement shall continue in full force and effect.

Hydro One Exh. 1601, § 16.

[10] UM 1897 - Staff/600/Muldoon/16-17.

[11] UM 1897 - CUB/200/Gehrke-Jenks/8-10.

Q. CUB expresses concern in its testimony that it "did not expect Hydro One to experience such a significant operation and management change"[12] as a result of the election in Ontario on June 7, 2018, and suggests that Hydro One's prior statements regarding the role of the Province in Hydro One's governance and management may not have been accurate.[13] Do you agree with this characterization of the record in this proceeding?

A. I do not. CUB's reply testimony states that "Hydro One has erroneously characterized the relationship between itself and the province of Ontario as that of a typical investor."[14] CUB goes on to quote one of my statements at the Commission's February 26, 2018 Special Public Meeting: "There is zero. Zero involvement from the Government. Zero direction from the Government."[15] CUB concludes: "The recent election and subsequent events in Ontario clearly indicate this is not the case, and call into question the accuracy of Mr. Scarlett's comments before the Commission."[16] I want to reassure the Commission that I and my Hydro One colleagues have not misled the Commission, Commission Staff, CUB, and the other parties to this proceeding.

At the time I participated in the February 2018 Special Public Meeting, my statement was true, and I firmly stand by it. Furthermore, Section 2.1.3 of the Governance Agreement states that "The Province shall, with respect to its ownership interest in Hydro One, engage in the business and affairs of Hydro One and the Hydro One Entities as an investor and not as a manager." As noted above, the Governance Agreement was filed in this docket on March 29, 2018.

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[12] UM 1897 - CUB/200/Gehrke-Jenks/3/Lines 23-24.

[13] UM 1897 - CUB/200/Gehrke-Jenks/5-6.

[14] UM 1897 - CUB/200/Gehrke-Jenks/5/Lines 10-11.

[15] UM 1897 - CUB/200/Gehrke-Jenks/5/Lines 12-13.

[16] UM 1897 - CUB/200/Gehrke-Jenks/5/Lines 13-15.

After the February 2018 Special Public Meeting and the submission of Hydro One's Rebuttal Testimony in March 2018, the campaigns for the June 7, 2018 Ontario election began in earnest. Hydro One was made aware of the Progressive Conservative Party's intention to remove Hydro One's CEO during a campaign event on April 10, 2018. The campaign promise to remove Hydro One's CEO and Board of Directors was officially announced on April 12, 2018. Election campaigns in Canada are shorter than in the United States and starting in June 2018, Hydro One and Avista informed the Commission of the recent political developments as it became clear they may impact Hydro One, well before any potential decision on the merger by the Commission.

On June 19, 2018, shortly after the election on June 7, 2018, Hydro One filed its response to ALJ Patrick Power's Bench Request and explained the outcome of the election and the campaign promises made by the Ontario Progressive Conservative Party regarding Hydro One.[17] On June 19, Hydro One still did not know how the election could impact Hydro One, but updated the Commission regarding campaign promises made by the new government.

Since the June 19 filing, Hydro One and Avista have regularly updated the Commission on the actions of the Ontario government with respect to the management and Board of Directors of Hydro One. Hydro One filed with the Commission a report, dated July 18, 2018, regarding the July 11, 2018 Letter Agreement between Hydro One and the Province that established the process for replacement of Hydro One's Board and retirement of its CEO;[18] a July 19, 2018 report regarding a Standard & Poor's Report;[19] a Report, dated August 15, 2018, on the appointment of

[17] UM 1897 - Hydro One Limited's Response to June 14, 2018 Bench Request (June 19, 2018).

[18] UM 1897 - First Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (July 18, 2018).

[19] UM 1897 - Second Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (July 19, 2018).

Hydro One's new Board;[20] a September 7, 2018 Report on the selection of Thomas ("Tom") Woods as the Hydro One Board Chair and the new Board's appointment of Paul Dobson as Acting CEO and President and Christopher Lopez as Acting CFO;[21] and a September 14, 2018 Report on Hydro One's S&P Rating.[22]

III. NEXT STEPS IN REGULATORY PROCESS

Q. In light of the events described above, how should the Commission proceed with determining whether to approve the Proposed Transaction?

A. As described in my supplemental testimony, the parties to this proceeding carefully considered the fact that the Province owns 47% of Hydro One's stock and the fact that the Province's relationship with Hydro One is largely defined by the Governance Agreement, which has been part of the record since March 29, 2018. Through three in-person and numerous telephonic settlement conferences, all of the parties discussed the risks associated with the Province's stock ownership and filed a Stipulation and Settlement with the Commission on May 25, 2018 ("Stipulated Settlement") with 115 merger commitments (each, a "Stipulated Commitment," collectively, the "Stipulated Commitments") designed to ensure the independence and financial health of Avista in light of the fact that Hydro One's largest shareholder is the Province. The Commission should assess whether these 115 Stipulated Commitments, and

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[20] UM 1897 - Third Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (August 15, 2018).

[21] UM 1897 - Fourth Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (September 7, 2018).

[22] UM 1897 - Fifth Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (September 14, 2018).

additional proposed commitments discussed herein, adequately ensure that the Proposed Transaction is in the public interest and provides net benefits to Avista customers.

Q. Should the Commission, as suggested by Commission Staff,[23] delay consideration of the Proposed Transaction until Hydro One's new board selects a new CEO and until Hydro One implements the requirements of the Hydro One Accountability Act?

A. No. Hydro One has a new, fully independent board, filled with directors with impressive resumes and significant experience serving as directors of other major corporations. As explained in Hydro One Board Chair Tom Woods' and Acting CEO Paul Dobson's rebuttal testimony,[24] Hydro One's new board will set the strategic direction for Hydro One's executive leadership team. On September 19, Hydro One's new Board unanimously passed a resolution acknowledging and affirming, for and on behalf of Hydro One: (i) Hydro One's obligations under the Merger Agreement and with respect to the merger-related commitments to be performed by Hydro One and/or its subsidiaries if the Proposed Transaction is consummated pursuant to the Merger Agreement; and (ii) Hydro One's intention to consummate the Merger; in each case in accordance with the terms of, and subject to the conditions set out in, the Merger Agreement and the merger-related commitments. This strategic direction to proceed with the Avista transaction applies regardless of whether Hydro One has an acting CEO or new CEO. Furthermore, as explained below, the *Hydro One Accountability Act* does not apply to Avista's executives and employees, and Hydro One and Avista proposed an additional commitment in their supplemental

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[23] UM 1897 - Staff/600/Muldoon/3/Lines 1-11; UM 1897 - Staff/600/Muldoon/40/Lines 3-10.

[24] UM 1897 - Hydro One/2300/Woods; UM 1897 - Hydro One/2200/Dobson.

testimony filed on August 30 that puts complete control over Avista's post-merger employee compensation in the hands of Avista's post-merger board.

There is no need to wait for Hydro One to select its new CEO; nor should the Commission wait for implementation of the *Hydro One Accountability Act* because it does not and cannot apply to Avista. These actions are not relevant to the Commission's assessment of whether the Proposed Transaction is in the public interest and provides net benefits to Avista customers.[25]

IV. EXISTING AND NEW COMMITMENTS DESIGNED TO PROTECT AVISTA

Q. Should the Commission limit itself to considering whether only the 115 Stipulated Commitments provide Avista the independence and financial security it needs for the Commission to conclude that the Proposed Transaction is in the public interest and provides net benefits to Avista customers?

A. No. As evidenced in my supplemental testimony[26] and Hydro One's Acting CFO Chris Lopez's supplemental testimony[27] in which we proposed two additional commitments, Hydro One agrees that it is appropriate for the Commission to consider the need for additional commitments or amendments to the 115 Stipulated Commitments to address: (i) the events that

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[25] Commission Staff suggests that the Commission could wait to approve the Proposed Transaction for many months. To be clear, the Proposed Transaction must be approved well in advance of March 29, 2019. On September 19, 2018, Avista exercised its right under the Merger Agreement to unilaterally extend the End Date of the Merger Agreement from September 30, 2018, to March 29, 2019, in order to accommodate the additional time needed to receive approval from the Oregon, Washington, and Idaho utility commissions. Because the closing process for a transaction like this takes time, such approvals must be obtained well in advance of March 29, 2019. Furthermore, the Washington Utilities and Transportation Commission has a December 14, 2018 statutory deadline to issue an order approving the transaction. Hydro One urges the Commission to issue an order approving the transaction before the end of 2018. There are numerous accounting and tax benefits that can be secured if the Proposed Transaction closes by the end of 2018, as explained in Acting CFO Chris Lopez's rebuttal testimony. UM 1897 - Hydro One/2500/Lopez.

[26] UM 1897 - Hydro One/1600/Scarlett/31-34.

[27] UM 1897 - Hydro One/1800/Lopez/16/Lines 2-13.

occurred since the June 7, 2018 Ontario election, and (ii) the Province's role as Hydro One's largest shareholder.

Q. Do you agree with CUB's conclusion that there are no "ring-fencing arrangements that will protect Oregon ratepayers from potential actions coming from the provincial government"[28]?

A. Absolutely not. CUB asserts that if the Proposed Transaction is consummated, Avista will be "owned by a utility controlled by the whims of foreign politics"[29] and that Avista "would be subject to the management of a company controlled by the whims of Ontario elections."[30] CUB states that it no longer supports the acquisition of Avista by Hydro One[31] and asks the Commission to reject the merger application.[32] CUB's reliance on colorful metaphors[33] is not helpful and disrespects the careful thinking of the many parties who worked hard to come up with the comprehensive Stipulated Settlement filed in this case. Hydro One will focus its comments on the facts of the situation and how the Stipulated Settlement protects Avista customers in Oregon from any adverse effects from political developments in Ontario.

I agree with AWEC's assessment of the impacts of the June 7, 2018 election on the Proposed Transaction. AWEC concludes:

> [T]he ability of the Province of Ontario to exercise political influence in a manner that is harmful to ratepayers is limited especially considering the protections

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[28] UM 1897 - CUB/200/Gehrke-Jenks/5/Lines 6-7.

[29] UM 1897 - CUB/200/Gehrke-Jenks/4/Lines 19-20.

[30] UM 1897 - CUB/200/Gehrke-Jenks/16/Lines 12-13.

[31] UM 1897 - CUB/200/Gehrke-Jenks/3/Lines 10-11.

[32] UM 1897 - CUB/200/Gehrke-Jenks/16/Lines 18-19.

[33] UM 1897 - CUB/200/Gehrke-Jenks/3/Lines 13-20.

> contained in the merger commitments. The Commission remains the sole jurisdiction for establishing Avista's rates and terms of service for Oregon customers, and a change to Hydro One's Board or CEO will not change the Commission's jurisdiction over these matters. …
>
> I would note that because of the merger commitments, the current and future political events in the Province of Ontario pose a risk that resides primarily with the Hydro One entity, and not Avista ratepayers. The politics in Canada and the current individuals sitting on Hydro One's Board should not in theory impact Avista's revenue requirement. And if the upstream political events impact Avista's rates and terms of service the commitments require Avista and Hydro One to hold ratepayers harmless from any cost impact arising from the merger.[34]

Q. CUB[35] and Commission Staff[36] express concern that the *Hydro One Accountability Act, 2018* (Hydro One Exh. 1602) will impact Hydro One's ability to attract top-notch talent to fill its CEO position and other executive positions in the future. Commission Staff also speculates that the Province might try to impose aspects of the *Hydro One Accountability Act* on Avista in the future.[37] Do you agree with these assessments and are there existing or new commitments that address these concerns?

A. Hydro One's Board Chair Tom Woods addresses the impact of the *Hydro One Accountability Act* on Hydro One's ability to recruit and retain executives in his rebuttal testimony. Mr. Woods also explains that, under the *Hydro One Accountability Act*, the Hydro One Board retains its authority to set the compensation of Hydro One executives, but with consultation and regulatory oversight from the Province.

[34] UM 1897 - AWEC/100/Mullins/3-4.

[35] UM 1897 - CUB/200/Gehrke-Jenks/12/Lines 14-17.

[36] UM 1897 - Staff/600/Muldoon/3/Lines 3-11.

[37] UM 1897 - Staff/600/Muldoon/20/Lines 3-5.

With respect to Avista, the *Hydro One Accountability Act* has no impact whatsoever, as it does not apply to Hydro One subsidiaries outside Canada. Furthermore, my supplemental testimony[38] states that Avista and Hydro One are proposing an additional commitment that gives the Avista post-merger board sole authority to set employee compensation, including for its CEO and executive management. The Stipulated Commitments provide that all of the commitments are binding on Hydro One and Avista (Stipulated Commitment No. 110), that the Commission has jurisdiction to enforce all of the Stipulated Commitments (Stipulated Commitment No. 111), and that Oregon courts will have jurisdiction over Hydro One and Avista to enforce all of the Stipulated Commitments (Stipulated Commitment No. 112). Therefore, the *Hydro One Accountability Act* does not apply to Avista, and any future efforts to apply the *Hydro One Accountability Act* or similar requirements on Avista will be ineffective.

Q. AWEC[39] proposes a further amendment to governance matters. Hydro One's and Avista's second proposed additional commitment[40] suspends Hydro One's right to remove and replace Hydro One's three Independent Director Designees on the post-merger Avista board for six months with Hydro One employees if the Province takes certain actions to control the Hydro One board. AWEC also wants to prevent Hydro One from ever using this power to install a total of five Hydro One executives or employees on the Avista post-merger board. Do you agree with AWEC's proposal?

A. Yes. Since the filing of AWEC's testimony in this docket on September 20th, Hydro One and Avista have discussed an amendment to the post-merger Avista board composition

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[38] UM 1897 - Hydro One/1600/Scarlett/31.

[39] UM 1897 - AWEC/100/Mullins/6/Lines 3-9.

[40] UM 1897 - Hydro One/1600/Scarlett/33/Lines 21-28.

with some parties in the Washington Utilities and Transportation Commission ("WUTC") docket, U-170970, including AWEC. AWEC, Hydro One and Avista have developed language to the effect that Hydro One will retain its right to replace its Independent Director Designees for a six-month period with Hydro One employees, so long as Hydro One employee-directors never make up a majority of Avista's post-merger board and so long as Hydro One's right to replace its Independent Director Designees for a six-month period is suspended if the Province takes an action to control a majority of the seats of Hydro One's board. AWEC has confirmed with Hydro One and Avista that the agreement reached in Washington also should be applied in Oregon. In Oregon, Stipulated Commitment No. 5 would be amended as follows to resolve the concerns raised in AWEC's September 20th reply testimony in this docket:

> …(ii) three of such directors are Independent Directors who are residents of the Pacific Northwest region, while such requirement is in effect (subject in the case of clause (ii) hereof to Hydro One determining, in good faith, that it is not able to appoint an Independent Director who is a resident of the Pacific Northwest region in a timely manner, in which case Hydro One may replace any such director with any person, including an employee or executive of Hydro One or any of its subsidiaries on an interim basis, not exceeding six months, provided that Hydro One designees who are employees or executives of Hydro One or any of its subsidiaries shall in no case constitute a majority of the directors of Avista, after which time Hydro One shall replace any such interim director with an Independent Director who is a resident of the Pacific Northwest region). If, at any time a circumstance arises, and during the pendency of any such circumstance, whereby the Province of Ontario ("Ontario") exercises its rights as a shareholder of Hydro One, uses legislative authority or acts in any other manner whatsoever, that results, or would result, in Ontario appointing nominees to the board of directors of Hydro One that constitute, or would constitute a majority of the directors of such board, then Hydro One's authority to replace an Independent Director with an employee or executive on an interim basis is suspended for the pendency of such circumstance.

Q. Commission Staff also expresses concern with Hydro One's and Avista's proposal to amend Stipulated Commitment No. 5 to suspend Hydro One's right to replace its Independent Director Designees for a maximum of six months with Hydro One employees

if the Province takes an action to control the Hydro One board. Commission Staff is concerned that the Commission and Oregon parties in the future may not be able to determine whether the Province has taken an action that would trigger the suspension.[41] Have Hydro One and Avista developed a mechanism to address this concern?

A. Yes. Hydro One and Avista are prepared to provide notice if certain actions are taken by the Province in the future. In Oregon, Hydro One and Avista propose to add an additional commitment that will require Hydro One to notify the Commission if certain events occur in the Province. This notice will provide the Commission the information it needs to determine that Hydro One's right to replace its Independent Director Designees with Hydro One employees has been suspended:

PROPOSED NEW COMMITMENT 116

> In the event of the enactment or adoption of any legislation, rule, policy, or directive by government at any level or by any governmental entity or official in Canada (a "Legislative Action") that affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, any of the parties to this proceeding may petition the Commission at any time to consider whether the Commission should amend its final order, and neither Hydro One nor any of its subsidiaries, including Avista, will oppose initiation of such a proceeding. Hydro One will report to the Commission any such Legislative Action in Canada that, in Hydro One's reasonable judgement, affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, as soon as practicable after it is publicly announced as being effective by the government or governmental entity or official. Nothing in this Commitment 116 shall be interpreted to limit the positions or arguments that Avista or Hydro One may take or advance in any such proceeding, including the right to argue that a petition presents insufficient grounds or evidence. Prior to filing a petition with the Commission under this Commitment 116, a party must provide Hydro One and Avista at least 30 days advance written notice and an opportunity to meet and confer about resolutions other than filing with the Commission under this commitment. Nothing in this commitment is intended to restrict the rights of the parties to petition the Commission concerning its order(s) in this docket, or to limit the authority of the Commission.

[41] UM 1897 - Staff/600/Muldoon/33/Lines 7-19.

Q. Commission Staff expresses concern that the Province may try to dictate who Hydro One appoints to the Avista Board.[42] Is this concern reasonable?

A. No. As explained above and in the rebuttal testimony of Hydro One Board Chair Tom Woods,[43] Hydro One has a new board that is entirely independent of the Province and Hydro One, as required by Section 4.2 of the Governance Agreement.[44] As noted above, the Province confirmed in Section 16 of the July 2018 Letter Agreement[45] that the Governance Agreement remains in full force and effect. Therefore, Hydro One's entirely independent and highly accomplished board will be responsible for appointing Hydro One's five directors (two Hydro One executives and three independent directors), not the Province.

To further address Commission Staff's concern, Hydro One and Avista propose to amend Stipulated Commitment No. 5 to require Hydro One and Avista to consult with each other in their selection of their independent director designees:

PROPOSED MODIFICATIONS TO STIPULATED COMMITMENT 5

5. Avista Board of Directors (BOD)

Avista and Hydro One agree that after closing of the Proposed Transaction, Avista will have a separate board of directors from Hydro One that consists of nine (9) members, determined as follows:

Five Hydro One Designated Directors:

Two executives of Hydro One or any of its subsidiaries, and

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[42] UM 1897 - Staff/600/Muldoon/19-20; UM 1897 - Staff/700/Anderson/4-6.

[43] UM 1897 - Hydro One/2300/Woods.

[44] UM 1897 - Hydro One Exh. 803.

[45] UM 1897 - Hydro One Exh. 1601.

Three Independent Directors who are residents of the Pacific Northwest Region.

Four Avista Designated Directors:

Three directors who as of immediately prior to the closing of the Proposed Transaction are members of the Board of Directors of Avista, including the Chairman of Avista's Pre-Merger Board of Directors (if such person is different from the Chief Executive Officer of Avista), and

Avista's Chief Executive Officer.

At least two of the Avista directors must be Independent Directors.

Avista and Hydro One shall consult with each other prior to the designation of any Independent Directors.

Q. To address its concern that the Province may attempt to dictate Hydro One's selection of Hydro One's three independent director designees on Avista's post-merger board, Commission Staff proposes that after the initial selection of Hydro One's and Avista's independent director designees by Hydro One and Avista, the independent directors will form an independent Governance Committee that will have sole responsibility to remove and replace Independent Directors in the future.[46] Can Hydro One agree to this commitment?

A. No. Staff's proposal will result in an Avista board that is governed by a majority of directors wholly independent from either Hydro One or Avista. Staff's proposal is seriously flawed and unworkable for several reasons.

First, Hydro One is investing more than $5 billion US in Avista. Hydro One must control the selection of the majority of Avista's post-merger board in order to ensure that its substantial investment results, over the long-term, in financial benefits to the shareholders of Hydro One while also abiding by all of the merger commitments adopted in these proceedings. Further, Hydro One

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[46] UM 1897 - Staff/700/Anderson/10/Lines 6-38.

must ensure that Hydro One and Avista work together, over the long-term, to ensure that Hydro One and Avista achieve the efficiencies that will save money for both companies -- ultimately to the benefit of Avista's customers. Hydro One cannot abdicate these duties to a majority panel of independent directors in this situation, where Avista will be a wholly owned indirect subsidiary of Hydro One.

Second, as described in the rebuttal testimony of Hydro One's and Avista's expert witness John Reed[47] and in the rebuttal testimony of Hydro One's acting CFO Chris Lopez,[48] the credit rating agencies are likely to separate Avista from Hydro One for the purposes of developing credit ratings if Staff's proposal is imposed as a commitment in this transaction. This will have two negative impacts on Hydro One and Avista. Avista's credit rating will not get any benefit from the financial strength of Hydro One. As a result, Avista will not get a credit boost from becoming a Hydro One subsidiary. With respect to Hydro One, the credit rating agencies may not include the potential revenue stream from Avista in Hydro One's credit rating because the agencies may conclude that Hydro One has lost control of Avista. As a result, Hydro One will bear the burden of the debt incurred to acquire Avista in its credit rating but will not get the benefit of Avista's revenue stream in its credit rating. This scenario could adversely affect Hydro One's credit rating.

Q. Commission Staff contends that its board structure proposal is appropriate because the New York Stock Exchange ("NYSE") recommends that corporations have majority independent boards[49] and because Avista currently has a majority independent

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[47] UM 1897 - Hydro One/2600/Reed.

[48] UM 1897 - Hydro One/2500/Lopez.

[49] UM 1897 - Staff/700/Anderson/2, 9.

board. Do you agree that the NYSE recommendation and Avista's current board structure support Commission Staff's recommendation?

A. Absolutely not. Commission Staff is attempting to apply a NYSE policy for the boards of a publicly traded corporation listed on the NYSE to a privately held subsidiary. The NYSE policy makes sense in the context of a parent corporation with many diverse shareholders. In fact, Hydro One has a wholly independent board (except for its CEO who serves as a director). The NYSE policy is wholly inappropriate in the context of a subsidiary that has only one shareholder -- its parent. The parent must be able to control its investment in the subsidiary through the subsidiary board in order to ensure that the investment in the subsidiary serves its shareholders.

As noted in Mr. Reed's supplemental testimony, the current board structure in Stipulated Commitment No. 5 is already highly protective when compared with the board structures imposed in other utility mergers around the country: "commitments similar to Stipulated Commitment No. 5, Avista Board of Directors, and Stipulated Commitment No. 4, Executive Management, are rarely used or required." [50]

Q. Commission Staff also contends that its board structure proposal is appropriate because it is modeled on the commitment in the Oncor-Sempra merger that established a committee of independent directors responsible for the selection of future independent directors.[51] Do you agree that the Oncor-Sempra merger commitment is a good point of comparison for the Hydro One-Avista merger?

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[50] UM 1897 - Hydro One/2000/Reed/13/Lines 16-18; *see also* Hydro One Exh. 2002.

[51] UM 1897 - Staff/700/Anderson/12-13.

A. No. There were several aspects of the Oncor-Sempra merger that demonstrate that it is not a good point of comparison for the Hydro One-Avista merger. Importantly, as explained in Mr. Reed's rebuttal testimony,[52] of the 40 utility mergers that he reviewed in comparison to the Hydro One-Avista merger, Oncor-Sempra is the only transaction that has included a committee of independent directors responsible for the selection of future independent directors.

First, unlike the Hydro One-Avista merger, Oncor already had a stand-alone ("de-linked") credit rating from its parent entity prior to the Sempra transaction because in 2007, when Oncor's predecessor was acquired by Energy Future Holdings ("EFH"), Oncor's credit rating was several notches higher than EFH's on a stand-alone basis. Thus de-linking was important to prevent EFH from pulling down Oncor's ratings. Conversely, Avista may receive an uplift in its credit rating by linking its credit rating to Hydro One. Therefore, Avista will be worse off if something triggered de-linking in this transaction -- such as a commitment to establish a committee of independent directors responsible for the selection of future independent directors. The economics of the Oncor-Sempra merger did not hinge on (i) whether Sempra's credit rating would receive the benefit of an assumption of revenue received from Oncor, and (ii) whether Oncor would receive a credit boost from being the subsidiary of Sempra.

Second, unlike the Hydro One-Avista merger in which Hydro One will be Avista's sole shareholder, Sempra only owned 80.04% of Oncor's stock, and minority shareholders owned the rest of Oncor's stock. These minority shareholders had existing veto and blocking rights that constrained Sempra's predecessor's (EFH) discretion in choosing its independent directors (although the requirement that new independent directors would be chosen solely by existing

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[52] UM 1897 - Hydro One/2600/Reed.

independent directors was new with the Sempra transaction). Here, Hydro One would be giving up the right to appoint directors that it would otherwise appoint in its sole discretion.

Third, Sempra already had affiliates in Texas that were competitors of Oncor. As a result, it was necessary to separate Oncor's board from undue influence by Sempra, motivated by the interests of its other affiliates.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

REBUTTAL TESTIMONY OF CHRISTOPHER F. LOPEZ
REPRESENTING HYDRO ONE

Financial Condition of Hydro One

Sufficiency of Existing Commitments

Staff's Proposal for an Independent Governance Committee

Staff's Proposal for Delay

Additional Matters

I. INTRODUCTION

Q. Please state your name, business address and present position with Hydro One Limited.

A. My name is Christopher F. Lopez, and my business address is 483 Bay Street, South Tower, 8th Floor, Toronto, Ontario M5G 2P5. On September 6, 2018 I was appointed as Acting Chief Financial Officer ("CFO") for Hydro One Limited ("Hydro One").[1] Prior to September 6, 2018, I was Senior Vice President of Finance for Hydro One.

Q. Please summarize your education and business experience.

A. Briefly, I received a Bachelor of Commerce in accounting and finance from Edith Cowan 10 University in 1996. I qualified from the Institute of Chartered Accountants in Australia in 1999. I received a graduate diploma in corporate governance and directorships from the Australian Institute of Company Directors in 2007.

Prior to joining Hydro One, I was the Vice President of Planning and Mergers & Acquisitions at TransAlta from 2011 to 2015. Prior to that, I was Director of Operations Finance at TransAlta in Calgary from 2007 to 2011, and was Country Financial Controller for TransAlta in Australia, from 2002 to 2007. My education and business experience is detailed in Hydro One Exh. 401, which contains my curriculum vitae.

Q. Please describe the responsibilities of your current position.

A. As Acting CFO, I am now responsible for the following lines of business: Corporate Accounting and Finance (including Treasury and Tax), Internal Audit, Investor Relations, and Pensions.

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[1] *See* UM-1897 - Fourth Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (Sept. 7, 2018).

Q. Have you filed prior testimony in this proceeding?

A. Yes, I have filed direct, rebuttal and supplemental testimony. I also co-sponsored June 2018 joint testimony in support of the Stipulation and Settlement filed with the Public Utility Commission of Oregon (the "Commission") on May 25, 2018 ("Stipulated Settlement").[2]

Q. Are you sponsoring any exhibits that accompany your testimony?

A. Yes. Attached to my testimony is:

- Exhibit 2501 – Moody's June 20, 2018 Press Release

A table of contents for my testimony is as follows:

[2] UM-1897 - Joint Testimony, Joint Parties Ex. 100 (June 19, 2018); *see also*, UM-1897 - All-Party Stipulation (May 25, 2018) (including Appendix A, Oregon Commitments).

<u>Summary of Testimony</u>

Q. Please summarize your testimony.

A. My testimony responds to the testimony of other parties regarding Hydro One's financial condition, the sufficiency of the financial commitments Hydro One has made, and the proposal of Commission Staff ("Staff") to preclude Hydro One from nominating three of the five independent directors on the Avista Board of Directors ("Avista Board").

II. <u>FINANCIAL CONDITION OF HYDRO ONE</u>

Q. Have you reviewed the testimony of Staff Witness Muldoon regarding Hydro One's financial condition?

A. Yes.

Q. Do you agree with his statements?

A. I do agree with many of them but I take issue with certain statements relating to Hydro One's current financial condition and how communications with rating agencies should be managed.

Q. Please describe the aspects of your education that relate to your ability to evaluate Hydro One's financial condition.

A. Having qualified from the Institute of Chartered Accountants in Australia, my training is equivalent to that of a Certified Public Accountant. My graduate diploma in corporate governance and directorships from the Australian Institute of Company Directors is equivalent to the ICD.D (Institute of Corporate Directors) designation in Canada.

Q. Please describe the aspects of your work experience that relate to your ability to evaluate Hydro One's financial condition.

A. I have 19 years of years of progressive experience in the utilities industry in Canada and Australia and over 12 years in senior financial positions in North America. As Hydro One's Acting CFO, the company's financial condition goes to the heart of everything I do. I am responsible for the contents of the reports that are filed with securities regulators and for communications with rating agencies and analysts. I am required to have a strong understanding of the criteria that rating agencies apply to determine a company's ratings. I carefully monitor statements made by rating agencies and the investment community regarding Hydro One as well as Hydro One's financial performance based on a range of metrics. I am also responsible for Hydro One's communications with its investors.

Q. What are Hydro One's and Avista's current ratings, as of October 1, 2018?

A. The table below presents ratings for Hydro One; our primary subsidiary, Hydro One Inc. (a transmission and distribution utility in Ontario) ("HOI"); and Avista. It presents ratings from Moody's Investors Service ("Moody's"), Standard & Poor's ("S&P"), and Dominion Bond Rating Service ("DBRS").

Company Rated / Rating Agency	Type of Rating	Current Rating	Agency Comment (if any)
Hydro One / S&P	Issuer	A-	CreditWatch Negative
Hydro One / Moody's	n/a	Not rated	
Hydro One /DBRS	n/a	Not rated	
HOI / S&P	Long-term credit	A-	CreditWatch Negative
HOI / Moody's	Senior unsecured debt	Baa1	Stable Outlook
HOI / DBRS	Issuer, Senior Unsecured Debentures	A (high)	Stable Outlook
Avista / S&P	Issuer	BBB	CreditWatch Positive
Avista / Moody's	Issuer	Baa1	Negative Outlook

Q. Are Hydro One's credit ratings investment grade?

A. Yes. That indicates Hydro One has access to capital on reasonable terms and conditions.

Q. Mr. Muldoon's discussion of communications with rating agencies suggests that messaging is important and Provincial leadership should communicate to rating agencies regarding Hydro One.[3] Would you agree with that suggestion?

A. While Mr. Muldoon is entirely correct that communications by a rated company with its rating agencies are important, I do not think Provincial leadership should communicate as Mr. Muldoon suggests, nor could it reasonably be expected to do so. To the best of my knowledge, since Hydro One became an investor owned utility, the Province has never met or communicated directly with the credit rating agencies about Hydro One's credit. As discussed by Mr. Shipman in his report to Mr. Reed (Exhibit 2601), and by Mr. Reed,[4] it would be highly unusual for a shareholder of a publicly-traded company, like the Province in the case of Hydro One, to have a role in credit rating agencies' presentations or communications for the company. In general, minority shareholders – even large minority shareholders – do not communicate with rating agencies on behalf of the company. The fact that the Province is not only a shareholder but also has legislative authority is not relevant here. Credit rating agencies rely on a company's management team for information and their own assessment of the company's financial and business risks in the development of credit ratings.

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[3] Muldoon, Commission Staff Ex. 600, page 10 (lines 11-13); see also Muldoon, Highly Confidential Commission Staff Ex. 601, page 16 (lines 13-19).
[4] Reed, Hydro One Ex. 2501, page 20 (lines 9-18).

Q. Please describe Hydro One's system for communicating with rating agencies and whether it has changed materially over the past year.

A. Hydro One meets with rating agencies during its annual review process and may provide updates on any material company or industry developments. We also obtain confirmation of ratings each time we issue new debt.

Q. Does this approach to communicating with rating agencies reflect prudent utility practice?

A. Yes.

Q. Mr. Muldoon cited to a Moody's publication that described an expectation of diminished Provincial support for Hydro One.[5] Should the Commission be concerned about that statement?

A. No, not at all. Moody's made that statement in its June 20, 2018 Press Release (*see* Exh. 2501 – see the first sentence in the 'Ratings Rationale' section) and notes that Moody's no longer views Hydro One Inc. as a government-related issuer under its methodology for rating government-related issuers.

Q. Are the recent developments relating to stock prices that Mr. Muldoon describes[6] relevant to the benefits that Avista customers will receive from the Proposed Transaction?

A. No, not at all. As Mr. Muldoon accurately observed,[7] Hydro One already has taken all necessary steps to secure funding for the Proposed Transaction and to provide

[5] Muldoon, Highly Confidential Commission Staff Ex. 601, page 15 (line 10-13 and footnote 10). Footnote 10 cites to a Standard & Poors report that Hydro One filed on Sept. 14, 2018, but based on Mr. Muldoon's reference to Moody's and the existence of a Moody's report that references Provincial support, we believe the citation should have been to Moody's June 20, 2018 press release.
[6] Muldoon, Commission Staff Ex. 600, page 12 (line 17) to 13 (line 10).
[7] Muldoon, Commission Staff Ex. 600, pages 10 (line 18) –12 (line 4); *see also* page 18 (lines 1-9).

coverage for its financial commitments – "the Applicant has taken cost effective action (in obtaining Canadian $4 Billion in credit lines) to guarantee it can meet the Stipulated Commitments[.]"[8] Moreover, the ring-fencing commitments ensure that no dividends will be paid in the event of potential financial risk to Avista.

III. SUFFICIENCY OF EXISTING COMMITMENTS

Q. Does Hydro One continue to believe that the Commission should approve the Proposed Transaction, including the merger commitments in the Settlement Agreement[9]?

A. Yes, we continue to believe that the Proposed Transaction brings substantial net benefits to Avista's Oregon ratepayers and will also promote the public interest in Oregon, for all the reasons we have previously discussed. While we recognize that the change of Hydro One's CEO and board were surprising, in a way, this turn of events underscores the strength of the 115 merger commitments (each, a "Stipulated Commitment," collectively, the "Stipulated Commitments") that were already in place: nothing that happened in Ontario would have had any impact on Avista if the transaction had already closed.

Q. Nevertheless, is Hydro One willing to adopt additional measures?

A. Yes. As we have previously informed the Commission, Stipulated Commitment No. 4 gives the Avista Board sole power over the selection of Avista's CEO,[10]

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[8] *Id*. at pages 11 (lines 17-18).

[9] UM-1897 - All-Party Stipulation (May 25, 2018) (including Appendix A, Oregon Commitments).

[10] *See* Stipulated Commitment No. 4 ("Any decision to hire, dismiss or replace the [CEO] of Avista shall be within the discretion of the Avista Board of Directors, and shall not require any approval of Hydro One or any of its affiliates (other than Avista) . . ."); Scarlett, Hydro One Ex. 1600, page 30 (lines 12-19)

and we have proposed a new commitment regarding the setting of compensation for Avista executives.[11]

Q. Would you consider any other measures?

A. Yes. Although we cannot accept the independent Governance Committee concept that Staff has proposed, which I discuss in detail below, we would consider alternative additional provisions designed to address concerns about the Province's relationship with Hydro One, even though we do not believe they are necessary.

IV. STAFF'S PROPOSAL FOR AN INDEPENDENT GOVERNANCE COMMITTEE

Q. Does Hydro One agree that an independent Governance Committee should be established through revisions to Stipulated Commitment No. 5 for the Avista Board as proposed by Staff?[12]

A. No, this governance proposal is extremely problematic because it would leave Hydro One in a position where it could designate only two of the nine directors on Avista's Board, even though Hydro One will indirectly own all of Avista's stock. Under Staff's proposal, independent directors would designate five directors and each of Hydro One and Avista would designate two.

Q. Why would it be problematic for Hydro One to designate only two seats on Avista's Board, as long as five of the nine seats were filled by independent directors?

[11] *See* UM-1897 - First Supplemental Report to Hydro One Limited's Response to July 14, 2018 Bench Request (July 18, 2018), p. 8; Scarlett, Hydro One Ex. 1600, page 31 (line 1-20).
[12] Muldoon, Commission Staff Ex.600, page 15 (lines 17-19); Anderson, Commission Staff Ex.700, *passim.*

A. This extremely unusual situation would create two types of problems. First, it could lead to significant adverse action on the part of S&P, as detailed in Exh. 2600 (Rebuttal Testimony of John Reed). Second, it would create significant difficulties from a tax and accounting perspective.

Q. Please explain the tax and accounting problems.

A. The proposed governance commitment would result in Hydro One not having control of Avista's Board and as a consequence, Hydro One would likely be unable to consolidate Avista; rather Avista would be accounted for using the equity method of accounting. This would significantly change reporting results. Furthermore, Hydro One and Avista could not file U.S. federal tax returns on a consolidated basis.

Q. Please explain what you mean when you refer to Hydro One not having control of the Avista Board?

A. I am referring to the power to designate a majority of the Board of Avista, even when three of the five Hydro One designees will be independent as defined by the NYSE. In other words, for rating agency, reporting and tax purposes, Hydro One will have sufficient control under the majority-independent board structure established by the existing commitments to consolidate Avista, but it would lose that control and ability if Staff's proposal for a Governance Committee were implemented.

Q. Why would it be problematic if Hydro One could not consolidate Avista?

A. If Hydro One could not consolidate Avista, it could result in Hydro One having increased debt on its balance sheet (debt component of financing structure) without the benefit of Avista's cashflows. This would have negative implications for credit metrics, as we could have more debt and no additional cash flow to service the debt, which would result in weaker

Funds from Operations ("FFO")/Debt metrics. This, in turn, could lead to a lower credit rating.

Furthermore, the inability to be able to file a Hydro one and Avista consolidated U.S. federal tax return would result in higher cash taxes.

Q. What would be the impact on Hydro One's FFO/Debt metrics?

A. The credit metrics could deteriorate which would result in a credit rating downgrade for Hydro One.

Q. Staff suggests that because this nominating committee structure was acceptable to Sempra in its acquisition of Oncor, it should also be acceptable to Hydro One in its acquisition of Avista.[13] Do you agree?

A. No. The Sempra/Oncor transaction was vastly different from our situation. As detailed in Exh. 2600 (Rebuttal Testimony of John Reed), we are not aware of any other transaction in which the acquiring company was willing to give up the right to appoint a majority of the subsidiary's board.

Q. How was Sempra/Oncor different?

A. Again, Mr. Reed goes into more detail on this issue, but significantly:

- Oncor's ring-fencing provisions, including restrictions on Oncor's parent company's ability to appoint, remove, and replace a majority of the Oncor Board of Directors, were put in place in 2007 as part EFH's leveraged buyout of Oncor in order to protect Oncor from the large amount of leveraged buy-out debt used to finance the purchase.

- NextEra had previously planned to acquire all of Oncor, but withdrew from the transaction when the Texas Commission refused to remove the ring-fencing condition that would have required a nominating committee. NextEra would not go forward with the transaction unless it could "link" its credit rating with Oncor's.

[13] Anderson, Commission Staff Ex. 700, page 12 (line 16) - 13 (line 9).

- Sempra did not acquire all of Oncor; Oncor continues to have a minority owner that already had the power to block certain actions by the majority owner; thus, Sempra did not give up the power that Staff would have Hydro One give up..

- In its Final Order, the Texas Commission does not highlight the commitments relating to the independent Boards in its evaluation of whether the transaction was ultimately in the public interest. Final Order, Joint Report and Application of Oncor Electric Delivery Company LLC and Sempra Energy for Regulatory Approvals Pursuant to PURA § 14.101, 39.262, and 39.915, Sip Op. at pgs. 4-5 (March 8, 2018). However, the Texas Commission does highlight the importance of the acquirer's investment-grade credit rating and commitment to extinguish all debt that resides above Oncor.

Q. Do you have any proposals relating to governance that the Commission could consider as an alternative to Staff's proposal?

A. Yes. In response to Staff's concern that the Province maybe become overly involved in Hydro One's affairs, even though we believe that Avista is already fully protected by existing governance and financial ring-fencing, we would be comfortable with two additional provisions that focus on the precise concern Staff has expressed: Provincial involvement with Hydro One. The first provision would revise Stipulated Commitment No. 5 to limit the total number of Hydro One executives and employees on the Avista board at any given time to four out of nine. The second provision would provide an express right to seek rehearing in the event of any legislation, rule, policy, or directive in Canada that affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment.

Q. Can you provide Hydro One's proposed change to Commitment No. 5?

A. Yes, the proposed change to Commitment No. 5 is as follows (note that red text indicates proposed revisions):

5. Avista Board of Directors (BOD)

Avista and Hydro One agree that after closing of the Proposed Transaction, Avista will have a separate board of directors from Hydro One that consists of nine (9) members, determined as follows:

Five Hydro One Designated Directors:

Two executives of Hydro One or any of its subsidiaries, and

Three Independent Directors who are residents of the Pacific Northwest Region.

Four Avista Designated Directors:

Three directors who as of immediately prior to the closing of the Proposed Transaction are members of the Board of Directors of Avista, including the Chairman of Avista's Pre-Merger Board of Directors (if such person is different from the Chief Executive Officer of Avista), and

Avista's Chief Executive Officer.

At least two of the Avista directors must be Independent Directors.

Avista and Hydro One shall consult with each other prior to the designation of any Independent Directors.

The initial Chairman of Avista's post-closing Board of Directors shall be the Chief Executive Officer of Avista as of the time immediately prior to closing for a one year term. If any Avista designee resigns, retires or otherwise ceases to serve as a director of Avista for any reason, the remaining Avista designees shall have the sole right to nominate a replacement director to fill such vacancy, and such person shall thereafter become an Avista designee.

Hydro One shall have the unfettered right to designate, remove and replace the Hydro One designees as directors of the Avista Board with or without cause or notice at its sole discretion, subject to the requirement that:

(i) two of such directors are executives of Parent or any of its subsidiaries; and

(ii) three of such directors are Independent Directors who are residents of the Pacific Northwest region, while such requirement is in effect (subject in the case of clause (ii) hereof to Hydro One determining, in good faith, that it is not able to appoint an Independent Director who is a resident of the Pacific Northwest region in a timely manner, in which case Hydro One may replace any such director with any person, including an employee or executive of Hydro One or any of its subsidiaries on an interim basis, not exceeding six months, provided that Hydro One designees who are employees or executives of Hydro One or any of its subsidiaries shall in no case constitute a majority of the directors of Avista, after which time Hydro One shall replace any such interim director with an Independent Director who is a resident of the Pacific Northwest region). If, at any time a circumstance arises, and during the pendency of any such circumstance, whereby the Province of Ontario ("Ontario") exercises its rights as a shareholder of Hydro One, uses legislative authority or acts in any other manner whatsoever, that results, or would result, in Ontario appointing nominees to the board of directors of Hydro One that constitute, or would constitute a majority of the directors of such board, then Hydro One's authority to replace an Independent Director with an employee or executive on an interim basis is suspended for the pendency of such circumstance.

Q. Can you provide Hydro One's proposed new commitment on the right to seek a rehearing in the event of any legislation, rule, policy, or directive in Canada that affects Avista's operations or Hydro One's compliance with any commitment?

A. Yes, the proposed new commitment is as follows:

PROPOSED NEW COMMITMENT 116

In the event of the enactment or adoption of any legislation, rule, policy, or directive by government at any level or by any governmental entity or official in Canada (a "Legislative Action") that affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, any of the parties to this proceeding may petition the Commission at any time to consider whether the Commission should amend its final order, and neither Hydro One nor any of its subsidiaries, including Avista, will oppose initiation of such a proceeding. Hydro One will report to the Commission any such Legislative Action in Canada that, in Hydro One's reasonable judgement, affects Avista's operations because of Avista's corporate relationship with Hydro One, or affects Hydro One's compliance with any commitment in this stipulation, as soon as practicable after it is publicly announced as being effective by the government or governmental entity or official. Nothing in this Commitment 116 shall be interpreted to limit the positions or arguments that Avista or Hydro One may take or advance in any such proceeding, including the right to argue that a petition presents insufficient grounds or evidence. Prior to filing a petition with the Commission under this Commitment 116, a party must provide Hydro One and Avista at least 30 days advance written notice and an opportunity to meet and confer about resolutions other than filing with the Commission under this commitment. Nothing in this commitment is intended to restrict the rights of the parties to petition the Commission concerning its order(s) in this docket, or to limit the authority of the Commission.

Q. Does Hydro One propose any additional changes to its Stipulated Commitments?

A. Yes. Hydro One also proposes to add the following to Stipulated Commitment No. 4:

> Any decisions regarding Avista employee compensation shall be made by the Avista Board consistent with the terms of the Merger Agreement between Hydro One and Avista, and current market standards and prevailing practices of relevant U.S. electric and gas utility benchmarks. The determination of the level of any compensation (including equity awards) approved by the Avista Board with respect to any employee in accordance with the foregoing shall not be subject to change by Hydro One or the Hydro One Board.

The addition of this language makes clear that the Avista Board will make all decisions regarding the compensation of Avista employees, further ensuring that Hydro One cannot exert any inappropriate control over Avista.

V. STAFF'S PROPOSAL FOR DELAY

Q. Staff has proposed that the Commission delay acting on Hydro One's application for several months.[14] Is that acceptable to Hydro One?

[14] Muldoon, Commission Staff Ex. 600, page 40 (line 2-21) and page 41 (line 18) to page 42 (line 19); see also Muldoon, Highly Confidential Commission Staff Ex. 601, page 10 (lines 8-23).

A. No. Hydro One does not believe delay would serve any useful purpose because sufficient information is already available and a delay of several months is unlikely to provide any additional information that is material to whether the Proposed Transaction provides net benefits to Avista's customers and serves the public interest. Hydro One has a strong preference to be able to close the Proposed Transaction by December 31, 2018. A year-end transaction close date has several advantages. First, Avista will be required to a have an audit of its financials as of the transaction close date. If that date is different than December 31st or January 1st, multiple audits would be required. Second, more accurate valuation information is available at year-end cutoff for accounting. In addition, a valuation of the pension will be required as of the transaction close date. Avista would not need to have a mid-period pension valuation completed by a third party actuary as well as the normal year-end pension valuation. Finally, Avista would avoid a "stub period" federal tax return, which again would save costs and minimize potential errors. In the end, a closing at the end of the year would provide limited disruption to the normal closing and reporting cycles, which saves costs and enhances the quality of financial reporting. Mr. Scarlett's rebuttal testimony provides additional reasons why there should be no delay.[15]

Q. When do you need final orders from all state commissions in order to meet your closing deadline?

A. We need orders in hand by December 14, 2018 to be able to close the Proposed Transaction by our preferred date of December 31, 2018 for the reasons I explained earlier. I expect that it will take approximately two weeks to complete the process established by the

[15] Scarlett, Hydro One Ex. 2400, Page 9 (line 3) - page 10 (line 6).

most favored nation provisions in all states (see Stipulated Commitment No. 115). Additional time will be needed to finalize details relating to financing and other matters. .

Q. What is the very latest date for completion of the Proposed Transaction?

A. Under the merger agreement, the transaction end date was originally September 30, 2018. Pursuant to section 7.1(b)(i) of the merger agreement, either party has the right to unilaterally extend that date by up to six months, if necessary to satisfy all of the conditions for closing. On September 19, 2018, Avista provided notice to Hydro One, extending the transaction end date to March 29, 2019. Mr. Morris, through Avista Exh. 2101, provides a copy of this notice letter.

VI. ADDITIONAL MATTERS

Q. Have you reviewed CUB's discussion of Hydro One's rates[16]?

A. Yes. CUB accurately notes that "Hydro One is an electricity distribution company. It does not generate electricity for its customers. In 2014, 62.1% of Ontarian rates were due to generation."[17]

Q. CUB outlines a number of concerns regarding the politics in Ontario, and in a somewhat similar vein, Staff questions whether the Progressive Conservative's promise to reduce rates by 12% could cause Hydro One not to invest in Avista and to seek greater cash flows from Avista. Are these concerns well-founded?

A. No, not at all, for several different reasons. First and foremost, cash flows from Avista have no bearing on rates for Ontario utility customers, so reducing Hydro One's

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[16] Gehrke-Jenks, CUB Ex. 200, pages 13-15.
[17] *Id.*, page 13, footnote 29.

investment in Avista or increasing cash flows from Avista would do nothing to reduce rates in Ontario. Further, Hydro One does not intend its acquisition of Avista to supplement Hydro One's rate revenue in its Ontario service territory. To the contrary, the acquisition of Avista is a strategic investment: (a) it expands Hydro One's reach into a new geographical market and into the natural gas distribution business, (b) it creates geographic diversification and (c) it increases scale. Like Avista, Hydro One earns a regulated rate of return and the regulatory constraints on rates are a universal fact of the utility business, not something specific to Hydro One. This deal is in no way intended to subsidize the rates of Hydro One customers, but rather, it is part of a strategy of diversification and growth with a partner that is a strong cultural match.

Second, Hydro One is obligated by its commitments to invest in Avista, including investment through equity infusions. For example, (i) Stipulated Commitment 44 (Capital Support) requires Hydro One to provide equity injections to support Avista's capital structure, (ii) Stipulated Commitment 45 (Common Equity Floor (CEF) in Capital Structure) requires Hydro One to make equity injections as necessary to maintain a CEF for Avista's Capital Structure consistent with Table 2's required equity and credit ratings thresholds, (iii) Stipulated Commitment 45 also requires Hydro One and Avista to notify the Commission if the actual or projected CEF will drop below one-half of one percent above the required target based on the applicable Credit Ratings in Table 2, (iv) Stipulated Commitment 45 further mandates that Avista maintain the ability to issue first mortgage bonds, a low cost method of financing that benefits customers, (v) Stipulated Commitment 50 (Restrictions on Upward Dividends and Distributions) restricts upward dividends from Avista to Hydro One, and (vi) Stipulated Commitment 43 (Cost of Capital) ensures that no cost of capital element may be more costly after the close of the merger than it would have been had the merger not occurred. Stipulated Commitment 91 (Sources of Funds for Hydro One and Avista Commitments) specifies that retained earnings at Avista that are eligible for payment of dividends to Olympus Equity LLC, consistent with the ring-fencing provisions in the commitments, may be used to fund commitments that require Hydro One and/or Avista funding.

All of these commitments are enforceable because Hydro One has submitted to the jurisdiction of the Commission and Oregon courts for enforcement of the Stipulated Commitments. *See* Stipulated Commitments 110 (Commitments Binding), 111 (Commission Enforcement of Commitments), 112 (Submittal to State Court Jurisdiction for Enforcement of Commission Orders), 113 (Annual Reporting on Commitments), and 114 (Resolution of Violations: Expedited Resolution of Minor and Procedural Compliance Issues).

Third, Hydro One's ability to increase cash flows from Avista is very limited due to the merger commitments that restrict cash flows under a number of circumstances and due to the fact that the majority of Avista's board – which will make decisions on issuing dividends – is comprised primarily of independent directors. Stipulated Commitment 46 (Avista Debt and Preferred Stock) prohibits Avista and its subsidiaries from making loans or transferring funds (other than dividends and payments pursuant to the MSA or equivalent cost allocation manual) to Hydro One or its affiliates without prior Commission approval. Stipulated Commitment 68 (Cost Allocations and Affiliate Interests) contains the same provision.

Stipulated Commitment 50 (Restrictions on Upwards Dividends) further restricts Avista's ability to make upward dividends, distributions, or like payments to Olympus Equity LLC under certain circumstances related to Avista's EBITDA, Avista's CEF, and Avista's S&P or Moody's long-term (local currency) issuer credit ratings. Stipulated Commitment 50 also prohibits Avista and Hydro One from requesting any extraordinary or special dividends or payouts for five years after the close the Proposed Transaction, and thereafter the Commission will have 60 days to review any application for a special upward dividend. Finally, Stipulated Commitment 50 includes restrictions on the compound annual growth rate of Avista's regular quarterly dividends to Olympus Equity LLC.

Under Stipulated Commitment 54 (Avista Cash Flows) Hydro One, its subsidiaries, and affiliates are prohibited from placing Avista's revenues in the accounts of Hydro One, its subsidiaries, or affiliates prior to the issuance of an upward dividend, thereby prohibiting the commingling of Avista funds in common accounts prior to an upward dividend issuance out of Avista. Stipulated Commitment 67 (Separate Books and Records) prohibits the commingling of Avista assets, cash flows, and financial accounts with those of Hydro One or subsidiaries.

In addition to these many restrictions on cash flows and upward dividends, Stipulated Commitment 39 (Foreign Exchange and Hedging on Dividends Payments and Allocations) requires Hydro One and Avista to hold Avista customers harmless from any currency exchange or related cash flow smoothing or hedging costs pertaining to activities beyond Avista's Oregon operations and not usual and customary prior to the close of the Proposed Transaction.

Fourth, Hydro One has to support Avista in order for Avista to meet the safety and quality service standards established in the merger commitments, including Stipulated Commitments 10 (Safety and Reliability Standards and Service Quality Measures), 11–31 (Customer Service Quality Commitments), and 32–33 (SENDOUT Software Suite for Commission Staff, CUB and AWEC).

Finally, it is in Hydro One's own interest to invest in Avista. Having spent $5.3 billion on acquiring Avista, it would be counterproductive for Hydro One to fail to support the utility going forward. As AWEC's witness Mr. Mullins observed, "At this time, AWEC has no reason to doubt that Hydro One's new Board and CEO will act in a manner that is prudent and reasonable with respect to Avista because it is in Hydro One's best interest to do so."

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

CHRISTOPHER F. LOPEZ
Exhibit No. 2501

Moody's June 20, 2018 Press Release

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's downgrades Hydro One Inc to Baa1 from A3; rating outlook stable

20 Jun 2018

Toronto, June 20, 2018 -- Moody's Investors Service ("Moody's") downgraded the ratings for Hydro One Inc. (HOI), including its senior unsecured ratings and its Medium Term Note program to Baa1 from A3. The Prime-2 commercial paper rating has been affirmed. The rating outlook has been changed to stable from negative.

"The acquisition of Avista into the Hydro One corporate family has negative implications for the probability of extraordinary support to Hydro One Inc," said Vice President and Senior Credit Officer Gavin MacFarlane. "The probability of government support is diminishing because it would benefit stakeholders outside of the regulated utility in Ontario."

Downgrades:

..Issuer: Hydro One Inc.

....Senior Unsecured Medium-Term Note Programs, Downgraded to (P)Baa1 from (P)A3

....Senior Unsecured Regular Bonds/Debentures, Downgraded to Baa1 from A3

Outlook Actions:

..Issuer: Hydro One Inc.

....Outlook, Changed To Stable From Negative

Affirmations:

..Issuer: Hydro One Inc.

....Senior Unsecured Commercial Paper, Affirmed P-2

RATINGS RATIONALE

Moody's no longer views Hydro One Inc. as a government related issuer under our methodology. Moody's no longer assigns any probability of extraordinary government support in HOI's credit analysis which has led to the downgrade. Moody's rarely views subsidiaries of holding companies as GRI's but had previously viewed HOI as a GRI because parent Hydro One Limited (HOL unrated) was effectively a shell holding company with only a small amount of preferred shares that were held by the government. By not treating HOI as a GRI, Moody's will no longer assign a Baseline Credit Assessment (BCA), default dependence or probability of extraordinary support. Moody's expects the acquisition of Avista to close in the second half of 2018.

HOI's Baa1 senior unsecured rating reflects its low business risk profile, where roughly 60% of the rate base is transmission and 40% is distribution, driven by a supportive regulatory environment under the Ontario Energy Board (OEB). We expect cash flow from operations to remain predictable and financial metrics to remain weak for the rating. Moody's acknowledges that HOI's lower financial metrics are primarily a result of the existing allowed return on equity (currently 9%) and authorized equity layer in the capital structure (currently 40%) that are established by the regulator.

Outlook:

The stable rating outlook reflects Moody's expectation that HOI will continue to deliver a stable underlying financial performance, including a ratio of cash flow to debt in the 11-13% range over the next several years and that the regulatory relationship with the OEB will remain constructive and supportive.

What could change the rating up:

An upgrade is possible with improved financial metrics, for example if the ratio of CFO pre-W/C to debt rose to the mid-teens range for a sustained period of time (the ratio was 12.4% at 03/31/2018). We could also upgrade the company with improved regulatory outcomes.

What could change the rating down:

We could downgrade the company if CFO pre-W/C to debt is below 11% or if the company experienced a deterioration in its regulatory outcomes.

Hydro One Inc. (HOI) is an electricity transmission and distribution company. HOI is about 47.4% indirectly owned by the Province of Ontario; however, its ownership position in Hydro One Inc. will likely decline to about 40% over the next several years. Hydro One Limited (HOL) is the publicly traded vehicle that owns 100% of HOI. HOI is regulated by the Ontario Energy Board (OEB) under cost-of-service and incentive rate frameworks.

The methodologies used in these ratings was the Regulated Electric and Gas Utilities published in June 2017 and the Government Related Issuers Methodology published in June 2018. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

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BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

REBUTTAL TESTIMONY OF JOHN R. REED, CONCENTRIC ENERGY ADVISORS, ON BEHALF OF HYDRO ONE LTD. AND AVISTA CORPORATION

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is John J. Reed. I am President and Chief Executive Officer of Concentric Energy Advisors, Inc. ("Concentric") and CE Capital Advisors, Inc. ("CE Capital"), which has its headquarters at 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

Q. On whose behalf are you submitting this testimony?

A. I am testifying on behalf of Hydro One Limited ("Hydro One") and Avista Corporation ("Avista") in support of the proposed transaction of Hydro One and Avista (the "Proposed Transaction") and the all-party stipulation ("Settlement Stipulation") in this proceeding filed with the Public Utility Commission of Oregon ("Commission") on May 25, 2018.

Q. Have you previously filed testimony in this proceeding?

A. Yes, I filed Supplemental Testimony in this proceeding on August 30, 2018.

Q. What is the purpose of your testimony?

A. The purpose of my Rebuttal Testimony is to respond to the Reply Testimonies of the Oregon Public Utility Commission Staff ("Staff") witnesses Matt Muldoon and Rose Anderson, Oregon Citizens' Utility Board ("CUB") witnesses Bob Jenks and William Gehrke, and the Alliance of Western Energy Consumers ("AWEC") witness Bradley G. Mullins as they pertain to the ability of the Province of Ontario ("Province") to impact Avista and the sufficiency of the governance, financial integrity and ring-fencing provisions of the

Commitments attached as Exhibit A to the Settlement Stipulation[1] ("Stipulated Commitments").

Q. Are you sponsoring any exhibits that accompany your testimony?

A. Yes:

- Exhibit 2601 is a report from Todd Shipman, an Executive Advisor with Concentric, that I am relying on in the opinions expressed in my testimony. Mr. Shipman is an expert on utility credit ratings, having recently completed 21 years as an analyst at Standard & Poor's.

A table of contents for my testimony is as follows:

II. SUMMARY OF REBUTTAL TESTIMONY

Q. Please briefly summarize the Reply Testimonies you respond to.

A. Hydro One and Avista recently submitted Supplemental Testimony addressing the recent developments in the Province and changes in Hydro One's Board of Directors and executive management and explaining how the Stipulated Commitments continue to be fully

[1] AVU-E-17-09 and AVU-G-17-05, Settlement and Stipulation (April 13, 2018) ("Settlement Stipulation").

protective of the public interest in Oregon, as well as the interests of Avista's Oregon customers. Both Staff and CUB disagree, asserting that the recent changes highlight new information not known when they entered into the Settlement Stipulation, namely that the Province has new/previously unknown influence or control over Hydro One which could influence Avista. In reaching this conclusion, Staff and/or CUB speculate about many things including why different members of Hydro One's executive team resigned, the import of Hydro One having a separate CEO and a separate Chairman of the Board (which is unchanged[2]), whether Hydro One and the Province of Ontario remain committed to the merger and to Avista, how politics in the Province may affect Hydro One in the future, and the views and potential actions of the credit rating agencies. In contrast to the views of Staff and CUB, AWEC explicitly recognizes that the potential for the Province to exercise influence over Hydro One was known when it entered into the Settlement Stipulation supporting the Proposed Transaction.[3]

Each of these parties offers a different recommendation to the Commission. Staff recommends that the Commission take a "wait and see" approach to the Proposed Transaction, allowing more time to pass until the Commission issues its order. Staff also recommends significant modifications to the Stipulated Commitments' already highly restrictive governance provisions in Stipulated Commitment No. 5, arguing that not only should Avista have an independent Board, but Hydro One would effectively have the number of directors of

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[2] *See* Hydro One Rebuttal Testimony of James Scarlett, Exhibit 2400 ("Scarlett Rebuttal"); Hydro One Rebuttal Testimony of Thomas Woods, Exhibit 2300.

[3] AWEC Reply Testimony of Mr. Mullins to Hydro One and Avista Supplemental Testimony, Exhibit 100, September 20, 2018, at 1 ("AWEC Reply").

Avista that it can nominate reduced from five (out of nine total) to two.[4] CUB goes much further and completely abandons the Settlement Stipulation and proclaims that it "cannot envision any ring-fencing arrangements that will protect Oregon ratepayers from potential actions coming from the provincial government"[5] and recommends the Commission reject the Proposed Transaction. Finally, AWEC recommends that the Commission approve the Proposed Transaction subject to Hydro One demonstrating it remains committed to the merger and the Stipulated Commitments and accepting its proposed more modest expansion of Stipulated Commitment No. 5.

Q. Please summarize your general response to these parties.

A. As I stated in my Supplemental Testimony, the recent developments do not affect the Settlement Stipulation's conclusion that the Proposed Transaction is in the public interest. While I appreciate that none of the parties to the Settlement Stipulation, including Avista or Hydro One, anticipated the departure of Hydro One's Board of Directors and certain executives in response to a change in Provincial leadership, this should not obscure the fact that such changes could occur and that Avista and its customers are fully protected from such events by the Stipulated Commitments. The central question that should be asked is whether these recent changes can realistically have a negative impact on Avista and its customers and whether the Stipulated Commitments adequately address any such impacts. While Staff and CUB assert that the Province has influence over Hydro One, neither identifies any tangible or realistic adverse impacts that any such influence would have on Avista that are not addressed by the Stipulated Commitments. Importantly, these parties have ignored the real and tangible

[4] Staff Reply Testimony of Mr. Muldoon to Hydro One and Avista Supplemental Testimony, Exhibit 600, September 20, 2018, at 6, 42 ("Muldoon Exh. 600 Reply").
[5] CUB Reply Testimony of Mr. Jenks and Mr. Gehrke to Hydro One and Avista Supplemental Testimony, Exhibit 200, September 20, 2018, at 5 ("CUB Reply").

benefits of the Proposed Transaction that would be lost if it did not go forward including the loss to Oregon ratepayers of over $7.5 million in bill credits, an additional annual $2 million contribution to the Avista charitable foundation, a $500,000 payment to Oregon's low-income rate assistance program, an increase of $1,275,000 over the current funding for Avista Oregon low-income weatherization programs, and significant environmental commitments. Nothing in these parties' testimonies changes my view that the Proposed Transaction remains in the public interest and that Avista's customers are well protected by the Stipulated Commitments. I respectfully recommend that the Commission approve the Proposed Transaction and Stipulated Commitments.

Q. Please summarize your specific responses to key issues and recommendations of these parties and your key conclusions.

A. My specific responses and conclusions include:

- There is no legitimate reason to delay approving the merger as Staff recommends. Whether a transaction is in the public interest and will produce benefits for customers is a matter of organizational alignment and buyer commitments, not a matter of individual executives as Staff seems to suggest. The Stipulated Commitments protect Avista and its customers from any adverse effects of the Province's recent involvement in Hydro One's governance and compensation and ensure that the transaction will benefit customers and the State of Oregon. There is no reason to question whether Hydro One remains committed to the merger. It is committed as demonstrated by the testimony filed in this supplemental process. Waiting to approve the merger will serve no positive purpose and will instead delay or put at risk the benefits that stakeholders will receive from the merger.

- Staff's proposal to modify Stipulated Commitment No. 5 is both unnecessary and detrimental to the transaction. As written, Stipulated Commitment No. 5 requires that Avista have a majority independent Board, something that is not often committed to or required in a utility merger. A majority independent Board, coupled with Hydro One's and Avista's other governance, financial and ring-fencing commitments ensure that the Avista Board will discharge its obligations to fulfill all of the terms of the Stipulated Commitments and to govern Avista effectively.
- Staff's proposed modification to Stipulated Commitment No. 5 could eliminate one of the key benefits of the merger Staff itself recognized – the positive impact on Avista's and Hydro One's credit ratings through linking the two firms' credit profiles.[6] As I discuss in more detail later in my Rebuttal Testimony, the Proposed Transaction is expected to be credit-positive for both Avista and Hydro One due to their ability to consolidate their credit profiles, thus ultimately creating a lower risk profile together than either would have absent the consolidation. And, perhaps unintentionally, Staff's proposal could raise questions about the viability of the Proposed Transaction's financing and credit rating impacts.
- AWEC's proposed modifications to Stipulated Commitment No. 5 would eliminate the possibility that Hydro One could ever replace more than two of

[6] Muldoon Exh. 600 Reply at 4.

its three designated independent directors on the Avista board with Hydro One executives or employees at the same time. This is acceptable to Hydro One and Avista.

- CUB's proclamation that there are no commitments that can protect customers in light of recent changes is truly puzzling. CUB has identified no realistic negative impact the Proposed Transaction could have on Avista and its Oregon customers. CUB's recommendation lacks both specificity and credibility and should therefore be given no weight by the Commission.
- Evaluating a transaction is clearly a very significant event. While I appreciate the diligence Staff and CUB have shown in evaluating the Proposed Transaction, it would be detrimental to the public interest, and specifically the interests of Avista and its Oregon customers, to adopt the recommendations of Staff and/or CUB now. Importantly, neither Staff nor CUB acknowledge the millions of dollars in customer benefits that will be lost if the Proposed Transaction does not go forward.
- While the recent changes in the Province and at Hydro One were unanticipated, they do not change the facts of this transaction nor do they minimize or eliminate the benefits it will create. Importantly, no party has pointed to any adverse impact that the recent events in Ontario would have on Avista's customers, or that would not be effectively mitigated through the application of the Stipulated Commitments. The Proposed Transaction and Stipulated Commitments are in the public interest and should be approved.

III. STAFF WITNESSES MULDOON AND ANDERSON

Q. Please briefly summarize the Reply Testimony of Staff witness Mr. Muldoon.

A. Mr. Muldoon testifies that the recent changes in the Board of Directors and executives of Hydro One appear to be the result of a "closed door, negotiated agreement that did not follow the established process for the removal of the Hydro One BOD in the Governance Agreement" and that these developments "cast a shadow of doubt that processes agreed to, whether in the Governance Agreement or otherwise, will be followed in the face of political interference."[7] Mr. Muldoon then asserts that both Board-level and executive leadership at Hydro One is unsettled and that it is "too early to predict" if these leaders have the same "enduring vision of the Proposed Transaction."[8] Mr. Muldoon goes on to assert that Provincial leadership and the chairman of Hydro One's Board of Directors have not communicated "consistently and regularly with credit rating agencies, market analysts, and stakeholders showing Provincial support of the Proposed Transaction."[9] Mr. Muldoon expresses concern regarding the credit rating agencies reaction to recent events and implications for the Proposed Transaction. Mr. Muldoon recommends that the Commission delay any action on the Proposed Transaction, and also recommends that Stipulated Commitment No. 5 be modified as proposed by Ms. Anderson because "[t]he Governance Commitment in the Stipulation in particular is likely not effective at adequately mitigating political risks in Ontario."[10]

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[7] Muldoon Exh. 600 Reply at 2.
[8] *Id.* at 3-4.
[9] *Id.* at 4.
[10] *Id.* at 5.

Q. Please provide a brief overview of the Reply Testimony of Staff witness Ms. Anderson.

A. Similar to Mr. Muldoon, Ms. Anderson testifies that Staff is concerned that the Province can influence the governance of Hydro One.,[11] and that this could be mirrored in Hydro One improperly influencing the Avista Board. Ms. Anderson testifies that the proposed merger is unlike any other merger involving a foreign utility that the Oregon Commission has reviewed in the past.[12] Ms. Anderson further testifies that Stipulated Commitment No. 5, even as expanded by Hydro One and Avista in Supplemental Testimony, is not strong enough to protect Avista from Provincial influence.[13] Ms. Anderson proposes to modify Stipulated Commitment No. 5 to include an "independent Governance Committee" for the Avista Board which would be responsible for appointing the Independent Directors on the Avista Board and for recommending Independent Directors for removal from the Board[14] "to help protect against future provincial influence that may not coincide with Oregon ratepayer interests."[15]

Province of Ontario Ownership and Governance Agreement

Q. Does Mr. Muldoon express his concern about the effects of the recent events in Ontario on the rates, service, or risks that Oregon customers would face under the terms of the Proposed Transaction?

A. No, not directly. He expresses concerns about how these or similar events could affect the governance of Avista, and I infer from that that he believes Oregon customers

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[11] Staff Reply Testimony of Ms. Anderson to Hydro One and Avista Supplemental Testimony, Exhibit 700, September 20, 2018, at 4 ("Anderson Exh. 700 Reply").
[12] Anderson Exh. 700 Reply at 5.
[13] *Id.* at 5-7.
[14] *Id.* at 8-9.
[15] *Id.* at 13.

of Avista would be adversely affected. He also does not point to any of the ring-fencing or other provisions of the Stipulated Commitments that would fail to achieve their objective of holding customers harmless if unexpected events arise. Furthermore, the Stipulated Commitments include state-of-the-art ring-fencing and other provisions that will be effective in making sure that Avista's Oregon customers are not harmed by the concerns Mr. Muldoon has raised.

Q. Mr. Muldoon raises concerns that (1) the Province could change Hydro One's policies and governance, including who sits on Avista's Board of Directors, (2) the passage of the Hydro One Accountability Act, 2018 could "set revised expectations to which persons in Hydro One-led companies, including Avista, must aspire to," and (3) the new government's promise to reduce Hydro One's rates could put pressure on Avista to defer investments or draw off Avista's cash.[16] Mr. Muldoon concludes that ring-fencing must "be robust enough to deter and deflect exertion of future Provincial pressure." What is your response?

A. The Stipulated Commitments thoroughly address Mr. Muldoon's concerns. First, Stipulated Commitment No. 5 requires that five of Avista's nine Board of Directors be independent as defined by the NYSE. Hydro One will designate three independent directors who both satisfy the NYSE requirements and reside in the Pacific Northwest. Avista will designate the other two independent directors who are members of Avista's current board. It should also be recognized that in addition to five independent directors, two additional directors will be designated by Avista, resulting in seven of Avista's nine directors being

[16] Muldoon Exh. 600 Reply at 19-20.

independent or Avista designees. The Province cannot determine who will sit on the Avista Board.

Second, Hydro One and Avista are bound by the Stipulated Commitments which, as Mr. Muldoon acknowledges, were "designed to mitigate risk of harm to Avista."[17] In particular, Stipulated Commitment No. 75 specifies that the delivery of safe and reliable utility service at just and reasonable rates in Oregon is included in Avista's management's mission and is a top corporate priority post-merger. Further, as noted in the Supplemental testimonies and rebuttal supplemental testimonies of Mr. Scarlett, Mr. Lopez, Mr. Woods, Mr. Dobson, and Mr. Morris, the executives and management of Hydro One and Avista are completely committed to the transaction and its success. AWEC's witness, Mr. Mullins, points out that "Hydro One and the Province of Ontario have an incentive for the merger to be successful. For that reason, ratepayers can have some assurance that the Province will not impose arbitrary and irrational policy objectives, as those would likely result in the greatest harm to the Province of Ontario itself."[18]

Third, the financial ring-fencing and other Stipulated Commitments work together to protect against financial risk such as those discussed by Mr. Muldoon. As I discussed in detail in my Supplemental Testimony, Stipulated Commitment No. 50 specifically restricts the ability of Avista to pay dividends in certain circumstances, ensuring that Avista's financial integrity and ability to prudently invest in its utility operations cannot be compromised by dividend and distributions to its new parent. Stipulated Commitments Nos. 44 and 53 work together to ensure Avista's post-closing access to capital and that Avista will continue to

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[17] *Id.* at 34.
[18] AWEC Reply at 5.

prudently invest in its utility operations. Stipulated Commitment No. 76 specifies Avista will maintain existing levels of capital where needed and Hydro One will provide capital where needed to improve the safety of regulated pipelines and associated controls.

Staff's Proposal to Delay Consideration of the Proposed Transaction

Q. Mr. Muldoon testifies that "Board-level and executive leadership at Hydro One currently remains very much unsettled. This is a significant concern to Staff and forces Staff to recommend that the Commission take no action in this docket at this time, pausing at least until more information can be gained about the new Board, as well as executive management appointments and retention."[19] Do you agree?

A. No, I do not. As I have stated, there is no legitimate reason to delay approving the merger as Mr. Muldoon suggests. I cannot conceive of any development that will transpire between now and when the Commission will need to act to avoid the expiration of the extension of the Hydro One/Avista Merger Agreement (which expires on March 29, 2019) that would affect whether the transaction is in the public interest. The transaction is in the public interest and will produce benefits for customers. The Stipulated Commitments protect Avista and its customers from influence of the Province and ensure certain benefits of the transaction. There is no reason to question whether Hydro One remains committed to the merger because it has clearly stated that it is committed. Waiting to approve the merger will serve no positive purpose, will instead delay or deny customers the benefits of the merger.

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[19] Muldoon Exh. 600 Reply at 2-3.

Stipulated Commitments and Staff's Proposal to Modify Stipulated Commitment No. 5

Q. Ms. Anderson testifies that Avista should have a majority independent Board of Directors.[20] What is your response?

A. As I noted earlier, Stipulated Commitment 5 already requires that five of Avista's nine Board of Directors be independent as defined by the NYSE. Hydro One will designate three independent directors who both satisfy the NYSE requirements and reside in the Pacific Northwest. Avista will designate the other two independent directors who are members of Avista's current board. That is a "majority independent" board by any rational standard. It should also be recognized that in addition to five independent directors, two additional directors will be designated by Avista, resulting in seven of Avista's nine directors being independent or Avista designees. This is a very strong governance commitment that ensures that Avista's board will protect the interests of Avista if the utility's interests diverge from those of Hydro One and will be cognizant of and responsive to the interests of the states in which Avista provides service.

Q. Ms. Anderson also recommends that the independent directors be designated by an independent Governance Committee that would be comprised entirely of the independent directors and who would have the sole right to nominate replacement independent directors to fill any vacancies and to recommend the removal of independent directors.[21] She also states that this is analogous to the requirement that NYSE-listed firms have an independent Governance Committee, and that it is essentially

[20] Anderson Exh. 700 Reply at 9.
[21] *Id.* at 10-11.

the same structure that Sempra Energy ("Sempra") agreed to in the acquisition of Oncor Electric Delivery Company LLC ("Oncor"). What are your responses to these points?

A. First, let me make clear the effects of Staff's proposal: the proposed amendment for Stipulated Commitment 5 would limit Hydro One to appointing only 2 of the 9 Board members to the Avista Board, even though Hydro One would own 100% of the shares of Avista. Consequently, it would only be allowed to elect 22% of the Avista Board. That would be an unprecedented governance restriction.

Second, Ms. Anderson attempts to analogize her proposal to the requirements for NYSE-listed firms. This is ironic, misplaced, and factually incorrect. It is ironic because the Board and Governance Committee requirements for NYSE-listed firms were created to help insure that Boards are *more* responsive to the interests of shareholders, and less likely to be influenced by firm management. Her proposal does the exact opposite; it makes Avista less responsive to the shareholders of Hydro One and less responsive to the shareholder of Avista. While she seeks to insulate the utility from what she fears will be unfavorable influence by the Province, she fails to explain how any such influence would result in negative consequences for Avista or its customers. Because the Stipulated Commitments include very robust ring-fencing provisions that are designed to protect against exactly that type of adverse influence, her concerns have already been addressed. She also notes that the Province expects to own between 40% and 45% of Hydro One, but she fails to offer any justification for why it is reasonable to disenfranchise the other 55% to 60% of Hydro One's owners, which include public-sector pension funds, unions, First Nations, mutual funds and individual investors. Even more than the Province of Ontario, it is their capital, and that of new bondholders, that will be invested in Avista.

Ms. Anderson also fails to acknowledge that the NYSE's independence requirements do not apply to subsidiary boards. This makes sense when you understand that these provisions are intended to protect the interests of shareholders in the publicly-traded enterprise. Where a subsidiary is 100% owned by its parent, it is presumed that it will be fully responsive to the parent shareholder.

Her requirement that the "Independent Governance Committee" also have unfettered control over the appointment of all independent directors also has no tie to or origin in any NYSE or other regulation or guideline. Quite to the contrary, in a typical NYSE governance model, *all* of the Board members, including all of the members of any Independent Governance Committee, are elected by the shareholders of the corporation. Independence does not mean independently appointed or elected; these directors, like all others, are elected by shareholders.

Finally, her conclusion that the provisions that Sempra agreed to in the Oncor acquisition are the same as what she seeks to impose on Hydro One is misinformed. Sempra acquired a partial ownership share of Oncor, which was previously held by Energy Future Holdings ("EHF"). Oncor also has two other minority owners that held, and still hold, very strong Board-level veto rights that effectively negate the majority owner's control over key financial decisions. So, while Sempra agreed to limit its control over independent Board members, as Ms. Anderson states, neither it nor its predecessor, EFH, had full control of Oncor to begin with. Those circumstances were very different. I am not aware of any other utility merger in the past 20 years that has had this provision imposed on the acquirer.

Q. What is the basis of your assessment of the Oncor/Sempra transaction?

A. I testified on behalf of Oncor on the ring-fencing provisions created by the 2007 EFH acquisition of Oncor. I was also NextEra Energy's expert witness on ring-fencing and other regulatory commitments and considerations in the 2016 proposed transaction between NextEra and Oncor. In my role as an industry expert, I closely followed and am well-familiar with the Sempra acquisition of Oncor which followed three other proposed acquisitions of Oncor.

The Oncor/Sempra merger was a much more complicated transaction, rooted in the history of the formation of Oncor, than either Mr. Muldoon or Ms. Anderson acknowledge. Most of its ring-fencing commitments were legacy commitments from the 2007 leveraged buyout of TXU by several investors, led by private equity firms Kohlberg Kravis Roberts & Co. L.P. and Texas Pacific Group to form EFH, which was a complex, highly-leveraged (*i.e.*, approximately $45 billion in debt),[22] and risky transaction. The ring-fencing protections in particular were necessary because there was such a wide gap between the credit profile and ratings of Oncor and its more highly-leveraged, lower-rated parent, EFH. Without ring-fencing, Oncor was at risk of being rated several notches *below* its pre-acquisition credit ratings. Further, as part of that transaction, EFH sold a minority interest in Oncor to an unrelated third party, TTI[23], which conferred certain special ownership rights to TTI, the minority owner. TTI's special ownership rights were intended to, when combined with the other separateness undertakings, to be sufficient for the complete de-linking of Oncor's credit profile and ratings from those of its parent company. Those special ownership rights, when

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[22] Koons, Cynthia, "TXU Buyout Is First to Test Junk Market Since Squeeze," Wall Street Journal, October 13, 2007.

[23] TTI is wholly owned by Texas Transmission Holdings Corporation, which is beneficially owned by two foreign financial investors, OMERS/Borealis Infrastructure Fund (49.5 percent) and the Government of Singapore Investment Corporation (49.5 percent), and Hunt Strategic Utility Investment L.L.C. (1 percent).

combined with other separateness undertakings, are recognized by the rating agencies' established methodologies to allow separation between a lower-rated parent and its higher-rated subsidiary (*i.e.*, in the case of Oncor, to permit Oncor to have an investment-grade credit rating despite the much lower-rated parent company).

Q. Even if the imposition of Staff's proposed amendment to Stipulated Commitment No. 5 is unnecessary, in your opinion, and unprecedented, is there any harm in imposing it?

A. Yes, there is. Staff's proposed modification to Stipulated Commitment No. 5 could eliminate one of the key benefits of the merger Staff itself recognized – the positive impact on Avista's credit ratings.[24] As I discuss above, the Proposed Transaction is expected to be credit-positive for Avista and Hydro One due to their ability to consolidate their credit profiles thus ultimately creating a lower risk profile together than either would have absent the consolidation. If Staff's proposed modifications to Stipulated Commitment No. 5 were adopted, this consolidation would be jeopardized if not eliminated. If it is eliminated, Hydro One's ability to affordably raise sufficient capital to complete the transaction could be in doubt.

Credit Rating Agencies

Q. Please briefly summarize and respond to Mr. Muldoon's testimony expressing concerns about S&P's September 13, 2018 downgrade and negative outlook for Hydro One's credit rating.

[24] Muldoon Exh. 600 Reply at 4.

A. Mr. Muldoon states that "While S&P notes that this negative outlook and downgrade would not carry to Avista should the Proposed Transaction be completed, one must remember that we earlier looked to Hydro One to boost Avista credit ratings because, in Oregon, we are looking for a net benefit above the Avista status quo."[25] Mr. Muldoon seems to suggest that S&P's action will negatively impact the possibility of ratings uplift for Avista attributable to the Proposed Transaction. I do not agree with this characterization. As described in more detail in the Expert Report of Todd Shipman, attached as Exhibit 2601 to my Rebuttal Testimony, S&P's credit position and positive CreditWatch listing for Avista was untouched by Hydro One's downgrade. Further, even with this downgrade, Hydro One is still rated two notches above Avista in bond ratings. A one-notch credit rating increase for Avista due to the merger is still likely to occur. However, as I discuss in more detail later in my testimony, if Staff's proposed modification to Stipulated Commitment No. 5 is adopted, the credit benefits of the Proposed Transaction will be jeopardized and the transaction could, under certain circumstances, be credit-negative.

Q. Please explain how Staff's proposed modification to Stipulated Commitment No. 5 to include an "independent Governance Committee" would jeopardize the credit benefits of the Proposed Transaction.

A. As proposed, the transaction is expected to be credit-positive for Avista and Hydro One due to their ability to "link" their credit profiles and create a lower risk profile together than either would have absent the consolidation. As Mr. Shipman explains, when a rated subsidiary is part of a larger group of companies within a corporate structure, the S&P ratings of the subsidiary are often affected by the credit profile of the whole group. The

[25] Muldoon Exh. 600 Reply at 36-37.

proposed modification to Stipulated Commitment No. 5 would harm the prospects for the desired ratings uplift by weakening S&P's view of Avista's status within the Hydro One group. As Mr. Shipman observes, "If Avista's status suffers sufficiently from the additional independence of Avista in the eyes of S&P, Avista could forego any opportunity at its current rating to benefit from being owned by a parent with a better credit rating." *See* Exhibit 2601 (Mr. Shipman's Report). In addition, Staff's proposed modification to Stipulated Commitment No. 5 could weaken S&P's assessment of Hydro One's post-merger risk and credit profile, contributing to lowering Hydro One's credit rating and limiting or eliminating the potential for ratings uplift for Avista.

Q. Does Mr. Shipman explain what could happen to Hydro One's credit profile if Staff's modifications to Stipulated Commitment No. 5 are adopted?

A. Yes, he does. Mr. Shipman explains that an indirect effect of Staff's proposed modifications to Stipulated Commitment No. 5 could be a weakening Hydro One's credit profile, to the detriment of the Proposed Transaction and Avista. He explains the factors that S&P reviews to establish credit ratings. These factors include both financial and business risk. Staff's proposed modifications to Stipulated Commitment No. 5 would likely impact S&P's assessment of Hydro One's business risk, which includes the dependability and source of Hydro One's cash flows, regulatory risks, and other factors. Staff's proposed Stipulated Commitment No. 5 would introduce more stringent barriers between Hydro One and Avista that could weaken their assessment of the business risk and "quality of cash flows" for Hydro One. Consequently, Staff's proposal could result in a lower credit rating for Hydro One. A lower Hydro One credit rating works against the desired uplift to Avista's credit rating, which Mr. Muldoon stresses is important to Oregon. Mr. Shipman explains in more detail how the "de-linking" of Avista's and Hydro One's ratings that would be created by Staff's proposed modifications to Stipulated Commitment No. 5 could have this extreme result.

Q Does Mr. Muldoon express other concerns regarding credit ratings?

A. Yes, Mr. Muldoon expresses concern over the fact that "Provincial leadership and the Hydro One BOD chair have not yet started to communicate consistently and regularly with credit rating agencies, market analysts and stakeholders showing Provincial support of the Proposed Transaction."[26]

Q. What is your response to Mr. Muldoon?

A. As discussed by Mr. Shipman, it would be highly unusual for a shareholder of a company, like the Province in the case of Hydro One, to have a role in credit rating agency presentations or communications for the company. Credit rating agencies rely on a company's management team for information and their own assessment of the company's financial and business risks in the development of credit ratings. As Mr. Lopez explains in his Rebuttal Testimony Exhibit 2500, to the best of his knowledge since Hydro One became an investor owned utility, the Province has never met or communicated directly with the credit rating agencies about Hydro One's credit. Further, neither I nor Mr. Shipman have ever seen a provincial or state regulator participate in credit rating agency presentations for another entity's rating in our almost six decades of collective experience.

[26] Muldoon Exh. 600 Reply at 4.

Foreign Acquisitions of U.S. Utilities

Q. While Mr. Muldoon agrees that many states have experience with foreign ownership of utilities, he implies that the Hydro One transaction presents more risk than other transactions involving non-U.S. parents.[27] Do you agree?

A. No. Avista and its customers are well protected by the Stipulated Commitments. Mr. Muldoon recognizes that Hydro One and Avista have already taken steps to ensure compliance with the Stipulated Commitments and that Hydro One has the financial wherewithal to be a strong counterparty for Avista.[28]

Q. What is your response to Ms. Anderson's testimony regarding the acquisition of Arizona-American Water by EPCOR Utilities, a Canadian utility whose sole shareholder is the City of Edmonton?

A. Ms. Anderson seems to misunderstand my Supplemental Testimony regarding the EPCOR transaction. I did not compare this transaction directly to the proposed merger of Avista and Hydro One. I simply identified the EPCOR acquisition as an example of foreign government ownership of a U.S. IOU that required no governance commitments.[29] While Ms. Anderson is correct that the cited EPCOR transaction is smaller than the proposed merger, that does not change the fact that it was approved with no governance commitments. This transaction did not have "lower stakes" as Ms. Anderson testifies.[30] It was thoroughly evaluated in a more than 17-month regulatory proceeding before the Arizona Public Utilities Commission approved the merger without conditions. Ms. Anderson's testimony that the

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[27] Muldoon Exh. 600 Reply at 29-30.
[28] *Id.* at 11.
[29] Supplemental Testimony of John Reed, at 14.
[30] Anderson Exh. 700 Reply at 8.

governance of EPCOR's U.S. subsidiary, EPCOR USA, is more restrictive than the proposed governance of Olympus Equity in the Proposed Transaction is without merit.[31] Ms. Anderson refers to an organization chart that was provided in EPCOR's application to the Arizona Public Utilities Commission. Nowhere in this application is the composition of EPCOR USA's board addressed. This organization chart simply depicts EPCOR USA reporting up through a Canadian subsidiary of EPCOR similar to Avista reporting to Olympus Equity. EPCOR's governance is not superior to what Hydro One and Avista have agreed to in the Stipulated Commitments.

Other Stipulated Commitments

Q. Mr. Muldoon testifies that a non-consolidation opinion does not necessarily assure that the Stipulated Commitments are strong enough to fully protect Avista absent the adoption of Staff's proposed modifications to Stipulated Commitment No. 5.[32] What is your response?

A. Mr. Muldoon is entirely mistaken. First, a non-consolidation opinion is a legal opinion addressing the likelihood of the utility becoming an involuntary party to the bankruptcy of an affiliate. Stipulated Commitment No. 57 requires Hydro One and Avista to file with the Commission within 90-days of the closing of the Proposed Transaction a non-consolidation opinion which concludes that ***the Stipulated Commitments are sufficient that any U.S. bankruptcy court or Canadian bankruptcy court would not order the substantive consolidation of the assets and liabilities of Avista with Hydro One or any of its other***

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[31] *Id.*
[32] Muldoon Exh. 600 Reply at 30-31.

affiliates or subsidiaries in the unlikely event of bankruptcy. A non-consolidation opinion provides reliable evidence that the Stipulated Commitments are strong enough to fully protect Avista from involuntary bankruptcy.

Further, additional Stipulated Commitments provide other clear protections and independence from Hydro One in the highly unlikely event of voluntary bankruptcy. Stipulated Commitment No. 55 provides for a "Golden Share" in the event the Avista Board wished to declare voluntary bankruptcy. The "Golden Share" is the sole share of Preferred Stock authorized by the Commission and held by an independent third-party with no financial stake, affiliation, relationship, interest, or tie to Hydro One or any of its affiliates including Avista. Any declaration of voluntary bankruptcy would require the vote of the holder of the Golden Share, and, in any matters of bankruptcy, the Golden Share will override all other outstanding shares of all types or classes of stock. The holder of the Golden Share must be approved by the Commission and ***solely represents the interests of Avista's utility customers***. This is extremely unusual. Even in the Oncor/Sempra merger, which Mr. Muldoon refers to as a "good comparison" for commitments in the Proposed Transaction, the Golden Share holder represented the rights of the utility's investors, not its utility customers. This is a very important distinction which makes Stipulated Commitment No. 55 much more restrictive than other Golden Share commitments. In addition to the holder of the Golden Share, a majority vote of the Independent Directors, including the affirmative vote of at least two of the Avista-designated Independent Directors, is required for Avista to enter into voluntary bankruptcy (Stipulated Commitment No. 56). These Stipulated Commitments are clearly strong enough to protect Avista's customers.

Q. Mr. Muldoon testifies that "commitments should leave all participants and stakeholders, including investors, without doubt of the certain application precluding future challenge or argument."[33] Do you agree?

A. Yes, and the Stipulated Commitments satisfy this objective. As I discussed in my Supplemental Testimony, the commitments are binding (Stipulated Commitment No. 110), the Commission has the ability to enforce them (Stipulated Commitment No. 111) and Hydro One will submit to the jurisdiction of Oregon courts for the enforcement of the commitments (Stipulated Commitment No. 112). Recent events do not change this.

IV. <u>CUB WITNESSES JENKS AND GEHRKE</u>

Q. Please provide a brief overview of the Reply Testimony of CUB witnesses Bob Jenks and William Gehrke.

A. Messrs. Jenks and Gehrke testify that based upon the recent developments in Ontario and at Hydro One, CUB is concerned that the Province of Ontario has direct influence over Hydro One.[34] Messrs. Jenks and Gehrke go on to assert that when CUB joined the Settlement Stipulation it did so under the belief that the Province would be bound by the Governance Agreement,[35] but recent events demonstrate both the Province's broad legislative authority which allows it to "sidestep" the Governance Agreement[36] and that the Province has direct influence over the management of Hydro One.[37] Messrs. Jenks and Gehrke speculate

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[33] Muldoon Exh. 700 Reply at 27.
[34] CUB Reply at 4.
[35] *Id.* at 6.
[36] *Id.* at 8.
[37] *Id.* at 4-5.

about a number of other areas including Hydro One's commitment to the merger,[38] credit ratings,[39] and politics in the Province.[40] Mr. Jenks recommends that the Commission not approve the merger.[41]

Q. Do Messrs. Jenks and Gehrke specifically evaluate the governance, financial and ring-fencing commitments made by Hydro One and Avista in the Settlement Stipulation that CUB is a party to?

A. No. They do not offer any reply testimony addressing the specific commitments made by Hydro One and Avista. Instead, Messrs. Jenks and Gehrke simply make the statement that "CUB cannot envision any ring-fencing arrangements that will protect Oregon ratepayers from potential actions coming from the provincial government."[42]

Q. What is your response?

A. As I discussed in my Supplemental Testimony, the Stipulated Commitments, in particular the Avista governance, ring-fencing and financial integrity commitments, provide significant protections for Avista's customers, including the appropriate separation of Avista from Hydro One, which are well in excess of industry norms.

Q. Please briefly summarize Messrs. Jenks' and Gehrke's testimony regarding credit ratings and the credit rating agencies.

A. Messrs. Jenks and Gehrke testify that Standard and Poor's ("S&P") downgraded Hydro One due to "a governance deficiency related to Hydro One's ownership

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[38] *Id.* at 12.
[39] *Id.*
[40] *Id.* at 13-15.
[41] *Id.* at 16.
[42] *Id.* at 5.

structure."[43] Messrs. Jenks and Gehrke conclude that S&P "clearly believes that the Hydro One Accountability Act increases Hydro One's risk profile."[44]

Q. What is your response?

A. It is correct that Hydro One was downgraded one notch based on what Standard & Poor's regarded as a governance concern. But, what Messrs. Jenks and Gehrke do not point out is that even with this downgrade, Hydro One is higher rated than Avista. This fact bears repeating: even with the concerns about government intervention, when the entirety of the business, financial, regulatory and political risks of the two firms are considered, Hydro One remains two notches above Avista in bond ratings based on Standard & Poor's evaluation. Therein lies one of the benefits of the transaction, which is still expected to be credit positive for Avista, in addition to providing several other benefits to customers and the states in which Avista operates.

V. AWEC WITNESS MULLINS

Q. Please provide a brief overview of the Reply Testimony of AWEC witness Bradley Mullins.

A. Mr. Mullins testifies that "[t]he risk of the recent political events was present when the stipulation was adopted, so AWEC's view of the transaction is largely unchanged. I would note that because of the merger commitments, the current and future political events in the Province of Ontario pose a risk that resides primarily with the Hydro One entity, and not Avista ratepayers."[45] Mr. Mullins testifies that while AWEC was surprised by the recent

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[43] *Id.* at 12.
[44] *Id.*
[45] AWEC Reply at 4.

developments in the Province and at Hydro One, he believes the transaction continues to meet the standard for approval under ORS 757.511 provided Hydro One demonstrates it remains committed to the transaction and the Stipulated Commitments and Stipulated Commitment No. 5 is modified to eliminate the potential for Hydro One executives and employees constituting a majority of the Avista Board, even on a temporary basis.

As I noted in my Supplemental Testimony, if Hydro One were unable to appoint an Independent Director residing in the Pacific Northwest for one of its designees in a timely manner, Hydro One could appoint an interim Director for a no more than a six-month term who is an employee of Hydro One or one of its subsidiaries while it found a suitable Independent Director. Hydro One and Avista have already proposed to limit this restriction such that it would not apply if, at any time a circumstance arises, and during the pendency of any such circumstance, whereby the Province exercises its rights as a shareholder of Hydro One, uses legislative authority, or acts in any other manner whatsoever, that results, or would result, in Ontario appointing nominees to the Board of Directors of Hydro One that constitute, or would constitute a majority of the directors of such board. Mr. Mullins proposes to limit this latitude such that Hydro One executives and employees could never form a majority of the board, even on a temporary basis.[46] In other words, at any point in time, only two of the three independent Hydro One designees could be temporarily replaced with Hydro One executives or employees.

Q. What is your response to Mr. Mullins?

A. I understand this limitation is acceptable to Hydro One and Avista.

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[46] *Id.* at 6.

VI. CONCLUSIONS AND RECOMMENDATIONS

Q. Please summarize your conclusions in response to Staff, CUB and AWEC witnesses' testimonies.

A. As I noted earlier, while I appreciate that none of the parties to the Settlement Stipulation, including Avista or Hydro One, anticipated the departure of Hydro One's Board of Directors and certain executives in response to a change in Provincial leadership, this does not change the fact that Avista and its customers are fully protected from such events by the Stipulated Commitments. While Staff and CUB assert that the Province has influence over Hydro One, neither identifies any tangible or realistic adverse impacts that any such influence would have on Avista that are not addressed by the Stipulated Commitments. My conclusions in response to these parties' recommendations are:

- Waiting to approve the merger will serve no positive purpose and will instead delay or put at risk the benefits that stakeholders will receive from the merger. The Stipulated Commitments protect Avista and its customers from any adverse effects of the Province's recent involvement in Hydro One's governance and compensation and ensure that the transaction will benefit customers and the State of Oregon.
- Staff's proposal to modify Stipulated Commitment No. 5 is both unnecessary and detrimental to the transaction. As written, Stipulated Commitment No. 5 requires that Avista have a majority independent Board, something that is not often committed to or required in a utility merger. Staff's proposal to require an "independent Governance Committee" could eliminate one of the key benefits of the merger Staff itself recognized – the credit-positive impact on

Avista and Hydro One. Further, the expectation of a positive impact on Avista's credit rating is unchanged by Hydro One's recent credit rating downgrade.

- AWEC's proposed modifications to Stipulated Commitment No. 5 to further limit Hydro One's authority to appoint interim directors is acceptable.
- CUB's recommendation that the Commission reject the Proposed Transaction because it cannot envision any commitments that would protect customers in light of recent changes gives scant attention to the structural safeguards built into the Commitments.
- A majority independent Board, coupled with Hydro One's and Avista's other governance, financial and ring-fencing commitments ensure that the Avista Board will discharge its obligations to fulfill all the terms of the Stipulated Commitments and to effectively govern Avista.

Q. Do Hydro One and Avista propose any other modifications or additions to Stipulated Commitment No. 5 or other commitments in response to Staff, CUB and AWEC?

A. Yes. Hydro One and Avista propose to amend Stipulated Commitment No. 5 to require Hydro One and Avista to consult with each other in their selection of all the independent director designees. Hydro One and Avista also propose to amend Stipulated Commitment No. 4 to require that any decisions regarding Avista employee compensation shall be made by the Avista Board and shall not be subject to change by Hydro One.[47]

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[47] See Scarlett Rebuttal, Exhibit 2400.

Q. Has anything raised in the testimonies of Staff, CUB or AWEC witnesses changed your conclusion that the Proposed Transaction is in the public interest?

A. No. Nothing in these parties' testimonies changes my view that the Proposed Transaction remains in the public interest and that Avista's customers are well protected by the Stipulated Commitments. Further, neither Staff nor CUB acknowledge the millions of dollars in customer benefits that will be lost if the Proposed Transaction does not go forward. It would be detrimental to the public interest, and specifically the interests of Avista and its Oregon customers, to adopt the recommendations of Staff and/or CUB now. I respectfully recommend that the Commission approve the Proposed Transaction and Stipulated Commitments.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

Todd Shipman, CFA

Executive Advisor

Mr. Shipman has over 30 years of experience in utility regulation, utility credit analysis, consulting, and capital market strategies. He is an expert witness and specializes in credit rating advisory and hybrid securities. Mr. Shipman's breadth of experience, which extends from financial analysis to regulatory intervention to capital markets, allows him to effectively advise on many areas within the energy industry.

Mr. Shipman is an adjunct faculty member at Boston University, where he teaches advanced undergraduate finance courses that cover capital markets, economic policy, and corporate finance.

PROFESSIONAL HISTORY

Concentric Energy Advisors
Executive Advisors 2018 - Present

Boston University Boston, MA
Lecturer January 2017 - Present

Adjunct faculty member in the Questrom School of Business, Department of Finance and Economics. Teach advanced undergraduate finance courses that cover capital markets, economic policy and corporate finance.

S&P Global Ratings New York, NY and Boston, MA
Senior Director April 2014 - May 2018
Director April 2000 - April 2014
Associate Director March 1997 - April 2000

Sector Specialist on the Global Infrastructure Ratings North American Utilities team. Performed credit surveillance of utilities, pipelines, midstream energy, and diversified energy companies. Chaired most team rating committees. Wrote credit reports and commentaries and led outreach efforts to investors and the regulatory community, including speeches and training seminars. Lead analytical role developing global rating criteria for utilities, master limited partnerships, and hybrid capital securities.

Electric Utility Research Inc (defunct), San Francisco, CA
Senior Vice President May 1996 - March 1997

Edited and contributed to an investor newsletter covering the electric utility industry.

Sithe Energies Inc. New York, NY
Manager, Regulatory Affairs November 1993 - May 1996

Managed state regulatory matters for a major independent power company. Coordinated interventions in regulatory proceedings. Assisted in identifying development opportunities. Participated in investor relations activities.

Regulatory Research Associates Jersey City, NJ
Vice President October 1993 - November 1993
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Analyzed and reported on actions by state regulators affecting the financial status of electric, gas, and telephone utilities for a firm that provided research to the Wall St. community. Contributed to the firm's sell-side research.

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J.D., Texas Tech University School of Law, Lubbock, TX May 1984

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General Criteria:

Group Rating Methodology

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General Criteria:

Group Rating Methodology

*(**Editor's Note:** We're republishing this article following our periodic review completed on Dec. 18, 2017. See the "Revisions And Updates" section for details.)*

1. This article describes Standard & Poor's Ratings Services methodology for rating members of corporate, financial institutions and insurance groups.

2. This paragraph has been deleted.

3. This article presents the rating methodology for members of corporate, USPF, and financial services groups, including how group support interacts with extraordinary government support for government-related entities and systemically important financial institutions.

4. The criteria articulate the steps in determining an issuer credit rating (ICR) or financial strength rating (FSR) on a member of a corporate or financial services group. This involves assessing the group's overall creditworthiness, the stand-alone credit profile of group members, and the status of an entity relative to other group members and the parent company.

5. One of the main rating considerations is the potential for support (or negative intervention) from the parent company or group.

6. These criteria therefore address a key area of "external support" as described in paragraphs 31 to 35 of "General Criteria: Principles Of Credit Ratings," published Feb. 16, 2011.

I. SCOPE OF THE CRITERIA

7. These criteria apply to all regulated and nonregulated members of a corporate or financial services group, including holding companies, and to U.S. public finance entities that utilize obligated group/credit group structures to secure debt.

8. A corporate group for the purpose of these criteria includes industrial entities and utilities. Corporate groups excluded at this time from these criteria are: project finance entities, corporate securitizations, nonprofit and cooperative organizations (other than agricultural cooperatives). A financial services group is predominantly (1) a financial institutions group or (2) an insurance group (see the Glossary in Appendix A for definitions of both). Please see the "Revisions And Updates" section for information about changes in scope since publication.

9. The group rating methodology also sets out our approach for rating nonoperating and operating holding companies at the top of a group structure, as well as intermediate holding companies. It also applies to mutual or cooperative groups, even though group members may not be linked by ownership but by a variety of ties, including mutual-support mechanisms. The methodology also applies to U.S. public finance obligated groups and credit groups ("obligated

groups"), which are a collection of an organization's subsidiaries that are cross-obligated to pay specific debt issues.

10. The criteria assess the group status of a group member to determine a potential long-term ICR or FSR on the entity. For criteria on incorporating government support, see "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015 (subsequently referred to as the "GRE criteria"), and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011 (subsequently referred to as the "bank criteria"). For criteria on credit-substitution debt guarantees, see "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, and "Guarantee Criteria," published Oct. 21, 2016. For constraints posed by the sovereign rating and/or transfer and convertibility risk assessments, see "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions", published Nov. 19, 2013.

II. SUMMARY OF THE CRITERIA

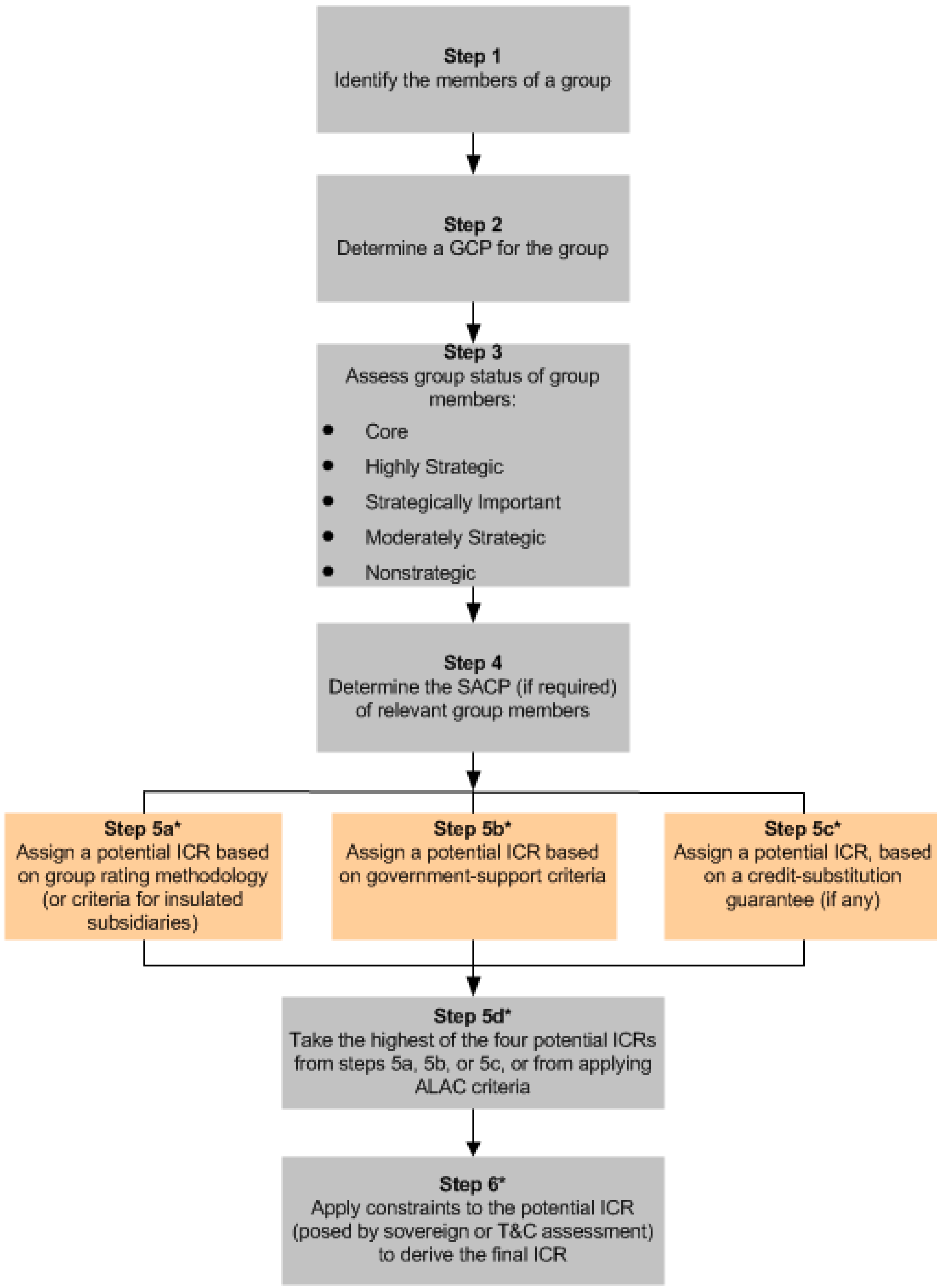
11. The group rating methodology explains how our assessment of likely extraordinary group support (or conversely, negative group intervention) factors into the ICR on an entity that is a member of a group.

12. The methodology consists of six steps (see chart 1):

- Identifying the group's members;
- Determining a group credit profile (GCP);
- Assessing the status of an entity within the group and the resulting likelihood of group support;
- Assessing a stand-alone credit profile (SACP) for an entity if required;
- Combining the SACP and support conclusions to determine a potential ICR for a group entity, by notching up or down from the SACP or GCP; and
- Applying constraints if any to the potential ICR, depending on the relevant sovereign rating and/or transfer and convertibility (T&C) risk assessments.

13. The criteria define five categories of group status: "core," "highly strategic," "strategically important," "moderately strategic," and "nonstrategic." These categories indicate our view of the likelihood that an entity will receive support from the group and determine the potential long-term ICR, with reference to the GCP and SACP (see table 1).

Building Blocks For Determining A Rating After Considering The Group Rating Methodology



*An insurance company can receive an ICR or an FSR. GCP--Group credit profile. ICR--Issuer credit rating. FSR--Financial strength rating. SACP--Stand-alone credit profile. T&C--Transfer and convertibility.

Table 1

Summary Of Associating An Entity's Group Status With A Potential Long-Term ICR

Group status	Brief definition	Potential long-term ICR*
Core	Integral to the group's current identity and future strategy. The rest of the group is likely to support these entities under any foreseeable circumstances. (see ¶¶54-55)	Generally at GCP (see ¶74)§
Highly strategic	Almost integral to the group's current identity and future strategy. The rest of the group is likely to support these subsidiaries under almost all foreseeable circumstances. (see ¶57)	Generally one notch below GCP (but see ¶74)§
Strategically important	Less integral to the group than highly strategic subsidiaries. The rest of the group is likely to provide additional liquidity, capital, or risk transfer in most foreseeable circumstances. However, some factors raise doubts about the extent of group support. (see ¶59)	Generally three notches above SACP (but see ¶74)§
Moderately strategic	Not important enough to warrant additional liquidity, capital, or risk transfer support from the rest of the group in some foreseeable circumstances. Nevertheless, there is potential for some support from the group. (see ¶60)	Generally one notch above SACP (but see ¶74)§
Nonstrategic	No strategic importance to the group. These subsidiaries could be sold in the near to medium term. (see ¶61)	Generally at SACP (but see ¶74)§

*Paragraph 28 prevails when the GCP is 'ccc+' or lower. §The potential issuer credit rating (ICR) is subject to sovereign rating constraints (see ¶77) and the government support criteria (see ¶27). An insurance company may receive an ICR and/or an FSR (financial strength rating). GCP--Group credit profile (see ¶33). SACP--Stand-alone credit profile (see also the Glossary in Appendix A).

14. A modified approach applies when a member is assessed as insulated from the rest of the group (see paragraphs 75 and 76), and when determining the interaction of group and government support.

15. For group members classified as government-related entities (GREs), the criteria for considering government support are found in the GRE criteria, published March 25, 2015.

16. For banks not classified as GREs, the criteria for assessing government support are in the bank criteria, published Nov. 9, 2011.

17. This paragraph has been deleted.

18. This paragraph has been deleted.

19. This paragraph has been deleted.

20. This paragraph has been deleted.

III. METHODOLOGY

21. The likelihood of financial support from a group to a group member, and vice versa, affects that group member's overall creditworthiness.

22. These criteria enable the ICR to reflect our view that a group member may receive or extend such support in the future, beyond what we already factor into its SACP. Ongoing support from the group forms part of the SACP assessment, as explained in "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

23. The potential for extraordinary support is factored into the ICR, even when the need for such support appears remote.

24. The criteria for the SACP assessment are in paragraph 71 and 72.

25. A situation where a group member's potential long-term ICR exceeds its SACP reflects the likelihood of that entity, in a credit-stress scenario, receiving timely and sufficient group support (beyond that already factored into the SACP), thereby lowering the likelihood of its default. For a bank, an indicative ICR is equivalent to a potential ICR.

26. A group member's potential long-term ICR that is lower than its SACP reflects the risk that, if the group were in a credit-stress scenario, the group would draw support from the group member.

27. The criteria set out a six-step process for assessing group members, including the likelihood of either group and government support or negative intervention in a stress scenario (see preceding chart). The steps are:

i. Identify which entities are group members.

ii. Assess the creditworthiness of the group as a whole and assign a GCP. The GCP assessment may factor in potential support from a government if such support would extend to the entire group (see the GRE criteria, published March 25, 2015, and the bank criteria, published Nov. 9, 2011).

iii. Assess the group status (that is, the strategic importance to the group) of each group member to be rated.

iv. Determine the SACP of group members to be rated, unless an entity is exempt in accordance with paragraph 51.

v. Assign a potential long-term ICR using, where applicable, criteria for GREs or other government support (see the GRE criteria, published March 25, 2015, and the bank criteria published Nov. 9, 2011), as well as credit-substitution criteria (see "Guarantee Criteria," published Oct. 21, 2016, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, dealing with debt guarantees (see also paragraph 47).

vi. Assign the final ICR after considering any constraints to the potential long-term ICR posed by the relevant sovereign rating and/or T&C risk assessments (see paragraph 77).

28. In all cases, when an ICR is 'CCC+' or lower, the criteria in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, apply. If a GCP is 'ccc+' or lower, but a subsidiary has an SACP of 'b-' or higher (which incorporates the ongoing effect of being part of the group), the rating on the subsidiary could result from a downward adjustment to the SACP for the possibility of extraordinary negative intervention from the group.

29. The final ICR would be the highest of the four potential long-term ICRs resulting from the group support, government support, additional loss-absorbing capacity (ALAC) support, or credit-substitution guarantee methodologies. For financial services groups, the final ICR may be subject to the caps described in paragraphs 96-98, under section IV.C, titled "Rating Financial Services Group Entities Above The Sovereign." For corporate groups, the final ICR may be subject to the caps described in paragraphs 166 to 168 under section VI.C, titled "Rating Corporate Group Entities Above The Sovereign." The case of extraordinary government support flowing through the group to a subsidiary or subgroup is addressed in paragraph 48. For financial services groups, the case of a strong subsidiary of a relatively weaker parent group is addressed in paragraphs 99 to 103 ("Insulated Subsidiaries Of A Financial Services Group"). We do not view a foreign bank subsidiary that is highly or moderately systemically important in the country where it is domiciled as an insulated subsidiary, however, given that it still has links with its parent group even when the "host" authorities impose restrictions on intragroup flows. Governments can have strong incentives to maintain financial

stability in the local market through a combination of local regulatory intervention and government support. This means that support from a "host" government can sometimes be more likely than the potential for extraordinary support from a parent group. For U.S. public finance issuers, these criteria will be used to determine the ICR. If an issue rating is requested, it may differ from the ICR if the legal pledge supporting the bonds includes other features that strengthen or weaken credit quality from that indicated by the ICR, such as a closed lien or subordination. Barring these considerations, the USPF rating will be at the level indicated by the ICR.

A. Identifying Group Members

30. For the purposes of these criteria, the terms "group" and "group members" refer to the parent or ultimate parent, and all the entities over which a parent or ultimate parent has direct or indirect control. Often, the scope of consolidation is the same as that in the parent's or ultimate parent's consolidated audited accounts, plus proportionate stakes in joint ventures (JVs) exclusively or jointly controlled, but not included in such accounts.

31. "Control" refers to the ability to dictate a group member's strategy and cash flow. Control may be present even if ownership is less than 50% plus one share/unit (for an example see paragraph 83).

B. The Group Credit Profile (GCP)

32. In assessing the overall credit profile of a group, the relevant methodologies for assessing corporates, financial institutions, insurance companies, or other entity types apply. For conglomerates (including their holding companies), the specific rating methodology is the one relevant for the operations that most strongly influence the group's profile. This could be based on the amount of capital (such as when financial services dominate the activities), or earnings and dividends to the holding company (for groups with substantial corporate activities). The GCP assessment does reflect the impact of these other operations on the creditworthiness of the group.

B.1 Defining the GCP

33. The GCP is not a rating, but a component of the ICR on a group member. Consequently, GCPs do not have outlooks. The GCP is Standard & Poor's opinion of a group's or subgroup's creditworthiness as if it were a single legal entity, subject to the potential restrictions discussed in paragraphs 38 and 39 below. A GCP is determined when there is more than one legal entity in a group. The term "unsupported GCP" designates our opinion of a group's or subgroup's creditworthiness excluding the likelihood of extraordinary support or negative intervention from a government or a wider group, and also excluding ALAC support. Unless prefixed with the term "unsupported," a GCP incorporates the likelihood of such extraordinary support or negative intervention from a government or a wider group. A GCP does not indicate the credit quality of any specific obligation.

34. A complex group can have more than one GCP to reflect subgroups (see paragraphs 65 to 67 for the treatment of subgroups within a group).

35. GCPs range from 'aaa' (the highest level) to 'd', on a scale that parallels the ICR ('AAA' to 'D'). The lowercase letters for GCPs indicate their status as a component of a rating rather than as a rating. Like an ICR, a GCP can carry the modifier

"+" or "-". Typically, a GCP is 'd' only in the case of a generalized group default. The ICR on a legal entity within a group is lowered to 'D' or 'SD' (selective default) only in accordance with "S&P Global Ratings Definitions," published June 26, 2017.

36. The criteria assess the consolidated group as though it were a single legal entity (for an exception see paragraph 38).

a) Noncontrolling interests

37. In general, for the purpose of determining a GCP, equity minority interests (also called "noncontrolling interests") in fully consolidated group members count as shareholders' equity (correspondingly, common dividends to these minority interests are treated as part of common dividends for income-statement, cash-flow statement, and balance-sheet purposes).

b) Insulated subsidiaries

38. We would typically count an insulated subsidiary as an equity affiliate, rather than consolidate it with the group, if we assign it a potential ICR that is two or more notches higher than the GCP. If a higher-rated insulated entity's resources are unavailable to the rest of the group, the GCP could be lower, which may in turn further restrict the potential for a higher rating on a group member. Although such an insulated subsidiary is treated as an equity affiliate in the assessment of the GCP, the GCP takes account of projected income flows from the subsidiary.

39. If the potential ICR on an insulated subsidiary is one notch higher than the GCP, it is consolidated with the group for the purposes of determining the GCP. However, the GCP assessment will take account of potential restrictions on resource flows within the group, as is also the case when considering a foreign bank subsidiary that is rated above the GCP because it is highly or moderately systemically important in the country where it is domiciled. In this case, the subsidiary is not classified as insulated, but the GCP will take account of the impact of any local restrictions on the flow of capital, funding, and liquidity, and any implications for the business and risk positions of the parent (see Appendix B for more details).

c) Entities owned by a financial sponsor

40. If the owner of a group entity is a "financial sponsor" (a company with no long-term or strategic interest in the group entity), the GCP assessment excludes the financial sponsor. This means the potential ICR on that group entity does not factor in the likelihood of support from the financial sponsor, nor is it directly constrained by our view of the sponsor's creditworthiness.

41. However, an entity's ownership by a financial sponsor may lead us to view the entity's financial policy and/or overall management as affected by the financial sponsor's exit strategy, its need for cash, or its policy regarding the upstreaming of cash from its holdings. This different treatment, relative to that for strategic corporate owners, reflects our view that, regardless of the degree of control it exerts, a financial sponsor has a lower incentive to support the entity under stress. Also, financial sponsors typically have diverse interests and may not be willing or able to bail out individual entities. The investment time frame is usually short, and as such the direction and management of the investment will be a function of the financial sponsor's exit strategy.

42. The GCP relevant for an entity owned by a financial sponsor typically includes one or more intermediate holding companies of the group, but excludes the financial sponsor's other holdings (that is, other operating companies it

controls, as well as its own intermediate holding companies). The group often uses its intermediate holding companies to control operating companies, even those fully or partly owned by a financial sponsor.

43. The relevance of this GCP reflects the view that the primary influence on an intermediate holding company's creditworthiness is the operating companies it owns. The intermediate holding company's purpose is to acquire, control, fund, or secure financing for its operating companies, and it generally depends on those companies' cash flow to service its financial obligations.

d) Holding companies

44. For a holding company that heads a group, sections IV.F and IV.G apply for insurance groups and financial institutions groups, respectively. For a holding company of a corporate group that contains insurance or financial institution subsidiaries, section VI applies.

e) Multiple ownership and joint ventures

45. If a group entity is under the joint control of at least two parents--for example, a joint venture--the insolvency or financial difficulty of a particular parent may weigh less on the subsidiary's credit quality than if the subsidiary were fully owned by that particular parent. There are different analytical approaches for a group's affiliated business operations, such as joint ventures and their debt, depending on the perceived relationship between the parents and the affiliated operations:

- Investment holding. This is when the group has little or no control over the operating entity. In this case, the approach is to treat the entity as an equity affiliate, which is not consolidated into the GCP. The value, volatility, and liquidity of the investment in the entity, if material, are analyzed on a case-specific basis.
- Partly controlled subsidiary. This is when the group has partial control over a material operating entity. The GCP assessment would involve a partial consolidation--for example pro rata--of the operating entity and, where appropriate, any forecast additional investment in that entity.
- Integrated subsidiary. This is when the group has dominant control over an operating entity and has effectively integrated it into the group (for a full definition of a fully integrated subsidiary see the glossary in Appendix A). The GCP assessment therefore fully consolidates the operating entity.

f) Extraordinary government support in the GCP

46. In some instances, the potential for extraordinary government support (beyond that already factored into the SACP or unsupported GCP) is a component of the ICRs on certain group members or the GCPs (see the GRE criteria, published March 25, 2015, and the bank criteria, published Nov. 9, 2011), reflecting the GRE status of an entity or the systemic importance of a bank. In determining the supported GCP by using the government support tables in the GRE criteria or bank criteria, we use the unsupported GCP in place of the SACP.

47. In this case, the criteria assess whether such government support, driven by GRE status or systemic importance, would likely accrue to all members of the group (for members of a group where the ultimate parent is a GRE, see table 2).

48. To determine the ICR for a particular group subsidiary, where the assessment indicates that the government:

- Is likely to extend such extraordinary support directly to that subsidiary (bypassing the group), any rating uplift for such support is added to the SACP of that subsidiary in determining the ICR. If the subsidiary has core or highly strategic group status or "almost certain" GRE status, then the rating outcome is based on the group support or GRE support.

- Is likely to extend such extraordinary support indirectly, via the group, to the subsidiary, the supported GCP (which would include uplift, if any, for such support) is the reference point in determining the ICR for that subsidiary because the group is still responsible for the flow of support. The same approach applies if government support is likely for a subsidiary within a subgroup via the head entity of that subgroup; i.e., the supported GCP for the subgroup is the reference point for determining the ICR for the subsidiary.
- Is unlikely to extend such support, the criteria use the unsupported GCP in determining the ICR for that subsidiary.

Table 2

Rating Government-Related Entities--Likelihood Of Government Support Versus Group Support*

SACP or GCP levels	If the subsidiary is likely to benefit directly from extraordinary government support	If the subsidiary is likely to get extraordinary government support indirectly through the group	If the government is unlikely to support the subsidiary either directly or indirectly
SACP is lower than an unsupported GCP	ICR = Higher of the SACP + uplift for potential government support, or SACP + uplift for group status uplift (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status uplift. If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP.	ICR = SACP + uplift for group status (with reference to the unsupported GCP).
SACP is higher than or equal to an unsupported GCP	ICR = SACP + uplift for potential government support (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status (with reference to the GCP). If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP (unless the subsidiary's SACP>= the GCP). If the SACP>= the GCP, the ICR is capped at the level of the GCP (unless the subsidiary is insulated).	ICR = SACP, subject to a cap at the level of the GCP (unless the subsidiary is insulated).

*See section VI. E.1 for the definition of an insulated subsidiary. Subject to paragraph 77, the rating assigned to a subsidiary that does not have an SACP is at the level of the GCP if the subsidiary is "core," or one notch lower than the GCP if the subsidiary is classified as "highly strategic." SACP--Stand-alone credit profile. ICR--Issuer credit rating (also FSR--Financial strength rating for insurance companies). GRE--Government-related entity.

C. Group Status Of Individual Members

49. The assessment of the strategic importance (or "group status") of group members takes into account the group's organization and degree of cohesiveness.

C.1 Subsidiaries

50. A subsidiary's group status will often reflect the amount and timeliness of credit support it would receive under stress. This section describes the framework that classifies a subsidiary's group status into one of five categories (for insurance holding companies and financial services holding companies, see sections IV.F and IV.G, respectively):

- Core,
- Highly strategic,
- Strategically important,
- Moderately strategic, or
- Nonstrategic.

51. An SACP for a subsidiary categorized as core or highly strategic to a group is not necessary unless otherwise required under other Standard & Poor's criteria. An example of such criteria is listed in paragraph 85.

52. If a group fails to support a group member in financial distress or puts a group member up for sale and that entity was

previously assessed as at least strategically important, our approach is to review the group status of all rated group members.

53. A subsidiary's group status indicates differing degrees of enhancement, or uplift, above its stand-alone creditworthiness that contribute to the potential long-term ICR (see subsections a) to e) below). The ICR on a subsidiary could be at the GCP level if its SACP reaches or exceeds the GCP level. For criteria on incorporating the likelihood of government support, see paragraphs 46 to 48; for a credit-substitution debt guarantee, see paragraph 69; and for treatment of insulated subsidiaries, see paragraphs 75 and 76. As described in paragraph 77, the final ICR is determined after considering any constraints to the potential long-term ICR posed by the sovereign rating and, with respect to the foreign currency ICR and T&C assessments.

a) Core entities

54. A core entity meets all of the following characteristics (see table 1 for a summary) and at least one of those in paragraph 55:

- Is highly unlikely to be sold;
- Operates in lines of business or functions (which may include group risk management and financing) integral to the overall group strategy. The activities it undertakes or the products and services it sells are very closely aligned with the group's mainstream business and customer base. The entity also often operates in the same target market. Captive insurance operations can be an example of a core subsidiary engaged in group risk management activities for a corporate or financial services group. A financing subsidiary set up specifically to raise corporate debt on behalf of a group can be an example of a core subsidiary engaged in financing activities on behalf of a group. A financing subsidiary of an insurance group, by contrast, is typically not as integral to the group's activities and instead we assess such subsidiaries using section IV.F, "Insurance Holding Companies";
- Has a strong, long-term commitment of support from senior group management in good times and under stressful conditions, or incentives exist to induce such support (for example, cross-default clauses in financing documents, or the subsidiary plays an integral role in group risk management or financing). A decision to integrate the operations of a subsidiary or affiliate fully into those of the group or, for an insurer, to reinsure at least 90% of the subsidiary's risks within the group, indicates such commitment;
- Is reasonably successful at what it does or does not have ongoing performance problems that could result in underperformance against the group management's specific targets and group earnings norms over the medium- to long-term. In addition, the subsidiary's business risk should not be substantially higher than the group's. A newly acquired subsidiary has heightened potential for unanticipated risks to emerge, particularly during the first two years after the acquisition, and may not yet be deemed reasonably successful;
- Either constitutes a significant proportion of the consolidated group or is fully integrated with the group (see the glossary in Appendix A);
- Is closely linked to the group's reputation, name, brand, or risk management;
- Has been operating for more than five years (unless it meets the conditions for a start-up operation in paragraph 64); and
- If it is a captive (re)insurer, shows all of the previous features, and at least 90% of the subsidiary's business comes from other group companies on behalf of the group. A captive insurer that does not represent a "significant proportion" of the group may still be assessed as core if its third-party business does not exceed 10% of net premium written, and as highly strategic if third-party business does not exceed 30% of net premium written. (This bullet point only applies to captive (re)insurers.)

55. A core entity must also have at least one of the following characteristics:

- Shares the same name or brand with the main group; or
- Is incorporated separately for legal, regulatory, or tax purposes, but operates more as a division or profit center within the group. Its business, customer, and regional orientations are usually similar to those of other principal operations of the group. A core subsidiary often uses the group's distribution networks and shares administrative functions with other major operating units; or
- Demonstrates capitalization or leverage commensurate with the GCP.

56. U.S. public finance obligated groups are core entities if the obligated group meets the conditions of paragraphs 54 and 55 or if it contains the majority of the organization's primary operating facilities, such as its hospitals or senior living facilities.

b) Highly strategic subsidiaries

57. A subsidiary is highly strategic (that is, nearly core) when it meets all of the characteristics listed below (see table 1 for a summary):

- The first three characteristics listed in paragraph 54;
- All but one of the remaining characteristics in paragraph 54 (excluding the last bullet if the entity is not a captive insurer); and
- At least one characteristic listed in paragraph 55.

58. If the subsidiary is a captive insurer that does not represent a "significant proportion" of the group, it may still be assessed as highly strategic if third-party business does not exceed 30% of net premiums written.

c) Strategically important subsidiaries

59. When a subsidiary does not meet the conditions for core or highly strategic, it is categorized as strategically important if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment (for example, cross-default clauses in financing documents); and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms (except for a prudentially regulated group, in which case paragraph 90 applies).

d) Moderately strategic subsidiaries

60. When a subsidiary does not meet the conditions for core, highly strategic, or strategically important group status, it is categorized as moderately strategic if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold in the near term;
- Meets one of the remaining three characteristics for strategically important in paragraph 59; and
- Is likely to receive support from the group should it fall into financial difficulty.

e) Nonstrategic subsidiaries

61. When a subsidiary does not meet the conditions for core, highly strategic, strategically important, or moderately strategic, it is categorized as nonstrategic (see table 1 for a summary).

C.2 Branches

62. A branch is part of a legal entity that is typically at another location. A branch therefore has the same creditworthiness as the legal entity, unless the branch is in another country and the actions of that sovereign could affect the branch's ability to service its obligations (see paragraphs 97 and 98 for financial services). For more details on the criteria for bank branches, see "Assessing Bank Branch Creditworthiness," published Oct. 14, 2013.

C.3 Start-ups

63. A start-up operation may fit into any of the five group status categories, although it must show all the characteristics in paragraph 54 to be in the core category.

64. A start-up (see the glossary in Appendix A for a definition) subsidiary is generally not regarded as core (see paragraph 54) or highly strategic (see paragraph 57), however, because of the lack of an operating history. For a start-up, the potential for volatile earnings is likely to be higher than for long-standing operations. However, a start-up may be assessed as core to the group if it meets all the other characteristics listed in paragraph 54; or highly strategic to the group in line with paragraph 57. This means it meets all but one of the other characteristics listed in paragraph 54, apart from "has been operating for more than five years," and if it is set up to serve important existing customers, or has been created as a separate legal entity due to regulatory requirements or tax considerations, such that the group otherwise has the requisite operating history.

C.4 Subgroups

65. A subgroup can be headed by a nonoperating holding company or an operating entity of the wider group (for a definition of subgroup, see the glossary in Appendix A). USPF obligated groups may also be part of a subgroup.

66. A subgroup can have a GCP separate from that of the wider group.

67. In instances when the potential for extraordinary government support (beyond that already factored into the SACP) is a component of the ICRs on certain members of a subgroup or the subgroup's GCP, the criteria assess whether such government support would accrue to all members of the subgroup in accordance with paragraph 48.

C.5 Credit-substitution debt guarantee of group entities

68. When a group member's debt carries a credit-substitution guarantee, this means the guarantor will pay that group member's guaranteed obligations if it defaults. The evaluation of creditworthiness is therefore not on that group member (the primary obligor), but on the guarantor.

69. The criteria for credit-substitution guarantees are in the relevant sections of "Guarantee Criteria," published on Oct. 21, 2016, "Methodology And Assumptions For Analyzing Letter Of Credit-Supported Debt," published Feb. 20, 2015, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006.

70. For insurance group subsidiaries that are beneficiaries of policy guarantees and other support agreements, see paragraphs 104 to 109 below.

D. Determining The SACP Of Group Members

71. The criteria for assessing the SACP of group members are:

- For financial institutions entities, in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011; "Rating Finance Companies," published March 18, 2004; "Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds," published Sept. 12, 2006; "Rating Private Equity Companies' Debt And Counterparty Obligations," published March 11, 2008; "Nonbank Financial Institutions Rating Methodology," published Dec. 9, 2014; and "Key Credit Factors For Financial Market Infrastructure Companies," published Dec. 9, 2014;
- For insurance entities, in "Insurers: Rating Methodology," published on May 7, 2013;
- For corporate entities, in "Corporate Methodology," published Nov. 19, 2013; and
- For USPF, in the relevant USPF sector criteria, most commonly "Not-For-Profit Health Care," published June 14, 2007, or "Senior Living," published June 18, 2007.

72. The SACP of a group member can be affected by its membership of that group. As discussed in "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, the determination of an SACP includes ongoing interaction or influence, whether beneficial (positive), neutral, or burdensome (negative). Table 1 of that article lists examples of positive and negative influence that affect the SACP of a group member. These include implications for the financial profile and the business model of the group member. (See Appendix B for more details on subsidiaries of financial institutions [FI] groups.)

E. Assigning The Issuer Credit Rating (ICR)

73. The ICR on a member of a group reflects its SACP, group status, and the potential for external support (or negative intervention) from the government or parent group, in line with relevant criteria (see also chart 1 and table 1).

74. Subject to paragraphs 96 to 98, 166 to 168, and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013, and unless (a) the subsidiary is assigned a potential ICR higher than the GCP on the basis of the potential for extraordinary government support in accordance with bullet point five of paragraph 27, or (b) the subsidiary is classified as an insulated subsidiary with an ICR above the GCP, the potential long-term ICR for a:

- Core group entity is equal to the GCP.
- Highly strategic subsidiary is one notch lower than the GCP, unless the SACP on that subsidiary is equal to, or higher than, the GCP. In such a case, the potential long-term ICR is at the same level as the GCP.
- Strategically important subsidiary is three notches higher than its SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Moderately strategic subsidiary is one notch higher than that subsidiary's SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Nonstrategic subsidiary is at the level of the subsidiary's SACP, subject to a cap at the GCP level.

E.1 Insulated subsidiaries

75. Financial stress at the parent level will likely affect a subsidiary's SACP, particularly if there are close business or funding ties between the two. Excluding the conditions described in paragraph 29, a subsidiary with an SACP higher than the GCP does not generally receive an ICR that is higher than the GCP. This is notably because:

- The relatively weaker parent could potentially divert assets from the subsidiary or burden it with liabilities during financial stress, and the subsidiary could have much less debt- and capital-raising flexibility; and
- In some jurisdictions, a bankruptcy petition by the parent could include the subsidiary or cause the subsidiary to go into administration or similar measures.

76. However, in some instances an entity may be partly insulated, segmented, or ring-fenced from its group, from a credit perspective. Such insulation may lead to a rating on a subsidiary being higher than the GCP. For members of a financial services group, this rating approach is explained in paragraphs 99 to 103. For members of a corporate group, the rating approach is explained in paragraphs 141 to 151. For U.S. public finance obligated groups, this approach is explained in "Senior Living," published June 18, 2007.

F. Rating Group Entities Above The Sovereign

77. The general criteria for assigning higher foreign currency ratings to nonsovereign entities than those on the sovereign are in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013. The specific criteria provisions, which describe how group support can support ratings above the sovereign, are discussed in paragraphs 96 to 98 of this article for members of financial services groups and in paragraphs 166 to 168 of this article for members of corporate groups.

IV. METHODOLOGY: FINANCIAL SERVICES GROUPS

78. The term financial services group covers bank groups, other financial institutions groups, and insurance groups. This part of the article explains factors specific to both types of groups.

79. For the purposes of these criteria, a member of a financial services group need not itself be a bank, financial institution, or insurance entity. For example, a bank or insurance company may have a subsidiary that does not offer financial services. These criteria would apply to such an entity.

80. The criteria for considering government support for banks not classified as GREs are in the bank criteria published Nov. 9, 2011.

81. The following subparts supplement paragraph 44, which describes the approach for holding companies:

- Nonoperating and operating holding companies (see paragraphs 110 to 121 for insurance holding companies and paragraphs 122 to 129 for financial institution nonoperating holding companies).
- Financial institution operating holding companies. The approach is to treat such companies like any other operating entity.

A. Identifying Members Of A Financial Services Group

82. This section IV supplements the definitions in paragraphs 30 and 31 and the glossary in Appendix A.

83. An example of "control" is when a bank is a shareholder in a 50-50 joint venture financial institution, but the regulator of both the bank and joint venture holds the bank responsible for the joint venture. This indicates that the bank controls the joint venture.

84. Banking and insurance are regarded as prudentially regulated sectors.

B. Group Status Of Members Of A Financial Services Group

1. Subsidiaries

85. Supplementing paragraph 51, an example of criteria that require a core or highly strategic subsidiary to have an SACP assessment are those in "Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions," published Jan. 29, 2015.

86. Supplementing paragraph 55, for core and highly strategic insurance subsidiaries of insurance groups, "commensurate capitalization" refers to capitalization that is:

- In line with group policies and practices for subsidiaries with similar group status, and
- Significantly above the regulatory minima.

a) Core entities

87. In determining whether a member of a financial services group is core, a "significant proportion of the consolidated group" in paragraph 54 means that the entity represents, or shows the ability to reach, the following level of capital, on the basis of projections for the next two to three years:

- At least 5% of consolidated group capital; and
- For a subsidiary of an insurance group, a "significant proportion" of group earnings refers to at least 5% of consolidated operating earnings before internal retrocession. For this analysis, the assessment of "operating earnings" involves evaluating EBIT (see the glossary of "Insurers: Rating Methodology," published May 7, 2013).
- For a complex global group with 20 or more significant operating subsidiaries, an entity may still be core, although its capital and earnings are below those stated above, if it is a bank or insurance company among the leaders in that market.

88. An insurance group's subsidiary is not considered core, highly strategic, or strategically important if there is a significant possibility of it being placed into run-off. However, this does not apply to subsidiaries whose operations could be transferred to other core, highly strategic, or strategically important subsidiaries, as long as there is no measurable credit impact on policyholder and nonpolicyholder financial obligations. In addition, this does not apply to subsidiaries of groups that for reputation reasons will likely support a subsidiary even in run-off, or which continue to consider the subsidiary's line of business as strategic.

b) Highly strategically important subsidiaries

89. This subsection supplements paragraph 57. The following additional consideration applies in order for a regulated subsidiary of a financial services group to be assessed as highly strategically important:

- A subsidiary in another business sector, such as an insurance subsidiary of a bank or a bank subsidiary of an insurer is often assessed as highly strategic instead of core to reflect the different operational characteristics and prudential regulatory frameworks of these businesses, which can limit the degree of integration over time.

c) Strategically important subsidiaries

90. For prudentially regulated groups, subsidiaries may occasionally be regarded as strategically important if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the characteristics in paragraph 59. However, the following additional conditions apply in order for a regulated subsidiary of a financial services group to be assessed as strategically important:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, the group is likely to provide additional liquidity, capital, or risk transfers in most foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator.

d) Moderately strategic subsidiaries

91. For prudentially regulated groups, subsidiaries may occasionally be regarded as moderately strategic if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the requirements in paragraph 60. For a regulated subsidiary of a financial services group to be assessed as moderately strategic, the following additional conditions apply:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, there is the potential for some limited support from the group, even if the subsidiary may not be important enough to warrant additional liquidity, capital, or risk transfer from the group in some foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator. Examples of when there is the potential for limited support are (1) when minority ownership of a subsidiary implies a dilution of the group's responsibility, or (2) when the fragile financial position of the parent or group constrains either's ability to provide support.

2. Subgroups

92. The group status of members of a subgroup can be associated with that subgroup. The approach depends on the subgroup's status within the wider group, subject to the sovereign-related constraints indicated in paragraph 77.

93. If a subgroup is core to the wider group, we use the following approach if the wider group is expected to take the same stance as the subgroup toward supporting the subgroup's members (if not, paragraph 94 applies):

- The ICR on a core subsidiary of the subgroup is at the level of the wider group's GCP.
- The ICR on a highly strategic subsidiary of the subgroup is one notch lower than the wider group's GCP (unless its SACP equals that GCP).
- The ICR on a strategically important subsidiary of the subgroup is three notches higher than its SACP (capped at one notch below the GCP of the wider group, unless its SACP equals that GCP).
- The ICR on a moderately strategic subsidiary of the subgroup is one notch above its SACP (capped at one notch below the GCP of the wider group).

- The ICR on a nonstrategic subsidiary of the subgroup is equal to that entity's SACP.

94. If a subgroup is highly strategic, strategically important, or moderately strategic to the wider group, the assessment of its members reflects the following five factors to the extent they are relevant:

- The subsidiary's importance to the subgroup;
- The subgroup's importance to the wider group;
- The subgroup's GCP, or its unsupported GCP if we do not expect the wider group to contribute to the subgroup's support to the subsidiary;
- The subsidiary's SACP; and
- Our view as to which members of the group would provide support in case of stress.

95. The ICR on a subsidiary of a nonstrategic subgroup is based on that subsidiary's status relative to the subgroup and on the subgroup's GCP. In the rare cases that a nonstrategic subgroup's subsidiary is core or highly strategic to the wider group, and we expect the wider group to support the subsidiary directly, rather than via the subgroup, the ICR on that subsidiary is based on the subsidiary's status relative to the wider group and the wider group's GCP.

C. Rating Financial Services Group Entities Above The Sovereign

96. Implicit group support can lift the ICR on a group member higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

1. Members of financial institutions groups

97. Supplementing paragraph 77, group support does not result in an ICR on a subsidiary being higher than the relevant foreign currency sovereign credit rating, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do:

- And the subsidiary is core to the group, the ICR on that subsidiary is one notch above the sovereign rating applicable in the host jurisdiction (see also paragraph 62 for bank branches).
- Uplift for the potential for group support cannot lift the ICR on a subsidiary, that is not core, higher than the sovereign rating on the host country. This is unless the subsidiary's exposure to that jurisdiction is less than 10%, and risks associated with that jurisdiction (such as a deposit freeze or monetary-union exit) are considered immaterial.

2. Members of insurance groups

98. Supplementing paragraph 77, group support does not result in an ICR on a foreign subsidiary or branch of an insurance group being higher than the local currency sovereign credit rating on the country where the subsidiary is domiciled, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do, and:

- The subsidiary is an insurer benefiting from a policyholder guarantee according to the criteria in paragraph 104, or is a foreign branch of an insurance company, the rating is the lower of: (1) the ICR on the guarantor, (2) the result from adding six notches to the local currency sovereign credit rating if it is 'BBB-' or higher, and (3) the result from adding four notches to a local currency sovereign credit rating that is 'BB+' or lower.
- The subsidiary has less than 10% exposure to the local jurisdiction and faces immaterial risk from a deposit freeze or

the sovereign's exit from a monetary union, the sovereign's creditworthiness does not constrain the rating assigned to the subsidiary. For example, such a foreign subsidiary is rated 'A+' if it is a highly strategic member of a group with a GCP of 'aa-', even though the rating on the host sovereign is 'BBB'. The 'A+' rating is one notch lower than the GCP in line with the approach for highly strategic subsidiaries (see paragraph 74).

- The subsidiary is in neither of the two preceding situations, the rating is the lower of: (1) the local currency sovereign credit rating (plus three notches if a core subsidiary), and (2) the potential rating otherwise derived from these criteria. An example is a potential long-term ICR of 'A-' for a strategically important subsidiary of a group in a 'AAA' rated jurisdiction. The subsidiary has an SACP of 'bbb' and all its operations are in a country that has a sovereign local currency rating of 'A-'; the rating would be three notches above the SACP, based on the strategically important status, but limited to 'A-'.

D. Insulated Subsidiaries Of A Financial Services Group

99. Supplementing paragraph 76, a non-prudentially regulated entity of a financial services group is rated higher than the GCP if there is multiple ownership as described in paragraph 45 or, alternatively, two or more of the following restrictions are in place (see "Project Finance Framework Methodology" and "Project Finance Transaction Structure Methodology," both published Sept. 16, 2014):

- Limited-purpose entity structure;
- Covenants; or
- Collateral.

100. Although prudentially regulated subsidiaries are generally not rated higher than the GCP, they may receive a rating one notch higher than the GCP as an insulated subsidiary if all of the following conditions are met:

- The subsidiary has an SACP that is at least one notch higher than the GCP, or the SACP plus the uplift for potential government support is one notch higher than the GCP.
- The subsidiary's prospects in terms of financial performance and funding are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- Regulatory restrictions (such as regarding liquidity, capital, or funding) are of sufficient strength that they would prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness;
- It is unlikely that proceedings that could lead to a default at the group level, under our criteria, would directly lead to a default of the subsidiary; and
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength.

101. The potential long-term ICR for an insulated subsidiary is two notches above the GCP if the entity fulfills the characteristics listed in paragraph 100, and its SACP (or its SACP plus the uplift for potential government support) stands at least two notches above the GCP, and one of the following situations applies:

- The holding company or group's weaker credit quality results from its ownership of smaller, nonregulated business activities that are largely unrelated to the business line of the regulated entity's operations, and management has taken affirmative steps to distance the rest of the group from such unrelated subsidiaries, as shown by actual

behavior, beyond the usual verbal assurances that management will not imperil the creditworthiness of the rated subsidiary by supporting weaker operations; or
- The subsidiary is a clearinghouse, exchange, or central securities depository that would likely benefit from any necessary protective actions by the host authorities in the interest of financial stability, if the wider group came under stress; or
- The subsidiary is a regulated entity and we expect the host regulator to intervene in an effective manner to protect the position of the subsidiary.

102. The potential long-term ICR on an insulated subsidiary is three notches above the GCP if the entity meets the conditions for assigning ratings that are one and two notches above the SACP in paragraphs 100 and 101, and all the following characteristics apply:

- The subsidiary's SACP (or the SACP plus the uplift for potential government support) stands at least three notches above the GCP;
- The subsidiary is assessed to be severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent. This includes receiving immaterial funding, if any, from the group;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the insolvency of the parent company;
- The group and subsidiary's public statements on dividend policy are consistent with the independent integrity of the subsidiary;
- There is an independent trustee or equivalent party with the ability to enforce the protection of the rights of third parties; or significant minority interests that have sufficient power to block dividend payments (this will typically correspond to ownership of at least 20%, and such minority shareholders would have independent directors on the board of the subsidiary that can influence decision-making effectively); or the government has the right to change ownership of the subsidiary via existing legislation for the resolution of a troubled entity or other legal powers enabling it to change the ownership of a subsidiary in order to separate it from a troubled parent, and we expect that it could use this right; and
- There is a strong economic basis for the parent, regulator, or government's commitment to maintain the capital to support the higher rating on the subsidiary.

103. The potential long-term ICR for an insulated entity is delinked from the GCP if all the following characteristics are met:

- The GCP relating to that insulated entity has declined precipitously within a short period, for example within approximately 12 months, by three notches or more, either into or passing through the 'b' category; and
- The regulator for that entity is expected to act (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

E. Subsidiaries Of An Insurance Group As Beneficiaries Of Policy Guarantees And Other Support Agreements

104. This paragraph has been superseded by "Guarantee Criteria," published on Oct. 21, 2016.

105. This paragraph has been superseded by "Guarantee Criteria," published on Oct. 21, 2016.

106. For the purpose of these criteria, for a subsidiary of an insurance group, "support agreements" may include net-worth

maintenance agreements or any other agreement intended to provide support to subsidiary policyholders. These can lead to an enhancement (or uplift) of the ICR or FSR assigned to an entity. When an indirect support agreement does not meet all of the conditions for ratings substitution with those of the guarantor, then to qualify for any rating enhancement, the support agreement must meet all of the following conditions. It:

- Gives policyholders, financial creditors, or other third-party interests, such as regulators, the ability to enforce the agreement against the support provider, if the provider fails to perform its obligations;
- Cannot be modified or terminated to the detriment of the existing beneficiary policyholders, or creditors at the time of termination without their agreement, unless the beneficiary subsidiary's creditworthiness becomes at least as strong as the supported rating; or the beneficiary can be sold only to an insurer with the same or higher creditworthiness as the support provider;
- Stipulates that the subsidiary will be prudently capitalized, for example, relative to the regulatory capital requirement; and
- Provides that the support provider will cause the beneficiary entity to have sufficient cash and liquid assets for the timely payment of all of its debt if the agreement is to provide corporate debt support, and policyholder obligations if the agreement is to provide policyholder support.

107. When, in addition to the conditions in the previous paragraph, the beneficiary subsidiary is at least strategically important to the group, and the support agreement meets all of the following four conditions, the rating on the beneficiary (unless it has an SACP at or above the GCP) is one notch below the rating on the support provider:

- The agreement states definitively that the provider will support the beneficiary, and sets no material cap on the support;
- The agreement is provided by a regulated bank or insurer that is a core group or subgroup member;
- The agreement is binding on successors and agents of the support provider; and
- The beneficiary subsidiary does not demonstrate adverse performance and is unlikely to be part of a corporate restructuring.

108. When the conditions in paragraph 106 apply, but a subsidiary is not core, highly strategic, or strategically important, and a net-worth maintenance agreement meets both of the following conditions, the rating on the beneficiary is three notches above its SACP, subject to a cap at one notch below the rating on the support provider:

- The agreement demonstrates an intention to support the beneficiary in the medium- to long-term; and
- The agreement is provided by an affiliated regulated bank or insurer.

109. For an insurance subsidiary with explicit support from a qualifying guarantee, the FSR on a subsidiary insurer would generally be six notches higher than the local currency sovereign credit rating in countries rated 'BBB-' or higher, and four notches higher than the local currency sovereign credit rating in countries rated 'BB+' or lower, limited by the rating on the guarantor.

F. Insurance Holding Companies

110. The criteria do not assign a group status to holding companies at the head of an insurance group. The ratings on holding companies reflect the difference in their creditworthiness relative to the operating entities.

111. Holding companies are NOHCs if they do not carry on insurance business, or operating holding companies (OHCs) if they do. (See the glossary in Appendix A for definitions.) A holding company that carries out an immaterial amount of insurance business is still classified as an NOHC, however. The criteria assign only ICRs to NOHCs, while OHCs may receive both ICRs and FSRs.

112. The ICR on a NOHC reflects (1) the GCP and (2) the number of notches that differentiate the NOHC from the operating entities. The rating differential takes account of the ongoing subordination of the creditors of the holding company to those of the operating insurance subsidiaries (typically their policyholders). A financing subsidiary of an insurance group that does not have core group status is assigned a rating as if it were an NOHC.

113. The difference (in notches) between the ICR on a NOHC and the GCP reflects the degree of structural subordination within insurance groups. Structural subordination is considered very high in jurisdictions such as the U.S., where even strong companies have to obtain prior regulatory approval before transferring significant amounts of solvency capital from an operating company to its holding company. Structural subordination is somewhat less onerous in regions other than the U.S. We define an NOHC as either a U.S. or non-U.S. NOHC, based on the geographic split of estimated dividends that the NOHC could receive, or in the absence of data on dividends, on the geographic split of earnings.

114. Usually, a NOHC receives an ICR that is two notches below that on the core operating companies (three notches below in the case of U.S. NOHCs whose classification is based on the geographic breakdown of the group's premiums). In rare instances, a different notching approach applies as follows; the ICR on an NOHC is:

- One notch lower than that on the core operating companies, if (1) banking operations are expected to contribute at least 25% of the group's operating income on a forward-looking basis based on projections over the next two to three years, and (2) the holding company is domiciled in a jurisdiction with a common regulator for banks and insurers that is supportive of capital fungibility among the holding company and the banking and insurance subsidiaries. If there is an increased likelihood of regulatory intervention detrimental to the NOHC's creditors, however, the notching differential can in such circumstances exceed one notch.
- One notch lower, if a holding company of insurance and noninsurance businesses has nonregulated activities that consistently provide at least one-third of the group's operating income (for example, based on EBITDA as defined in "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013), and the noninsurance business is not regulated, and their cash flows to the holding company are not subject to regulatory intervention. This also applies if nonregulated activities provide the majority of the group's operating income.
- The same as the GCP, that is, the notching is zero, if nonregulated businesses provide a clear majority of the group's operating income. This assumes that the nonregulated businesses are either (1) not owned by an insurance company or bank, or (2) owned by an insurance company or bank whose transfer of dividends to its owners is prudentially regulated, but any limits on the payment of dividends are unlikely to prevent the pass through of dividends from the noninsurance business to the holding company.
- Two notches below the GCP, for a holding company of a U.S.-based insurance group, instead of the usual three, based on our assessment of the unconsolidated liquidity position of the holding company and specifically: (1) the group's diversity among regulated subsidiaries in different domiciles, (2) the group's fixed-charge coverage, (3) the operating companies' aggregate ordinary dividend capacity relative to the sum of the holding company's ongoing cash requirements and principal maturities over the next 12 months, and (4) the holding company's unencumbered cash and liquid investments relative to the sum of its ongoing cash requirements and principal maturities over the next 12 months.

- One notch lower than the GCP, if an intermediate insurance holding company that (1) is part of a broader bank group, (2) contains at least one operating company that is strategically important, highly strategic, or core to the bank group, and (3) has sufficient access to funding or support from the parent bank group operations and to dividend flows from its insurance operations.
- Assigned in accordance with the situations described in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, if the company is a holding company of an insurance group with a GCP of 'b-' or lower. The same approach applies for a holding company if the notching in this section would otherwise result in a rating of 'CCC+' or lower.

115. The notching from the GCP to derive the ICR on a NOHC is also increased in the following situations:

- If the holding company's liquidity is assessed as "less than adequate" or "weak," the ratings are capped at 'BB+' or 'B-', respectively; or
- When the holding company itself carries very significant asset or liability risks that are otherwise diluted within the overall GCP.

116. The liquidity assessment for a NOHC is a function of the first three subfactors defined in section D.2 of "Insurers: Rating Methodology," published May 7, 2013, and of the two ratios described in paragraph 119 below (which together create the "ratio subfactor"). All items are analyzed at the level of the unconsolidated holding company, which, in most cases, carries most of the group's financial obligations.

117. A NOHC's liquidity is assessed as "adequate," "less than adequate," or "weak." The criteria never assess an NOHC's liquidity as "exceptional" or "strong."

118. Liquidity is assessed as less than adequate when one or two of the following four subfactors are negative, and weak when three or more of the subfactors are negative (in all other cases, liquidity is assessed as adequate):

- The first three subfactors defined in section D2 of "Insurers: Rating Methodology," published May 7, 2013; and
- The ratio subfactor in paragraph 119.

119. The ratio subfactor is positive when both of the following ratios (calculated at the level of the unconsolidated holding company) exceed 1.5x, negative if the first one is less than 1.2x and the second one less than 1.0x, and neutral otherwise. The two ratios are:

- Liquid assets to noncontingent short-term financial liabilities, where the numerator excludes stakes in subsidiaries but includes undrawn committed backup facilities (see paragraph 181 of "Insurers: Rating Methodology," published May 7, 2013), and the denominator includes liabilities with structured settlements, with no optional features;
- The holding company's ability to pay its total liquidity requirements (excluding principal servicing) out of its cash inflows: [Dividends from operating entities + net investment revenues from holding assets] / [overhead expenses + interest charges + other ongoing financial charges + shareholder distributions, if any].

120. The FSR and ICR for an operating holding company result from notching down from the GCP by up to two notches (or by up to three notches in the case of U.S. OHCs, where the classification is based on the group's geographic breakdown of premiums) to reflect the ongoing cash flow subordination consistent with our approach for NOHCs. The number of notches from the GCP predominantly is a function of:

- The group's financial leverage and the holding company's role as a debt financing vehicle;

- The holding company's dependence on income streams from operating subsidiaries versus the diversity of such income streams and the holding company's ability to generate revenues from own activities to service its debt obligations; and
- The availability of excess capital held at the holding company.

121. The following are examples of how ratings on OHCs are derived with respect to the GCP:

- If the group's financial leverage is immaterial and an OHC's activities are integral to those of the group, the rating on the OHC is typically equal to the GCP.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically equal to the GCP if a combination of diverse income streams from operating subsidiaries, revenues from own activities, and/or sizable excess capital, in our view, enables the OHC to meet its ongoing payment obligations under essentially all foreseeable circumstances. Again, this applies if the OHC's activities are integral to those of the group.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically one notch lower than the GCP if a combination of offsetting factors (related to the factors in the second and third bullet points of paragraph 120), in our view, enables the OHC to meet its ongoing payment obligations under most foreseeable circumstances.
- For OHCs that operate with financial leverage of more than 30%, the ICR is typically two notches lower than the GCP. This differential typically also applies if an OHC operates with financial leverage lower than 30%, but is dependent on income streams from a few operating subsidiaries, has limited capacity to generate revenues from own activities, and/or does not hold sizable excess capital.

G. Financial Institution Nonoperating Holding Companies

122. For NOHCs at the head of financial institutions groups:

- The ICR is generally one notch lower than the GCP.
- The rating differential between a NOHC and the core operating entities is mainly due to the NOHC's reliance on dividends and other distributions from operating companies to meet obligations.
- Certain factors lead to higher relative credit risk at an NOHC and result in wider notching from the GCP (see paragraphs 126 and 127 for examples).
- In certain circumstances, a weak financial profile at the NOHC, as shown by high double leverage (see sidebar below) and/or weak liquidity, reflects poorly on the group's financial profile and the creditworthiness of the consolidated financial entity.

123. The creditworthiness of an NOHC is closely tied to that of the consolidated group, but is marginally weaker than the core operating entities'.

124. The ICR on a NOHC is usually one notch lower than those on the group's core operating entities. The differential reflects our perception of marginally greater credit risk at the NOHC relative to the group operating entities. This risk arises from the NOHC's reliance on distributions from the operating companies to meet its obligations, possible supervisory barriers to payments and potentially different treatment in a default situation, and the structural subordination of holding company obligations to those at the operating company level.

125. Factors that may widen the ratings gap between the NOHC and the core operating entities include increasing stress at the holding company or group level, the potential imposition of supervisory barriers to payments from operating

companies to the NOHC, and the possibility that a government may rescue the operating company (in most cases, the bank), but not the NOHC, in a default situation. The greater the potential for these actions, the wider the differential between the rating on the NOHC and the core operating entities.

126. We reflect these factors by assigning a credit rating to the NOHC that is usually one notch lower than the credit ratings on the core operating entities of the group. The gap may be wider than one notch when:

- The group is under stress;
- The GCP includes an uplift for potential extraordinary government support, but the same degree of support is not expected to accrue to the NOHC (in certain cases, some support may be expected to accrue to the NOHC);
- The likelihood of regulatory intervention that would be detrimental to the NOHC's creditors increases;
- There are severe liquidity mismatches at the NOHC level, or a ratio of NOHC liquid assets--cash, money market funds, and marketable securities--to short-term debt (debts falling due within 12 months) that indicates the NOHC's weaker capacity to meet maturities of short-term obligations. The ratio indicates the amount of time the entity could survive without access to any debt financing; or
- Double leverage creates heightened sensitivity for an NOHC's creditors that is not offset by greater liquidity at the NOHC level (see sidebar below for more details).

Double Leverage For Financial Institutions Groups

- We define double leverage (DL) as holding company investment in subsidiaries divided by holding company (unconsolidated) shareholders' equity. DL renders the NOHC dependent in part on dividends to meet interest payments on external debt.
- The calculation of DL from public data is often unreliable and complicated by the existence of multiple holding companies in some organizational structures. If DL exists at each holding company level, a single group measure of DL is not meaningful.
- Holding company accounts are often only available annually, and detailed breakdowns of balance-sheet items are rare. In particular, NOHC-only disclosure frequently does not distinguish between equity investments in subsidiaries and advances to subsidiaries. Some groups employ different accounting standards for holding company and consolidated accounts. For all of these reasons, published measures of DL are often not comparable, but DL remains an important analytical tool to measure creditworthiness of financial institutions.
- Regulators often have the authority to prevent dividend payments by a subsidiary to its parent. If interest received from operating companies is insufficient to meet an NOHC's external interest and principal repayment obligations, the NOHC may suffer a strain on liquidity.
- We do not link specific thresholds for double leverage to the rating differential between the ICRs on the NOHC and core operating entities of a regulated financial group. Rather, we take DL into account in our analysis of the creditworthiness of the consolidated group. High DL may strain the liquidity needs of the NOHC and is a sign that the liquidity management of the group may be aggressive. We consider a high DL ratio as an indicator of potential for stress on the NOHC's liquidity and a signal that the group's liquidity could be strained if not offset by compensating factors.
- We would generally view the threshold of 120% double leverage as sufficiently high to expect offsetting liquidity at the NOHC parent to compensate. Similarly, if the absolute amount of double leverage of a financial group with a NOHC exceeds two years' net income of the consolidated group, we would look for offsetting liquidity at the NOHC parent to compensate.
- NOHCs often issue hybrid capital securities that build regulatory capital. They invest the proceeds in operating subsidiaries as equity or as similarly structured hybrid securities. We calculate DL in two ways: (1) with a common equity double-leverage measure that treats hybrid capital as debt, and (2) with a total equity double leverage measure that treats hybrid capital as equity. When a financial institutions group's common equity DL is higher than its total equity DL, the NOHC has issued hybrid capital securities and invested the proceeds as equity in an operating subsidiary.

127. When a regulated financial institutions group with a bank holding company has a GCP lower than 'bbb-', the gap between the ICR on a NOHC and its core operating company (typically a bank) is at least two notches.

128. For nonregulated nonbank financial institutions groups, the ICR assigned to a NOHC may be equalized with the GCP when the core operating entity or entities' activities display dependability or diversity (geographically or by business line) sufficient to support the NOHC's debt servicing. In such groups, we may equalize the rating on the NOHC with that on the nonregulated operating companies if there are no potential material restrictions (such as covenants) on the operating entities' ability to directly support the NOHC's creditworthiness.

129. For an intermediate nonoperating holding company within an FI group, the ICR is notched down from the core operating entity subsidiary of that holding company as if the intermediate holding company were the head of the group. This is unless we expect the wider group to provide support for the subsidiaries of the intermediate holding

company by injecting financial resources into the intermediate holding company. In that case, the ICR of the intermediate holding company is set at the level of its core operating subsidiary.

V. METHODOLOGY: U.S. PUBLIC FINANCE OBLIGATED GROUPS

130. U.S. public finance obligated groups typically consist of a group of subsidiaries, or a single subsidiary, that are cross obligated as security for specific debt. Obligated group structures are most commonly used by not-for-profit hospitals, health systems, and senior living organizations.

131. Obligated groups are created for purposes of securing debt, and do not have operating or governance independence from the larger group. While debt covenants may contain some restrictions, for example limitations on the transfer of assets out of the obligated group, covenants are generally not strong enough to insulate the obligated group from the strategic and operating influence of the group. Exceptions are described in paragraph 76.

132. Individual obligated group members may have separate legal incorporation and varying strategic value to the group. However, since the purpose of the obligated group is to secure debt on a joint and several basis, group status will be determined for the obligated group as a whole, not for its individual members. In applying the methodology in these criteria, obligated groups will be considered a single entity.

133. The group status of an obligated group will be core if it meets the conditions in paragraphs 54 and 55, or if it contains the majority of the operating assets of the organization, such as its hospitals or senior living facilities.

134. Most U.S. public finance ratings are issue ratings, although ICRs are assigned upon request. These criteria will be used to determine the ICR in accordance with paragraphs 21 to 29. The issue rating could differ from the ICR based on the specific security package for the bonds. We expect that barring subordination or structural enhancement, the issue rating will be at the level indicated by the ICR.

135. Following is an example of the application of this methodology to a health system that has three obligated groups, all of which have requested ICRs.

Chart 2—Example of Group Rating Methodology Application to U.S. Public Finance—Organization Structure

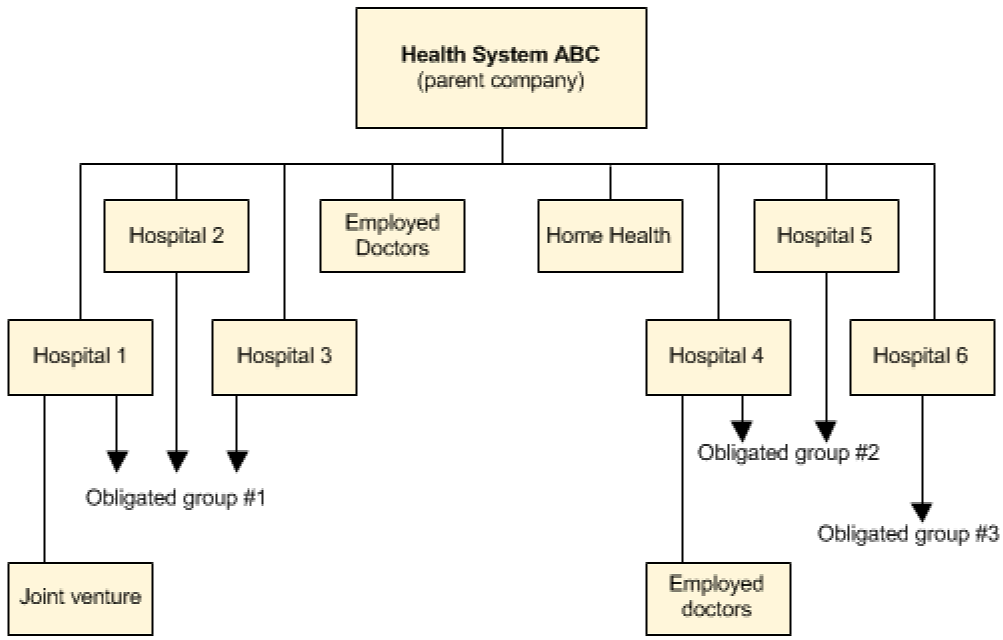
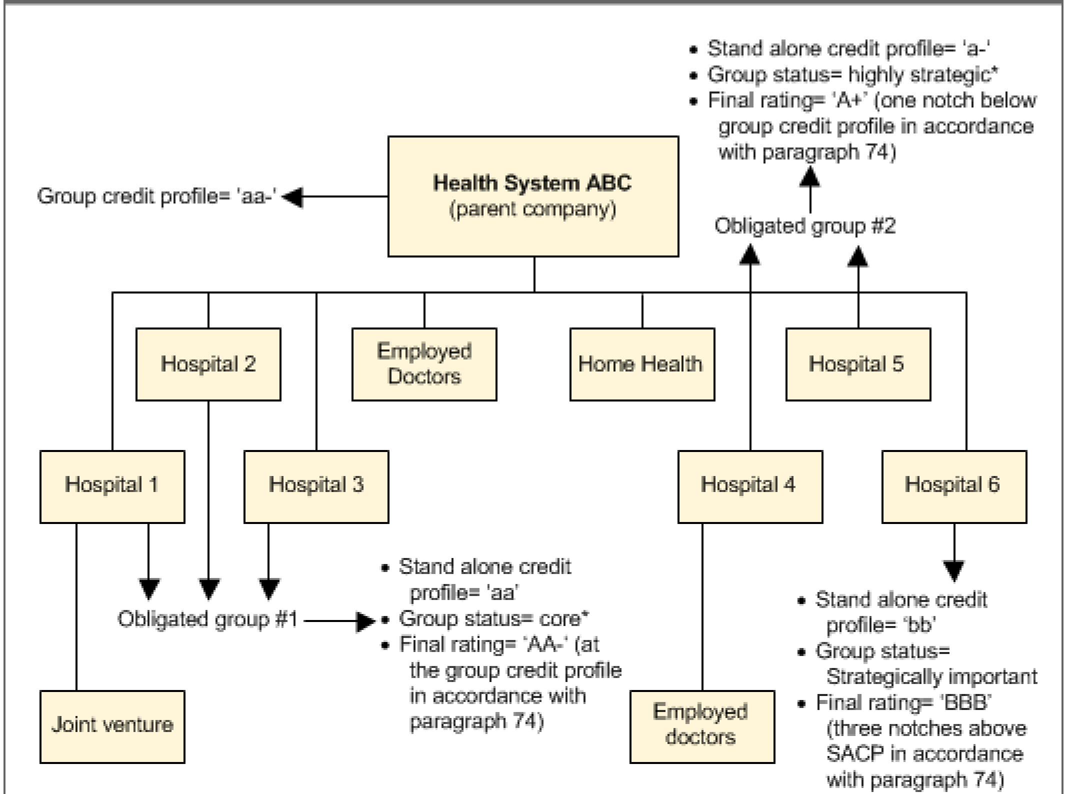


Chart 3—Example of Group Rating Methodology Application to U.S. Public Finance—Rating Profile



*The criteria do not require determination of a stand-alone credit profile (SACP) for obligated groups whose group status is "core" or "highly strategic" (see paragraph 51). The SACP provided here is for illustrative purposes.

VI: METHODOLOGY: CORPORATE GROUPS

A. Identifying Members Of A Corporate Group

136. For the purposes of these criteria, the scope of consolidation for corporate entities is generally the same as that of the group's consolidated audited accounts, plus proportionate stakes in joint ventures exclusively or jointly controlled, when we believe that the group has access to these JVs' cash flows and/or is likely to support them under stress.

137. We may adjust the consolidated statements we use to determine the GCP to include proportionately consolidated stakes in joint ventures that aren't included in the accounts, or adjust to treat as equity affiliates (using the equity method of accounting) subsidiaries that the group doesn't control or whose cash flows it doesn't have full (or unfettered) access to. Similarly, we may adjust consolidated statements to treat proportionately consolidated joint ventures as equity investees, when we believe that the group does not have sufficient control or access to these

entities' cash flows, or is unlikely to provide financial support to them.

138. The ICR of the parent is the same as the GCP. We analyze the GCP on a consolidated basis except where it has an insulated subsidiary to which we've assigned a potential ICR that is two or more notches higher than the GCP, as described in paragraph 38.

139. In line with paragraphs 38 and 39, the existence of an insulated subsidiary could negatively affect the GCP as its cash flows may not be available to the group. In cases where these subsidiaries represent such a material part of the organization's financial strength as to have an impact on the GCP, we generally would adjust the GCP down one to two notches from what it would have been if determined on a fully consolidated basis reflecting the potential for reduced cash flow.

B. Group Status Of Members Of Specific Corporate Groups

140. We're supplementing the definitions in paragraph 30 of "group" and "group members" to include:

- Insulated subsidiaries,
- Captive finance subsidiaries,
- Financing subsidiaries,
- Joint ventures,
- Dedicated suppliers/purchasers, and
- Entities with interlocking business relationships.

i. Insulated subsidiaries

141. Following on from paragraphs 38 and 39, we may rate some subsidiaries of groups higher than the GCP if all the following conditions are met:

- The subsidiary's SACP plus the potential for government support is higher than the GCP;
- The subsidiary's financial performance and funding prospects are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- The subsidiary is severable from the group, in our opinion, and able to stand on its own or subcontract certain functions previously provided by the parent;
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength;
- It is unlikely, in our opinion, that the subsidiary will be drawn into bankruptcy proceedings at the group level that would lead to a default on the subsidiary's obligations;
- For regulated entities, there is evidence that legislative, regulatory, or structural restrictions would inhibit the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

The subsidiary meets the following provisions:

- It holds itself out as a separate entity and maintains arm's-length relationships with its affiliates;
- It doesn't commingle its funds, other assets, and cash flows with those of any other entity;
- It maintains its own records, books of account, financial statements, and other corporate documents separate from

those of any other company; and
- It pays its own liabilities out of its own funds and observes all corporate formalities.

142. In line with paragraph 141, the indicative long-term ICR for an insulated subsidiary is one notch above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least one notch above the GCP, and
- The conditions listed in paragraph 141 are met.

143. The indicative long-term ICR for an insulated subsidiary, as explained in paragraph 141, is two notches above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least two notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy; and

At least one of the following three characteristics are met:

- There are significant minority shareholders with an active economic interest;
- Independent directors on the board have effective influence on decision making;
- There is evidence of strong legislative, regulatory, or structural restrictions, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness.

144. The indicative long-term ICR for an insulated subsidiary, as defined in paragraph 141, is three notches above the GCP if:

- The subsidiary's SACP plus the potential for government support stands at least three notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy;
- Strong legislative, regulatory, or structural restrictions exist, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

Either:

- There are significant minority shareholders with an active economic interest; or
- Independent directors on the board have effective influence on decision making; or
- There is a near-term likelihood of regulatory intervention restricting dividends or other payments from the subsidiary to its parent based on the financial condition of the group.

145. The indicative long-term ICR for an insulated subsidiary (as per paragraph 141) that is a regulated entity could be

de-linked from the GCP if either:

- The regulator has taken action to prevent the subsidiary from transferring cash flows to its parent, or
- For a regulated financial institution that is a subsidiary of a corporate group, where that corporate parent is experiencing material and sustained stress, the regulator could, in our opinion, act at some point (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

146. The indicative long-term ICR for a subsidiary could be de-linked from the GCP even if the parent company owns more than 50% of its equity, but doesn't exert control due to the existence of substantial creditor protections and the provisions set out in paragraphs 147 through 149 below are met. In such cases, we generally expect the minority shareholders to hold at least a 15% equity stake in the subsidiary, to be unaffiliated with the majority shareholder, to take an active role in corporate governance and have rights to ensure the company is adequately capitalized to conduct its business, to maintain fair relationships with the majority shareholder, to have some experience in the industry, and to have veto rights on such matters as material changes to the business, dividend payments, and voluntary bankruptcy filings.

147. In addition to meeting the conditions in the preceding paragraph, to be de-linked from the GCP, a subsidiary must:

- Maintain independent directors or an equivalent anti-filing mechanism (as an example, having a minority parent whose vote is required for major corporate decisions such as voluntary bankruptcy filings);
- Have no cross-default provisions with the parent;
- Meet the separateness provisions described below; and
- Maintain arm's-length relationships with its parent and affiliates.

148. The presence of independent directors on the governing board of an entity may help reduce the likelihood of the subsidiary filing voluntary insolvency proceedings merely for the convenience of its parent, in our opinion. An anti-filing mechanism, sometimes referred to as a "hindrance mechanism," is any sort of contractual mechanism between a debtor and a creditor that creates a disincentive for the debtor to file for bankruptcy. Examples include: 1) the appointment of an independent director to the borrower's board of directors and requiring unanimous board approval to file a petition for bankruptcy; or 2) inclusion of a pre-petition waiver, which is typically a contract between a debtor and a creditor where the debtor voluntarily waives a right guaranteed in bankruptcy in exchange for consideration by a creditor.

149. We assess separateness by reviewing whether the subsidiary meets these conditions:

- Maintains books, records, financial statements, and its accounts separate from any other entity;
- Holds itself out as a separate entity and conducts its own business in its own name;
- Doesn't pledge or commingle its funds, other assets, and cash flows for the benefit of any other entity or to make any loans or advances to any other entity;
- Avoids acquiring obligations or securities of its parent(s) or affiliates;
- Allocates fairly and reasonably any overhead for shared office space;
- Uses separate stationery, invoices, and checks;
- Pays the salaries of its own employees and maintains a sufficient number of employees in light of its contemplated business; and

- Avoids guaranteeing or becoming obliged for the debts of its parent(s) or affiliates.

150. We evaluate the breadth and specific separateness conditions listed in paragraphs 147 through 149 based on the likelihood that the courts might, in a specific jurisdiction, bring the subsidiary or its assets into the insolvency proceeding of another entity (for instance, a parent).

151. In line with paragraphs 38 and 39 and supplementing paragraph 28, we'll not assign an indicative long-term ICR for an insulated entity below 'B-' as a result of the GCP falling into the 'ccc' category. This would apply if the SACP is at least 'b-' and we believe it's unlikely that the subsidiary will be drawn into proceedings at the group level that would lead to a default of the subsidiary.

ii. Captive finance subsidiaries

152. A captive finance subsidiary (as opposed to a financing subsidiary) functions primarily as a means to market a company's products--by providing financing (in the form of loans or leases) to the company's dealers or end customers. When such a captive finance subsidiary generates 70% or more of its receivables from sales of its parent's or group's goods or services, we generally view the captive's default risk as indistinguishable from that of the parent, and we assess these captive finance subsidiaries as core to the group. We may also assess a captive finance subsidiary with less than 70% of its portfolio related to its parent as having core status to the group if facilitating the parent's product sales is the key strategic mission of the finance unit and if the captive-related business is the most important factor in the unit's financial performance.

153. For us to assess a captive finance subsidiary as core or highly strategic to a group, the subsidiary must provide significant benefits to the parent's marketing efforts. We determine significance by evaluating:

- The percent of parent product sold via the subsidiary (penetration rate). For diversified groups, the percent of total sales may be less important than the percent of certain specific product lines. In turn, those products must be important to the overall performance of the company. For example, a manufacturer of both aircraft and widgets may rely on its captive finance unit only for the former.
- The alternatives available to sell the parent's products. For example, at times, there are numerous banks in a given market eager to lend to car buyers.
- The costs and challenges in conducting its own financing. For some entities, the funding costs may outweigh the benefits--or it may become difficult to gain access to capital.

154. If a captive finance entity is an insulated subsidiary according to the insulated subsidiaries portion of this section, then we could rate the subsidiary up to three notches higher than the GCP. We assess a captive finance entity as severable when it is able to operationally stand on its own, by taking over or subcontracting to external companies certain functions that were previously provided by its parent. Given the nature of the business model of a captive finance entity, we would expect that it actually retains commercial ties with its parent.

iii. Financing subsidiaries

155. A financing subsidiary is a separate legal entity created for the sole purpose of carrying out certain financial activities on behalf of its parent company (such as raising debt for the group). When a financing subsidiary is wholly owned, shares the same corporate name, and issues debt on behalf of the group, we treat that finance subsidiary as core.

iv. Joint ventures

156. Supplementing paragraph 45, for JVs, we may attribute support to one of its owners (sponsors), even if the sponsor does not own a controlling stake in the JV and the JV is not part of its group. In these cases, we believe that there would be situations in which the sponsor would support the JV, regardless of the actions of the other JV sponsors. Situations in which one sponsor may be willing to support such a JV arrangement include when the JV operates in the same line of business as the sponsor and the sponsor essentially makes all day-to-day business and operating decisions. Alternatively, the JV may be of critical importance to another asset that is majority owned by the sponsor or to the overall market strategy of the sponsor. An example would be a 50%/50% JV refinery that is deeply integrated into a highly strategic chemical complex of one of the JV sponsors. In this case, the sponsor owning the chemical complex may have a strong incentive to support the JV refinery even if the other sponsor does not. We'd usually consider the JV to be strategically important, moderately strategic, or nonstrategic to one or more of its sponsors if it meets the conditions described in sections III.C.1.c, C.1.d, or C.1.e, respectively. In rare cases, however, we could consider the JV highly strategic to one or more of its sponsors if it met the conditions in section III.C.1.b.

v. Dedicated supplier/purchaser relationships

157. Although usually associated with ownership, support can also arise from other relevant circumstances. Even without having any ownership interest, an entity can support another entity based on economic incentives or contractual arrangements.

158. Group members are typically owned or controlled by the parent or ultimate parent. But there can be instances in corporate ratings in which a company has a dedicated supplier/purchaser relationship with an affiliated entity and only a minority ownership interest or none at all. For example, a beverage company (supplier) has numerous strategic relationships with its authorized bottlers allowing these bottlers exclusive right to bottle and sell the beverage company's soft drinks within specified territories. In many instances, the beverage company might not have an economic interest in a specific bottler, but their relationship is tied to the bottling, licensing, and distribution agreements. Alternatively, the beverage company (supplier) may have an ownership interest, yet there is also a second majority or significant owner.

159. A pre-condition to including such entities as part of the group is that the corporate entities have contractual commitments to purchase/supply the primary components of their product from the single supplier/purchaser affiliated entity. In addition, the supplier's/purchaser's product must represent more than 75% of the entity's (including joint ventures) net sales/cost of goods sold and EBITDA. In general, we believe economic incentive is the most important factor on which to base judgments about the degree of linkage between entities with dedicated supplier/purchaser relationships. We define the group in this instance as the supplier and its affiliated entity/purchaser. It does not include other affiliated entities/purchasers/suppliers. When a shareholder other than the supplier/purchaser owns or controls the affiliated entity and the contractual agreement is not perpetual, we believe the insolvency or financial difficulty of the larger investor or significant owner may weigh more on the affiliated entity's credit quality than if it were controlled by the supplier/purchaser. In these cases, we would not include the affiliated entity/purchaser/supplier in the group analysis of the supplier/purchaser.

160. We'll classify an entity as moderately strategic to the supplier/purchaser if at least three of the following five conditions are met:

- The entity represents more than 20% of the cash flow of the supplier/purchaser or more than 10% of the supplier's/purchaser's total volume.
- The term of the supplier/purchaser agreement is either perpetual or long-term (at least two years with automatic renewals).
- The supplier or purchaser has an economic interest in the entity that we assess to be material. We determine this by looking at the absolute value of the supplier's/purchaser's investment.
- There is evidence of the supplier's/purchaser's willingness and ability to provide financial support to the purchaser/supplier. We determine this by looking at prior loans, capital investments, or marketing support given to the purchaser.
- There is a shared name. We believe that a shared name creates an incentive for the supplier to provide support to prevent reputational risk in the capital markets.

vi. Entities with interlocking business relationships

161. Some groups of entities with interlocking business relations could benefit the rating of individual entities belonging to that group even in the absence of control as defined in paragraph 31. Group membership will be based on meeting at least four of the following conditions:

- Name affiliation,
- Common management,
- Board composition or board control,
- Shared corporate history,
- Common business ties,
- Common financing group members,
- Shared corporate support functions, and
- Cross ownership holdings.

162. In such cases, we determine the GCP as the weighted average of the creditworthiness of the material group members.

163. If the GCP, determined as in paragraph 162, is higher than the SACP of a specific group member, that group member could be assigned a strategically important classification or a moderately strategic classification, subject to the conditions in paragraphs 164 and 165, respectively.

164. We classify an entity as strategically important to the group if it meets all of the following:

- Is likely to remain a part of the group;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment; and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

165. We classify an entity as moderately strategic to the group if it meets the first two conditions (below) and at least one of the following last three conditions:

- Is likely to remain a part of the group in the near term;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;

- Has the long-term commitment of senior group management, or incentives exist to induce such commitment;
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

C. Rating Corporate Group Entities Above The Sovereign

166. Implicit group support can result in the ICR on a group member being higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

167. Supplementing paragraph 77, if we consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default, the ICR of the subsidiary could be higher than the foreign currency rating of the sovereign:

- If the subsidiary is core to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus three notches, and (2) the potential rating otherwise derived from these criteria;
- If subsidiary is highly strategic to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus two notches, and (2) the potential rating otherwise derived from these criteria; and,
- If the subsidiary is strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the sovereign foreign currency rating. Therefore, in these cases, the rating is the potential rating otherwise derived from these criteria and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

168. Implicit group support can result in the ICR on a group member being higher than the relevant T&C if the sovereign is rated 'B-' or lower and if we consider the parent group to be able and willing to sufficiently support the subsidiary during transfer and convertibility restrictions. For these cases, the ICR of the subsidiary could be higher than the T&C assessment for the country where that subsidiary operates:

- If the subsidiary is core to the group, the foreign currency rating is the lower of: (1) the T&C assessment for the country plus one notch, and (2) the potential rating otherwise derived from paragraph 167.
- If the subsidiary is highly strategic, strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the T&C assessment for the country.

VII. APPENDICES

Appendix A: Glossary

169. All financial metrics used to apply these criteria, including geographic or business-line breakdowns of a group's activities, include projections over the next two to three years.

170. Captive insurer: A subsidiary that mainly provides insurance services for group members. Captive insurers typically show a very high degree of integration with group financial and risk management strategy. Captive insurers include captive reinsurance subsidiaries of insurance groups and captive insurance and reinsurance subsidiaries of corporate or FI groups. The captives of corporate or FI groups insure risks of non-insurance subsidiaries either directly as

insurers or indirectly as reinsurers. In turn, they may reinsure some of the aggregated risk with third-party reinsurers, thereby playing a central role in the group's risk retention strategy.

171. Financial institution: The term "financial institution" includes retail banks, commercial banks, corporate and investment banks, large broker-dealers, mortgage lenders, trust banks, credit unions, building societies, custody banks, finance companies, asset managers, exchanges, clearinghouses, regional securities brokers, and similar financial institutions.

172. Financial services sector: Consists of banks, nonbank financial institutions, and insurers.

173. Financial sponsor: This is an entity that does not have a long-term, strategic investment in a company. Rather, the financial sponsor is a financial investment firm, trying to increase the value of its investment by improving management, capital, or both, typically with the ultimate goal of liquidating the investment. Financial sponsors include private-equity firms, hedge funds, venture capital, public and private investment companies, and mutual funds.

174. Financial strength rating (FSR): A Standard & Poor's insurer financial strength rating is a forward-looking opinion about the financial security characteristics of an insurer with respect to its ability to pay under its insurance policies and contracts in accordance with their terms (see "S&P Global Ratings Definitions," published June 26, 2017).

175. Fully integrated: This refers to a subsidiary that depends on the rest of the group for its administrative and operational activities, and infrastructure. These ties render it highly improbable to sever the subsidiary from the group. Examples of such subsidiaries can include booking or cost centers, or captive insurers, captive financing operations, and entities that exist solely to issue debt or carry on treasury operations on behalf of a group.

176. Group credit profile (GCP): The GCP is Standard & Poor's opinion of a group's creditworthiness as if the group were a single legal entity, and is conceptually equivalent to an ICR. A GCP does not address any specific obligation.

177. Insurance company or insurers: Entities that carry insurance risk, excluding for example, insurance brokers and companies servicing an insurance sector. In these criteria, unless otherwise stated, these terms include reinsurance companies and reinsurers.

178. Insurance group: A group of companies that has insurance as its predominant activity.

179. Intermediate holding company of a financial services group: A legal entity that is a subsidiary within a group that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities.

180. Investment holding company: A corporate entity that invests in, but does not intend to support, other companies (which are usually operating entities).

181. Issuer credit rating (ICR): Also called "counterparty credit rating," a Standard & Poor's issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, focusing on its capacity and willingness to meet its financial obligations in full and as they come due (see "S&P Global Ratings Definitions," published June 26, 2017).

182. Local currency issuer credit rating: A nonsovereign entity's local currency ICR reflects Standard & Poor's opinion of

that entity's willingness and ability to service its financial obligations, regardless of currency and in the absence of restrictions on its access to foreign exchange needed to service debt.

183. Nonoperating holding company (NOHC) of a financial services group: A legal entity that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. An NOHC may also provide services to subsidiaries such as investment and treasury management.

184. Operating holding company (OHC) of a financial services group: A legal entity that conducts prudentially regulated business activities and also is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. If a holding company has a banking license, it is an OHC.

185. Parent: An entity with controlling or joint-control interest in another incorporated entity (a subsidiary) or a joint venture.

186. Prudentially regulated: This refers to the regulation of a financial services entity by one or more regulatory authority by setting standards for capitalization and potential restrictions on distributions. For examples, see paragraph 84.

187. Stand-alone credit profile (SACP): See "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

188. Start-up: An entity operating for five years or less.

189. Subgroup: A group of legal entities within a wider group that are either controlled by a single legal entity, or collectively by several entities.

190. Transfer and convertibility (T&C): Defined in "Criteria For Determining Transfer And Convertibility Assessments," published May 18, 2009. A country T&C assessment reflects Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

191. Ultimate parent: The legal entity at the top of a group structure, in which the control chain may include several successive layers and exclusive controlling or joint-control interest in another incorporated entity ("subsidiary") or joint venture. Under the criteria, a natural person, family firm, foundation, managed fund, or private equity firm would not generally be treated as an ultimate parent. In general, "family firm" refers to one that is family-controlled, and "private equity firm" to a natural person or fund-controlled entity primarily investing in a private capacity in operating entities.

Appendix B: Frequently Asked Questions: Implications Of Membership On An FI Group

192. Q: How do the criteria take into account the impact on a subsidiary's SACP from being part of an FI group?

193. A: Our criteria recognize the actual business and financial links between a subsidiary and its wider group. We also acknowledge that even absent such interactions, the ownership link itself means that the parent operating entity's credit standing usually influences the financial position of the subsidiary. In our view, this is particularly true for

institutions where continued confidence among customers and investors is paramount. As a result, we believe that financial stress at the parent level will likely affect the subsidiary's creditworthiness to at least some extent, particularly if there are close business or funding ties between the two.

194. A subsidiary's creditworthiness can be affected by its existing financial, commercial, and reputational linkages with the wider group. These can affect the assessments that we use to determine the SACP. Factors that we consider include:

- Whether the subsidiary's prospects in terms of financial performance and funding are sufficiently independent from those of the group so that the relative strength of the subsidiary can remain nearly intact even if other group entities encounter severe setbacks.
- Direct financial exposures to the parent or other group, which may include but not be limited to funding links--for example, where the subsidiary is funding the parent or other group companies, or is relying on the continued ability of affiliates to provide it with funding or liquidity.
- Capital mobility--such as when a subsidiary depends on capital injections from the parent or has significant excess capital resources from a regulatory perspective that could be passed to its parent.
- Strong reputational or franchise linkages--for example, through sharing a common brand or identity that becomes contaminated. In the case of a bank, concerns about the position of the parent could undermine the confidence of depositors, existing and potential clients, and the wholesale market, causing the subsidiary to lose business.
- Operational linkages--for example, when the subsidiary has a high dependence on group affiliates to provide critical operational and technological functions.
- Strategic decisions--such as when the parent decides to exit a product or market that provides its subsidiary important revenues or is a good source for future growth.

195. The subsidiary's creditworthiness could also be undermined by a continued ability of the weaker parent to take assets from the subsidiary or burden it with liabilities during financial stress, leaving the subsidiary with less flexibility to raise debt or capital. Furthermore, in some jurisdictions, a bankruptcy petition by the parent would include the subsidiary or cause the subsidiary to go into administration.

196. We consider that factors such as tight regulatory oversight and the legal powers of the relevant authorities can create regulatory restrictions that would prevent or limit a foreign bank subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness. This influences our view of the extent to which the SACP reflects the potential for negative intervention by the parent. Among the factors that we consider are:

- The potential effectiveness of government support in protecting the credit strength of the subsidiary based on the nature of the regulatory oversight and the degree of legal intervention powers that the host government can exercise, which is also informed by the scores assigned to "banking regulation and supervision" and "regulatory track record" when assessing the institutional framework for the host country in our BICRA assessment (see "Banking Industry Country Risk Assessment Methodology And Assumptions," published Nov. 9, 2011), and our view of the legal infrastructure.
- Whether the regulatory capital requirements of the host regulator are set at a transparent level that is higher than the minimum for a license.
- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by the subsidiary to be used by the parent or other parts of the group.
- The degree to which the subsidiary receives funding from group entities.

- Whether the subsidiary would not be drawn into the group's bankruptcy or reorganization proceedings (this could be supported by a nonconsolidation opinion from an independent expert to confirm the separateness of the parent and subsidiary).
- Whether the host country has in place a resolution regime or other legal intervention powers that enable the host government to change the ownership of the firm prior to the bankruptcy of the subsidiary or its parent.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.
- Whether the subsidiary is severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent.
- Whether the subsidiary has sufficient capacity to ensure independence of decisions from the group, which could be reinforced by the existence of outside ownership.

197. While some of these factors may be in place even before a parent comes under stress, generally we observe that regulators tend to play an increasingly active and protective role of systemically important banks as the parental situation deteriorates. If we observe inaction on the part of the authorities in the face of a marked deterioration in the group's credit standing, which could threaten the viability of the systemically important subsidiary, this could lead us to reconsider whether the subsidiary is indeed systemically important.

198. Q: If a foreign bank subsidiary is rated higher than its parent due to the potential for extraordinary government support in its host market, how does this affect Standard & Poor's view of the creditworthiness of the group?

199. A: When the host authorities consider a foreign bank subsidiary to be a systemically important entity in that market, the subsidiary may be subject to actions by various government authorities and regulators that would provide some protection to the subsidiary in the case of parental stress. These actions can restrict the flow of resources from the subsidiary to the parent and can therefore reduce the link between parent and group creditworthiness, and can pull down the GCP determined for the group.

200. We take account of the potential restrictions on intragroup flows on the GCP by:

- Considering the potential negative implications for the business position assessment used when determining the GCP due to the prospective impact on group strategy or franchise.
- Considering the negative impact on the risk position assessment used when determining the GCP due to restricted capital flexibility that is not otherwise captured in the RACF.
- Considering the extent of restrictions other than on capital flows.

201. Items that we consider to assess the degree of the adjustment include:

- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by the subsidiary to be used by the parent or other parts of the group.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.

202. Q: Can a foreign bank subsidiary that is rated higher than the GCP because of host government support still be considered core to the parent bank?

203. A: Yes, because group status reflects the likelihood of potential group support. The potential for the subsidiary to receive host government support does not automatically affect the group incentives to provide support. However, in

some circumstances, the group may have a reduced likelihood of supporting the subsidiary if the operations in the foreign jurisdiction could be ring-fenced in the future from the rest of the group.

Appendix C: Superseded And Partly Superseded Criteria

204. For issuers within the scope of these criteria, this article supersedes:

- Criteria | Corporates | Utilities: Methodology: Differentiating The Issuer Credit Ratings Of A Regulated Utility Subsidiary And Its Parent, March 11, 2010
- Regulation Benefits Ratings On European Automakers' Captive Finance Subsidiaries, May 18, 2006
- Corporate Criteria--Parent/Subsidiary Links; General Principles; Subsidiaries/Joint Ventures/Nonrecourse Projects; Finance Subsidiaries; Rating Link to Parent, Oct. 28, 2004
- Criteria | Corporates | Utilities: U.K. Regulatory Ring-Fencing Risk For Utility Holding Companies: Standard & Poor's Approach, July 8, 2003

205. The subpart titled "Rating Group Entities Above The Sovereign" in this article partly superseded the article "Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings," published Feb. 11, 2003, which was fully superseded by "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," on Nov. 19, 2013.

206. This article partly supersedes "Captive Finance Operations," published April 17, 2007, by superseding the references to group support in that article (the sections titled "Assessing Captive Finance Operations" and "Captive-Specific Aspects" are not superseded). That article was later fully superseded by "Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers," on Dec. 14, 2015.

207. This article partly supersedes the following article, which now only applies to captive insurers that are subsidiaries of companies excluded from the scope of this article by paragraph 8: "Rating Captive Insurers," April 13, 2004.

Appendix D: A Specific Application Of The Interaction Between GRE And GRM Criteria

208. If subsidiaries classified as GREs are owned by the government via a holding or asset management company but we believe that "control" over a GRE's strategy and cash flow rests ultimately with the relevant government, or a representative thereof, we will typically analyze the GRE using our government-related-entity criteria (see paragraphs 48 and 67).

209. As an example, we are likely to rate a regulated utility that is classified as a GRE and is owned by a holding company, whose sole purpose is acting as the legal owner on behalf of the government and that does not carry out its own business activities, using our criteria for rating government-related entities.

210. Other GRE subsidiaries are rated as per paragraph 29 and the section "Extraordinary government support in the GCP" of these criteria, and the section "Rating GRE Subsidiaries" in the GRE criteria. Per these criteria, the final ICR is the highest of the three potential long-term ICRs resulting from group support, government support, or credit-substitution

guarantee methodologies, but the GRE criteria also provide for the case where we may rate based solely on potential extraordinary government support for the subsidiary and not consider the group credit profile, subject to certain conditions (in paragraph 79 of the GRE criteria).

Appendix E: Frequently Asked Questions On Members Of Corporate Groups

Could a subsidiary assessed as core to the group be rated above both the local and foreign currency ratings of the sovereign, based on group support? Does it matter whether the sovereign local currency rating is higher than the sovereign foreign currency rating? Would the answer be different if the transfer and convertibility assessment is equal to the foreign currency rating?

211. A "core" subsidiary could generally be rated up to three notches above the sovereign foreign currency rating (up to the group credit profile), based on group support. That would be regardless of the level of the sovereign local currency rating. However, if the transfer and convertibility (T&C) assessment is equal to the sovereign foreign currency rating, the subsidiary rating could be at most one notch above the sovereign foreign currency rating/T&C assessment, and again, regardless of the sovereign local currency rating. If we consider that the parent group is able and willing to sufficiently support the subsidiary during a stress associated with a sovereign default, paragraph 167 allows for core subsidiaries to be rated up to three notches higher than the foreign currency rating of the sovereign, and paragraph 168 allows core subsidiaries ratings to exceed the T&C assessment only by one notch, based on group support.

One of the conditions to be assessed moderately strategic, strategically important, highly strategic, or core to the group is for the entity to be unlikely or highly unlikely to be sold. Would a partial sale of the subsidiary be interpreted by Standard & Poor's as not meeting this condition? Would the percentage of the sale make a difference in this assessment?

212. A partial sale typically indicates a decrease in the importance of the subsidiary. Therefore, although a partial sale is not necessarily indicating that the subsidiary is not meeting the highly unlikely to be sold condition, it generally goes against the spirit of some of the conditions to be assessed core and highly strategic to the group as defined in paragraphs 54 through 57.

213. For core and highly strategic assessments, we would typically expect no partial sales, regardless of the percentage, although we recognize that there are certain organizational structures where ownership levels and control do not necessarily go hand and hand (e.g., master limited partnerships and corporations that have shares with different voting rights). In the cases of strategically important and moderately strategic, as long as control is maintained, the credit implications of the sale will be based on the judgments described in paragraphs 59–61. Nevertheless, in those cases we would typically expect that the group not only controls the subsidiary but also owns a majority stake in it.

214. In order for the group to have incentives to support a subsidiary, the subsidiary needs to be a relevant part of the group. The higher the importance, the more are the incentives. For a subsidiary to be assessed as core, the likelihood of it being sold has to be minimal. This is a general prerequisite to meet all other conditions to be assessed core (e.g., to have long-term commitment of support from management implies that the subsidiary will remain part of the group).

Could a newly acquired company be assessed as "core" to the group?

215. Yes, although we expect this situation to be very unusual. For an entity to be core to its group, it must be integral to the group's operations. A newly acquired subsidiary has the potential for unanticipated risks to emerge as part of its

integration into the group. For example, we believe that the characteristics that define if an entity is core to a group could be present if the acquired company operates in the same line of business, has a long track record of overperforming, fits with the overall group's strategy, and we believe that it is sufficiently material for the group to support it if needed. On the other hand, a start-up subsidiary is generally not regarded as core if it lacks an operating history, given its risks of integration into the group. In addition, the potential for volatile earnings and cash flows is likely to be higher for a start–up than for a company that has been operating for a long time. However, we may assess a start-up as core to the group if it meets all but one of the other characteristics listed in paragraph 54, apart from "has been operating for more than five years," and if it is set up to serve important existing customers, or has been created as a separate legal entity due to regulatory requirements or tax considerations, such that the group otherwise has the requisite operating history (see paragraphs 54 and 64).

How would Standard & Poor's apply the group rating methodology criteria in cases where there is a majority shareholder but there is also a shareholders´agreement preventing that majority shareholder from exercising control of the subsidiary?

216. Our group ratings methodology explains how our assessment of likely extraordinary support (or negative group intervention) factors into the issuer credit rating on an entity that is a member of a group. The group refers to the parent or ultimate parent, as defined in paragraphs 185 and 191, and all the entities over which the parent or ultimate parent has direct or indirect control. Control is a key concept, and our definition refers to the ability to dictate a group member's strategy and cash flow. However, shareholders' agreements have different goals, operate in different ways, and have diverse implications. To the extent that Standard & Poor's concludes that the agreement limits the otherwise controlling parent in dictating the strategy of the subsidiary, we could assess that control is not present and therefore the subsidiary would not be considered affected by the parent's group influence. This argument is twofold. If the subsidiary is not affected by the group's considerations because it is not controlled by the parent, we'd not consider the subsidiary as consolidated with the parent and would most likely consider it as an equity affiliate when determining the issuer credit rating on the parent (and the group credit profile would only consider the projected income flows coming from the subsidiary).

217. This paragraph has been deleted.

Could a subsidiary assessed as core or highly strategic to the group also be classified as insulated?

218. Yes. A subsidiary can both be assigned a "group status" (such as "core" or "highly strategic") and be assessed as an "insulated subsidiary" if it meets the conditions in paragraph 141. In such cases, our "insulated subsidiary" assessment takes precedence over the "group status" when assigning the issuer credit rating, potentially leading to alternative outcomes to those in table 1.

219. This paragraph has been deleted.

How does Standard & Poor's determine the GCP for a corporate group when the ultimate parent is an Investment Holding Company and there are no consolidated accounts?

220. We believe that the characteristics of groups headed by an investment holding company (IHC) are best reflected by the IHC's individual financial profile and, therefore, in those cases, the GCP is the ICR of the parent as determined by Methodology: Investment Holding Companies, that is, using individual financial accounts. Given the intrinsic nature of the business of an IHC, its creditworthiness depends on its ability to maximize portfolio value and rotate its portfolio to

realize capital gains. IHCs are typically financed independently of the investee companies and generally rely on dividends from them rather than on access to cash flows. Even when IHCs have control, investees tend to have independent management and maintain an arm's-length relationship with the holding. As a result, the economic and financial reality of an IHC is typically best represented by non-consolidated accounts. In addition, IHCs do not typically produce consolidated accounts as investments tend to be temporary and investees, which are therefore "available for sale", are accounted for as equity investments.

221. The content in this paragraph was moved to paragraph 234, Appendix F.

222. The content in this paragraph was moved to paragraph 235, Appendix F.

223. The content in this paragraph was moved to paragraph 236, Appendix F.

In some jurisdictions, such as in Brazil, controlling entities are jointly and severally liable for the unpaid liabilities of a financial institution it owns. How is such risk incorporated in the analysis of a corporate group that owns a bank?

224. While the responsibility of a controlling shareholder to support the bank is not equivalent to a financial guarantee (it does not guarantee timely payment), it is a legal obligation ultimately enforceable via a potential freeze on assets. This creates a very strong incentive to capitalize the bank when needed. In instances when a corporate group owns or controls a bank, we seek to assess the expected maximum risk exposure that the financial institution could represent for the corporate, based on the bank's credit profile, size, and ownership profile.

225. As such, we determine the GCP by adding a potential liability for recapitalizing the bank to the group debt and use that adjusted debt amount to calculate corporate financial ratios. We use the bank's SACP (determined as per our bank rating methodology) to guide our assessment of the likelihood for the liability, and total capital--defined as minimum regulatory capital plus a 100 basis point (bp) cushion--to help size the severity. The weaker the SACP, the more likely the parent will need to cover potential shortfalls in capital. For that reason, we apply a 100% severity for banks with an SACP in the 'b' category; 50% for an SACP in the 'bb' category, 30% for an SACP in the 'bbb' category, 20% for an SACP in the 'a' category, and 0% for an SACP in the 'aa' or 'aaa' categories.

226. In case of more than one controlling entity, we consider the ownership percentage of each one in determining the potential capital calls. Nevertheless, we see less legal incentive to support when there are public shareholders, since their assets cannot be frozen as can those of private-sector owners, even though a public owner may be more influenced to provide financial assistance based on the relative systemic importance of the bank subsidiary.

227. Typically, the group status of the bank will be at least strategically important, given that the applicable law requires support, especially under stressful conditions. For assigning strategically important status, the other conditions under these criteria should also be met, including that the bank subsidiary is unlikely to be sold and is important to the group's long-term strategy. We would also consider the existence of cross-default mechanisms in our analysis of support and liquidity of the corporate entity.

228. In cases where the GCP could be higher than the sovereign rating, to size the potential liability spilling over from the bank to its ultimate corporate parent, we start with the hypothetical sovereign default scenario determined in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," Nov. 19, 2013. We may

adjust this initial calculation of potential support from the corporate entity if we expect regulatory forbearance that could, for example, relax regulatory capital requirements in times of stress. This reflects our understanding that banking authorities are likely to try to permit banks to continue operating as a going concern, after absorption of losses, to avoid closure of the institution.

229. Finally, to assign a GCP higher than the sovereign rating, we consider a 100% likelihood of the bank's capital call, and size the severity of this event as the higher of the simulated sovereign default scenario (adjusted if relevant as discussed above) and the bank's minimum regulatory capital plus a 100-bp cushion.

Appendix F: Frequently Asked Questions Pertaining To All Sectors

How do we rate Loan Participation Notes (LPNs) issued by a special purpose vehicle on behalf of a corporate, financial institution, or insurance entity (including their holding companies)?

230. We rate LPNs issued by an SPV at the same level as we would rate an equivalent-ranking debt of its underlying borrower (the sponsor) (and treat the contractual obligations of the SPV as financial obligations of the sponsor) provided that all the following conditions are met:

- All of the SPV's debt obligations are backed by equivalent-ranking obligations with equivalent payment terms issued by the sponsor;
- The SPV is a strategic financing entity for the sponsor set up solely to raise debt on behalf of the sponsor's group; and
- We believe the sponsor is willing and able to support the SPV to ensure full and timely payment of interest and principal when due on the debt issued by the SPV, including payment of any expenses of the SPV.

231. As a consequence, we assign a 'D' or 'SD' issuer credit rating (ICR) to the sponsor if the SPV fails to make payments on the debt when due, as we would typically do in case of default on a similarly ranking debt issuance of the sponsor (see also "Methodology: Timeliness Of Payments: Grace Periods, Guarantees, And Use Of ‘D’ And ‘SD’ Ratings," Oct 24, 2013).

232. For multiple sponsor SPVs, or SPVs that do not meet all the conditions above, the relevant Structured Finance criteria apply, which may include "Asset Isolation And Special-Purpose Entity Criteria—Structured Finance," May 7, 2013 and "Global Methodology For Rating Repackaged Securities," Oct. 16, 2012.

233. These criteria do not supersede established criteria that address specific situations, such as rating Sukuk (see "Methodology For Rating Sukuk," Jan. 19, 2015.

How does Standard & Poor's determine a GCP for a mixed group, when the consolidated financial profile may not lend itself to analysis using only one criteria framework? A "mixed group" refers to a group (or subgroup) with multiple operating units that are inherently different in nature, and are subject to different criteria frameworks (for example, a corporate entity that owns one or more financial services entities).

234. To evaluate a mixed group, we typically use the rating methodology that is relevant for the operations that most strongly influence the group's profile. However, at the same time, the GCP assessment should reflect the impact of other operations on the creditworthiness of the group.

235. Therefore, when the analysis of consolidated financial statements using a single sector's criteria framework does not produce a sufficiently meaningful picture of credit quality, we will draw on two or more different criteria frameworks, applying them to determine SACPs for the different businesses within the group. The SACPs determined using these distinct methodologies would then be aggregated to derive the GCP. The GCP would be derived by a weighted combination of the individual SACPs. The weighting would reflect each business unit's proportional contribution to the overall enterprise, typically based on a normalized, forward-looking measurement of one or more of the following: earnings, cash flow, dividends, assets or a comparable measure. The GCP would include adjustments to account for any benefits or risks not captured in the aggregation of the component SACPs.

236. This guidance does not supersede established criteria that may address mixed groups in specific categories, such as financial services groups that engage in both banking and insurance activities or corporate groups that engage in captive finance activities. Additionally, this guidance does not supersede other guidance that may be applicable in specific situations, such as the determination of a GCP for corporate groups with leasing or finance company operations that are closely connected to the core corporate operations, but do not meet the requirements for treatment as captive finance operations.

REVISIONS AND UPDATES

This article was originally published on Nov. 19, 2013. The criteria became effective on Nov. 19, 2013.

Changes introduced after original publication:

- Table 2 has been updated to also apply to a government-related entity (GRE) with "almost certain" or "extremely high" likelihood of government support.
- In paragraph 46, we have clarified the use of the criteria tables in determining supported versus unsupported group credit profiles.
- Appendix D has been updated to add paragraph 210 to further clarify the interaction of our GRE criteria and group rating methodology with respect to government support.
- Cross-references to GRE criteria have been updated.
- On Dec. 13, 2013, we republished this article to clarify our description in the third bullet point under paragraph 167 of how we arrive at the rating of a subsidiary that's strategically important, moderately strategic, or nonstrategic to a group when considering rating corporate group entities above the sovereign.
- On Sept. 16, 2014, we republished this article to add Appendix E, a section on frequently asked questions on members of corporate groups.
- On March 25, 2015, we republished this article in connection with an update to "Rating Government-Related Entities: Methodology And Assumptions," also published March 25, 2015.
- Following our periodic review completed on Dec. 23, 2015, we deleted outdated sections that previously appeared in paragraphs 2 and 17-20, which were related to the initial publication of our criteria and no longer relevant.
- On Feb. 18, 2016, we republished this article to correct a criteria error in the first and fifth bullet points of paragraph 104 relating to policyholder guarantees, replacing the reference to policyholder obligations in the first bullet point with a reference to senior unsecured obligations, and removing the reference to the guarantor's insolvency or bankruptcy in the fifth bullet point. We also added references to additional loss-absorbing capacity (ALAC) support to paragraphs 29 and 33 and step 5d of chart 1 to reflect that the previous text (published Nov. 19, 2013) had been partially superseded by "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity,"

published April 27, 2015.
- On April 28, 2016, we added two questions at the end of "Appendix E: Frequently Asked Questions On Members Of Corporate Groups" and deleted paragraph 217, which we replaced with paragraphs 221-223.
- On Aug. 9, 2016, we added "Appendix F: Frequently Asked Questions Pertaining To All Sectors."
- On Oct. 21, 2016, we republished this article to indicate that paragraphs 104 and 105 have been superseded by "Guarantee Criteria," published Oct. 21, 2016, and updated references to archived criteria articles. We also added a question to Appendix E (see new paragraphs 224-229) and therefore renumbered paragraphs 224-227 to 230-233.
- On Dec. 14, 2016, we republished the article following the publication of "Key Credit Factors For The Operating Leasing Industry" to bring entities that were previously excluded into scope.
- Following our periodic review completed on Dec. 22, 2016, we updated criteria references.
- On Sept. 29, 2017, we republished the article to move paragraphs 221-223 to "Appendix F: Frequently Asked Questions Pertaining To All Sectors" from "Appendix E: Frequently Asked Questions On Members Of Corporate Groups" to reflect the more expansive scope originally intended.
- Following our periodic review completed on Dec. 18, 2017, we updated criteria references and deleted paragraphs 104, 105, and 219, which were superseded. We moved paragraphs 221-223 to paragraphs 234-236.

Criteria articles that partly superseded this article

- Paragraphs 29 and 33 and step 5d of chart 1 were partially superseded by "Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity," published April 27, 2015, which added references to additional loss-absorbing capacity (ALAC) as a form of extraordinary external support.
- Paragraphs 104 and 105 have been superseded by the publication of "Guarantee Criteria," published Oct. 21, 2016.
- Paragraph 219 of Appendix E has been superseded by "Reflecting Subordination Risk In Corporate Issue Ratings," published on Sept. 21, 2017.

Change of scope

- Project developers are now in scope following the publication of our revised criteria for rating such entities, "Methodology For Rating Project Developers," on March 21, 2016.
- Companies with noncontrolling equity interests (NCEI) are now in scope following publication of our revised criteria for NCEIs, "Methodology For Companies With Noncontrolling Equity Interests," on Jan. 5, 2016.
- Investment holding companies (IHCs) are now in scope following the publication of our revised criteria for IHCs, "Methodology: Investment Holding Companies," on Dec. 1, 2015.
- Japanese general trading companies mentioned in paragraph 8 are now in scope of these criteria following publication of "Methodology For Rating General Trading And Investment Companies" on June 10, 2015.
- Issuers in the commodities trading industry are now in scope of these criteria following publication of "Commodities Trading Industry Methodology" on Jan. 29, 2015.
- Master limited partnerships and general partnerships of master limited partnerships are now in scope of these criteria following publication of "Methodology: Master Limited Partnerships And General Partnerships" on Sept. 22, 2014.
- Transportation equipment leasing and car rental companies are now in scope of these criteria following publication of "Key Credit Factors For The Operating Leasing Industry," published on Dec. 14, 2016.
- Agricultural cooperatives are now in scope following the publication of "Key Credit Factors For Agricultural Cooperatives" on March 17, 2015.

RELATED CRITERIA AND RESEARCH

Related Criteria

- Reflecting Subordination Risk In Corporate Issue Ratings, Sept. 21, 2017
- S&P Global Ratings Definitions, June 26, 2017
- Commodities Trading Industry Methodology, Jan. 19, 2017
- Key Credit Factors For The Operating Leasing Industry, Dec. 14, 2016
- Guarantee Criteria, Oct. 21, 2016
- Methodology For Rating Project Developers, March 21, 2016
- Methodology For Companies With Noncontrolling Equity Interests, Jan. 5, 2016
- Methodology: Investment Holding Companies, Dec. 1, 2015
- Methodology For Rating General Trading And Investment Companies, June 10, 2015
- Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity, April 27, 2015
- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Key Credit Factors For Agricultural Cooperatives, March 17, 2015
- Methodology And Assumptions For Analyzing Letter Of Credit-Supported Debt, Feb. 20, 2015
- Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions, Jan. 29, 2015
- Issue Credit Rating Methodology For Nonbank Financial Institutions And Nonbank Financial Services Companies, Dec. 9, 2014
- Key Credit Factors For Financial Market Infrastructure Companies, Dec. 9, 2014
- Nonbank Financial Institutions Rating Methodology, Dec. 9, 2014
- Methodology: Master Limited Partnerships And General Partnerships, Sept. 22, 2014
- Project Finance Framework Methodology, Sept. 16, 2014
- Project Finance Transaction Structure Methodology, Sept. 16, 2014
- Corporate Methodology, Nov. 19, 2013
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Assessing Bank Branch Creditworthiness, Oct. 14, 2013
- Insurers: Rating Methodology, May 7, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating, May 11, 2012
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Criteria For Determining Transfer And Convertibility Assessments, May 18, 2009
- Rating Private Equity Companies' Debt And Counterparty Obligations, March 11, 2008
- Senior Living, June 18, 2007
- Not-For-Profit Health Care, June 14, 2007
- Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria, Oct. 1, 2006
- Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds, Sept. 12, 2006
- Rating Finance Companies, March 18, 2004

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions.

Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

S&P Global
Ratings

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Criteria | Corporates | General:

Corporate Methodology

November 19, 2013

*(**Editor's Note:** We republished this article following our periodic review completed on Oct. 11, 2017. See the "Revisions And Updates" section for details. On April 23, 2018, we updated the definition of a financial sponsor-owned company in table 23 and the contact information.)*

1. These criteria present Standard & Poor's Ratings Services methodology for rating corporate industrial companies and utilities. The criteria organize the analytical process according to a common framework and articulate the steps in developing the stand-alone credit profile (SACP) and issuer credit rating (ICR) for a corporate entity.

2. This article is related to our criteria article "Principles Of Credit Ratings," which we published on Feb. 16, 2011.

SUMMARY OF THE CRITERIA

3. The criteria describe the methodology we use to determine the SACP and ICR for corporate industrial companies and utilities. Our assessment reflects these companies' business risk profiles, their financial risk profiles, and other factors that may modify the SACP outcome (see "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, for the definition of SACP). The criteria provide clarity on how we determine an issuer's SACP and ICR and are more specific in detailing the various factors of the analysis. The criteria also provide clear guidance on how we use these factors as part of determining an issuer's ICR. Standard & Poor's intends for these criteria to provide the market with a framework that clarifies our approach to fundamental analysis of corporate credit risks.

4. The business risk profile comprises the risk and return potential for a company in the markets in which it participates, the competitive climate within those markets (its industry risk), the country risks within those markets, and the competitive advantages and disadvantages the company has within those markets (its competitive position). The business risk profile affects the amount of financial risk that a company can bear at a given SACP level and constitutes the foundation for a company's expected economic success. We combine our assessments of industry risk, country risk, and competitive position to determine the assessment for a corporation's business risk profile.

5. The financial risk profile is the outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to the company's financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.

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6. We then combine an issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor (see table 3). Additional rating factors can modify the anchor. These are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. Comparable ratings analysis is the last analytical factor under the criteria to determine the final SACP on a company.

7. These criteria are complemented by industry-specific criteria called Key Credit Factors (KCFs). The KCFs describe the industry risk assessments associated with each sector and may identify sector-specific criteria that supersede certain sections of these criteria. As an example, the liquidity criteria state that the relevant KCF article may specify different standards than those stated within the liquidity criteria to evaluate companies that are part of exceptionally stable or volatile industries. The KCFs may also define sector-specific criteria for one or more of the factors in the analysis. For example, the analysis of a regulated utility's competitive position is different from the methodology to evaluate the competitive position of an industrial company. The regulated utility KCF will describe the criteria we use to evaluate those companies' competitive positions (see "Key Credit Factors For The Regulated Utility Industry," published Nov. 19, 2013).

SCOPE OF THE CRITERIA

8. This methodology applies to nonfinancial corporate issuer credit ratings globally. Please see "Recovery Rating Criteria For Speculative-Grade Corporate Issuers," published Dec. 7, 2016, and "Reflecting Subordination Risk In Corporate Issue Ratings," published Sept. 21, 2017, for further information on our methodology for determining issue ratings. This methodology does not apply to the following sectors, based on the unique characteristics of these sectors, which require either a different framework of analysis or substantial modifications to one or more factors of analysis: project finance entities, project developers, commodities trading, investment holding companies and companies that maximize their returns by buying and selling equity holdings over time, Japanese general trading companies, corporate securitizations, nonprofit and cooperative organizations (other than agricultural cooperatives, and other entities whose cash flows are primarily derived from partially owned equity holdings.

9. This paragraph has been deleted.

10. This paragraph has been deleted.

METHODOLOGY

A. Corporate Ratings Framework

11. The corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several factors so that Standard & Poor's considers all salient issues. First we analyze the company's business risk profile, then evaluate its financial risk profile, then combine those to determine an issuer's anchor. We then analyze six factors that could potentially modify our anchor conclusion.

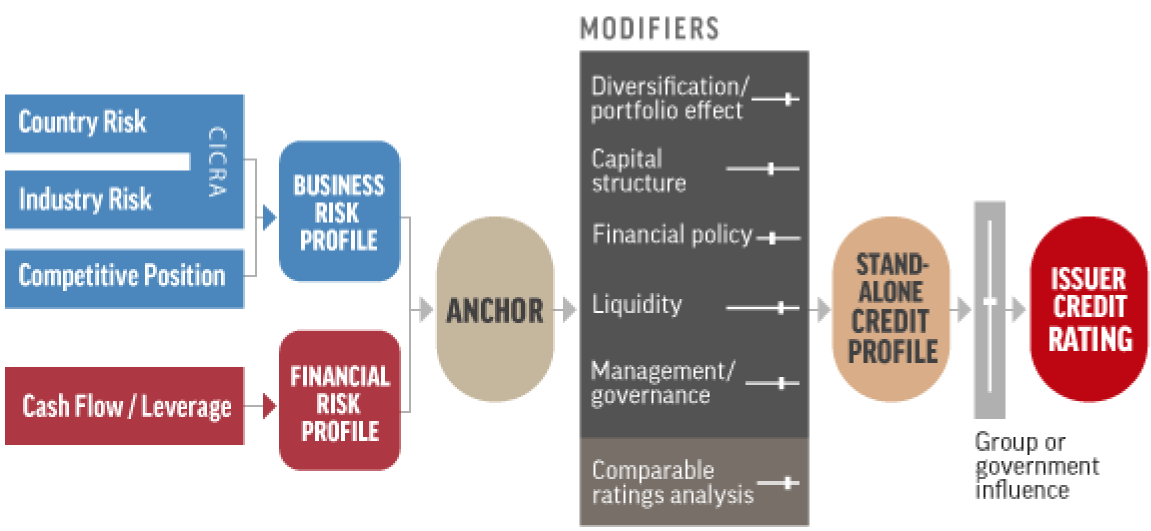
12. To determine the assessment for a corporate issuer's business risk profile, the criteria combine our assessments of industry risk, country risk, and competitive position. Cash flow/leverage analysis determines a company's financial risk profile assessment. The analysis then combines the corporate issuer's business risk profile assessment and its financial risk profile assessment to determine its anchor. In general, the analysis weighs the business risk profile more heavily for investment-grade anchors, while the financial risk profile carries more weight for

speculative-grade anchors.

13. After we determine the anchor, we use additional factors to modify the anchor. These factors are: diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance. The assessment of each factor can raise or lower the anchor by one or more notches--or have no effect. These conclusions take the form of assessments and descriptors for each factor that determine the number of notches to apply to the anchor.

14. The last analytical factor the criteria call for is comparable ratings analysis, which may raise or lower the anchor by one notch based on a holistic view of the company's credit characteristics.

Corporate Criteria Framework



15. The three analytic factors within the business risk profile generally are a blend of qualitative assessments and quantitative information. Qualitative assessments distinguish risk factors, such as a company's competitive advantages, that we use to assess its competitive position. Quantitative information includes, for example, historical cyclicality of revenues and profits that we review when assessing industry risk. It can also include the volatility and level of profitability we consider in order to assess a company's competitive position. The assessments for business risk profile are: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable.

16. In assessing cash flow/leverage to determine the financial risk profile, the analysis focuses on quantitative measures. The assessments for financial risk profile are: 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged.

17. The ICR results from the combination of the SACP and the support framework, which determines the extent of the difference between the SACP and the ICR, if any, for group or government influence. Extraordinary influence is then captured in the ICR. Please see "Group Rating Methodology," published Nov. 19, 2013, and "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015, for our methodology on group and government influence.

18. Ongoing support or negative influence from a government (for government-related entities), or from a group, is factored into the SACP (see "SACP criteria"). While such ongoing support/negative influence does not affect the industry or country risk assessment, it can affect any other factor in business or financial risk. For example, such support or negative influence can affect: national industry analysis, other elements of competitive position, financial risk profile, the liquidity assessment, and comparable ratings analysis.

19. The application of these criteria will result in an SACP that could then be constrained by the relevant sovereign rating and transfer and convertibility (T&C) assessment affecting the entity when determining the ICR. In order for the final ICR to be higher than the applicable sovereign rating or T&C assessment, the entity will have to meet the conditions established in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

1. Determining the business risk profile assessment

20. Under the criteria, the combined assessments for country risk, industry risk, and competitive position determine a company's business risk profile assessment. A company's strengths or weaknesses in the marketplace are vital to its credit assessment. These strengths and weaknesses determine an issuer's capacity to generate cash flows in order to service its obligations in a timely fashion.

21. Industry risk, an integral part of the credit analysis, addresses the relative health and stability of the markets in which a company operates. The range of industry risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of industry risk is in section B.

22. Country risk addresses the economic risk, institutional and governance effectiveness risk, financial system risk, and payment culture or rule of law risk in the countries in which a company operates. The range of country risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. The treatment of country risk is in section C.

23. The evaluation of an enterprise's competitive position identifies entities that are best positioned to take advantage of key industry drivers or to mitigate associated risks more effectively--and achieve a competitive advantage and a stronger business risk profile than that of entities that lack a strong value proposition or are more vulnerable to industry risks. The range of competitive position assessments is: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable. The full treatment of competitive position is in section D.

24. The combined assessment for country risk and industry risk is known as the issuer's Corporate Industry and Country Risk Assessment (CICRA). Table 1 shows how to determine the combined assessment for country risk and industry risk.

Table 1

Determining The CICRA

	--Country risk assessment--					
Industry risk assessment	**1 (very low risk)**	**2 (low risk)**	**3 (intermediate risk)**	**4 (moderately high risk)**	**5 (high risk)**	**6 (very high risk)**
1 (very low risk)	1	1	1	2	4	5
2 (low risk)	2	2	2	3	4	5
3 (intermediate risk)	3	3	3	3	4	6

Table 1

Determining The CICRA (cont.)

Industry risk assessment	--Country risk assessment-- 1 (very low risk)	2 (low risk)	3 (intermediate risk)	4 (moderately high risk)	5 (high risk)	6 (very high risk)
4 (moderately high risk)	4	4	4	4	5	6
5 (high risk)	5	5	5	5	5	6
6 (very high risk)	6	6	6	6	6	6

25. The CICRA is combined with a company's competitive position assessment in order to create the issuer's business risk profile assessment. Table 2 shows how we combine these assessments.

Table 2

Determining The Business Risk Profile Assessment

Competitive position assessment	--CICRA-- 1	2	3	4	5	6
1 (excellent)	1	1	1	2	3*	5
2 (strong)	1	2	2	3	4	5
3 (satisfactory)	2	3	3	3	4	6
4 (fair)	3	4	4	4	5	6
5 (weak)	4	5	5	5	5	6
6 (vulnerable)	5	6	6	6	6	6

*See paragraph 26.

26. A small number of companies with a CICRA of 5 may be assigned a business risk profile assessment of 2 if all of the following conditions are met:

- The company's competitive position assessment is 1.
- The company's country risk assessment is no riskier than 3.
- The company produces significantly better-than-average industry profitability, as measured by the level and volatility of profits.
- The company's competitive position within its sector transcends its industry risks due to unique competitive advantages with its customers, strong operating efficiencies not enjoyed by the large majority of the industry, or scale/scope/diversity advantages that are well beyond the large majority of the industry.

27. For issuers with multiple business lines, the business risk profile assessment is based on our assessment of each of the factors--country risk, industry risk, and competitive position--as follows:

- Country risk: We use the weighted average of the country risk assessments for the company across all countries where companies generate more than 5% of sales or EBITDA, or where more than 5% of fixed assets are located.
- Industry risk: We use the weighted average of the industry risk assessments for all business lines representing more than 20% of the company's forecasted earnings, revenues or fixed

assets, or other appropriate financial measures if earnings, revenue, or fixed assets do not accurately reflect the exposure to an industry.

- Competitive position: We assess all business lines identified above for the components competitive advantage, scope/scale/diversity, and operating efficiency (see section D). They are then blended using a weighted average of revenues, earnings, or assets to form the preliminary competitive position assessment. The level of profitability and volatility of profitability are then assessed based on the consolidated financials for the enterprise. The preliminary competitive position assessment is then blended with the profitability assessment, as per section D.5, to assess competitive position for the enterprise.

2. Determining the financial risk profile assessment

28. Under the criteria, cash flow/leverage analysis is the foundation for assessing a company's financial risk profile. The range of assessments for a company's cash flow/leverage is 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged. The full treatment of cash flow/leverage analysis is the subject of section E.

3. Merger of financial risk profile and business risk profile assessments

29. An issuer's business risk profile assessment and its financial risk profile assessment are combined to determine its anchor (see table 3). If we view an issuer's capital structure as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor is dependent upon favorable business, financial, and economic conditions to meet its commitments on its obligations, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. If the issuer meets the conditions for assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings, we will not apply Table 3.

Table 3

Combining The Business And Financial Risk Profiles To Determine The Anchor

	--Financial risk profile--					
Business risk profile	**1 (minimal)**	**2 (modest)**	**3 (intermediate)**	**4 (significant)**	**5 (aggressive)**	**6 (highly leveraged)**
1 (excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
2 (strong)	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
3 (satisfactory)	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
4 (fair)	bbb/bbb-	bbb-	bb+	bb	bb-	b
5 (weak)	bb+	bb+	bb	bb-	b+	b/b-
6 (vulnerable)	bb-	bb-	bb-/b+	b+	b	b-

30. When two anchor outcomes are listed for a given combination of business risk profile assessment and financial risk profile assessment, an issuer's anchor is determined as follows:

- When a company's financial risk profile is 4 or stronger (meaning, 1-4), its anchor is based on the comparative strength of its business risk profile. We consider our assessment of the business risk profile for corporate issuers to be points along a possible range within its category (e.g., "strong"). Consequently, each of these assessments that ultimately generate the business risk profile for a specific issuer can be at the upper or lower end of such a range.

Issuers with a stronger business risk profile for the range of anchor outcomes will be assigned the higher anchor. Those with a weaker business risk profile for the range of anchor outcomes will be assigned the lower anchor.

- When a company's financial risk profile is 5 or 6, its anchor is based on the comparative strength of its financial risk profile. Issuers with stronger cash flow/leverage ratios for the range of anchor outcomes will be assigned the higher anchor. Issuers with weaker cash flow/leverage ratios for the range of anchor outcomes will be assigned the lower anchor. For example, a company with a business risk profile of (1) excellent and a financial risk profile of (6) highly leveraged would generally be assigned an anchor of 'bb+' if its ratio of debt to EBITDA was 8x or greater and there were no offsetting factors to such a high level of leverage.

4. Building on the anchor

31. The analysis of diversification/portfolio effect, capital structure, financial policy, liquidity, and management and governance may raise or lower a company's anchor. The assessment of each modifier can raise or lower the anchor by one or more notches--or have no effect in some cases (see tables 4 and 5). We express these conclusions using specific assessments and descriptors that determine the number of notches to apply to the anchor. However, this notching in aggregate can't lower an issuer's anchor below 'b-' (see "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, for the methodology we use to assign 'CCC' and 'CC' category SACPs and ICRs to issuers).

32. The analysis of the modifier diversification/portfolio effect identifies the benefits of diversification across business lines. The diversification/portfolio effect assessments are 1, significant diversification; 2, moderate diversification; and 3, neutral. The impact of this factor on an issuer's anchor is based on the company's business risk profile assessment and is described in Table 4. Multiple earnings streams (which are evaluated within a firm's business risk profile) that are less-than-perfectly correlated reduce the risk of default of an issuer (see Appendix D). We determine the impact of this factor based on the business risk profile assessment because the benefits of diversification are significantly reduced with poor business prospects. The full treatment of diversification/portfolio effect analysis is the subject of section F.

Table 4

Modifier Step 1: Impact Of Diversification/Portfolio Effect On The Anchor

	--Business risk profile assessment--					
Diversification/portfolio effect	**1 (excellent)**	**2 (strong)**	**3 (satisfactory)**	**4 (fair)**	**5 (weak)**	**6 (vulnerable)**
1 (significant diversification)	+2 notches	+2 notches	+2 notches	+1 notch	+1 notch	0 notches
2 (moderate diversification)	+1 notch	+1 notch	+1 notch	+1 notch	0 notches	0 notches
3 (neutral)	0 notches	0 notches	0 notches	0 notches	0 notches	0 notches

33. After we adjust for the diversification/portfolio effect, we determine the impact of the other modifiers: capital structure, financial policy, liquidity, and management and governance. We apply these four modifiers in the order listed in Table 5. As we go down the list, a modifier may (or may not) change the anchor to a new range (one of the ranges in the four right-hand columns in the table). We'll choose the appropriate value from the new range, or column, to determine the next modifier's effect on the anchor. And so on, until we get to the last modifier on the list--management and governance. For example, let's assume that the anchor, after adjustment for diversification/portfolio effect but before adjusting for the other modifiers, is 'a'. If the capital

structure assessment is very negative, the indicated anchor drops two notches, to 'bbb+'. So, to determine the impact of the next modifier--financial policy--we go to the column 'bbb+ to bbb-' and find the appropriate assessment--in this theoretical example, positive. Applying that assessment moves the anchor up one notch, to the 'a- and higher' category. In our example, liquidity is strong, so the impact is zero notches and the anchor remains unchanged. Management and governance is satisfactory, and thus the anchor remains 'a-' (see chart following table 5).

Table 5

Modifier Step 2: Impact Of Remaining Modifier Factors On The Anchor

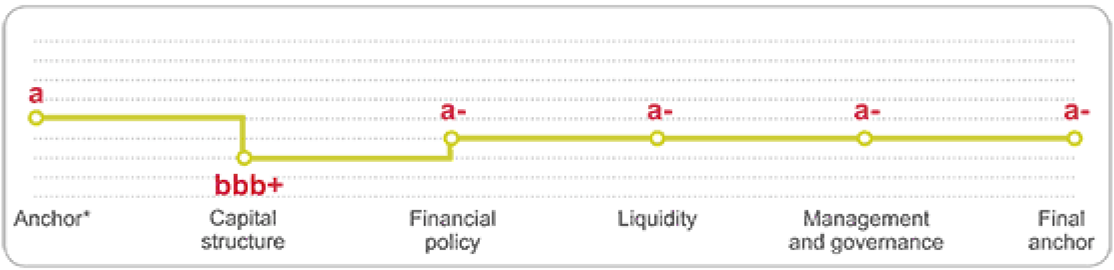
	--Anchor range--			
	'a-' and higher	**'bbb+' to 'bbb-'**	**'bb+' to 'bb-'**	**'b+' and lower**
Factor/Assessment				
Capital structure (see section G)				
1 (Very positive)	2 notches	2 notches	2 notches	2 notches
2 (Positive)	1 notch	1 notch	1 notch	1 notch
3 (Neutral)	0 notches	0 notches	0 notches	0 notches
4 (Negative)	-1 notch	-1 notch	-1 notch	-1 notch
5 (Very negative)	-2 or more notches	-2 or more notches	-2 or more notches	-2 notches
Financial policy (FP; see section H)				
1 (Positive)	+1 notch if M&G is at least satisfactory	+1 notch if M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory	+1 notch if liquidity is at least adequate and M&G is at least satisfactory
2 (Neutral)	0 notches	0 notches	0 notches	0 notches
3 (Negative)	-1 to -3 notches(1)	-1 to -3 notches(1)	-1 to -2 notches(1)	-1 notch
4 (FS-4, FS-5, FS-6, FS-6 [minus])	N/A(2)	N/A(2)	N/A(2)	N/A(2)
Liquidity (see section I)				
1 (Exceptional)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
2 (Strong)	0 notches	0 notches	0 notches	+1 notch if FP is positive, neutral, FS-4, or FS-5 (3)
3 (Adequate)	0 notches	0 notches	0 notches	0 notches
4 (Less than adequate [4])	N/A	N/A	-1 notch(5)	0 notches
5 (Weak)	N/A	N/A	N/A	'b-' cap on SACP
Management and governance (M&G; see section J)				
1 (Strong)	0 notches	0 notches	0, +1 notches(6)	0, +1 notches(6)
2 (Satisfactory)	0 notches	0 notches	0 notches	0 notches
3 (Fair)	-1 notch	0 notches	0 notches	0 notches
4 (Weak)	-2 or more notches(7)	-2 or more notches(7)	-1 or more notches(7)	-1 or more notches(7)

Table 5

Modifier Step 2: Impact Of Remaining Modifier Factors On The Anchor (cont.)

(1) Number of notches depends on potential incremental leverage. (2) See "Financial Policy," section H.2. (3) Additional notch applies only if we expect liquidity to remain exceptional or strong. (4) See "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Dec. 16, 2014. SACP is capped at 'bb+.' (5) If issuer SACP is 'bb+' due to cap, there is no further notching. (6) This adjustment is one notch if we have not already captured benefits of strong management and governance in the analysis of the issuer's competitive position. (7) Number of notches depends upon the degree of negative effect to the enterprise's risk profile.

Example: How Remaining Modifiers Can Change The Anchor



*After adjusting for diversification/portfolio effect. See paragraph 33.

34. Our analysis of a firm's capital structure assesses risks in the firm's capital structure that may not arise in the review of its cash flow/leverage. These risks include the currency risk of debt, debt maturity profile, interest rate risk of debt, and an investments subfactor. We assess a corporate issuer's capital structure on a scale of 1, very positive; 2, positive; 3, neutral; 4, negative; and 5, very negative. The full treatment of capital structure is the subject of section G.

35. Financial policy serves to refine the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage, capital structure, and liquidity analyses. Those assumptions do not always reflect or adequately capture the long-term risks of a firm's financial policy. The financial policy assessment is, therefore, a measure of the degree to which owner/managerial decision-making can affect the predictability of a company's financial risk profile. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)." The full treatment of financial policy analysis is the subject of section H.

36. Our assessment of liquidity focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis also assesses the potential for a company to breach covenant tests tied to declines in earnings before interest, taxes, depreciation, and amortization (EBITDA). The methodology incorporates a qualitative analysis that addresses such factors as the ability to absorb high-impact, low-probability events, the nature of bank relationships, the level of standing in credit markets, and the degree of prudence of the company's financial risk management. The liquidity assessments are 1, exceptional; 2, strong; 3, adequate; 4, less than adequate; and 5, weak. An SACP is capped at 'bb+' for issuers whose liquidity is less than adequate and 'b-' for issuers whose liquidity is weak, regardless of the assessment of any modifiers or comparable ratings analysis. (For the complete methodology on assessing corporate issuers' liquidity, see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Dec. 16, 2014.)

37. The analysis of management and governance addresses how management's strategic competence, organizational effectiveness, risk management, and governance practices shape the

company's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. The range of management and governance assessments is: 1, strong; 2, satisfactory; 3, fair; and 4, weak. Typically, investment-grade anchor outcomes reflect strong or satisfactory management and governance, so there is no incremental benefit. Alternatively, a fair or weak assessment of management and governance can lead to a lower anchor. Also, a strong assessment for management and governance for a weaker entity is viewed as a favorable factor, under the criteria, and can have a positive impact on the final SACP outcome. For the full treatment of management and governance, see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012.

5. Comparable ratings analysis

38. The anchor, after adjusting for the modifiers, could change one notch up or down in order to arrive at an issuer's SACP based on our comparable ratings analysis, which is a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch improvement, a negative assessment leads to a one-notch reduction, and a neutral assessment indicates no change to the anchor. The application of comparable ratings analysis reflects the need to 'fine-tune' ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.

B. Industry Risk

39. The analysis of industry risk addresses the major factors that Standard & Poor's believes affect the risks that entities face in their respective industries. (See "Methodology: Industry Risk," published Nov. 19, 2013.)

C. Country Risk

40. The analysis of country risk addresses the major factors that Standard & Poor's believes affect the country where entities operate. Country risks, which include economic, institutional and governance effectiveness, financial system, and payment culture/rule of law risks, influence overall credit risks for every rated corporate entity. (See "Country Risk Assessment Methodology And Assumptions," published Nov. 19, 2013.)

1. Assessing country risk for corporate issuers

41. The following paragraphs explain how the criteria determine the country risk assessment for a corporate entity. Once it's determined, we combine the country risk assessment with the issuer's industry risk assessment to calculate the issuer's CICRA (see section A, table 1). The CICRA is one of the factors of the issuer's business risk profile. If an issuer has very low to intermediate exposure to country risk, as represented by a country risk assessment of 1, 2, or 3, country risk is neutral to an issuer's CICRA. But if an issuer has moderately high to very high exposure to country risk, as represented by a country risk assessment of 4, 5, or 6, the issuer's CICRA could be influenced by its country risk assessment.

42. Corporate entities operating within a single country will receive a country risk assessment for that jurisdiction. For entities with exposure to more than one country, the criteria prospectively measure the proportion of exposure to each country based on forecasted EBITDA, revenues, or fixed assets, or other appropriate financial measures if EBITDA, revenue, or fixed assets do not

accurately reflect the exposure to that jurisdiction.

43. Arriving at a company's blended country risk assessment involves multiplying its weighted-average exposures for each country by each country's risk assessment and then adding those numbers. For the weighted-average calculation, the criteria consider countries where the company generates more than 5% of its sales or where more than 5% of its fixed assets are located, and all weightings are rounded to the nearest 5% before averaging. We round the assessment to the nearest integer, so a weighted assessment of 2.2 rounds to 2, and a weighted assessment of 2.6 rounds to 3 (see table 6).

Table 6

Hypothetical Example Of Weighted-Average Country Risk For A Corporate Entity

Country	Weighting (% of business*)	Country risk§	Weighted country risk
Country A	45	1	0.45
Country B	20	2	0.4
Country C	15	1	0.15
Country D	10	4	0.4
Country E	10	2	0.2
Weighted-average country risk assessment (rounded to the nearest whole number)	--	--	2

*Using EBITDA, revenues, fixed assets, or other financial measures as appropriate. §On a scale from 1-6, lowest to highest risk.

44. A weak link approach, which helps us calculate a blended country risk assessment for companies with exposure to more than one country, works as follows: If fixed assets are based in a higher-risk country but products are exported to a lower-risk country, the company's exposure would be to the higher-risk country. Similarly, if fixed assets are based in a lower-risk country but export revenues are generated from a higher-risk country and cannot be easily redirected elsewhere, we measure exposure to the higher-risk country. If a company's supplier is located in a higher-risk country, and its supply needs cannot be easily redirected elsewhere, we measure exposure to the higher-risk country. Conversely, if the supply chain can be re-sourced easily to another country, we would not measure exposure to the higher risk country.

45. Country risk can be mitigated for a company located in a single jurisdiction in the following narrow case. For a company that exports the majority of its products overseas and has no direct exposure to a country's banking system that would affect its funding, debt servicing, liquidity, or ability to transfer payments from or to its key counterparties, we could reduce the country risk assessment by one category (e.g., 5 to 4) to determine the adjusted country risk assessment. This would only apply for countries where we considered the financial system risk subfactor a constraint on the overall country risk assessment for that country. For such a company, other country risks are not mitigated: economic risk still applies, albeit less of a risk than for a company that sells domestically (potential currency volatility remains a risk for exporters); institutional and governance effectiveness risk still applies (political risk may place assets at risk); and payment culture/rule of law risk still applies (legal risks may place assets and cross-border contracts at risk).

46. Companies will often disclose aggregated information for blocks of countries, rather than disclosing individual country information. If the information we need to estimate exposure for all countries is not available, we use regional risk assessments. Regional risk assessments are calculated as averages of the unadjusted country risk assessments, weighted by gross domestic

product of each country in a defined region. The criteria assess regional risk on a 1-6 scale (strongest to weakest). Please see Appendix A, Table 26, which lists the constituent countries of the regions.

47. If an issuer does not disclose its country-level exposure or regional-level exposure, its individual country risk exposures or regional exposures will be estimated.

2. Adjusting the country risk assessment for diversity

48. We will adjust the country risk assessment for a company that operates in multiple jurisdictions and demonstrates a high degree of diversity of country risk exposures. As a result of this diversification, the company could have less exposure to country risk than the rounded weighted average of its exposures might indicate. Accordingly, the country risk assessment for a corporate entity could be adjusted if an issuer meets the conditions outlined in paragraph 49.

49. The preliminary country risk assessment is raised by one category to reflect diversity if all of the following four conditions are met:

- If the company's head office, as defined in paragraph 51, is located in a country with a risk assessment stronger than the preliminary country risk assessment;
- If no country, with a country risk assessment equal to or weaker than the company's preliminary country risk assessment, represents or is expected to represent more than 20% of revenues, EBITDA, fixed assets, or other appropriate financial measures;
- If the company is primarily funded at the holding level, or through a finance subsidiary in a similar or stronger country risk environment than the holding company, or if any local funding could be very rapidly substituted at the holding level; and
- If the company's industry risk assessment is '4' or stronger.

50. The country risk assessment for companies that have 75% or more exposure to one jurisdiction cannot be improved and will, in most instances, equal the country risk assessment of that jurisdiction. But the country risk assessment for companies that have 75% or more exposure to one jurisdiction can be weakened if the balance of exposure is to higher risk jurisdictions.

51. We consider the location of a corporate head office relevant to overall risk exposure because it influences the perception of a company and its reputation--and can affect the company's access to capital. We determine the location of the head office on the basis of 'de facto' head office operations rather than just considering the jurisdiction of incorporation or stock market listing for public companies. De facto head office operations refers to the country where executive management and centralized high-level corporate activities occur, including strategic planning and capital raising. If such activities occur in different countries, we take the weakest country risk assessment applicable for the countries in which those activities take place.

D. Competitive Position

52. Competitive position encompasses company-specific factors that can add to, or partly offset, industry risk and country risk--the two other major factors of a company's business risk profile.

53. Competitive position takes into account a company's: 1) competitive advantage, 2) scale, scope, and diversity, 3) operating efficiency, and 4) profitability. A company's strengths and weaknesses on the first three components shape its competitiveness in the marketplace and the sustainability or vulnerability of its revenues and profit. Profitability can either confirm our initial assessment of competitive position or modify it, positively or negatively. A stronger-than-industry-average set of

competitive position characteristics will strengthen a company's business risk profile. Conversely, a weaker-than-industry-average set of competitive position characteristics will weaken a company's business risk profile.

54. These criteria describe how we develop a competitive position assessment. They provide guidance on how we assess each component based on a number of subfactors. The criteria define the weighting rules applied to derive a preliminary competitive position assessment. And they outline how this preliminary assessment can be maintained, raised, or lowered based on a company's profitability. Standard & Poor's competitive position analysis is both qualitative and quantitative.

1. The components of competitive position

55. A company's competitive position assessment can be: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; or 6, vulnerable.

56. The analysis of competitive position includes a review of:

- Competitive advantage;
- Scale, scope, and diversity;
- Operating efficiency; and
- Profitability.

57. We follow four steps to arrive at the competitive position assessment. First, we separately assess competitive advantage; scale, scope, and diversity; and operating efficiency (excluding any benefits or risks already captured in the issuer's CICRA assessment). Second, we apply weighting factors to these three components to derive a weighted-average assessment that translates into a preliminary competitive position assessment. Third, we assess profitability. Finally, we combine the preliminary competitive position assessment and the profitability assessment to determine the final competitive position assessment. Profitability can confirm, or influence positively or negatively, the competitive position assessment.

58. We assess the relative strength of each of the first three components by reviewing a variety of subfactors (see table 7). When quantitative metrics are relevant and available, we use them to evaluate these subfactors. However, our overall assessment of each component is qualitative. Our evaluation is forward-looking; we use historical data only to the extent that they provide insight into future trends.

59. We evaluate profitability by assessing two subcomponents: level of profitability (measured by historical and projected nominal levels of return on capital, EBITDA margin, and/or sector-specific metrics) and volatility of profitability (measured by historically observed and expected fluctuations in EBITDA, return on capital, EBITDA margin, or sector specific metrics). We assess both subcomponents in the context of the company's industry.

Table 7

Competitive Position Components And Subfactors

Component	Explanation	Subfactors
1. Competitive advantage (see Appendix B, section 1)	The strategic positioning and attractiveness to customers of a company's products or services, and the fragility or sustainability of its business model	• Strategy • Differentiation/uniqueness/product positioning/bundling • Brand reputation and marketing • Product and/or service quality • Barriers to entry and customers' switching costs • Technological advantage and capabilities and vulnerability to/ability to drive technological displacement • Asset base characteristics
2. Scale, scope, and diversity (see Appendix B, section 2)	The concentration or diversification of business activities	• Diversity of products or services • Geographic diversity • Volumes, size of markets and revenues, and market share • Maturity of products or services
3. Operating efficiency (see Appendix B, section 3)	The quality and flexibility of a company's asset base and its cost management and structure	• Cost structure • Manufacturing processes • Working capital management • Technology
4. Profitability		• Level of profitability (historical and projected return on capital, EBITDA margin, and/or sector-relevant measure) • Volatility of profitability

2. Assessing competitive advantage, scale, scope, and diversity, and operating efficiency

60. We assess competitive advantage; scale, scope, and diversity; and operating efficiency as: 1, strong; 2, strong/adequate; 3, adequate; 4, adequate/weak; or 5, weak. Tables 8, 9, and 10 provide guidance for assessing each component.

61. In assessing the components' relative strength, we place significant emphasis on comparative analysis. Peer comparisons provide context for evaluating the subfactors and the resulting component assessment. We review company-specific characteristics in the context of the company's industry, not just its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.) For example, when evaluating an airline, we will benchmark the assessment against peers in the broader transportation-cyclical industry (including the marine and trucking subsectors), and not just against other airlines. Likewise, we will compare a home furnishing manufacturer with other companies in the consumer durables industry, including makers of appliances or leisure products. We might occasionally extend the comparison to other industries if, for instance, a company's business lines cross several industries, or if there are a limited

number of rated peers in an industry, subsector, or region.

62. An assessment of strong means that the company's strengths on that component outweigh its weaknesses, and that the combination of relevant subfactors results in lower-than-average business risk in the industry. An assessment of adequate means that the company's strengths and weaknesses with respect to that component are balanced and that the relevant subfactors add up to average business risk in the industry. A weak assessment means that the company's weaknesses on that component override any strengths and that its subfactors, in total, reveal higher-than-average business risk in the industry.

63. Where a component is not clearly strong or adequate, we may assess it as strong/adequate. A component that is not clearly adequate or weak may end up as adequate/weak.

64. Although we review each subfactor, we don't assess each individually--and we seek to understand how they may reinforce or weaken each other. A component's assessment combines the relative strengths and importance of its subfactors. For any company, one or more subfactors can be unusually important--even factors that aren't common in the industry. Industry KCF articles identify subfactors that are consistently more important, or happen not to be relevant, in a given industry.

65. Not all subfactors may be equally important, and a single one's strength or weakness may outweigh all the others. For example, if notwithstanding a track record of successful product launches and its strong brand equity, a company's strategy doesn't appear adaptable, in our view, to changing competitive dynamics in the industry, we will likely not assess its competitive advantage as strong. Similarly, if its revenues came disproportionately from a narrow product line, we might view this as compounding its risk of exposure to a small geographic market and, thus, assess its scale, scope, and diversity component as weak.

66. From time to time companies will, as a result of shifting industry dynamics or strategies, expand or shrink their product or service lineups, alter their cost structures, encounter new competition, or have to adapt to new regulatory environments. In such instances, we will reevaluate all relevant subfactors (and component assessments).

Table 8

Competitive Advantage Assessment

Qualifier	What it means	Guidance
Strong	• The company has a major competitive advantage due to one or a combination of factors that supports revenue and profit growth, combined with lower-than-average volatility of profits. • There are strong prospects that the company can sustain this advantage over the long term. • This should enable the company to withstand economic downturns and competitive and technological threats better than its competitors can. • Any weaknesses in one or more subfactors are more than offset by strengths in other subfactors that produce sustainable and profitable revenue growth.	• The company's business strategy is highly consistent with, and adaptable to, industry trends and conditions and supports its leadership in the marketplace. • It consistently develops and markets well-differentiated products or services, aligns products with market demand, and enhances the attractiveness or uniqueness of its value proposition through bundling. • Its superior track record of product development, service quality, and customer satisfaction and retention support its ability to maintain or improve its market share. • Its products or services command a clear price premium relative to its competitors' thanks to its brand equity, technological leadership, or quality of service; it is able to sustain this advantage with innovation and effective marketing. • It benefits from barriers to entry from regulation, market characteristics, or intrinsic benefits (such as patents, technology, or customer relationships) that effectively reduce the threat of new competition. • It has demonstrated a commitment and ability to effectively reinvest in its asset base, as evidenced by a continuous pipeline of new products and/or improvement in key capabilities, such as employee retention, customer care, distribution, and supplier relations. These tangible and intangible assets support long term prospects of sustainable and profitable growth.
Adequate	• The company has some competitive advantages, but not so large as to create a superior business model or durable benefit compared to its peers'. • It has some but not all drivers of competitiveness. Certain factors support the business' long-term viability and should result in average profitability and average profit volatility during recessions or periods of increased competition. However, these drivers are partially offset by the company's disadvantages or lack of sustainability of other factors.	• The company's strategy is well adapted to marketplace conditions, but it is not necessarily a leader in setting industry trends. • It exhibits neither superior nor subpar abilities with respect to product or service differentiation and positioning. • Its products command no price premium or advantage relative to competing brands as a result of its brand equity or its technological positioning. • It may enjoy some barriers to entry that provide some defense against competitors but don't overpower them. It faces some risk of product/service displacement or substitution longer term. • Its metrics of product or service quality and customer satisfaction or retention are in line with its industry's average. The company could lose customers to competitors if it makes operational missteps. • Its asset profile does not exhibit particularly superior or inferior characteristics compared to other industry participants. These assets generate consistent revenue and profit growth although long-term prospects are subject to some uncertainty.

Weak	• The company has few, if any, competitive advantages and a number of competitive disadvantages. • Because the company lacks many competitive advantages, its long-term prospects are uncertain, and its profit volatility is likely to be higher than average for its industry. • The company is less likely than its competitors to withstand economic, competitive, or technological threats. • Alternatively, the company has weaknesses in one or more subfactors that could keep its profitability below average and its profit volatility above average during economic downturns or periods of increased competition.	• The company's strategy is inconsistent with, or not well adapted to, marketplace trends and conditions. • There is evidence of little innovation, slowness in developing and marketing new products, an inability to raise prices, and/or ineffective bundling. • Its products generally enjoy no price premium relative to competing brands and it often has to sell its products at a lower price than its peers can command. • It has suffered or is at risk of suffering customer defections due to falling quality and because customers perceive its products or services to be less valuable than those of its competitors. • Its revenues and market shares are vulnerable to aggressive pricing by existing or new competitors or to technological displacement risks over the near to medium term. • Its metrics of product or service quality and customer satisfaction or retention are weaker than the industry average. • Its reinvestment in its business is lower than its peers', its ability to retain operational talent is limited, its distribution network is inefficient, and its revenue could stagnate or decline as result.

Table 9

Scale, Scope, And Diversity

Qualifier	What it means	Guidance
Strong	• The company's overall scale, scope, and diversity supports stable revenues and profits by rendering it essentially invulnerable to all but the most disruptive combinations of adverse factors, events, or trends. • Its significant advantages in scale, scope, and diversity enable it to withstand economic, regional, competitive, and technological threats better than its competitors can.	• The company's range of products or services is among the most comprehensive in its sector. It derives its revenue and profits from a broader set of products or services than the industry average. • Its products and services enjoy industry-leading market shares relative to other participants in its industry. • It does not rely on a particular customer or small group of customers. If it does, the customer(s) is/are of high credit quality, their demand is highly sustainable, or the company and its customer(s) have significant interdependence. • It does not depend on any particular supplier or related group of suppliers that it could not easily replace. If it does, the supplier(s) is/are of high credit quality, or the company and its supplier(s) have significant interdependence. • It enjoys broader geographic diversity than its peers and doesn't overly depend on a single regional or local market. If it does, the market is local, often for regulatory reasons. The company's production or service centers are diversified across several locations. • It holds a strategic investment that provides positive business diversification.
Adequate	• The company's overall scale, scope, and diversity is comparable to its peers'. • Its ability to withstand economic, competitive, or technological threats is comparable to the ability of others within its sector.	• The company has a broad range of products or services compared with its competitors and doesn't depend on a particular product or service for the majority of its revenues and profits. • Its market share is average compared with that of its competitors. • Its dependence on or concentration of key customers is no higher than the industry average, and the loss of a top customer would be unlikely to pose a high risk to its business stability. • It isn't overly dependent on any supplier or regional group of suppliers that it couldn't easily replace. • It doesn't depend excessively on a single local or regional market, and its geographic footprint of production and revenue compares with that of other industry participants.

Weak	• The company's lack of scale, scope, and diversity compromises the stability and sustainability of its revenues and profits. • The company's vulnerability to, or reliance on, various elements of scale, scope, and diversity leaves it less likely than its competitors to withstand economic, competitive, or technological threats.	• The company's product or service lineup is somewhat limited compared to those of its sector peers. The company derives its profits from a narrow group of products or services, and has not achieved significant market share compared with its peers. • Demand for its products or services is lower than for its competitors', and this trend isn't improving. • It relies heavily on a particular customer or small group of customers, and the characteristics of the customer base do not mitigate this risk. • It depends on a particular supplier or group of suppliers, which it would not be able to easily replace without incurring high switching costs. • It depends disproportionately on a single local or regional economy for selling its goods or services, and the company's industry is global. • Key production assets are concentrated by location, and the company has limited ability to quickly replace them without incurring high costs relative to its profits.

Table 10

Operating Efficiency Assessment

Qualifier	What it means	Guidance
Strong	• The company maximizes revenues and profits via intelligent use of assets and by minimizing costs and increasing efficiency. • The company's cost structure should enable it to withstand economic downturns better than its peers.	• The company has a lower cost structure than its peers resulting in higher profits or margins even if capacity utilization or demand are well below ideal levels and during down economic and industry cycles. • It has demonstrated its ability to efficiently manage fixed and variable costs in cyclical downturns, and has a history of successful and often ongoing cost reductions programs. • Its capacity utilization is close to optimal at the peak of the industry cycle and outperforms the industry average over the cycle. • It has demonstrated that it can pass along increases in input costs and we expect this will continue. • It has a very high ability to adjust production and labor costs in response to changes in demand without repercussions for product quality, or has demonstrated the ability to operate very profitably in a more costly or less flexible labor environment. • Its suppliers have demonstrated an ability to meet swings in demand without causing bottlenecks or quality issues, and can absorb all but the most severe supply chain disruptions. • It has superior working capital management, as evidenced by a consistently better-than-average "cash conversion cycle" and other working capital metrics, supporting higher cash flow and lower funding costs. • Its investments in technology are likely to increase revenue growth and/or improve its cost structure and operating efficiency.

Adequate	• A combination of cost structure and efficiency should support sustainable profits with average profit volatility relative to the company's peers. Its cost structure is similar to its peers'.	• The company has demonstrated the ability to manage some fixed and most variable costs except during periods of extremely weak demand, and has some history of cutting costs in good and bad times. • Its cost structure permits some profitability even if capacity utilization or customer demand is well below ideal levels. The company can at least break even during most of the industry/demand cycle. • Its cost structure is in line with its peers'. For example, its selling, general, and administrative (SG&A) expense as a percent of revenue is similar to its peers' and is likely to be stable. • It has demonstrated an ability to adjust labor costs in most scenarios without hurting product output and quality, or can operate profitability in a more costly or less flexible labor environment; it has some success passing on input cost increases, although perhaps only partially or with time lag. • Its suppliers have met typical swings in demand without causing widespread bottlenecks or quality issues, and the company has some capacity to withstand limited supply chain disruptions. • It has good working capital management, evidenced by its cash conversion cycle and working capital metrics that are on par with its peers'. • Its investments in technology are likely to help it at least maintain its cost structure and current level of operating efficiency.
Weak	• The company's operating efficiency leaves it with lower profitability than its peers' due to lower asset utilization and/or a higher, less flexible cost structure.	• The company's cost structure permits better-than-marginal profitability only if capacity utilization is at the top of the cycle or during periods of strong demand. The company needs solid and sustained industry conditions to generate fair profitability. • It has limited success or capability of managing fixed costs and even most typically variable costs are fixed in the next two to three years. • It has a limited track record of successful cost reductions, such as reducing labor costs in the face of swings in demand, or it has limited ability to pass along increases in input costs. • Its costs are higher than its peers'. For example, the company's SG&A expense as a percent of revenue is above that of its peers, and likely to remain so. • Its suppliers may face bottlenecks or quality issues in the event of modest swings in demand, or have limited technological capabilities. There is evidence that a limited supply chain disruption would make it difficult for suppliers to meet their commitments to the company. • Its working capital management is weak, as evidenced by working capital metrics that are significantly worse than those of its peers, resulting in lower cash flow and higher funding costs. • It lacks investments in technology, which could hurt is revenue growth and/or result in a higher cost structure and less efficient operations relative to its peers'.

3. Determining the preliminary competitive position assessment: Competitive position group profile and category weightings

67. After assessing competitive advantage; scale, scope, and diversity; and operating efficiency, we determine a company's preliminary competitive position assessment by ascribing a specific weight to each component. The weightings depend on the company's Competitive Position Group Profile (CPGP).

68. There are six possible CPGPs: 1) services and product focus, 2) product focus/scale driven, 3) capital or asset focus, 4) commodity focus/cost driven, 5) commodity focus/scale driven, and 6) national industry and utilities (see table 11 for definitions and characteristics).

Table 11

Competitive Position Group Profile (CPGP)

	Definition and characteristics	Examples
Services and product focus	Brands, product quality or technology, and service reputation are typically key differentiating factors for competing in the industry. Capital intensity is typically low to moderate, although supporting the brand often requires ongoing reinvestment in the asset base.	Typically, these are companies in consumer-facing light manufacturing or service industries. Examples include branded drug manufacturers, software companies, and packaged food.
Product focus/scale driven	Product and geographic diversity, as well as scale and market position are key differentiating factors. Sophisticated technology and stringent quality controls heighten risk of product concentration. Product preferences or sales relationships are more important than branding or pricing. Cost structure is relatively unimportant.	The sector most applicable is medical device/equipment manufacturers, particularly at the higher end of the technology scale. These companies largely sell through intermediaries, as opposed to directly to the consumer.
Capital or asset focus	Sizable capital investments are generally required to sustain market position in the industry. Brand identification is of limited importance, although product and service quality often remain differentiating factors.	Heavy manufacturing industries typically fall into this category. Examples include telecom infrastructure manufacturers and semiconductor makers.
Commodity focus/cost driven	Cost position and efficiency of production assets are more important than size, scope, and diversification. Brand identification is of limited importance	Typically, these are companies that manufacture products from natural resources that are used as raw materials by other industries. Examples include forest and paper products companies that harvest timber or produce pulp, packaging paper, or wood products.
Commodity focus/scale driven	Pure commodity companies have little product differentiation, and tend to compete on price and availability. Where present, brand recognition or product differences are secondary or of less importance.	Examples range from pure commodity producers and most oil and gas upstream producers, to some producers with modest product or brand differentiation, such as commodity foods.
National industries and utilities	Government policy or control, regulation, and taxation and tariff policies significantly affect the competitive dynamics of the industry (see paragraphs 72-73).	An example is a water-utility company in an emerging market.

69. The nature of competition and key success factors are generally prescribed by industry characteristics, but vary by company. Where service, product quality, or brand equity are important competitive factors, we'll give the competitive advantage component of our overall assessment a higher weighting. Conversely, if the company produces a commodity product, differentiation comes less into play, and we will more heavily weight scale, scope, and diversity as well as operating efficiency (see table 12).

Table 12

Competitive Position Group Profiles (CPGPs) And Category Weightings

Component	Services and product focus	Product focus/scale driven	Capital or asset focus	Commodity focus/cost driven	Commodity focus/scale driven	National industries and utilities
	--(%)--					
1. Competitive advantage	45	35	30	15	10	60
2. Scale, scope, and diversity	30	50	30	35	55	20
3. Operating efficiency	25	15	40	50	35	20
Total	100	100	100	100	100	100
Weighted-average assessment*	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0	1.0-5.0

*1 (strong), 2 (strong/adequate), 3 (adequate), 4 (adequate/weak), 5 (weak).

70. We place each of the defined industries (see Appendix B, table 27) into one of the six CPGPs (see above and Appendix B, table 27). This is merely a starting point for the analysis, since we recognize that some industries are less homogenous than others, and that company-specific strategies do affect the basis of competition.

71. In fact, the criteria allow for flexibility in selecting a company's group profile (with its category weightings). Reasons for selecting a profile different than the one suggested in the guidance table could include:

- The industry is heterogeneous, meaning that the nature of competition differs from one subsector to the next, and possibly even within subsectors. The KCF article for the industry will identify such circumstances.
- A company's strategy could affect the relative importance of its key factors of competition.

72. For example, the standard CPGP for the telecom and cable industry is services and product focus. While this may be an appropriate group profile for carriers and service providers, an infrastructure provider may be better analyzed under the capital or asset focus group profile. Other examples: In the capital goods industry, a construction equipment rental company may be analyzed under the capital or asset focus group profile, owing to the importance of efficiently managing the capital spending cycle in this segment of the industry, whereas a provider of hardware, software, and services for industrial automation might be analyzed under the services and product focus group profile, if we believe it can achieve differentiation in the marketplace based on product performance, technology innovation, and service.

73. In some industries, the effects of government policy, regulation, government control, and taxation and tariff policies can significantly alter the competitive dynamics, depending on the country in which a company operates. That can alter our assessment of a company's competitive advantage; scale, size, and diversity; or operating efficiency. When industries in given countries have risks that differ materially from those captured in our global industry risk profile and assessment (see "Methodology: Industry Risk," published Nov. 19, 2013, section B), we will weight competitive advantage more heavily to capture the effect, positive or negative, on competitive dynamics. The assessment of competitive advantage; scale, size, and diversity; and operating efficiency will reflect advantages or disadvantages based on these national industry risk factors. Table 13 identifies the circumstances under which national industry risk factors are positive or negative.

Table 13

National Industry Risk Factors	
National industry risk factors are positive	• Government policy including regulation, ownership, and taxation is supportive and has a good track record of mitigating risks to the stability of industry margins. • Any government ownership, tariff, and taxation policy supports growth prospects for revenues and profit generation. • There is very little discernible risk of negative policy, regulatory, ownership, or taxation changes that could threaten business stability.
National industry risk factors are negative	• Government policy and regulation has a weak track record of stabilizing margins and reducing industry risks. • Any government ownership, tariff, and taxation policy undermine growth prospects for revenues and profit generation. • There is an increasing risk of negative policy, ownership, and taxation changes that could undermine industry stability.

74. When national industry risk factors are positive for a company, typically they support revenue growth, profit growth, higher EBITDA margins, and/or lower-than-average volatility of profits. Often, these benefits provide barriers to entry that impede or even bar new market entrants, which should be reflected in the competitive advantage assessment. These benefits may also include risk mitigants that enable a company to withstand economic downturns and competitive and technological threats better in its local markets than its global competitors can. The scale, scope, and diversity assessment might also benefit from these policies if the company is able to withstand economic, regional, competitive, and technological threats better than its global competitors can. Likewise, the company's operating efficiency assessment may improve if, as a result, it is better able than its global competitors to withstand economic downturns, taking into account its cost structure.

75. Conversely, when national industry risk factors are negative for a company, typically they detract from revenue growth and profit growth, shrink EBITDA margins, and/or increase the average volatility of profits. The company may also have less protection against economic downturns and competitive and technological threats within its local markets than its global competitors do. We may also adjust the company's scale, scope, and diversity assessment lower if, as a result of these policies, it is less able to withstand economic, regional, competitive, and technological threats than its global competitors can. Likewise, we may adjust its operating efficiency assessment lower if, as a result of these policies, it is less able to withstand economic downturns, taking into account the company's cost structure.

76. An example of when we might use a national industry risk factor would be for a telecommunications network owner that benefits from a monopoly network position, supported by substantial capital barriers to entry, and as a result is subject to regulated pricing for its services. Accordingly, in contrast to a typical telecommunications company, our analysis of the company's competitive position would focus more heavily on the monopoly nature of its operations, as well as the nature and reliability of the operator's regulatory framework in supporting future revenue and earnings. If we viewed the regulatory framework as being supportive of the group's future earnings stability, and we considered its monopoly position to be sustainable, we would assess these

national industry risk factors as positive in our assessment of the group's competitive position.

77. The weighted average assessment translates into the preliminary competitive position assessment on a scale of 1 to 6, where one is best. Table 14 describes the matrix we use to translate the weighted average assessment of the three components into the preliminary competitive position assessment.

Table 14

Translation Table For Converting Weighted-Average Assessments Into Preliminary Competitive Position Assessments

Weighted average assessment range	Preliminary competitive position assessment
1.00 – 1.50	1
>1.50 – 2.25	2
>2.25 – 3.00	3
>3.00 – 3.75	4
>3.75 – 4.50	5
>4.50 – 5.00	6

4. Assessing profitability

78. We assess profitability on the same scale of 1 to 6 as the competitive position assessment.

79. The profitability assessment consists of two subcomponents: level of profitability and the volatility of profitability, which we assess separately. We use a matrix to combine these into the final profitability assessment.

a) Level of profitability

80. The level of profitability is assessed in the context of the company's industry. We most commonly measure profitability using return on capital (ROC) and EBITDA margins, but we may also use sector-specific ratios. Importantly, as with the other components of competitive position, we review profitability in the context of the industry in which the company operates, not just in its narrower subsector. (See list of industries and subsectors in Appendix B, table 27.)

81. We assess level of profitability on a three-point scale: above average, average, and below average. Industry KCF articles may establish numeric guidance, for instance by stating that an ROC above 12% is considered above average, between 8%-12% is average, and below 8% is below average for the industry, or by differentiating between subsectors in the industry. In the absence of numeric guidance, we compare a company against its peers across the industry.

82. We calculate profitability ratios generally based on a five-year average, consisting of two years of historical data, our projections for the current year (incorporating any reported year-to-date results and estimates for the remainder of the year), and the next two financial years. There may be situations where we consider longer or shorter historical results or forecasts, depending on such factors as availability of financials, transformational events (such as mergers or acquisitions [M&A]), cyclical distortion (such as peak or bottom of the cycle metrics that we do not deem fully representative of the company's level of profitability), and we take into account improving or deteriorating trends in profitability ratios in our assessment.

b) Volatility of profitability

83. We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA, EBITDA margins, or return on capital. The KCF articles provide guidance on which measures are most appropriate for a given industry or set of companies. For each of these measures, we divide the standard error by the average of that measure over the time period in order to ensure better comparability across companies.

84. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' linear trend line. We regress the company's EBITDA, EBITDA margins, or return on capital against time. A key advantage of SER over standard deviation or coefficient of variation is that it doesn't view upwardly trending data as inherently more volatile. At the same time, we recognize that SER, like any statistical measure, may understate or overstate expected volatility and thus we will make qualitative adjustments where appropriate (see paragraphs 86-90). Furthermore, we only calculate SER when companies have at least seven years of historical annual data and have not significantly changed their line of business during the timeframe, to ensure that the results are meaningful.

85. As with the level of profitability, we evaluate a company's SER in the context of its industry group. For most industries, we establish a six-point scale with 1 capturing the least volatile companies, i.e., those with the lowest SERs, and 6 identifying companies whose profits are most volatile. We have established industry-specific SER parameters using the most recent seven years of data for companies within each sector. We believe that seven years is generally an adequate number of years to capture a business cycle. (See Appendix B, section 4 for industry-specific SER parameters.) For companies whose business segments cross multiple industries, we evaluate the SER in the context of the organization's most dominant industry--if that industry represents at least two-thirds of the organization's EBITDA, sales, or other relevant metric. If the company is a conglomerate and no dominant industry can be identified, we will evaluate its profit volatility in the context of SER guidelines for all nonfinancial companies.

86. In certain circumstances, the SER derived from historical information may understate--or overstate--expected future volatility, and we may adjust the assessment downward or upward. The scope of possible adjustments depends on certain conditions being met as described below.

87. We might adjust the SER-derived volatility assessment to a worse assessment (i.e., to a higher assessment for greater volatility) by up to two categories if the expected level of volatility isn't apparent in historical numbers, and the company either:

- Has a weighted country risk assessment of 4 or worse, which may, notwithstanding past performance, result in a less stable business environment going forward;
- Operates in a subsector of the industry that may be prone to higher technology or regulation changes, or other potential disruptive risks that have not emerged over the seven year period;
- Is of limited size and scope, which will often result in inherently greater vulnerability to external changes; or
- Has pursued material M&A or internal growth projects that obscure the company's underlying performance trend line. As an example, a company may have consummated an acquisition during the trough of the cycle, masking what would otherwise be a significant decline in performance.

88. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.

89. Conversely, we may adjust the SER-derived volatility assessment to a better assessment (i.e., to a lower assessment reflecting lower volatility) by up to two categories if we observe that the conditions historically leading to greater volatility have receded and are misrepresentative. This will be the case when:

- The company grew at a moderately faster, albeit more uneven, pace relative to the industry. Since we measure volatility around a linear trend line, a company growing at a constant percentage of moderate increase (relative to the industry) or an uneven pace (e.g., due to "lumpy" capital spending programs) could receive a relatively unfavorable assessment on an unadjusted basis, which would not be reflective of the company's performance in a steady state. (Alternatively, those companies that grow at a significantly higher-than-average industry rate often do so on unsustainable rates of growth or by taking on high-risk strategies. Companies with these high-risk growth strategies would not receive a better assessment and could be adjusted to a worse assessment;)
- The company's geographic, customer, or product diversification has increased in scope as a result of an acquisition or rapid expansion (e.g. large, long-term contracts wins), leading to more stability in future earnings in our view; or
- The company's business model is undergoing material change that we expect will benefit earnings stability, such as a new regulatory framework or major technology shift that is expected to provide a significant competitive hedge and margin protection over time.

90. The choice of one or two categories depends on the degree of likelihood that the related risks will materialize and our view of the likely severity of these risks.

91. If the company either does not have at least seven years of annual data or has materially changed its business lines or undertaken abnormally high levels of M&A during this time period, then we do not use its SER to assess the volatility of profitability. In these cases, we use a proxy to establish the volatility assessment. If there is a peer company that has, and is expected to continue having, very similar profitability volatility characteristics, we use the SER of that peer entity as a proxy.

92. If no such matching peer exists, or one cannot be identified with enough confidence, we perform an assessment of expected volatility based on the following rules:

- An assessment of 3 if we expect the company's profitability, supported by available historical evidence, will exhibit a volatility pattern in line with, or somewhat less volatile than, the industry average.
- An assessment of 2 based on our confidence, supported by available historical evidence, that the company will exhibit lower volatility in profitability metrics than the industry's average. This could be underpinned by some of the factors listed in paragraph 89, whereas those listed in paragraph 87 would typically not apply.
- An assessment of 4 or 5 based on our expectation that profitability metrics will exhibit somewhat higher (4), or meaningfully higher (5) volatility than the industry, supported by available historical evidence, or because of the applicability of possible adjustment factors listed in paragraph 87.
- Assessments of either 1 or 6 are rarely assigned and can only be achieved based on a combination of data evidence and very high confidence tests. For an assessment of 1, we require strong evidence of minimal volatility in profitability metrics compared with the industry, supported by at least five years of historical information, combined with a very high degree of confidence that this will continue in the future, including no country risk, subsector risk or size considerations that could otherwise warrant a worse assessment as per paragraph 87. For an assessment of 6 we require strong evidence of very high volatility in profitability metrics

compared with the industry, supported by at least five years of historical information and very high confidence that this will continue in the future.

93. Next, we combine the level of profitability assessment with the volatility assessment to determine the final profitability assessment using the matrix in Table 15.

Table 15

Profitability Assessment

	--Volatility of profitability assessment--					
Level of profitability assessment	**1**	**2**	**3**	**4**	**5**	**6**
Above average	1	1	2	3	4	5
Average	1	2	3	4	5	6
Below average	2	3	4	5	6	6

5. Combining the preliminary competitive position assessment with profitability

94. The fourth and final step in arriving at a competitive position assessment is to combine the preliminary competitive position assessment with the profitability assessment. We use the combination matrix in Table 16, which shows how the profitability assessment can confirm, strengthen, or weaken (by up to one category) the overall competitive position assessment.

Table 16

Combining The Preliminary Competitive Position Assessment And Profitability Assessment

	--Preliminary competitive position assessment--					
Profitability assessment	**1**	**2**	**3**	**4**	**5**	**6**
1	1	2	2	3	4	5
2	1	2	3	3	4	5
3	2	2	3	4	4	5
4	2	3	3	4	5	5
5	2	3	4	4	5	6
6	2	3	4	5	5	6

95. We generally expect companies with a strong preliminary competitive position assessment to exhibit strong and less volatile profitability metrics. Conversely, companies with a relatively weaker preliminary competitive position assessment will generally have weaker and/or more volatile profitability metrics. Our analysis of profitability helps substantiate whether management is translating any perceived competitive advantages, diversity benefits, and cost management measures into higher earnings and more stable return on capital and return on sales ratios than the averages for the industry. When profitability differs markedly from what the preliminary/anchor competitive position assessment would otherwise imply, we adjust the competitive position assessment accordingly.

96. Our method of adjustment is biased toward the preliminary competitive position assessment rather than toward the profitability assessment (e.g., a preliminary competitive assessment of 6

and a profitability assessment of 1 will result in a final assessment of 5).

E. Cash Flow/Leverage

97. The pattern of cash flow generation, current and future, in relation to cash obligations is often the best indicator of a company's financial risk. The criteria assess a variety of credit ratios, predominately cash flow-based, which complement each other by focusing on the different levels of a company's cash flow waterfall in relation to its obligations (i.e., before and after working capital investment, before and after capital expenditures, before and after dividends), to develop a thorough perspective. Moreover, the criteria identify the ratios that we think are most relevant to measuring a company's credit risk based on its individual characteristics and its business cycle.

98. For the analysis of companies with intermediate or stronger cash flow/leverage assessments (a measure of the relationship between the company's cash flows and its debt obligations as identified in paragraphs 106 and 124), we primarily evaluate cash flows that reflect the considerable flexibility and discretion over outlays that such companies typically possess. For these entities, the starting point in the analysis is cash flows before working capital changes plus capital investments in relation to the size of a company's debt obligations in order to assess the relative ability of a company to repay its debt. These "leverage" or "payback" cash flow ratios are a measure of how much flexibility and capacity the company has to pay its obligations.

99. For entities with significant or weaker cash flow/leverage assessments (as identified in paragraphs 105 and 124), the criteria also call for an evaluation of cash flows in relation to the carrying cost or interest burden of a company's debt. This will help us assess a company's relative and absolute ability to service its debt. These "coverage"- or "debt service"-based cash flow ratios are a measure of a company's ability to pay obligations from cash earnings and the cushion the company possesses through stress periods. These ratios, particularly interest coverage ratios, become more important the further a company is down the credit spectrum.

1. Assessing cash flow/leverage

100. Under the criteria, we assess cash flow/leverage as 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; or 6, highly leveraged. To arrive at these assessments, the criteria combine the assessments of a variety of credit ratios, predominately cash flow-based, which complement each other by focusing attention on the different levels of a company's cash flow waterfall in relation to its obligations. For each ratio, there is an indicative cash flow/leverage assessment that corresponds to a specified range of values in one of three given benchmark tables (see tables 17, 18, and 19). We derive the final cash flow/leverage assessment for a company by determining the relevant core ratios, anchoring a preliminary cash flow assessment based on the relevant core ratios, determining the relevant supplemental ratio(s), adjusting the preliminary cash flow assessment according to the relevant supplemental ratio(s), and, finally, modifying the adjusted cash flow/leverage assessment for any material volatility.

2. Core and supplemental ratios

a) Core ratios

101. For each company, we calculate two core credit ratios--funds from operations (FFO) to debt and debt to EBITDA--in accordance with Standard & Poor's ratios and adjustments criteria (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013). We compare these

payback ratios against benchmarks to derive the preliminary cash flow/leverage assessment for a company. These ratios are also useful in determining the relative ranking of the financial risk of companies.

b) Supplemental ratios

102. The criteria also consider one or more supplemental ratios (in addition to the core ratios) to help develop a fuller understanding of a company's financial risk profile and fine-tune our cash flow/leverage analysis. Supplemental ratios could either confirm or adjust the preliminary cash flow/leverage assessment. The confirmation or adjustment of the preliminary cash flow/leverage assessment will depend on the importance of the supplemental ratios as well as any difference in indicative cash flow/leverage assessment between the core and supplemental ratios as described in section E.3.b.

103. The criteria typically consider five standard supplemental ratios, although the relevant KCF criteria may introduce additional supplemental ratios or focus attention on one or more of the standard supplemental ratios. The standard supplemental ratios include three payback ratios--cash flow from operations (CFO) to debt, free operating cash flow (FOCF) to debt, and discretionary cash flow (DCF) to debt--and two coverage ratios, FFO plus interest to cash interest and EBITDA to interest.

104. The criteria provide guidelines as to the relative importance of certain ratios if a company exhibits characteristics such as high leverage, working capital intensity, capital intensity, or high growth.

105. If the preliminary cash flow/leverage assessment is significant or weaker (see section E.3), then two coverage ratios, FFO plus interest to cash interest and EBITDA to interest, will be given greater importance as supplemental ratios. For the purposes of calculating the coverage ratios, "cash interest" includes only cash interest payments (i.e., interest excludes noncash interest payable on, for example, payment-in-kind [PIK] instruments) and does not include any Standard & Poor's adjusted interest on such items as leases, while "interest" is the income statement figure plus Standard & Poor's adjustments to interest (see "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013).

106. If the preliminary cash flow/leverage assessment is intermediate or stronger, the criteria first apply the three standard supplemental ratios of CFO to debt, FOCF to debt, and DCF to debt. When FOCF to debt and DCF to debt indicate a cash flow/leverage assessment that is lower than the other payback-ratio-derived cash flow/leverage assessments, it signals that the company has either larger than average capital spending or other non-operating cash distributions (including dividends). If these differences persist and are consistent with a negative trend in overall ratio levels, which we believe is not temporary, then these supplemental leverage ratios will take on more importance in the analysis.

107. If the supplemental ratios indicate a cash flow/leverage assessment that is different than the preliminary cash flow/leverage assessment, it could suggest an unusual debt service or fixed charge burden, working capital or capital expenditure profile, or unusual financial activity or policies. In such cases, we assess the sustainability or persistence of these differences. For example, if either working capital or capital expenditures are unusually low, leading to better indicated assessments, we examine the sustainability of such lower spending in the context of its impact on the company's longer term competitive position. If there is a deteriorating trend in the company's asset base, we give these supplemental ratios less weight. If either working capital or capital expenditures are unusually high, leading to weaker indicated assessments, we examine the persistence and need for such higher spending. If elevated spending levels are required to maintain a company's competitive position, for example to maintain the company's asset base, we

give more weight to these supplemental ratios.

108. For capital-intensive companies, EBITDA and FFO may overstate financial strength, whereas FOCF may be a more accurate reflection of their cash flow in relation to their financial obligations. The criteria generally consider a capital-intensive company as having ongoing capital spending to sales of greater than 10%, or depreciation to sales of greater than 8%. For these companies, the criteria place more weight on the supplementary ratio of FOCF to debt. Where we place more analytic weight on FOCF to debt, we also seek to estimate the amount of maintenance or full cycle capital required (see Appendix C) under normal conditions (we estimate maintenance or full-cycle capital expenditure required because this is not a reported number). The FOCF figure may be adjusted by adding back estimated discretionary capital expenditures. The adjusted FOCF to debt based on maintenance or full cycle capital expenditures often helps determine how much importance to place on this ratio. If both the FOCF to debt and the adjusted (for estimated discretionary capital spending) FOCF to debt derived assessments are different from the preliminary cash/flow leverage assessment, then these supplemental leverage ratios take on more importance in the analysis.

109. For working-capital-intensive companies, EBITDA and FFO may also overstate financial strength, and CFO may be a more accurate measure of the company's cash flow in relation to its financial risk profile. Under the criteria, if a company has a working capital-to-sales ratio that exceeds 25% or if there are significant seasonal swings in working capital, we generally consider it to be working-capital-intensive. For these companies, the criteria place more emphasis on the supplementary ratio of CFO to debt. Examples of companies that have working-capital-intensive characteristics can be found in the capital goods, metals and mining downstream, or the retail and restaurants industries. The need for working capital in those industries reduces financial flexibility and, therefore, these supplemental leverage ratios take on more importance in the analysis.

110. For all companies, when FOCF to debt or DCF to debt is negative or indicates materially lower cash flow/leverage assessments, the criteria call for an examination of management's capital spending and cash distribution strategies. For high-growth companies, typically the focus is on FFO to debt instead of FOCF to debt because the latter ratio can vary greatly depending on the growth investment the company is undergoing. The criteria generally consider a high-growth company one that exhibits real revenue growth in excess of 8% per year. Real revenue growth excludes price or foreign exchange related growth, under these criteria. In cases where FOCF or DCF is low, there is a greater emphasis on monitoring the sustainability of margins and return on capital and the overall financing mix to assess the likely trend of future debt ratios. In addition, debt service ratio analysis will be important in such situations. For companies with more moderate growth, the focus is typically on FOCF to debt unless the capital spending is short term or is not funded with debt.

111. For companies that have ongoing and well entrenched banking relationships we can reflect these relationships in our cash flow/leverage analysis through the use of the interest coverage ratios as supplemental ratios. These companies generally have historical links and a strong ongoing relationship with their main banks, as well as shareholdings by the main banks, and management influence and interaction between the main banks and the company. Based on their bank relationships, these companies often have lower interest servicing costs than peers, even if the macro economy worsens. In such cases, we generally use the interest coverage ratios as supplemental ratios. This type of banking relationship occurs in Japan, for example, where companies that have the type of bank relationship described in this paragraph tend to have a high socioeconomic influence within their country by way of their revenue size, total debt quantum, number of employees, and the relative importance of the industry.

c) Time horizon and ratio calculation

112. A company's credit ratios may vary, often materially, over time due to economic, competitive, technological, or investment cycles, the life stage of the company, and corporate or strategic actions. Thus, we evaluate credit ratios on a time series basis with a clear forward-looking bias. The length of the time series is dependent on the relative credit risk of the company and other qualitative factors and the weighting of the time series varies according to transformational events. A transformational event is any event that could cause a material change in a company's financial profile, whether caused by changes to the company's capital base, capital structure, earnings, cash flow profile, or financial policies. Transformational events can include mergers, acquisitions, divestitures, management changes, structural changes to the industry or competitive environment, and/or product development and capital programs. This section provides guidance on the timeframe and weightings the criteria apply to calculate the indicative ratios.

113. The criteria generally consider the company's credit ratios for the previous one to two years, current-year forecast, and the two subsequent forecasted financial years. There may be situations where longer--or even shorter--historical results or forecasts are appropriate, depending on such factors as availability of financials, transformational events, or relevance. For example, a utility company with a long-term capital spending program may lend itself to a longer-term forecast, whereas for a company experiencing a near-term liquidity squeeze even a two-year forecast will have limited value. Alternatively, for most commodities-based companies we emphasize credit ratios based on our forward-looking view of market conditions, which may differ materially from the historical period.

114. Historical patterns in cash flow ratios are informative, particularly in understanding past volatility, capital spending, growth, accounting policies, financial policies, and business trends. Our analysis starts with a review of these historical patterns in order to assess future expected credit quality. Historical patterns can also provide an indication of potential future volatility in ratios, including that which results from seasonality or cyclicality. A history of volatility could result in a more conservative assessment of future cash flow generation if we believe cash flow will continue to be volatile.

115. The forecast ratios are based on an expected base-case scenario developed by Standard & Poor's, incorporating current and near-term economic conditions, industry assumptions, and financial policies. The prospective cyclical and longer-term volatility associated with the industry in which the issuer operates is addressed in the industry risk criteria (see section B) and the longer-term directional influence or event risk of financial policies is addressed in our financial policy criteria (see section H).

116. The criteria generally place greater emphasis on forecasted years than historical years in the time series of credit ratios when calculating the indicative credit ratio. For companies where we have five years of ratios as described in section E.3, generally we calculate the indicative ratio by weighting the previous two years, the current year, and the forecasted two years as 10%, 15%, 25%, 25%, and 25%, respectively.

117. This weighting changes, however, to place even greater emphasis on the current and forecast years when:

- The issuer meets the characteristics described in paragraph 113, and either shorter- or longer-term forecasts are applicable. The weights applied will generally be quite forward weighted, particularly if a company is undergoing a transformational event and there is moderate or better cash flow certainty.

- The issuer is forecast to generate negative cash flow available for debt repayment, which we believe could lead to deteriorating credit metrics. Forecast negative cash flows could be generated from operating activities as well as capital expenditures, share buybacks, dividends, or acquisitions, as we forecast these uses of cash based on the company's track record, market conditions, or financial policy. The weights applied will generally be 30%, 40%, and 30% for the current and two subsequent years, respectively.
- The issuer is in an industry that is prospectively volatile or that has a high degree of cash flow uncertainty. Industries that are prospectively volatile are industries whose competitive risk and growth assessments are either high risk (5) or very high risk (6) or whose overall industry risk assessments are either high risk (5) or very high risk (6). The weights applied will generally be 50% for the current year and 50% for the first subsequent forecast year.

118. When the indicative ratio(s) is borderline (i.e., less than 10% different from the threshold in relative terms) between two assessment thresholds (as described in section E.3 and tables 17, 18, and 19) and the forecast points to a switch in the ratio between categories during the rating timeframe, we will weigh the forecast even more heavily in order to prospectively capture the trend.

119. For companies undergoing a transformational event, the weighting of the time series could vary significantly.

120. For companies undergoing a transformational event and with significant or weaker cash flow/leverage assessments, we place greater weight on near-term risk factors. That's because overemphasis on longer-term (inherently less predictable) issues could lead to some distortion when assessing the risk level of a speculative-grade company. We generally analyze a company using the arithmetic mean of the credit ratios expected according to our forecasts for the current year (or pro forma current year) and the subsequent financial year. A common example of this is when a private equity firm acquires a company using additional debt leverage, which makes historical financial ratios meaningless. In this scenario, we weight or focus the majority of our analysis on the next one or two years of projected credit measures.

3. Determining the cash flow/leverage assessment

a) Identifying the benchmark table

121. Tables 17, 18, and 19 provide benchmark ranges for various cash flow ratios we associate with different cash flow/leverage assessments for standard volatility, medial volatility, and low volatility industries. The tables of benchmark ratios differ for a given ratio and cash flow/leverage assessment along two dimensions: the starting point for the ratio range and the width of the ratio range.

122. If an industry exhibits low volatility, the threshold levels for the applicable ratios to achieve a given cash flow/leverage assessment are less stringent than those in the medial or standard volatility tables, although the range of the ratios is narrower. Conversely, if an industry exhibits medial or standard levels of volatility, the threshold for the applicable ratios to achieve a given cash flow/leverage assessment are elevated, albeit with a wider range of values.

123. The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA (see section A, table 1). The low volatility table (table 19) will generally apply when a company's CICRA is 1, unless otherwise indicated in a sector's KCF criteria. The medial volatility table (table 18) will be used under certain

circumstances for companies with a CICRA of 1 or 2. Those circumstances are described in the respective sectors' KCF criteria. The standard volatility table (table 17) serves as the relevant benchmark table for companies with a CICRA of 2 or worse, and we will always use it for companies with a CICRA of 1 or 2 and whose competitive position is assessed 5 or 6. Although infrequent, we will use the low volatility table when a company's CICRA is 2 for companies that exhibit or are expected to exhibit low levels of volatility. The choice of volatility tables for companies with a CICRA of 2 is addressed in the respective sector's KCF article.

Table 17

Cash Flow/Leverage Analysis Ratios--Standard Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
Modest	45-60	1.5-2	9-13	10-15	35-50	25-40	15-25
Intermediate	30-45	2-3	6-9	6-10	25-35	15-25	10-15
Significant	20-30	3-4	4-6	3-6	15-25	10-15	5-10
Aggressive	12-20	4-5	2-4	2-3	10-15	5-10	2-5
Highly leveraged	Less than 12	Greater than 5	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

Table 18

Cash Flow/Leverage Analysis Ratios--Medial Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	50+	less than 1.75	10.5+	14+	40+	30+	18+
Modest	35-50	1.75-2.5	7.5-10.5	9-14	27.5-40	17.5-30	11-18
Intermediate	23-35	2.5-3.5	5-7.5	5-9	18.5-27.5	9.5-17.5	6.5-11
Significant	13-23	3.5-4.5	3-5	2.75-5	10.5-18.5	5-9.5	2.5-6.5
Aggressive	9-13	4.5-5.5	1.75-3	1.75-2.75	7-10.5	0-5	(11)-2.5
Highly leveraged	Less than 9	Greater than 5.5	Less than 1.75	Less than 1.75	Less than 7	Less than 0	Less than (11)

Table 19

Cash Flow/Leverage Analysis Ratios--Low Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	35+	Less than 2	More than 8	More than 13	More than 30	20+	11+
Modest	23-35	2-3	5-8	7-13	20-30	10-20	7-11

Table 19

Cash Flow/Leverage Analysis Ratios--Low Volatility (cont.)

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Intermediate	13-23	3-4	3-5	4-7	12-20	4-10	3-7
Significant	9-13	4-5	2-3	2.5-4	8-12	0-4	0-3
Aggressive	6-9	5-6	1.5-2	1.5-2.5	5-8	(10)-0	(20)-0
Highly leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5	Less than 5	Less than (10)	Less than (20)

b) Aggregating the credit ratio assessments

124. To determine the final cash flow/leverage assessment, we make these calculations:
1) First, calculate a time series of standard core and supplemental credit ratios, select the relevant benchmark table, and determine the appropriate time weighting of the credit ratios.

- Calculate the two standard core credit ratios and the five standard supplemental credit ratios over a five-year time horizon.
- Consult the relevant industry KCF article (if applicable), which may identify additional supplemental ratio(s). The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA.
- Calculate the appropriate weighted average cash flow/leverage ratios. If the company is undergoing a transformational event, then the core and supplemental ratios will typically be calculated based on Standard & Poor's projections for the current and next one or two financial years.

2) Second, we use the core ratios to determine the preliminary cash flow assessment.

- Compare the core ratios (FFO to debt and debt to EBITDA) to the ratio ranges in the relevant benchmark table.
- If the core ratios result in different cash flow/leverage assessments, we will select the relevant core ratio based on which provides the best indicator of a company's future leverage.

3) Third, we review the supplemental ratio(s).

- Determine the importance of standard or KCF supplemental ratios based on company-specific characteristics, namely, leverage, capital intensity, working capital intensity, growth rate, or industry.

4) Fourth, we calculate the adjusted cash flow/leverage assessment.

- If the cash flow/leverage assessment(s) indicated by the important supplemental ratio(s) differs from the preliminary cash flow/leverage assessment, we might adjust the preliminary cash flow/leverage assessment by one category in the direction of the cash flow/leverage assessment indicated by the supplemental ratio(s) to derive the adjusted cash flow/leverage assessment. We will make this adjustment if, in our view, the supplemental ratio provides the best indicator of a company's future leverage.
- If there is more than one important supplemental ratio and they result in different directional deviations from the preliminary cash flow/leverage assessment, we will select one as the

relevant supplemental ratio based on which, in our opinion, provides the best indicator of a company's future leverage. We will then make the adjustment outlined above if the selected supplemental ratio differs from the preliminary cash flow/leverage assessment and the selected supplemental ratio provides the best overall indicator of a company's future leverage.

5) Lastly, we determine the final cash flow/leverage assessment based on the volatility adjustment.

- We classify companies as stable for these cash flow criteria if cash flow/leverage ratios are expected to move up by one category during periods of stress based on their business risk profile. The final cash flow/leverage assessment for these companies will not be modified from the adjusted cash flow/leverage assessment.
- We classify companies as volatile for these cash flow criteria if cash flow/leverage ratios are expected to move one or two categories worse during periods of stress based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 30% from its current level. The final cash flow/leverage assessment for these companies will be modified to one category weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.
- We classify companies as highly volatile for these cash flow criteria if cash flow/leverage ratios are expected to move two or three categories worse during periods of stress, based on their business risk profiles. Typically, this is equivalent to EBITDA declining about 50% from its current level. The final cash flow/leverage assessment for these companies will be modified to two categories weaker than the adjusted cash flow/leverage assessment; the adjustment will be eliminated or reduced to one category if cash flow/leverage ratios, as evaluated, include a moderate to high level of stress already.

125. The volatility adjustment is the mechanism by which we factor a "cushion" of medium-term variance to current financial performance not otherwise captured in either the near-term base-case forecast or the long-term business risk assessment. We make this adjustment based on the following:

- The expectation of any potential cash flow/leverage ratio movement is both prospective and dependent on the current business or economic conditions.
- Stress scenarios include, but are not limited to, a recessionary economic environment, technology or competitive shifts, loss or renegotiation of major contracts or customers, and key product or input price movements, as typically defined in the company's industry risk profile and competitive position assessment.
- The volatility adjustment is not static and is company specific. At the bottom of an economic cycle or during periods of stressed business conditions, already reflected in the general industry risk or specific competitive risk profile, the prospect of weakening ratios is far less than at the peak of an economic cycle or business conditions.
- The expectation of prospective ratio changes may be formed by observed historical performance over an economic, business, or product cycle by the company or by peers.
- The assessment of which classification to use when evaluating the prospective number of scoring category moves will be guided by how close the current ratios are to the transition point (i.e. "buffer" in the current scoring category) and the corresponding amount of EBITDA movement at each scoring transition.

F. Diversification/Portfolio Effect

126. Under the criteria, diversification/portfolio effect applies to companies that we regard as conglomerates. They are companies that have multiple core business lines that may be operated as separate legal entities. For the purpose of these criteria, a conglomerate would have at least three business lines, each contributing a material source of earnings and cash flow.

127. The criteria aim to measure how diversification or the portfolio effect could improve the anchor of a company with multiple business lines. This approach helps us determine how the credit strength of a corporate entity with a given mix of business lines could improve based on its diversity. The competitive position factor assesses the benefits of diversity within individual lines of business. This factor also assesses how poorly performing businesses within a conglomerate affect the organization's overall business risk profile.

128. Diversification/portfolio effect could modify the anchor depending on how meaningful we think the diversification is, and on the degree of correlation we find in each business line's sensitivity to economic cycles. This assessment will have either a positive or neutral impact on the anchor. We capture any potential factor that weakens a company's diversification, including poor management, in our management and governance assessment.

129. We define a conglomerate as a diversified company that is involved in several industry sectors. Usually the smallest of at least three distinct business segments/lines would contribute at least 10% of either EBITDA or FOCF and the largest would contribute no more than 50% of EBITDA or FOCF, with the long-term aim of increasing shareholder value by generating cash flow. Industrial conglomerates usually hold a controlling stake in their core businesses, have highly identifiable holdings, are deeply involved in the strategy and management of their operating companies, generally do not frequently roll over or reshuffle their holdings by buying and selling companies, and therefore have high long-term exposure to the operating risks of their subsidiaries.

130. In rating a conglomerate, we first assess management's commitment to maintain the diversified portfolio over a longer-term horizon. These criteria apply only if the company falls within our definition of a conglomerate.

1. Assessing diversification/portfolio effect

131. A conglomerate's diversification/portfolio effect is assessed as 1, significant diversification; 2, moderate diversification; or 3, neutral. An assessment of moderate diversification or significant diversification potentially raises the issuer's anchor. To achieve an assessment of significant diversification, an issuer should have uncorrelated diversified businesses whose breadth is among the most comprehensive of all conglomerates'. This assessment indicates that we expect the conglomerate's earnings volatility to be much lower through an economic cycle than an undiversified company's. To achieve an assessment of moderate diversification, an issuer typically has a range of uncorrelated diversified businesses that provide meaningful benefits of diversification with the expectation of lower earnings volatility through an economic cycle than an undiversified company's.

132. We expect that a conglomerate will also benefit from diversification if its core assets consistently produce positive cash flows over our rating horizon. This supports our assertion that the company diversifies to take advantage of allocating capital among its business lines. To this end, our analysis focuses on a conglomerate's track record of successfully deploying positive discretionary cash flow into new business lines or expanding capital-hungry business lines. We assess companies that we do not expect to achieve these benefits as neutral.

2. Components of correlation and how it is incorporated into our analysis

133. We determine the assessment for this factor based on the number of business lines in separate industries (as described in table 27) and the degree of correlation between these business lines as described in table 20. There is no rating uplift for an issuer with a small number of business lines that are highly correlated. By contrast, a larger number of business lines that are not closely correlated provide the maximum rating uplift.

Table 20

Assessing Diversification/Portfolio Effect

	--Number of business lines--		
Degree of correlation of business lines	**3**	**4**	**5 or more**
High	Neutral	Neutral	Neutral
Medium	Neutral	Moderately diversified	Moderately diversified
Low	Moderately diversified	Significantly diversified	Significantly diversified

134. The degree of correlation of business lines is high if the business lines operate within the same industry, as defined by the industry designations in Appendix B, table 27. The degree of correlation of business lines is medium if the business lines operate within different industries, but operate within the same geographic region (for further guidance on defining geographic regions, see Appendix A, table 26). An issuer has a low degree of correlation across its business lines if these business lines are both a) in different industries and b) either operate in different regions or operate in multiple regions.

135. If we believe that a conglomerate's various industry exposures fail to provide a partial hedge against the consolidated entity's volatility because they are highly correlated through an economic cycle, then we assess the diversification/portfolio effect as neutral.

G. Capital Structure

136. Standard & Poor's uses its capital structure criteria to assess risks in a company's capital structure that may not show up in our standard analysis of cash flow/leverage. These risks may exist as a result of maturity date or currency mismatches between a company's sources of financing and its assets or cash flows. These can be compounded by outside risks, such as volatile interest rates or currency exchange rates.

1. Assessing capital structure

137. Capital structure is a modifier category, which adjusts the initial anchor for a company after any modification due to diversification/portfolio effect. We assess a number of subfactors to determine the capital structure assessment, which can then raise or lower the initial anchor by one or more notches--or have no effect in some cases. We assess capital structure as 1, very positive; 2, positive; 3, neutral; 4, negative; or 5, very negative. In the large majority of cases, we believe that a firm's capital structure will be assessed as neutral. To assess a company's capital structure, we analyze four subfactors:

- Currency risk associated with debt,
- Debt maturity profile (or schedule),

- Interest rate risk associated with debt, and
- Investments.

138. Any of these subfactors can influence a firm's capital structure assessment, although some carry greater weight than others, based on a tiered approach:

- Tier one risk subfactors: Currency risk of debt and debt maturity profile, and
- Tier two risk subfactor: Interest rate risk of debt.

139. The initial capital structure assessment is based on the first three subfactors (see table 21). We may then adjust the preliminary assessment based on our assessment of the fourth subfactor, investments.

Table 21

Preliminary Capital Structure Assessment

Preliminary capital structure assessment	Subfactor assessments
Neutral	No tier one subfactor is negative.
Negative	One tier one subfactor is negative, and the tier two subfactor is neutral.
Very negative	Both tier one subfactors are negative, or one tier one subfactor is negative and the tier two subfactor is negative.

140. Tier one subfactors carry the greatest risks, in our view, and, thus, could have a significant impact on the capital structure assessment. This is because, in our opinion, these factors have a greater likelihood of affecting credit metrics and potentially causing liquidity and refinancing risk. The tier two subfactor is important in and of itself, but typically less so than the tier one subfactors. In our view, in the majority of cases, the tier two subfactor in isolation has a lower likelihood of leading to liquidity and default risk than do tier one subfactors.

141. The fourth subfactor, investments, as defined in paragraph 153, quantifies the impact of a company's investments on its overall financial risk profile. Although not directly related to a firm's capital structure decisions, certain investments could provide a degree of asset protection and potential financial flexibility if they are monetized. Thus, the fourth subfactor could modify the preliminary capital structure assessment (see table 22). If the subfactor is assessed as neutral, then the preliminary capital structure assessment will stand. If investments is assessed as positive or very positive, we adjust the preliminary capital structure assessment upward (as per table 22) to arrive at the final assessment.

Table 22

Final Capital Structure Assessment

	--Investments subfactor assessment--		
Preliminary capital structure assessment	**Neutral**	**Positive**	**Very positive**
Neutral	Neutral	Positive	Very positive
Negative	Negative	Neutral	Positive
Very negative	Very negative	Negative	Negative

2. Capital structure analysis: Assessing the subfactors

a) Subfactor 1: Currency risk of debt

142. Currency risk arises when a company borrows without hedging in a currency other than the currency in which it generates revenues. Such an unhedged position makes the company potentially vulnerable to fluctuations in the exchange rate between the two currencies, in the absence of mitigating factors. We determine the materiality of any mismatch by identifying situations where adverse exchange-rate movements could weaken cash flow and/or leverage ratios. We do not include currency mismatches under the following scenarios:

- The country where a company generates its cash flows has its currency pegged to the currency in which the company has borrowed, or vice versa (or the currency of cash flows has a strong track record and government policy of stability with the currency of borrowings), examples being the Hong Kong dollar which is pegged to the U.S. dollar, and the Chinese renminbi which is managed in a narrow band to the U.S. dollar (and China's foreign currency reserves are mainly in U.S. dollars). Moreover, we expect such a scenario to continue for the foreseeable future;
- A company has the proven ability, through regulation or contract, to pass through changes in debt servicing costs to its customers; or
- A company has a natural hedge, such as where it may sell its product in a foreign currency and has matched its debt in that same currency.

143. We also recognize that even if an entity generates insufficient same-currency cash flow to meet foreign currency-denominated debt obligations, it could have substantial other currency cash flows it can convert to meet these obligations. Therefore, the relative amount of foreign denominated debt as a proportion of total debt is an important factor in our analysis. If foreign denominated debt, excluding fully hedged debt principal, is 15% or less of total debt, we assess the company as neutral on currency risk of debt. If foreign-denominated debt, excluding fully hedged debt principal, is greater than 15% of total debt, and debt to EBITDA is greater than 3.0x, we evaluate currency risks through further analysis.

144. If an entity's foreign-denominated debt in a particular currency represents more than 15% of total debt, and if its debt to EBITDA ratio is greater than 3.0x, we identify whether a currency-specific interest coverage ratio indicates potential currency risk. The coverage ratio divides forecasted operating cash flow in each currency by interest payments over the coming 12 months for that same currency. It is often easier to ascertain the geographic breakdown of EBITDA as opposed to operating cash flow. So in situations where we don't have sufficient cash flow information, we may calculate an EBITDA to interest expense coverage ratio in the relevant currencies. If neither cash flow nor EBITDA information is disclosed, we estimate the relevant exposures based on available information.

145. In such an instance, our assessment of this subfactor is negative if we believe any appropriate interest coverage ratio will fall below 1.2x over the next 12 months.

b) Subfactor 2: Debt maturity profile

146. A firm's debt maturity profile shows when its debt needs to be repaid, or refinanced if possible, and helps determine the firm's refinancing risk. Lengthier and more evenly spread out debt

maturity schedules reduce refinancing risk, compared with front-ended and compressed ones, since the former give an entity more time to manage business- or financial market-related setbacks.

147. In evaluating debt maturity profiles, we measure the weighted average maturity (WAM) of bank debt and debt securities (including hybrid debt) within a capital structure, and make simplifying assumptions that debt maturing beyond year five matures in year six. WAM = (Maturity1/Total Debt)*tenor1 + (Maturity2/Total Debt)* tenor2 +... (Thereafter/Total Debt)* tenor6

148. In evaluating refinancing risk, we consider risks in addition to those captured under the 12-month to 24-month time-horizons factored in our liquidity criteria (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Dec. 16, 2014). While we recognize that investment-grade companies may have more certain future business prospects and greater access to capital than speculative-grade companies, all else being equal, we view a company with a shorter maturity schedule as having greater refinancing risk compared to a company with a longer one. In all cases, we assess a company's debt maturity profile in conjunction with its liquidity and potential funding availability. Thus, a short-dated maturity schedule alone is not a negative if we believe the company can maintain enough liquidity to pay off debt that comes due in the near term.

149. Our assessment of this subfactor is negative if the WAM is two years or less, and the amount of these near-term maturities is material in relation to the issuer's liquidity so that under our base-case forecast, we believe the company's liquidity assessment will become less than adequate or weak over the next two years due to these maturities. In certain cases, we may assess a debt maturity profile as negative regardless of whether or not the company passes the aforementioned test. We expect such instances to be rare, and will include scenarios where we believed a concentration of debt maturities within a five-year time horizon poses meaningful refinancing risk, either due to the size of the maturities in relation to the company's liquidity sources, the company's leverage profile, its operating trends, lender relationships, and/or credit market standings.

c) Subfactor 3: Interest rate risk of debt

150. The interest rate risk of debt subfactor analyzes the company's mix of fixed-rate and floating-rate debt. Generally, a higher proportion of fixed-rate debt leads to greater predictability and stability of interest expense and therefore cash flows. The exception would be companies whose operating cash flows are to some degree correlated with interest rate movements--for example, a regulated utility whose revenues are indexed to inflation--given the typical correlation between nominal interest rates and inflation.

151. The mix of fixed versus floating-rate debt is usually not a significant risk factor for companies with intermediate or better financial profiles, strong profitability, and high interest coverage. In addition, the interest rate environment at a given point in time will play a role in determining the impact of interest rate movements. Our assessment of this subcategory will be negative if a 25% upward shift (e.g., from 2.0% to 2.5%) or a 100 basis-point upward shift (e.g., 2% to 3%) in the base interest rate of the floating rate debt will result in a breach of interest coverage covenants or interest coverage rating thresholds identified in the cash flow/leverage criteria (see section E.3).

152. Many loan agreements for speculative-grade companies contain a clause requiring a percentage of floating-rate debt to be hedged for a period of two to three years to mitigate this risk. However, in many cases the loan matures after the hedge expires, creating a mismatched hedge. We consider only loans with hedges that match the life of the loan to be--effectively--fixed-rate debt.

d) Subfactor 4: Investments

153. For the purposes of the criteria, investments refer to investments in unconsolidated equity affiliates, other assets where the realizable value isn't currently reflected in the cash flows generated from those assets (e.g. underutilized real-estate property), we do not expect any additional investment or support to be provided to the affiliate, and the investment is not included within Standard & Poor's consolidation scope and so is not incorporated in the company's business and financial risk profile analysis. If equity affiliate companies are consolidated, then the financial benefits and costs of these investments will be captured in our cash flow and leverage analysis. Similarly, where the company's ownership stake does not qualify for consolidation under accounting rules, we may choose to consolidate on a pro rata basis if we believe that the equity affiliates' operating and financing strategy is influenced by the rated entity. If equity investments are strategic and provide the company with a competitive advantage, or benefit a company's scale, scope, and diversity, these factors will be captured in our competitive position criteria and will not be used to assess the subfactor investments as positive. Within the capital structure criteria, we aim to assess nonstrategic financial investments that could provide a degree of asset protection and financial flexibility in the event they are monetized. These investments must be noncore and separable, meaning that a potential divestiture, in our view, has no impact on the company's existing operations.

154. In many instances, the cash flows generated by an equity affiliate, or the proportional share of the associate company's net income, might not accurately reflect the asset's value. This could occur if the equity affiliate is in high growth mode and is currently generating minimal cash flow or net losses. This could also be true of a physical asset, such as real estate. From a valuation standpoint, we recognize the subjective nature of this analysis and the potential for information gaps. As a result, in the absence of a market valuation or a market valuation of comparable companies in the case of minority interests in private entities, we will not ascribe value to these assets.

155. We assess this subfactor as positive or very positive if three key characteristics are met. First, an estimated value can be ascribed to these investments based on the presence of an existing market value for the firm or comparable firms in the same industry. Second, there is strong evidence that the investment can be monetized over an intermediate timeframe--in the case of an equity investment, our opinion of the marketability of the investment would be enhanced by the presence of an existing market value for the firm or comparable firms, as well as our view of market liquidity. Third, monetization of the investment, assuming proceeds would be used to repay debt, would be material enough to positively move existing cash flow and leverage ratios by at least one category and our view on the company's financial policy, specifically related to financial discipline, supports the assessment that the potential proceeds would be used to pay down debt. This subfactor is assessed as positive if debt repayment from the investment sale has the potential to improve cash flow and leverage ratios by one category. We assess investments as very positive if proceeds upon sale of the investment have the potential to improve cash flow and leverage ratios by two or more categories. If the three characteristics are not met, this subfactor will be assessed as neutral and the preliminary capital structure assessment will stand.

156. We will not assess the investments subfactor as positive or very positive when the anchor is 'b+' or lower unless the three conditions described in paragraph 155 are met, and:

- For issuers with less than adequate or weak liquidity, the company has provided a credible near-term plan to sell the investment.
- For issuers with adequate or better liquidity, we believe that the company, if needed, could sell the investment in a relatively short timeframe.

H. Financial Policy

157. Financial policy refines the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment (see section E). Those assumptions do not always reflect or entirely capture the short-to-medium term event risks or the longer-term risks stemming from a company's financial policy. To the extent movements in one of these factors cannot be confidently predicted within our forward-looking evaluation, we capture that risk within our evaluation of financial policy. The cash flow/leverage assessment will typically factor in operating and cash flows metrics we observed during the past two years and the trends we expect to see for the coming two years based on operating assumptions and predictable financial policy elements, such as ordinary dividend payments or recurring acquisition spending. However, over that period and, generally, over a longer time horizon, the firm's financial policies can change its financial risk profile based on management's or, if applicable, the company's controlling shareholder's (see Appendix E, paragraphs 254-257) appetite for incremental risk or, conversely, plans to reduce leverage. We assess financial policy as 1) positive, 2) neutral, 3) negative, or as being owned by a financial sponsor. We further identify financial sponsor-owned companies as "FS-4", "FS-5", "FS-6", or "FS-6 (minus)" (see section H.2).

1. Assessing financial policy

158. First, we determine if a company is owned by a financial sponsor. Given the intrinsic characteristics and aggressive nature of financial sponsor's strategies (i.e. short- to intermediate-term holding periods and the use of debt or debt-like instruments to maximize shareholder returns), we assign a financial risk profile assessment to a firm controlled by a financial sponsor that reflects the likely impact on leverage due to these strategies and we do not separately analyze management's financial discipline or financial policy framework.

159. If a company is not controlled by a financial sponsor, we evaluate management's financial discipline and financial policy framework. Management's financial discipline measures its tolerance for incremental financial risk or, conversely, its willingness to maintain the same degree of financial risk or to lower it compared with recent cash flow/leverage metrics and our projected ratios for the next two years. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies. We do not assess these factors for financial sponsor controlled firms.

160. The financial discipline assessments can have a positive or negative influence on an enterprise's overall financial policy assessment, or can have no net effect. Conversely, the financial policy framework assessment cannot positively influence the overall financial policy assessment. It can constrain the overall financial policy assessment to no greater than neutral.

161. The separate assessments of a company's financial policy framework and financial discipline determine the financial policy adjustment.

162. We assess management's financial discipline as 1, positive; 2, neutral; or 3, negative. We determine the assessment by evaluating the predictability of an entity's expansion plans and shareholder return strategies. We take into account, generally, management's tolerance for material and unexpected negative changes in credit ratios or, instead, its plans to rapidly decrease leverage and keep credit ratios within stated boundaries.

163. A company's financial policy framework assessment is: 1, supportive or 2, non-supportive. We make the determination by assessing the comprehensiveness of a company's financial policy framework and whether financial targets are clearly communicated to a large number of

stakeholders, and are well defined, achievable, and sustainable.

Table 23

Financial Policy Assessments

Assessment	What it means	Guidance
Positive	Indicates that we expect management's financial policy decisions to have a positive impact on credit ratios over the time horizon, beyond what can be reasonably built in our forecasts on the basis of normalized operating and cash flow assumptions. An example would be when a credible management team commits to dispose of assets or raise equity over the short to medium term in order to reduce leverage. A company with a 1 financial risk profile will not be assigned a positive assessment.	If financial discipline is positive, and the financial policy framework is supportive
Neutral	Indicates that, in our opinion, future credit ratios won't differ materially over the time horizon beyond what we have projected, based on our assessment of management's financial policy, recent track record, and operating forecasts for the company. A neutral financial policy assessment effectively reflects a low probability of "event risk," in our view.	If financial discipline is positive, and the financial policy framework is non-supportive. Or when financial discipline is neutral, regardless of the financial policy framework assessment.
Negative	Indicates our view of a lower degree of predictability in credit ratios, beyond what can be reasonably built in our forecasts, as a result of management's financial discipline (or lack of it). It points to high event risk that management's financial policy decisions may depress credit metrics over the time horizon, compared with what we have already built in our forecasts based on normalized operating and cash flow assumptions.	If financial discipline is negative, regardless of the financial policy framework assessment
Financial Sponsor*	We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflects our presumption of some deterioration in credit quality in the medium term. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.	We define financial sponsor-owned companies as nonfinancial corporate entities in which one or more financial sponsors own at least 40% of the entity's common equity, or retain the majority of the voting rights and control through preference shares, and where we consider that the sponsors exercise control of the company either solely or jointly.

*Assessed as FS-4, FS-5, FS-6, or FS-6 (minus).

2. Financial sponsor-controlled companies

164. We define a financial sponsor as an entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short-to-intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

165. We define financial sponsor-owned companies as nonfinancial corporate entities in which one or more financial sponsors own at least 40% of the entity's common equity, or retain the majority of the voting rights and control through preference shares, and where we consider that the sponsors exercise control of the company either solely or jointly. "Control" refers to the sponsors' ability to dictate an entity's strategy and cash flow. The strategic goals of the sponsors must be aligned for us to consider the sponsors as having joint control.

166. We differentiate between financial sponsors and other types of controlling shareholders and

companies that do not have controlling shareholders based on our belief that short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.

167. Financial sponsors often dictate policies regarding risk-taking, financial management, and corporate governance for the companies that they control. There is a common pattern of these investors extracting cash in ways that increase the companies' financial risk by utilizing debt or debt like instruments. Accordingly, the financial risk profile we assign to companies that are controlled by financial sponsors ordinarily reflect our presumption of some deterioration in credit quality or steadily high leverage in the medium term.

168. We assess the influence of financial sponsor ownership as "FS-4", "FS-5", "FS-6", and "FS-6 (minus)" depending on how aggressive we assume the sponsor will be and assign a financial risk profile accordingly (see table 24).

169. Generally, financial sponsor-owned issuers will receive an assessment of "FS-6" or "FS-6 (minus)", leading to a financial risk profile assessment of '6', under the criteria. A "FS-6" assessment indicates that, in our opinion, forecasted credit ratios in the medium term are likely be to be consistent with a '6' financial risk profile, based on our assessment of the financial sponsor's financial policy and track record. A "FS-6 (minus)" will likely be applied to companies that we forecast to have near-term credit ratios consistent with a '6' financial risk profile, but we believe the financial sponsor to be very aggressive and that leverage could increase materially even further from our forecasted levels.

170. In a small minority of cases, a financial sponsor-owned entity could receive an assessment of "FS-5". This assessment will apply only when we project that the company's leverage will be consistent with a '5' (aggressive) financial risk profile (see tables 17, 18, and 19), we perceive that the risk of releveraging is low based on the company's financial policy and our view of the owner's financial risk appetite, and liquidity is at least adequate.

171. In even rarer cases, we could assess the financial policy of a financial sponsor-owned entity as "FS-4". This assessment will apply only when all of the following conditions are met: other shareholders own a material (generally, at least 20%) stake, we expect the sponsor to relinquish control over the intermediate term, we project that leverage is currently consistent with a '4' (significant) financial risk profile (see tables 17, 18, and 19), the company has said it will maintain leverage at or below this level, and liquidity is at least adequate.

Table 24

Financial Risk Profile Implications For Sponsor-Owned Issuers

Assessment	What it Means	Guidance
FS-4	Financial risk profile set at '4'	Issuer must meet all of the following conditions: • Other shareholders must own a material (no less than 20%) stake; • We anticipate that the sponsor will relinquish control over the medium term; • For issuers subject to Table 17 (standard volatility), debt to EBITDA is less than 4x, and we estimate that it will remain less than 4x. For issuers that are subject to Table 18 (medial volatility), debt to EBITDA is below 4.5x and we forecast it to remain below that level. Or for issuers subject to Table 19 (low volatility), debt to EBITDA is less than 5x and our estimation is it will remain below that level; • The company has indicated a financial policy stipulating a level of leverage consistent with a significant or better financial risk profile (that is, debt to EBITDA of less than 4x when applying standard volatility tables, 4.5x when applying medial volatility tables, or less than 5x when applying low volatility tables) and • We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-5	Financial risk profile set at '5'	Issuer must meet all of the following conditions: • For issuers subject to the standard volatility table, debt to EBITDA is less than 5x, and we estimate that it will remain less than 5x. For issuers that are subject to the medial volatility table, debt to EBITDA is below 5.5x and we forecast it to remain below that level. Or for issuers subject to the low volatility table, debt to EBITDA is less than 6x and our estimation is it will remain below that level; • We believe the risk of releveraging beyond 5x (standard volatility issuer), 5.5x (medial volatility issuer), or 6x (low volatility issuer) is low; and • We assess liquidity to be at least adequate, with adequate covenant headroom.
FS-6	Financial risk profile set at '6'	Standard & Poor's debt to EBITDA is greater than 5x (when applying the standard volatility table), greater than 5.5x (when applying the medial volatility table), or greater than 6x (when applying the low volatility table). However, we believe leverage is unlikely to increase meaningfully beyond these levels.
FS-6 (minus)	Financial risk profile set at '6', and anchor reduced by one notch (unless this results in a final rating below 'B-')	In determining the anchor the financial risk profile is a '6', but we believe the track record of the financial sponsor indicates that leverage could increase materially from already high levels.

3. Companies not controlled by a financial sponsor

172. For companies not controlled by a financial sponsor we evaluate management's financial discipline and financial policy framework to determine the influence on an entity's financial risk profile beyond what is implied by recent credit ratios and our cash flow and leverage forecasts. This influence can be positive, neutral, or negative.

173. We do not distinguish between management and a controlling shareholder that is not a financial sponsor when assessing these subfactors, as the controlling shareholder usually has the final say

on financial policy.

a) Financial discipline

174. The financial discipline assessment is based on management's leverage tolerance and the likelihood of event risk. The criteria evaluate management's potential appetite to incur unforeseen, higher financial risk over a prolonged period and the associated impact on credit measures. We also assess management's capacity and commitment to rapidly decrease debt leverage to levels consistent with its credit ratio targets.

175. This assessment therefore seeks to determine whether unforeseen actions by management to increase, maintain, or reduce financial risk are likely to occur during the next two to three years, with either a negative or positive effect, or none at all, on our baseline forecasts for the period.

176. This assessment is based on the leverage tolerance of a company's management, as reflected in its plans or history of acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263).

177. We assess financial discipline as positive, neutral, or negative, based on its potential impact on our forward-looking assessment of a firm's cash flow/leverage, as detailed in table 25. For example, a neutral assessment for leverage tolerance reflects our expectation that management's financial policy will unlikely lead to significant deviation from current and forecasted credit ratios. A negative assessment acknowledges a significant degree of event risk of increased leverage relative to our base-case forecast, resulting from the company's acquisition policy, its shareholder remuneration policy, or its organic growth strategy. A positive assessment indicates that the company is likely to take actions to reduce leverage, but we cannot confidently incorporate these actions into our baseline forward-looking assessment of cash flow/leverage.

178. A positive assessment indicates that management is committed and has the capacity to reduce debt leverage through the rapid implementation of credit enhancing measures, such as asset disposals, rights issues, or reductions in shareholder returns. In addition, management's track record over the past five years shows that it has taken actions to rapidly reduce unforeseen increases in debt leverage and that there have not been any prolonged periods when credit ratios were weaker than our expectations for the rating. Management, even if new, also has a track record of successful execution. Conversely, a negative assessment indicates management's financial policy allows for significant increase in leverage compared with both current levels and our forward-looking forecast under normal operating/financial conditions or does not have observable time limits or stated boundaries. Management has a track record of allowing for significant and prolonged peaks in leverage and there is no commitment or track record of management using mitigating measures to rapidly return to credit ratios consistent with our expectations.

179. As evidence of management's leverage tolerance, we evaluate its track record and plans regarding acquisitions, shareholder remuneration, and organic growth strategies (see Appendix E, paragraphs 258 to 263). Acquisitions could increase the risk that leverage will be higher than our base-case forecast if we view management's strategy as opportunistic or if its financial policy (if it exists) provides significant headroom for debt-financed acquisitions. Shareholder remuneration could also increase the risk of leverage being higher than our base-case forecast if management's shareholder reward policies are not particularly well defined or have no clear limits, management has a tolerance for shareholder returns exceeding operating cash flow, or has a track record of sustained cash returns despite weakening operating performance or credit ratios. Organic growth strategies can also result in leverage higher than our base-case forecast if these plans have no clear focus or investment philosophy, capital spending is fairly unpredictable, or there is a track

record of overspending or unexpected or rapid shifts in plans for new markets or products.

180. We also take into account management's track record and level of commitment to its stated financial policies, to the extent a company has a stated policy. Historical evidence and any deviations from stated policies are key elements in analyzing a company's leverage tolerance. Where material and unexpected deviation in leverage may occur (for example, on the back of operating weakness or acquisitions), we also assess management's plan to restore credit ratios to levels consistent with previous expectations through rapid and proactive non-organic measures. Management's track record to execute its deleveraging plan, its level of commitment, and the scope and timeframe of debt mitigating measures will be key differentiators in assessing a company's financial policy discipline.

Table 25

Assessing Financial Discipline

Descriptor	What it means	Guidance
Positive	Management is likely to take actions that result in leverage that is lower than our base-case forecast, but can't be confidently included in our base-case assumptions. Event risk is low.	Management is committed and has capacity to reduce debt leverage and increase financial headroom through the rapid implementation of credit enhancing measures, in line with its stated financial policy, if any. This relates primarily to management's careful and moderate policy with regard to acquisitions and shareholder remuneration as well as to its organic growth strategy. The assessments are supported by historical evidence over the past five years of not showing any prolonged weakening in the company's credit ratios, or relative to our base-case credit metrics' assumptions. Management, even if new, has a track record of successful execution.
Neutral	Leverage is not expected to deviate materially from our base-case forecast. Event risk is moderate.	Management's financial discipline with regard to acquisitions, shareholder remuneration, as well as its organic growth strategy does not result in significantly different leverage as defined in its stated financial policy framework.
Negative	Leverage could become materially higher than our base-case forecast. Event risk is high.	Management's financial policy framework does not explicitly rule out a significant increase in leverage compared to our base-case assumptions, possibly reflecting a greater event risk with regard to its M&A and shareholder remuneration policy as well as to its organic growth strategy. These points are supported by historical evidence over the past five years of allowing for significant and prolonged peaks in leverage, which remained unmitigated by credit supporting measures by management.

b) Financial policy framework

181. The company's financial policy framework assesses the comprehensiveness, transparency, and sustainability of the entity's financial policies (see Appendix E, paragraphs 264-268). This will help determine whether there is a satisfactory degree of visibility into the issuer's future financial risk profile. Companies that have developed and sustained a comprehensive set of financial policies are more likely to build long-term, sustainable credit quality than those that do not.

182. We will assess a company's financial policy framework as supportive or non-supportive based on evidence that supports the characteristics listed below. In order for an entity to receive a supportive assessment for financial policy framework, there must be sufficient evidence of management's financial policies to back that assessment.

183. A company assessed as supportive will generally exhibit the following characteristics:

- Management has a comprehensive set of financial policies covering key areas of financial risk, including debt leverage and liability management. Financial targets are well defined and quantifiable.

- Management's financial policies are clearly articulated in public forums (such as public listing disclosures and investor presentations) or are disclosed to a limited number of key stakeholders such as main creditors or to the credit rating agencies. The company's adherence to these policies is satisfactory.
- Management's articulated financial policies are considered achievable and sustainable. This assessment takes into consideration historical adherence to articulated policies, existing financial risk profile, capacity to sustain capital structure through nonorganic means, demands of key stakeholders, and the stability of financial policy parameters over time.

184. A company receives a non-supportive assessment if it does not meet all the conditions for a supportive assessment. We expect a non-supportive assessment to be uncommon.

I. Liquidity

185. Our assessment of liquidity focuses on monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis assesses the potential for a company to breach covenant tests related to declines in EBITDA, as well as its ability to absorb high-impact, low-probability events, the nature of the company's bank relationships, its standing in credit markets, and how prudent (or not) we believe its financial risk management to be (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," published Dec. 16, 2014).

J. Management And Governance

186. The analysis of management and governance addresses how management's strategic competence, organizational effectiveness, risk management, and governance practices shape the issuer's competitiveness in the marketplace, the strength of its financial risk management, and the robustness of its governance. Stronger management of important strategic and financial risks may enhance creditworthiness (see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012).

K. Comparable Ratings Analysis

187. The comparable ratings analysis is our last step in determining a SACP on a company. This analysis can lead us to raise or lower our anchor, after adjusting for the modifiers, on a company by one notch based on our overall assessment of its credit characteristics for all subfactors considered in arriving at the SACP. This involves taking a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate. A positive assessment leads to a one-notch upgrade, a negative assessment leads to a one-notch downgrade, and a neutral assessment indicates no change to the anchor.

188. The application of comparable ratings analysis reflects the need to "fine-tune" ratings outcomes, even after the use of each of the other modifiers. A positive or negative assessment is therefore likely to be common rather than exceptional.

189. We consider our assessments of each of the underlying subfactors to be points within a possible range. Consequently, each of these assessments that ultimately generate the SACP can be at the upper or lower end, or at the mid-point, of such a range:

- A company receives a positive assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the higher end of the range;
- A company receives a negative assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the lower end of the range;
- A company receives a neutral assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be in line with the middle of the range.

190. The most direct application of the comparable ratings analysis is in the following circumstances:

- Business risk assessment. If we expect a company to sustain a position at the higher or lower end of the ranges for the business risk category assessment, the company could receive a positive or negative assessment, respectively.
- Financial risk assessment and financial metrics. If a company's actual and forecasted metrics are just above (or just below) the financial risk profile range, as indicated in its cash flow/leverage assessment, we could assign a positive or negative assessment.

191. We also consider additional factors not already covered, or existing factors not fully captured, in arriving at the SACP. Such factors will generally reflect less frequently observed credit characteristics, may be unique, or may reflect unpredictability or uncertain risk attributes, both positive and negative.

192. Some examples that we typically expect could lead to a positive or negative assessment using comparable ratings analysis include:

- Short operating track record. For newly formed companies or companies that have experienced transformational events, such as a significant acquisition, a lack of an established track record of operating and financial performance could lead to a negative assessment until such a track record is established.
- Entities in transition. A company in the midst of changes that we anticipate will strengthen or weaken its creditworthiness and that are not already fully captured elsewhere in the criteria could receive a positive or negative assessment. Such a transition could occur following major divestitures or acquisitions, or during a significant overhaul of its strategy, business, or financial structure.
- Industry or macroeconomic trends. When industry or macroeconomic trends indicate a strengthening or weakening of the company's financial condition that is not already fully captured elsewhere in the criteria, the company could receive a positive or negative assessment, respectively.
- Unusual funding structures. A company with exceptional financial resources that the criteria do not capture in the traditional ratio or liquidity analysis, or in capital structure analysis, could receive a positive assessment.
- Contingent risk exposures. How well (or not) a company identifies, manages, and reserves for contingent risk exposures that can arise if guarantees are called, derivative contract break clauses are activated, or substantial lawsuits are lost could lead to a negative assessment.

APPENDIXES

A. Country Risk

Table 26

Country And Regional Risk

Region		
Western Europe		
Southern Europe		
Western + Southern Europe		
East Europe		
Central Europe		
Eastern Europe and Central Asia		
Middle East		
Africa		
North America		
Central America		
Latin America		
The Caribbean		
Asia-Pacific		
Central Asia		
East Asia		
Australia NZ		
Country	**Region**	**GDP Weighting (%)**
South Africa	Africa	16.64
Egypt	Africa	13.62
Nigeria	Africa	27.02
Algeria	Africa	10.15
Morocco	Africa	5.23
Angola	Africa	6.00
Tunisia	Africa	2.31
Ethiopia	Africa	2.64
Ghana	Africa	1.84
Kenya	Africa	2.90
Tanzania	Africa	2.28
Uganda	Africa	1.28
Botswana	Africa	0.75
Congo, Democratic Republic of	Africa	1.57
Gabon	Africa	0.86
Senegal	Africa	0.74

Table 26

Country And Regional Risk (cont.)

Mozambique	Africa	0.76
Burkina Faso	Africa	0.60
Zambia	Africa	1.29
Congo, Republic of	Africa	0.67
Zimbabwe	Africa	0.67
Eritrea	Africa	0.16
Indonesia	Asia-Pacific	26.81
Taiwan	Asia-Pacific	27.22
Thailand	Asia-Pacific	12.22
Malaysia	Asia-Pacific	10.20
Philippines	Asia-Pacific	8.59
Vietnam	Asia-Pacific	5.62
Bangladesh	Asia-Pacific	5.22
Sri Lanka	Asia-Pacific	2.38
Cambodia	Asia-Pacific	0.51
Laos	Asia-Pacific	0.36
Papua New Guinea	Asia-Pacific	0.51
Mongolia	Asia-Pacific	0.36
Australia	Australia NZ	91.88
New Zealand	Australia NZ	8.12
Guatemala	Central America	33.81
Costa Rica	Central America	28.48
Panama	Central America	26.56
Honduras	Central America	11.14
India	Central Asia	81.55
Pakistan	Central Asia	9.70
Kazakhstan	Central Asia	8.67
Bhutan	Central Asia	0.08
Poland	Central Europe	36.46
Czech Republic	Central Europe	13.73
Romania	Central Europe	13.32
Hungary	Central Europe	9.26
Slovakia	Central Europe	6.71
Bulgaria	Central Europe	3.80
Croatia	Central Europe	3.82
Serbia	Central Europe	2.94
Lithuania	Central Europe	3.24

Table 26

Country And Regional Risk (cont.)

Latvia	Central Europe	2.09
Bosnia and Herzegovina	Central Europe	1.22
Estonia	Central Europe	1.77
Albania	Central Europe	0.88
Macedonia	Central Europe	0.76
China	East Asia	60.84
Japan	East Asia	27.03
South Korea	East Asia	8.29
Hong Kong	East Asia	1.71
Singapore	East Asia	1.81
Macau	East Asia	0.33
Greece	Eastern Europe	76.41
Slovenia	Eastern Europe	16.05
Cyprus	Eastern Europe	7.53
Russia	Eastern Europe and Central Asia	86.13
Ukraine	Eastern Europe and Central Asia	6.10
Belarus	Eastern Europe and Central Asia	3.52
Azerbaijan	Eastern Europe and Central Asia	3.48
Georgia	Eastern Europe and Central Asia	0.77
Brazil	Latin America	41.14
Mexico	Latin America	22.71
Argentina	Latin America	9.43
Colombia	Latin America	6.62
Venezuela	Latin America	7.05
Peru	Latin America	3.55
Chile	Latin America	4.53
Ecuador	Latin America	1.77
Bolivia	Latin America	0.58
Uruguay	Latin America	1.01
El Salvador	Latin America	0.44
Paraguay	Latin America	0.54
Trinidad and Tobago	Latin America	0.51
Suriname	Latin America	0.09
Belize	Latin America	0.03
Turkey	Middle East	26.23
Saudi Arabia	Middle East	24.51
United Arab Emirates	Middle East	13.12

Table 26

Country And Regional Risk (cont.)

Israel	Middle East	10.04
Qatar	Middle East	6.90
Kuwait	Middle East	5.37
Iraq	Middle East	7.34
Oman	Middle East	2.69
Lebanon	Middle East	1.50
Jordan	Middle East	1.18
Bahrain	Middle East	1.11
United States	North America	90.70
Canada	North America	9.30
Italy	Southern Europe	57.06
Spain	Southern Europe	36.81
Portugal	Southern Europe	6.13
Dominican Republic	The Caribbean	67.51
Jamaica	The Caribbean	14.62
Bahamas	The Caribbean	8.96
Barbados	The Caribbean	4.58
Curacao	The Caribbean	3.37
Cayman Islands	The Caribbean	0.00
Grenada	The Caribbean	0.96
Turks and Caicos	The Caribbean	0.00
Germany	Western Europe	27.12
United Kingdom	Western Europe	20.95
France	Western Europe	19.83
Netherlands	Western Europe	6.16
Belgium	Western Europe	3.73
Sweden	Western Europe	4.00
Switzerland	Western Europe	4.91
Austria	Western Europe	3.06
Norway	Western Europe	3.50
Denmark	Western Europe	2.40
Finland	Western Europe	1.91
Ireland	Western Europe	1.76
Luxembourg	Western Europe	0.45
Iceland	Western Europe	0.12
Malta	Western Europe	0.08

B. Competitive Position

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles

Industry	Subsector	Competitive position group profile
Transportation cyclical	Airlines	Capital or asset focus
	Marine	Capital or asset focus
	Trucking	Capital or asset focus
Auto OEM	Automobile and truck manufacturers	Capital or asset focus
Metals and mining downstream	Aluminum	Commodity focus/cost driven
	Steel	Commodity focus/cost driven
Metals and mining upstream	Coal and consumable fuels	Commodity focus/cost driven
	Diversified metals and mining	Commodity focus/cost driven
	Gold	Commodity focus/cost driven
	Precious metals and minerals	Commodity focus/cost driven
Homebuilders and developers	Homebuilding	Capital or asset focus
Oil and gas refining and marketing	Oil and gas refining and marketing	Commodity focus/scale driven
Forest and paper products	Forest products	Commodity focus/cost driven
	Paper products	Commodity focus/cost driven
Building Materials	Construction materials	Capital or asset focus
Oil and gas integrated, exploration and production	Integrated oil and gas	Commodity focus/scale driven
	Oil and gas exploration and production	Commodity focus/scale driven
Agribusiness and commodity foods	Agricultural products	Commodity focus/scale driven
Real estate investment trusts (REITs)	Diversified REITs	Real-estate specific*
	Health care REITS	Real-estate specific*
	Industrial REITs	Real-estate specific*
	Office REITs	Real-estate specific*
	Residential REITs	Real-estate specific*
	Retail REITs	Real-estate specific*
	Specialized REITs	Not appplicable**
	Self-storage REITs	Real-estate specific*
	Net lease REITs	Real-estate specific*
	Real estate operating companies	Real-estate specific*
Leisure and sports	Casinos and gaming	Services and product focus
	Hotels, resorts, and cruise lines	Services and product focus
	Leisure facilities	Services and product focus
Commodity chemicals	Commodity chemicals	Commodity focus/cost driven

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles (cont.)

Industry	Subsector	Competitive position group profile
	Diversified chemicals	Commodity focus/cost driven
	Fertilizers and agricultural chemicals	Commodity focus/cost driven
Auto suppliers	Auto parts and equipment	Capital or asset focus
	Tires and rubber	Capital or asset focus
	Vehicle-related suppliers	Capital or asset focus
Aerospace and defense	Aerospace and defense	Services and product focus
Technology hardware and semiconductors	Communications equipment	Capital or asset focus
	Computer hardware	Capital or asset focus
	Computer storage and peripherals	Capital or asset focus
	Consumer electronics	Capital or asset focus
	Electronic equipment and instruments	Capital or asset focus
	Electronic components	Capital or asset focus
	Electronic manufacturing services	Capital or asset focus
	Technology distributors	Capital or asset focus
	Office electronics	Capital or asset focus
	Semiconductor equipment	Capital or asset focus
	Semiconductors	Capital or asset focus
Specialty Chemicals	Industrial gases	Capital or asset focus
	Specialty chemicals	Capital or asset focus
Capital Goods	Electrical components and equipment	Capital or asset focus
	Heavy equipment and machinery	Capital or asset focus
	Industrial componentry and consumables	Capital or asset focus
	Construction equipment rental	Capital or asset focus
	Industrial distributors	Services and product focus
Engineering and construction	Construction and engineering	Services and product focus
Railroads and package express	Railroads	Capital or asset focus
	Package express	Services and product focus
	Logistics	Services and product focus
Business and consumer services	Consumer services	Services and product focus
	Distributors	Services and product focus
	Facilities services	Services and product focus
	General support services	Services and product focus
	Professional services	Services and product focus
Midstream energy	Oil and gas storage and transportation	Commodity focus/scale driven

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles (cont.)

Industry	Subsector	Competitive position group profile
Technology software and services	Internet software and services	Services and product focus
	IT consulting and other services	Services and product focus
	Data processing and outsourced services	Services and product focus
	Application software	Services and product focus
	Systems software	Services and product focus
	Consumer software	Services and product focus
Consumer durables	Home furnishings	Services and product focus
	Household appliances	Services and product focus
	Housewares and specialties	Services and product focus
	Leisure products	Services and product focus
	Photographic products	Services and product focus
	Small appliances	Services and product focus
Containers and packaging	Metal and glass containers	Capital or asset focus
	Paper packaging	Capital or asset focus
Media and entertainment	Ad agencies and marketing services companies	Services and product focus
	Ad-supported internet content platforms	Services and product focus
	Broadcast TV networks	Services and product focus
	Cable TV networks	Services and product focus
	Consumer and trade magazines	Services and product focus
	Data/professional publishing	Services and product focus
	Directories	Services and product focus
	E-Commerce (services)	Services and product focus
	Educational publishing	Services and product focus
	Film and TV programming production	Capital or asset focus
	Miscellaneous media and entertainment	Services and product focus
	Motion picture exhibitors	Services and product focus
	Music publishing	Services and product focus
	Music recording	Services and product focus
	Newspapers	Services and product focus
	Outdoor advertising	Services and product focus
	Printing	Commodity focus/scale driven
	Radio broadcasters	Services and product focus
	Trade shows	Services and product focus
	TV stations	Services and product focus

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles (cont.)

Industry	Subsector	Competitive position group profile
Oil and gas drilling, equipment and services	Onshore contract drilling	Commodity focus/scale driven
	Offshore contract drilling	Capital or Asset Focus
	Oil and gas equipment and services (oilfield services)	Commodity focus/scale driven
Retail and restaurants	Catalog retail	Services and product focus
	Internet retail	Services and product focus
	Department stores	Services and product focus
	General merchandise stores	Services and product focus
	Apparel retail	Services and product focus
	Computer and electronics retail	Services and product focus
	Home improvement retail	Services and product focus
	Specialty stores	Services and product focus
	Automotive retail	Services and product focus
	Home furnishing retail	Services and product focus
Health care services	Health care services	Commodity focus/scale driven
Transportation infrastructure	Airport services	National industries and utilities
	Highways	National industries and utilities
	Railtracks	National industries and utilities
	Marine ports and services	National industries and utilities
Environmental services	Environmental and facilities services	Services and product focus
Regulated utilities	Electric utilities	National industries and utilities
	Gas utilities	National industries and utilities
	Multi-utilities	National industries and utilities
	Water utilities	National industries and utilities
Unregulated power and gas	Independent power producers and energy traders	Capital or asset focus
	Merchant power	Capital or asset focus
Pharmaceuticals	Branded pharmaceuticals	Services and product focus
	Generic pharmaceuticals	Commodity focus/scale driven
Health care equipment	High-tech health care equipment	Product focus/scale driven
	Low-tech health care equipment	Commodity focus/scale driven
Branded nondurables	Brewers	Services and product focus
	Distillers and vintners	Services and product focus
	Soft drinks	Services and product focus
	Packaged foods and meats	Services and product focus

Table 27

List Of Industries, Subsectors, And Standard Competitive Position Group Profiles (cont.)

Industry	Subsector	Competitive position group profile
	Tobacco	Services and product focus
	Household products	Services and product focus
	Apparel, footwear, accessories, and luxury goods	Services and product focus
	Personal products	Services and product focus
Telecommunications and cable	Cable and satellite	Services and product focus
	Alternative carriers	Services and product focus
	Integrated telecommunication services	Services and product focus
	Wireless towers	Capital or asset focus
	Data center operators	Capital or asset focus
	Fiber-optic carriers	Capital or asset focus
	Wireless telecommunication services	Services and product focus

*See "Key Credit Factors For The Real Estate Industry," published Nov. 19, 2013. **For specialized REITs, there is no standard CPGP, as the CPGP will vary based on the underlying industry exposure (e.g. a forest and paper products REIT).

1. Analyzing subfactors for competitive advantage

193. Competitive advantage is the first component of our competitive position analysis. Companies that possess a sustainable competitive advantage are able to capitalize on key industry factors or mitigate associated risks more effectively. When a company operates in more than one business, we analyze each segment separately to form an overall view of its competitive advantage. In assessing competitive advantage, we evaluate the following subfactors:

- Strategy;
- Differentiation/uniqueness, product positioning/bundling;
- Brand reputation and marketing;
- Product/service quality;
- Barriers to entry, switching costs;
- Technological advantage and capabilities, technological displacement; and
- Asset profile.

a) Strategy

194. A company's business strategy will enhance or undermine its market entrenchment and business stability. Compelling business strategies can create a durable competitive advantage and thus a relatively stronger competitive position. We form an opinion as to the source and sustainability (if any) of the company's competitive advantage relative to its peers'. The company may have a

differentiation advantage (i.e., brand, technology, regulatory) or a cost advantage (i.e., lower cost producer/servicer at the same quality level), or a combination.

195. Our assessment of a company's strategy is informed by a company's historical performance and how realistic we view its forward-looking business objectives to be. These may include targets for market shares, the percentage of revenues derived from new products, price versus the competition's, sales or profit growth, and required investment levels. We evaluate these objectives in the context of industry dynamics and the attractiveness of the markets in which the company participates.

b) Differentiation/uniqueness, product positioning/bundling

196. The attributes of product or service differentiation vary by sector, and may include product or services features, performance, durability, reliability, delivery, and comprehensiveness, among other measures. The intensity of competition may be lower where buyers perceive the product or service to be highly differentiated or to have few substitutes. Conversely, products and services that lack differentiation, or offer little value-added in the eyes of customers, are generally commodity-type products that primarily compete on price. Competition intensity will often be highest where limited or moderate investment (R&D, capital expenditures, or advertising) or low employee skill levels (for service businesses) are required to compete. Independent market surveys, media commentaries, market share trends, and evidence of leading or lagging when it comes to raising or lowering prices can indicate varying degrees of product differentiation.

197. Product positioning influences how companies are able to extend or protect market shares by offering popular products or services. A company's abilities to replace aging products with new ones, or to launch product extensions, are important elements of product positioning. In addition, the ability to sell multiple products or services to the same customer, known as bundling or cross-selling, (for instance, offering an aftermarket servicing contract together with the sale of a new appliance) can create a competitive advantage by increasing customers' switching costs and fostering loyalty.

c) Brand reputation and marketing

198. Brand equity measures the price premium a company receives based on its brand relative to the generic equivalent. High brand equity typically translates into customer loyalty, built partially via marketing campaigns. One measure of advertising effectiveness can be revenue growth compared with the increase in advertising expenses.

199. We also analyze re-investment and advertising strategies to anticipate potential strengthening or weakening of a company's brand. A company's track record of boosting market share and delivering attractive margins could indicate its ability to build and maintain brand reputation.

d) Product/service level quality

200. The strength and consistency of a value proposition is an important factor contributing to a sustainable competitive advantage. Value proposition encompasses the key features of a product or a service that convince customers that their purchase has the right balance between price and quality. Customers generally perceive a product or a service to be good if their expectations are consistently met. Quality, both actual and perceived, can help a company attract and retain customers. Conversely, poor product and service quality may lead to product recalls, higher-than-normal product warnings, or service interruptions, which may reduce demand.

Measures of customer satisfaction and retention, such as attrition rates and contract renewal rates, can help trace trends in product/service quality.

201. Maintaining the value proposition requires consistency and adaptability around product design, marketing, and quality-related operating controls. This is pertinent where product differentiation matters, as is the case in most noncommodity industries, and especially so where environmental or human health (concerns for the chemical, food, and pharmaceutical industries) adds a liability dimension to the quality and value proposition. Similarly, regulated utilities (which often do not set their own prices) typically focus on delivering uninterrupted service, often to meet the standards set by their regulator.

e) Barriers to entry, switching costs

202. Barriers to entry can reduce or eliminate the threat of new market entrants. Where they are effective, these barriers can lead to more predictable revenues and profits, by limiting pricing pressures and customer losses, lowering marketing costs, and improving operating efficiency. While barriers to entry may enable premium pricing, a dominant player may rationally choose pricing restraint to further discourage new entrants.

203. Barriers to entry can be one or more of: a natural or regulatory monopoly; supportive regulation; high transportation costs; an embedded customer base that would incur high switching costs; a proprietary product or service; capital or technological intensiveness.

204. A natural monopoly may result from unusually high requirements for capital and operating expenditures that make it uneconomic for a market to support more than a single, dominant provider. The ultimate barrier to entry is found among regulated utilities, which provide an essential service in their 'de juris' monopolies and receive a guaranteed rate of return on their investments. A supportive regulatory regime can include rules and regulations with high hurdles that discourage competitors, or mandate so many obligations for a new entrant as to make market entry financially unviable.

205. In certain industrial sectors, proprietary access to a limited supply of key raw materials or skilled labor, or zoning laws that effectively preclude a new entrant, can provide a strong barrier to entry. Factors such as relationships, long-term contracts or maintenance agreements, or exclusive distribution agreements can result in a high degree of customer stickiness. A proprietary product or service that's protected by a copyright or patent can pose a significant hurdle to new competitors.

f) Technological advantage and capabilities, technological displacement

206. A company may benefit from a proprietary technology that enables it to offer either a superior product or a commodity-type product at a materially lower cost. Proven research and development (R&D) capabilities can deliver a differentiated, superior product or service, as in the pharmaceutical or high tech sectors. However, optimal R&D strategies or the importance or effectiveness of patent protection differ by industry, stage of product development, and product lifecycle.

207. Technological displacement can be a threat in many industries; new technologies or extensions of current ones can effectively displace a significant portion of a company's products or services.

g) Asset profile

208. A company's asset profile is a reflection of its reinvestment, which creates tangible or intangible

assets, or both. Companies in similar sectors and industries usually have similar reinvestment options and, thus, their asset profiles tend to be comparable. The reinvestment in "heavy" industries, such as oil and gas, metals and mining, and automotive, tends to produce more tangible assets, whereas the reinvestment in certain "light" industries, such as services, media and entertainment, and retail, tends to produce more intangible assets.

209. We evaluate how a company's asset profile supports or undermines its competitive advantage by reviewing its manufacturing or service creation capabilities and investment requirements, its distribution capabilities, and its track record and commitment to reinvesting in its asset base. This may include a review of the company's ability to attract and retain a talented workforce; its degree of vertical integration and how that may help or hinder its ability to secure supply sources, control the value-added part of its production chain, or adjust to technological developments; or its ability develop a broad and strong distribution network.

2. Analyzing subfactors for scale, scope, and diversity

210. In assessing the relative strength of this component, we evaluate four subfactors:

- Diversity of product or service range;
- Geographic diversity;
- Volumes, size of markets and revenues, and market shares; and
- Maturity of products or services.

211. In a given industry, entities with a broader mix of business activities are typically lower risk, and entities with a narrower mix are higher risk. High concentration of business volumes by product, customer, or geography, or a concentration in the production footprint or supplier base, can lead to less stable and predictable revenues and profits. Comparatively broader diversity helps a company withstand economic, competitive, or technological threats better than its peers.

212. There is no minimum size criterion, although size often provides a measure of diversification. Size and scope of operations is important relative to those of industry peers, though not in absolute terms. While relatively smaller companies can enjoy a high degree of diversification, they will likely be, almost by definition, more concentrated in terms of product, number of customers, or geography than their larger peers in the same industry.

213. Successful and continuing diversification supports a stronger competitive position. Conversely, poor diversification weakens overall competitive position. For example, a company will weaken its overall business position if it enters new product lines and countries where it has limited expertise and lacks critical mass to be a real competitor to the incumbent market leaders. The weakness is greater when the new products or markets are riskier than the traditional core business.

214. Where applicable, we also include under scale, scope, and diversity an assessment of the potential benefits derived from unconsolidated (or partially consolidated) investments in strategic assets. The relative significance of such an investment and whether it is in an industry that exhibits high or, conversely, low correlation with the issuer's businesses would be considered in determining its potential benefits to scale, scope, and diversity. This excludes nonstrategic, financial investments, the analysis of which does not fall under the competitive position criteria but, instead, under the capital structure criteria.

a) Diversity of product or service range

215. The concentration of business volumes or revenues in a particular or comparatively small set of

products or services can lead to less stable revenues and profits. Even if this concentration is in an attractive product or service, it may be a weakness. Likewise, the concentration of business volumes with a particular customer or a small group of customers, or the reliance on one or a few suppliers, can expose the company to a potentially greater risk of losing and having to replace related revenues and profits. On the other hand, successful diversification across products, customers, and/or suppliers can lead to more stable and predictable revenues and profits, which supports a stronger assessment of scale, scope, and diversity.

216. The relative contribution of different products or services to a company's revenues or profits helps us gauge its diversity. We also evaluate the correlation of demand between product or services lines. High correlation in demand between seemingly different product or service lines will accentuate volume declines during a weak part of the business cycle.

217. In most sectors, the share of revenue a company receives from its largest five to 10 customers or counterparties reveals how diversified its customer base is. However, other considerations such as the stability and credit quality of that customer base, and the company's ability to retain significant customers, can be mitigating or accentuating factors in our overall evaluation. Likewise, supplier dependency can often be measured based on a supplier's share of a company's operating or capital costs. However, other factors, such as the degree of interdependence between the company and its supplier(s), the substitutability of key supply sources, and the company's presumed ability to secure alternative supply without incurring substantial switching costs, are important considerations. Low switching costs (i.e. limited impact on input price, quality, or delivery times as a result of having to adapt to a new supply chain partner) can mitigate a high level of concentration.

b) Geographic diversity

218. We assess geographic diversity both from the standpoint of the breadth of the company's served or addressable markets, and from the standpoint of how geographically concentrated its facilities are.

219. The concentration of business volumes and revenues within a particular region can lead to greater exposure to economic factors affecting demand for a company's goods or services in that region. Even if the company's volumes and revenues are concentrated in an attractive region, it may still be vulnerable to a significant drop in demand for its goods and services. Conversely, a company that serves multiple regions may benefit from different demand conditions in each, possibly resulting in greater revenue stability and more consistent profitability than a more focused peer's. That said, we consider geographic diversification in the context of the industry and the size of the local or regional economy. For instance, companies operating in local industries (such as food retailers) may benefit from a well-entrenched local position.

220. Generally, though, geographically concentrated production or service operations can expose a company to the risk of disruption, and damage revenues and profitability. Even when country risks don't appear significant, a company's vulnerability to exogenous factors (for example, natural disasters, labor or political unrest) increases with geographic concentration.

c) Volumes, size of markets and revenues, market share

221. Absolute sales or unit volumes and market share do not, by themselves, support a strong assessment of scale, scope, and diversity. Yet superior market share is a positive, since it may indicate a broad range of operations, products, or services.

222. We view volume stability (relative to peers') as a positive especially when: a company has

demonstrated it during an economic downturn; if it has been achieved without relying on greater price concessions than competitors have made; and when it is likely to be sustained in the future. However, volume stability combined with shrinking market share could be evidence of a company's diminishing prospects for future profitability. We assess the predictability of business volumes and the likely degree of future volume stability by analyzing the company's performance relative to peers' on several industry factors: cyclicality; ability to adapt to technological and regulatory threats; the profile of the customer base (stickiness); and the potential life cycle of the company's products or services.

223. Depending on the industry sector, we measure a company's relative size and market share based on unit sales; the absolute amount of revenues; and the percentage of revenues captured from total industry revenues. We also adjust for industry and company specific qualitative considerations. For example, if an industry is particularly fragmented and has a number of similarly sized participants, none may have a particular advantage or disadvantage with respect to market share.

d) Maturity of products or services

224. The degree of maturity and the relative position on the lifecycle curve of the company's product or service portfolio affect the stability and sustainability of its revenues and margins. It is important to identify the stage of development of a company's products or services in order to measure the life cycle risks that may be associated with key products or services.

225. Mature products or services (e.g. consumer products or broadcast programming) are not necessarily a negative, in our view, if they still contribute reliable profits. If demand is declining for a company's product or service, we examine its track record on introducing new products with staying power. Similarly, a company's track record with product launches is particularly relevant.

3. Analyzing subfactors for operating efficiency

226. In assessing the relative strength of this component, we consider four subfactors:

- Cost structure,
- Manufacturing processes,
- Working capital management, and
- Technology.

227. To the extent a company has high operating efficiency, it should be able to generate better profit margins than peers that compete in the same markets, whatever the prevailing market conditions. The ability to minimize manufacturing and other operational costs and thus maximize margins and cash flow--for example, through manufacturing excellence, cost control, and diligent working capital management--will provide the funds for research and development, marketing, and customer service.

a) Cost structure

228. Companies that are well positioned from a cost standpoint will typically enjoy higher capacity utilization and be more profitable over the course of the business cycle. Cost structure and cost control are keys to generating strong profits and cash flow, particularly for companies that produce commodities, operate in mature industries, or face pricing pressures. It is important to

consider whether a company or any of its competitors has a sustainable cost advantage, which can be based on access to cheaper energy, favorable manufacturing locations, or lower and more flexible labor costs, for example.

229. Where information is available, we examine a company's fixed versus variable cost mix as an indication of operating leverage, a measure of how revenue growth translates into growth in operating income. A company with significant operating leverage may witness dramatic declines in operating profit if unit volumes fall, as during cyclical downturns. Conversely, in an upturn, once revenues pass the breakeven point, a substantial percentage of incremental revenues typically becomes profit.

b) Manufacturing process

230. Capital intensity characterizes many heavy manufacturing sectors that require minimum volumes to produce acceptable profits, cash flow, and return on assets. We view capacity utilization through the business cycle (combined with the cost base) as a good indication of manufacturers' ability to maintain profits in varying economic scenarios. Our capacity utilization assessment is based on a company's production capacity across its manufacturing footprint. In addition, we consider the direction of a company's capacity utilization in light of our unit sales expectations, as opposed to analyzing it plant-by-plant.

231. Labor relations remain an important focus in our analysis of operating efficiency for manufacturers. Often, a company's labor cost structure is driven by its history of contractual negotiations and the countries in which it operates. We examine the rigidity or flexibility of a company's labor costs and the extent to which it relies on labor rather than automation. We analyze labor cost structure by assessing the extent of union representation, wage and benefit costs as a share of cost of goods sold (when available), and by assessing the balance of capital equipment vs. labor input in the manufacturing process. We also incorporate trends in a company's efforts to transfer labor costs from high-cost to low-cost regions.

c) Working capital management

232. Working capital management--of current or short-term assets and liabilities--is a key factor in our evaluation of operating efficiency. In general, companies with solid working capital management skills exhibit shorter cash conversion cycles (defined as days' investment in inventory and receivables less days' investment in accounts payable) than their lower-skilled peers. Short cash-conversion cycles could, for instance, demonstrate that a company has a stronger position in the supply chain (for example, requiring suppliers or dealers to hold more of its inventory). This allows a company to direct more capital than its peers can to other areas of investment.

d) Technology

233. Technology can play an important role in achieving superior operating efficiency through effective yield management (by improving input/output ratios), supply chain automation, and cost optimization.

234. Achieving high yield management is particularly important in industries with limited inventory and high fixed costs, such as transportation, lodging, media, and retail. The most efficient airlines can achieve higher revenue per available seat mile than their peers, while the most efficient lodging companies can achieve a higher revenue per available room than their peers. Both industries rely

heavily on technology to effectively allocate inventory (seats and rooms) to maximize sales and profitability.

235. Effective supply chain automation systems enable companies to reduce investments in inventory and better forecast future orders based on current trends. By enabling electronic data interchange between supplier and retailer, such systems help speed orders and reorders for goods by quickly pinpointing which merchandise is selling well and needs restocking. They also identify slow moving inventory that needs to be marked down, making space available for fresh merchandise.

236. Effective use of technology can also help hold down costs by improving productivity via automation and workflow management. This can reduce selling, general, and administrative costs, which usually represent a substantial portion of expenditures for industries with high fixed costs, thus boosting earnings.

4. Industry-specific SER parameters

Table 28

SER Calibration By Industry Based On EBITDA

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<10%	>10%-14%	>14%-22%	>22%-33%	>33%-76%	>76%
Auto OEM	=<25%	>25%-33%	>33%-35%	>35%-40%	>40%-46%	>46%
Metals and mining downstream	=<16%	>16%-31%	>31%-42%	>42%-53%	>53%-82%	>82%
Metals and mining upstream	=<16%	>16%-23%	>23%-28%	>28%-34%	>34%-59%	>59%
Homebuilders and developers	=<19%	>19%-33%	>33%-46%	>46%-65%	>65%-95%	>95%
Oil and gas refining and marketing	=<14%	>14%-21%	>21%-35%	>35%-46%	>46%-82%	>82%
Forest and paper products	=<9%	>9%-18%	>18%-26%	>26%-51%	>51%-114%	>114%
Building materials	=<9%	>9%-16%	>16%-19%	>19%-24%	>24%-33%	>33%
Oil and gas integrated, exploration and production	=<12%	>12%-19%	>19%-22%	>22%-28%	>28%-38%	>38%
Agribusiness and commodity foods	=<12%	>12%-19%	>19%-25%	>25%-39%	>39%-57%	>57%
Real estate investment trusts (REITs)	=<5%	>5%-9%	>9%-13%	>13%-20%	>20%-32%	>32%
Leisure and sports	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-24%	>24%
Commodity chemicals	=<14%	>14%-19%	>19%-28%	>28%-37%	>37%-51%	>51%
Auto suppliers	=<15%	>15%-20%	>20%-26%	>26%-32%	>32%-45%	>45%
Aerospace and defense	=<6%	>6%-9%	>9%-15%	>15%-24%	>24%-41%	>41%
Technology hardware and semiconductors	=<11%	>11%-15%	>15%-22%	>22%-31%	>31%-58%	>58%
Specialty chemicals	=<5%	>5%-10%	>10%-14%	>14%-23%	>23%-36%	>36%
Capital goods	=<12%	>12%-16%	>16%-21%	>21%-30%	>30%-45%	>45%
Engineering and construction	=<9%	>9%-14%	>14%-20%	>20%-28%	>28%-39%	>39%
Railroads and package express	=<5%	>5%-8%	>8%-10%	>10%-13%	>13%-22%	>22%

Table 28

SER Calibration By Industry Based On EBITDA (cont.)

	--Volatility of profitability assessment*--					
	1	**2**	**3**	**4**	**5**	**6**
Business and consumer services	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-30%	>30%
Midstream energy	=<5%	>5%-9%	>9%-11%	>11%-15%	>15%-31%	>31%
Technology software and services	=<4%	>4%-9%	>9%-14%	>14%-19%	>19%-33%	>33%
Consumer durables	=<7%	>7%-10%	>10%-13%	>13%-19%	>19%-35%	>35%
Containers and packaging	=<5%	>5%-7%	>7%-12%	>12%-18%	>18%-26%	>26%
Media and entertainment	=<6%	>6%-10%	>10%-14%	>14%-20%	>20%-29%	>29%
Oil and gas drilling, equipment and services	=<16%	>16%-22%	>22%-28%	>28%-44%	>44%-62%	>62%
Retail and restaurants	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-26%	>26%
Health care services	=<4%	>4%-5%	>5%-9%	>9%-12%	>12%-19%	>19%
Transportation infrastructure	=<2%	>2%-4%	>4%-7%	>7%-12%	>12%-19%	>19%
Environmental services	=<5%	>5%-9%	>9%-13%	>13%-22%	>22%-29%	>29%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-26%	>26%
Unregulated power and gas	=<7%	>7%-16%	>16%-20%	>20%-29%	>29%-47%	>47%
Pharmaceuticals	=<5%	>5%-8%	>8%-11%	>11%-17%	>17%-32%	>32%
Health care equipment	=<3%	>3%-5%	>5%-6%	>6%-10%	>10%-25%	>25%
Branded nondurables	=<4%	>4%-7%	>7%-10%	>10%-15%	>15%-43%	>43%
Telecommunications and cable	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-23%	>23%
Overall	=<5%	>5%-9%	>9%-15%	>15%-23%	>23%-43%	>43%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 29

SER Calibration By Industry Based On EBITDA Margin

	--Volatility of profitability assessment*--					
	1	**2**	**3**	**4**	**5**	**6**
Transportation cyclical	=<4%	>4%-8%	>8%-16%	>16%-28%	>28%-69%	>69%
Auto OEM	=<15%	>15%-19%	>19%-29%	>29%-31%	>31%-45%	>45%
Metals and mining downstream	=<10%	>10%-18%	>18%-26%	>26%-36%	>36%-56%	>56%
Metals and mining upstream	=<8%	>8%-10%	>10%-14%	>14%-19%	>19%-31%	>31%
Homebuilders and developers	=<10%	>10%-18%	>18%-30%	>30%-56%	>56%-114%	>114%
Oil and gas refining and marketing	=<12%	>12%-22%	>22%-28%	>28%-42%	>42%-71%	>71%
Forest and paper products	=<8%	>8%-13%	>13%-21%	>21%-41%	>41%-117%	>117%
Building materials	=<4%	>4%-8%	>8%-13%	>13%-18%	>18%-23%	>23%
Oil and gas integrated, exploration and production	=<4%	>4%-6%	>6%-8%	>8%-13%	>13%-22%	>22%

Table 29

SER Calibration By Industry Based On EBITDA Margin (cont.)

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Agribusiness and commodity foods	=<9%	>9%-14%	>14%-18%	>18%-27%	>27%-100%	>100%
Real estate investment trusts (REITs)	=<2%	>2%-5%	>5%-8%	>8%-13%	>13%-34%	>34%
Leisure and sports	=<3%	>3%-5%	>5%-6%	>6%-9%	>9%-18%	>18%
Commodity chemicals	=<9%	>9%-14%	>14%-18%	>18%-25%	>25%-37%	>37%
Auto suppliers	=<9%	>9%-13%	>13%-18%	>18%-23%	>23%-40%	>40%
Aerospace and defense	=<3%	>3%-6%	>6%-7%	>7%-12%	>12%-24%	>24%
Technology hardware and semiconductors	=<7%	>7%-10%	>10%-15%	>15%-21%	>21%-62%	>62%
Specialty chemicals	=<3%	>3%-6%	>6%-10%	>10%-19%	>19%-28%	>28%
Capital goods	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-33%	>33%
Engineering and construction	=<6%	>6%-8%	>8%-12%	>12%-17%	>17%-26%	>26%
Railroads and package express	=<2%	>2%-6%	>6%-8%	>8%-10%	>10%-17%	>17%
Business and consumer services	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-22%	>22%
Midstream energy	=<3%	>3%-6%	>6%-9%	>9%-14%	>14%-28%	>28%
Technology software and services	=<3%	>3%-6%	>6%-10%	>10%-15%	>15%-30%	>30%
Consumer durables	=<4%	>4%-8%	>8%-11%	>11%-15%	>15%-26%	>26%
Containers and packaging	=<5%	>5%-7%	>7%-9%	>9%-15%	>15%-22%	>22%
Media and entertainment	=<4%	>4%-6%	>6%-9%	>9%-14%	>14%-24%	>24%
Oil and gas drilling, equipment and services	=<6%	>6%-12%	>12%-16%	>16%-22%	>22%-32%	>32%
Retail and restaurants	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-21%	>21%
Health care services	=<3%	>3%-5%	>5%-6%	>6%-8%	>8%-15%	>15%
Transportation infrastructure	=<1%	>1%-3%	>3%-5%	>5%-7%	>7%-15%	>15%
Environmental services	=<3%	>3%-4%	>4%-6%	>6%-10%	>10%-24%	>24%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-24%	>24%
Unregulated power and gas	=<6%	>6%-10%	>10%-15%	>15%-23%	>23%-41%	>41%
Pharmaceuticals	=<4%	>4%-5%	>5%-7%	>7%-10%	>10%-21%	>21%
Health care equipment	=<2%	>2%-4%	>4%-5%	>5%-10%	>10%-16%	>16%
Branded nondurables	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-28%	>28%
Telecommunications and cable	=<2%	>2%-4%	>4%-5%	>5%-7%	>7%-13%	>13%
Overall	=<3%	>3%-6%	>6%-10%	>10%-16%	>16%-32%	>32%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 30

SER Calibration By Industry Based On Return On Capital

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<14%	>14%-28%	>28%-39%	>39%-53%	>53%-156%	>156%
Auto OEM	=<42%	>42%-64%	>64%-74%	>74%-86%	>86%-180%	>180%
Metals and mining downstream	=<25%	>25%-32%	>32%-43%	>43%-53%	>53%-92%	>92%
Metals and mining upstream	=<22%	>22%-30%	>30%-38%	>38%-45%	>45%-93%	>93%
Homebuilders and developers	=<12%	>12%-31%	>31%-50%	>50%-70%	>70%-88%	>88%
Oil and gas refining and marketing	=<14%	>14%-30%	>30%-48%	>48%-67%	>67%-136%	>136%
Forest and paper products	=<10%	>10%-22%	>22%-40%	>40%-89%	>89%-304%	>304%
Building materials	=<13%	>13%-20%	>20%-26%	>26%-36%	>36%-62%	>62%
Oil and gas integrated, exploration and production	=<16%	>16%-22%	>22%-31%	>31%-43%	>43%-89%	>89%
Agribusiness and commodity foods	=<12%	>12%-15%	>15%-29%	>29%-55%	>55%-111%	>111%
Real estate investment trusts (REITs)	=<8%	>8%-14%	>14%-20%	>20%-26%	>26%-116%	>116%
Leisure and sports	=<11%	>11%-17%	>17%-26%	>26%-34%	>34%-64%	>64%
Commodity chemicals	=<19%	>19%-28%	>28%-41%	>41%-50%	>50%-73%	>73%
Auto suppliers	=<20%	>20%-39%	>39%-50%	>50%-67%	>67%-111%	>111%
Aerospace and defense	=<7%	>7%-13%	>13%-19%	>19%-27%	>27%-61%	>61%
Technology hardware and semiconductors	=<8%	>8%-21%	>21%-34%	>34%-49%	>49%-113%	>113%
Specialty chemicals	=<5%	>5%-18%	>18%-28%	>28%-43%	>43%-64%	>64%
Capital goods	=<15%	>15%-24%	>24%-31%	>31%-45%	>45%-121%	>121%
Engineering and construction	=<12%	>12%-21%	>21%-23%	>23%-33%	>33%-54%	>54%
Railroads and package express	=<3%	>3%-11%	>11%-17%	>17%-20%	>20%-27%	>27%
Business and consumer services	=<9%	>9%-17%	>17%-23%	>23%-40%	>40%-87%	>87%
Midstream energy	=<5%	>5%-11%	>11%-17%	>17%-22%	>22%-34%	>34%
Technology software and services	=<8%	>8%-21%	>21%-35%	>35%-65%	>65%-105%	>105%
Consumer durables	=<8%	>8%-13%	>13%-20%	>20%-35%	>35%-60%	>60%
Containers and packaging	=<6%	>6%-14%	>14%-23%	>23%-35%	>35%-52%	>52%
Media and entertainment	=<9%	>9%-17%	>17%-26%	>26%-40%	>40%-86%	>86%
Oil and gas drilling, equipment and services	=<25%	>25%-33%	>33%-45%	>45%-65%	>65%-90%	>90%
Retail and restaurants	=<6%	>6%-14%	>14%-18%	>18%-26%	>26%-69%	>69%
Health care services	=<6%	>6%-10%	>10%-15%	>15%-25%	>25%-44%	>44%
Transportation infrastructure	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-27%	>27%
Environmental Services	=<7%	>7%-12%	>12%-24%	>24%-35%	>35%-72%	>72%

Table 30

SER Calibration By Industry Based On Return On Capital (cont.)

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Regulated utilities	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-36%	>36%
Unregulated power and gas	=<14%	>14%-19%	>19%-29%	>29%-55%	>55%-117%	>117%
Pharmaceuticals	=<6%	>6%-8%	>8%-15%	>15%-20%	>20%-33%	>33%
Health care equipment	=<4%	>4%-8%	>8%-19%	>19%-31%	>31%-81%	>81%
Branded nondurables	=<6%	>6%-10%	>10%-17%	>17%-29%	>29%-63%	>63%
Telecommunications and cable	=<7%	>7%-13%	>13%-19%	>19%-26%	>26%-60%	>60%
Overall	=<7%	>7%-15%	>15%-23%	>23%-38%	>38%-81%	>81%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

C. Cash Flow/Leverage Analysis

1. The merits and drawbacks of each cash flow measure

a) EBITDA

237. EBITDA is a widely used, and therefore a highly comparable, indicator of cash flow, although it has significant limitations. Because EBITDA derives from the income statement entries, it can be distorted by the same accounting issues that limit the use of earnings as a basis of cash flow. In addition, interest can be a substantial cash outflow for speculative-grade companies and therefore EBITDA can materially overstate cash flow in some cases. Nevertheless, it serves as a useful and common starting point for cash flow analysis and is useful in ranking the financial strength of different companies.

b) Funds from operations (FFO)

238. FFO is a hybrid cash flow measure that estimates a company's inherent ability to generate recurring cash flow from its operations independent of working capital fluctuations. FFO estimates the cash flow available to the company before working capital, capital spending, and discretionary items such as dividends, acquisitions, etc.

239. Because cash flow from operations tends to be more volatile than FFO, FFO is often used to smooth period-over-period variation in working capital. We consider it a better proxy of recurring cash flow generation because management can more easily manipulate working capital depending on its liquidity or accounting needs. However, we do not generally rely on FFO as a guiding cash flow measure in situations where assessing working capital changes is important to judge a company's cash flow generating ability and general creditworthiness. For example, for working-capital-intensive industries such as retailing, operating cash flow may be a better indicator than FFO of the firm's actual cash generation.

240. FFO is a good measure of cash flow for well-established companies whose long-term viability is

relatively certain (i.e., for highly rated companies). For such companies, there can be greater analytical reliance on FFO and its relation to the total debt burden. FFO remains very helpful in the relative ranking of companies. In addition, more established, healthier companies usually have a wider array of financing possibilities to cover potential short-term liquidity needs and to refinance upcoming maturities. For marginal credit situations, the focus shifts more to free operating cash flow--after deducting the various fixed uses such as working capital investment and capital expenditures--as this measure is more directly related to current debt service capability.

c) Cash flow from operations (CFO)

241. The measurement and analysis of CFO forms an important part of our ratings assessment, in particular for companies that operate in working-capital-intensive industries or industries in which working capital flows can be volatile. CFO is distinct from FFO as it is a pure measure of cash flow calculated after accounting for the impact on earnings of changes in operating assets and liabilities. CFO is cash flow that is available to finance items such as capital expenditures, repay borrowing, and pay for dividends and share buybacks.

242. In many industries, companies shift their focus to cash flow generation in a downturn. As a result, even though they typically generate less cash from ordinary business activities because of low capacity utilization and relatively low fixed-cost absorption, they may generate cash by reducing inventories and receivables. Therefore, although FFO is likely to be lower in a downturn, the impact on CFO may not be as great. In times of strong growth the opposite will be true, and consistently lower CFO compared to FFO without a corresponding increase in revenue and profitability can indicate an untenable situation.

243. Working capital is a key element of a company's cash flow generation. While there tends to be a need to build up working capital and therefore to consume cash in a growth or expansion phase, changes in working capital can also act as a buffer in case of a downturn. Many companies will sell off inventories and invest a lower amount in raw materials because of weaker business activities, both of which reduce the amount of capital and cash that is tied up in working capital. Therefore, working capital fluctuations can occur both in periods of revenue growth and contraction and analyzing a company's near-term working capital needs is crucial for estimating future cash flow developments.

244. Often, businesses that are capital intensive are not working-capital-intensive: most of the capital commitment is upfront in equipment and machinery, while asset-light businesses may have to invest proportionally more in inventories and receivables. That also affects margins, because capital-intensive businesses tend to have proportionally lower operating expenses (and therefore higher EBITDA margins), while working-capital-intensive businesses usually report lower EBITDA margins. The resulting cash flow volatility can be significant: because all investment is made upfront in a capital-intensive business, there is usually more room to absorb subsequent EBITDA volatility because margins are higher. For example, a capital-intensive company may remain reasonably profitable even if its EBITDA margin declines from 30% to 20%. By contrast, a working-capital-intensive business with a lower EBITDA margin (due to higher operating expenses) of 8% can post a negative EBITDA margin if EBITDA volatility is large.

d) Free operating cash flow (FOCF)

245. By deducting capital expenditures from CFO, we arrive at FOCF, which can be used as a proxy for a company's cash generated from core operations. We may exclude discretionary capital expenditures for capacity growth from the FOCF calculation, but in practice it is often difficult to discriminate between spending for expansion and replacement. And, while companies have some

flexibility to manage their capital budgets to weather down cycles, such flexibility is generally temporary and unsustainable in light of intrinsic requirements of the business. For example, companies can be compelled to increase their investment programs because of strong demand growth or technological changes. Regulated entities (for example, telecommunications companies) might also face significant investment requirements related to their concession contracts (the understanding between a company and the host government that specifies the rules under which the company can operate locally).

246. Positive FOCF is a sign of strength and helpful in distinguishing between two companies with the same FFO. In addition, FOCF is helpful in differentiating between the cash flows generated by more and less capital-intensive companies and industries.

247. In highly capital-intensive industries (where maintenance capital expenditure requirements tend to be high) or in other situations in which companies have little flexibility to postpone capital expenditures, measures such as FFO to debt and debt to EBITDA may provide less valuable insight into relative creditworthiness because they fail to capture potentially meaningful capital expenditures. In such cases, a ratio such as FOCF to debt provides greater analytical insight.

248. A company serving a low-growth or declining market may exhibit relatively strong FOCF because of diminishing fixed and working capital needs. Growth companies, in contrast, exhibit thin or even negative FOCF because of the investment needed to support growth. For the low-growth company, credit analysis weighs the positive, strong current cash flow against the danger that this high level of cash flow might not be sustainable. For the high-growth company, the opposite is true: weighing the negatives of a current cash deficit against prospects of enhanced cash flow once current investments begin yielding cash benefits. In the latter case, if we view the growth investment as temporary and not likely to lead to increased leverage over the long-term, we'll place greater analytical importance on FFO to debt rather than on FOCF to debt. In any event, we also consider the impact of a company's growth environment in our business risk analysis, specifically in a company's industry risk analysis (see section B).

e) Discretionary cash flow (DCF)

249. For corporate issuers primarily rated in the investment-grade universe, DCF to debt can be an important barometer of future cash flow adequacy as it more fully reflects a company's financial policy, including decisions regarding dividend payouts. In addition, share buybacks and potential M&A, both of which can represent very significant uses of cash, are important components in cash flow analysis.

250. The level of dividends depends on a company's financial strategy. Companies with aggressive dividend payout targets might be reluctant to reduce dividends even under some liquidity pressure. In addition, investment-grade companies are less likely to reduce dividend payments following some reversals--although dividends ultimately are discretionary. DCF is the truest reflection of excess cash flow, but it is also the most affected by management decisions and, therefore, does not necessarily reflect the potential cash flow available.

D. Diversification/Portfolio Effect

1. Academic research

251. Academic research recently concluded that, during the global financial crisis of 2007-2009, conglomerates had the advantage over single sector-focused firms because they had better

access to the credit markets as a result of their debt co-insurance and used the internal capital markets more efficiently (i.e., their core businesses had stronger cash flows). Debt co-insurance is the view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the crisis. (Source: "Does Diversification Create Value In The Presence Of External Financing Constraints? Evidence From The 2007-2009 Financial Crisis," Venkat Kuppuswamy and Belen Villalonga, Harvard Business School, Aug. 19, 2011.)

252. In addition, fully diversified, focused companies saw more narrow credit default swap spreads from 2004-2010 vs. less diversified firms. This highlighted that lenders were differentiating for risk and providing these companies with easier and cheaper access to capital. (Source: "The Power of Diversified Companies During Crises," The Boston Consulting Group and Leipzig Graduate School of Management, January 2012.)

253. Many rated conglomerates are either country- or region-specific; only a small percentage are truly global. The difference is important when assessing the country and macroeconomic risk factors. Historical measures for each region, based on volatility and correlation, reflect regional trends that are likely to change over time.

E. Financial Policy

1. Controlling shareholders

254. Controlling shareholder(s)--if they exist--exert significant influence over a company's financial risk profile, given their ability to use their direct or indirect control of the company's financial policies for their own benefit. Although the criteria do not associate the presence of controlling shareholder(s) to any predefined negative or positive impact, we assess the potential medium- to long-term implications for a company's credit standing of these strategies. Long-term ownership--such as exists in many family-run businesses--is often accompanied by financial discipline and reluctance to incur aggressive leverage. Conversely, short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.

255. The criteria define controlling shareholder(s) as:

- A private shareholder (an individual or a family) with majority ownership or control of the board of directors;
- A group of shareholders holding joint control over the company's board of directors through a shareholder agreement. The shareholder agreement may be comprehensive in scope or limited only to certain financial aspects; and
- A private equity firm or a group of private equity firms holding at least 40% in a company or with majority control of its board of directors.

256. A company is not considered to have a controlling shareholder if it is publicly listed with more than 50% of voting interest listed or when there is no evidence of a particular shareholder or group of shareholders exerting 'de facto' control over a company.

257. Companies that have as their controlling shareholder governments or government-related entities, infrastructure and asset-management funds, and diversified holding companies and

conglomerates are assessed in separate criteria.

2. Financial discipline

a) Leverage influence from acquisitions

258. Companies may employ more or less acquisitive growth strategies based on industry dynamics, regulatory changes, market opportunities, and other factors. We consider management teams with disciplined, transparent acquisition strategies that are consistent with their financial policy framework as providing a high degree of visibility into the projected evolution of cash flow and credit measures. Our assessment takes into account management's track record in terms of acquisition strategy and the related impact on the company's financial risk profile. Historical evidence of limited management tolerance for significant debt-funded acquisitions provides meaningful support for the view that projected credit ratios would not significantly weaken as a result of the company's acquisition policy. Conversely, management teams that pursue opportunistic acquisition strategies, without well-defined parameters, increase the risks that the company's financial risk profile may deteriorate well beyond our forecasts.

259. Acquisition funding policies and management's track record in this respect also provide meaningful insight in terms of credit ratio stability. In the criteria, we take into account management's willingness and capacity to mobilize all funding resources to restore credit quality, such as issuing equity or disposing of assets, to mitigate the impact of sizable acquisitions on credit ratios. The financial policy framework and related historical evidence are key considerations in our assessment.

b) Leverage influence from shareholder remuneration policies

260. A company's approach to rewarding shareholders demonstrates how it balances the interests of its various stakeholders over time. Companies that are consistent and transparent in their shareholder remuneration policies, and exhibit a willingness to adjust shareholder returns to mitigate adverse operating conditions, provide greater support to their long-term credit quality than other companies. Conversely, companies that prioritize cash returns to shareholders in periods of deteriorating economic, operating, or share price performance can significantly undermine long-term credit quality and exacerbate the credit impact of adverse business conditions. In assessing a company's shareholder remuneration policies, the criteria focus on the predictability of shareholder remuneration plans, including how a company builds shareholder expectations, its track record in executing shareholder return policies over time, and how shareholder returns compare with industry peers'.

261. Shareholder remuneration policies that lack transparency or deviate meaningfully from those of industry peers introduce a higher degree of event risk and volatility and will be assessed as less predictable under the criteria. Dividend and capital return policies that function primarily as a means to distribute surplus capital to shareholders based on transparent and stable payout ratios--after satisfying all capital requirements and leverage objectives of the company, and that support stable to improving leverage ratios--are considered the most supportive of long term credit quality.

c) Leverage influence from plans regarding investment decisions or organic growth strategies

262. The process by which a company identifies, funds, and executes organic growth, such as expansion into new products and/or new markets, can have a significant impact on its long-term credit quality. Companies that have a disciplined, coherent, and manageable organic growth strategy, and have a track record of successful execution are better positioned to continue to attract third-party capital and maintain long-term credit quality. By contrast, companies that allocate significant amounts of capital to numerous, unrelated, large and/or complex projects and often incur material overspending against the original budget can significantly increase their credit risk.

263. The criteria assess whether management's organic growth strategies are transparent, comprehensive, and measurable. We seek to evaluate the company's mid- to long-term growth objectives--including strategic rationales and associated execution risks--as well as the criteria it uses to allocate capital. Effective capital allocation is likely to include guidelines for capital deployment, including minimum return hurdles, competitor activity analysis, and demand forecasting. The company's track record will provide key data for this assessment, including how well it executes large and/or complex projects against initial budgets, cost overruns, and timelines.

3. Financial policy framework

a) Comprehensiveness of financial policy framework

264. Financial policies that are clearly defined, unambiguous, and provide a tight framework around management behavior are the most reliable in determining an issuer's future financial risk profile. We assess as consistent with a supportive assessment, policies that are clear, measurable, and well understood by all key stakeholders. Accordingly, the financial policy framework must include well-defined parameters regarding how the issuer will manage its cash flow protection strategies and debt leverage profile. This includes at least one key or a combination of financial ratio constraints (such as maximum debt to EBITDA threshold) and the latter must be relevant with respect to the issuer's industry and/or capital structure characteristics.

265. By contrast, the absence of established financial policies, policies that are vague or not quantifiable, or historical evidence of significant and unexpected variation in management's long-term financial targets could contribute to an overall assessment of a non-supportive financial policy framework.

b) Transparency of financial policies

266. We assess as supportive financial policy objectives that are transparent and well understood by all key stakeholders and we view them as likely to influence an issuer's financial risk profile over time. Alternatively, financial policies, if they exist, that are not communicated to key stakeholders and/or where there is limited historical evidence to support the company's commitment to these policies, are non-supportive, in our view. We consider the variety of ways in which a company communicates its financial policy objectives, including public disclosures, investor presentation materials, and public commentary.

267. In some cases, however, a company may articulate its financial policy objectives to a limited number of key stakeholders, such as its main creditors or to credit rating agencies. In these situations, a company may still receive a supportive classification if we assess that there is a sufficient track record (more than three years) to demonstrate a commitment to its financial policy objectives.

c) Achievability and sustainability of financial policies

268. To assess the achievability and sustainability of a company's financial policies, we consider a variety of factors, including the entity's current and historical financial risk profile; the demands of its key stakeholders (including dividend and capital return expectations of equity holders); and the stability of the company's financial policies that we have observed over time. If there is evidence that the company is willing to alter its financial policy framework because of adverse business conditions or growth opportunities (including M&A), this could support an overall assessment of non-supportive.

4. Financial policy adjustments--examples

269. Example 1: A moderately leveraged company has just been sold to a new financial sponsor. The financial sponsor has not leveraged the company yet and there is no stated financial policy at the outset. We expect debt leverage to increase upon refinancing, but we are not able to factor it precisely in our forecasts yet.
Likely outcome: FS-6 financial policy assessment, implying that we expect the new owner to implement an aggressive financial policy in the absence of any other evidence.

270. Example 2: A company has two owners--a family owns 75%, a strategic owner holds the remaining 25%. Although the company has provided Standard & Poor's with some guidance on long-term financial objectives, the overall financial policy framework is not sufficiently structured nor disclosed to a sufficient number of stakeholders to qualify for a supportive assessment. Recent history, however, does not provide any evidence of unexpected, aggressive financial transactions and we believe event risk is moderate.
Likely outcome: Neutral financial policy impact, including an assessment of neutral for financial discipline. Although the company's financial framework does not support long-term visibility, historical evidence and stability of management suggest that event risk is not significant. The unsupportive financial framework assessment, however, prevents the company from qualifying for an overall positive financial policy assessment, should the conditions for positive financial discipline be met.

271. Example 3: A company (not owned by financial sponsors) has stated leverage targets equivalent to a significant financial risk profile assessment. The company continues to make debt-financed acquisitions yet remains within its leverage targets, albeit at the weaker end of these. Our forecasts are essentially built on expectations that excess cash flow will be fully used to fund M&A or, possibly pay share repurchases, but that management will overall remain within its leverage targets.
Likely outcome: Neutral financial policy impact. Although management is fairly aggressive, the company consistently stays within its financial policy targets. We think our forecasts provide a realistic view of the evolution of the company's credit metrics over the next two years. No event risk adjustment is needed.

272. Example 4: A company (not owned by a financial sponsor) has just made a sizable acquisition (consistent with its long-term business strategy) that has brought its credit ratios out of line. Management expressed its commitment to rapidly improve credit ratios back to its long-term ratio targets--representing an acceptable range for the SACP--through asset disposals or a rights issue. We see their disposal plan (or rights issue) as realistic but precise value and timing are uncertain. At the same time, management has a supportive financial policy framework, a positive track record of five years, and assets are viewed as fairly easily tradable.
Likely outcome: Positive financial policy impact. Although forecast credit ratios will remain temporarily depressed, as we cannot fully factor in asset disposals (or rights issue) due to

uncertainty on timing/value, or without leaking confidential information, the company's credit risk should benefit from management's positive track record and a supportive financial policy framework. The anchor will be better by one notch if management and governance is at least satisfactory and liquidity is at least adequate.

273. Example 5: A company (not owned by a financial sponsor) has very solid financial ratios, providing it with meaningful flexibility for M&A when compared with management's long-term stated financial policy. Also, its stock price performance is somewhat below that of its closest industry peers. Although we have no recent evidence of any aggressive financial policy steps, we fundamentally believe that, over the long-term term, the company will end up using its financial flexibility for the right M&A opportunity, or alternatively return cash to shareholders.
Likely outcome: Negative financial policy impact. Long-term event risk derived from M&A cannot be built into forecasts nor shareholder returns (share buybacks or one-off dividends) be built into forecasts to attempt aligning projected ratios with stated long-term financial policy levels. This is because our forecasts are based on realistic and reasonably predictable assumptions for the medium term. The anchor will be adjusted down, by one notch or more, because of the negative financial policy assessment.

F. Corporate Criteria Glossary

Anchor: The combination of an issuer's business risk profile assessment and its financial risk profile assessment determine the anchor. Additional rating factors can then modify the anchor to determine the final rating or SACP.

Asset profile: A descriptive way to look at the types and quality of assets that comprise a company (examples can include tangible versus intangible assets, those assets that require large and continuing maintenance, upkeep, or reinvestment, etc.).

Business risk profile: This measure comprises the risk and return potential for a company in the market in which it participates, the country risks within those markets, the competitive climate, and the competitive advantages and disadvantages the company has. The criteria combine the assessments for Corporate Industry and Country Risk Assessment (CICRA), and competitive position to determine a company's business risk profile assessment.

Capital-intensive company: A company exhibiting large ongoing capital spending to sales, or a large amount of depreciation to sales. Examples of capital-intensive sectors include oil production and refining, telecommunications, and transportation sectors such as railways and airlines.

Cash available for debt repayment: Forecast cash available for debt repayment is defined as the net change in cash for the period before debt borrowings and debt repayments. This includes forecast discretionary cash flow adjusted for our expectations of: share buybacks, net of any share issuance, and M&A. Discretionary cash flow is defined as cash flow from operating activities less capital expenditures and total dividends.

Competitive position: Our assessment of a company's: 1) competitive advantage; 2) operating efficiency; 3) scale, scope, and diversity; and 4) profitability.

- Competitive advantage--The strategic positioning and attractiveness to customers of the company's products or services, and the fragility or sustainability of its business model.
- Operating efficiency--The quality and flexibility of the company's asset base and its cost management and structure.
- Scale, scope, and diversity--The concentration or diversification of business activities.
- Profitability--Our assessment of both the company's level of profitability and volatility of

profitability.

Competitive Position Group Profile (CPGP): Used to determine the weights to be assigned to the three components of competitive position other than profitability. While industries are assigned to one of the six profiles, individual companies and industry subsectors can be classified into another CPGP because of unique characteristics. Similarly, national industry risk factors can affect the weighing. The six CPGPs are:

- Services and product focus,
- Product focus/scale driven,
- Capital or asset focus,
- Commodity focus/cost driven,
- Commodity focus/scale driven, and
- National industry and utilities.

Conglomerate: Companies that have at least three distinct business segments, each contributing between 10%-50% of EBITDA or FOCF. Such companies may benefit from the diversification/portfolio effect.

Controlling shareholders: Equity owners who are able to affect decisions of varying effect on operations, leverage, and shareholder reward without necessarily being a majority of shareholders.

Corporate Industry and Country Risk Assessment (CICRA): The result of the combination of an issuer's country risk assessment and industry risk assessment.

Debt co-insurance: The view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the global financial crisis of 2007-2009.

Financial headroom: Measure of deviation tolerated in financial metrics without moving outside or above a pre-designated band or limit typically found in loan covenants (as in a debt to EBITDA multiple that places a constraint on leverage). Significant headroom would allow for larger deviations.

Financial risk profile: The outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to its financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.

Financial sponsor: An entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

Profitability ratio: Commonly measured using return on capital and EBITDA margins but can be measured using sector-specific ratios. Generally calculated based on a five-year average, consisting of two years of historical data, and our projections for the current year and the next two financial years.

Shareholder remuneration policies: Management's stated shareholder reward plans (such as a buyback or dividend amount, or targeted payout ratios).

Stand-alone credit profile (SACP): Standard & Poor's opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention or support from its parent, affiliate, or related government or from a third-party entity such as an insurer.

Transfer and convertibility assessment: Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

Unconsolidated equity affiliates: Companies in which an issuer has an investment, but which are not consolidated in an issuer's financial statements. Therefore, the earnings and cash flows of the investees are not included in our primary metrics unless dividends are received from the investees.

Upstream/midstream/downstream: Referring to exploration and production, transport and storage, and refining and distributing, respectively, of natural resources and commodities (such as metals, oil, gas, etc.).

Volatility of profitability/SER: We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' trend line. We combine it with the profitability ratio to determine the final profitability assessment. We only calculate SER when companies have at least seven years of historical annual data, to ensure that the results are meaningful.

Working-capital-intensive companies: Generally a company with large levels of working capital in relation to its sales in order to meet seasonal swings in working capital. Examples of working-capital-intensive sectors include retail, auto manufacturing, and capital goods.

FREQUENTLY ASKED QUESTIONS

A. Volatility of cash flows

If a company exhibits volatile cash flow metrics, does Standard & Poor's capture this in the cash flow volatility adjustment or in the financial policy assessment?

We capture this in either analytic factor, as appropriate. As per paragraph 125, the volatility adjustment is the mechanism by which we factor a "cushion" of medium-term variance to current financial performance not otherwise captured in either the near-term base-case forecast or the long-term business risk assessment. We make this adjustment based on the following:

- The expectation of any potential cash flow/leverage ratio movement is both prospective and dependent on the current business or economic conditions.
- Stress scenarios include, but are not limited to, a recession, technology or competitive shifts, loss or renegotiation of major contracts or customers, and key product or input price movements, as typically defined in the company's industry risk profile and competitive position assessment.
- The volatility adjustment is not static and is company-specific. At the bottom of an economic

cycle or during periods of stressed business conditions, already reflected in the general industry risk or specific competitive risk profile, the prospect of weakening ratios is far less than at the peak of an economic cycle or business conditions.

- The expectation of prospective ratio changes may be formed by observed historical performance over an economic, business, or product cycle by the company or by peers.
- The assessment of which classification to use when evaluating the prospective number of scoring category moves will be guided by how close the current ratios are to the transition point (i.e. "buffer" in the current scoring category) and the corresponding amount of EBITDA movement at each scoring transition.

As per paragraph 157, financial policy refines our view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment. Those assumptions do not always reflect or entirely capture the short-to-medium term event risks or the longer-term risks stemming from a company's financial policy. To the extent movements in one of these factors cannot be confidently predicted within our forward-looking evaluation of cash flow/leverage, we capture that risk in our evaluation of financial policy.

What constitutes a period of stress when assessing whether a company has a volatile or highly volatile level of cash flow/leverage?

As guidance, our global default studies demonstrate significant correlation of defaults with weak points in business cycles and banking crises. The 1991 peak default rate occurred after a mild recession in the U.S., a severe but short recession in the U.K., and the Nordic banking crisis. Other developed-market speculative-grade default peaks were the U.S., at 10.6% in 2001 (the U.S. recession) and 11.4% in 2009 (the global banking crisis and recession); and Europe, at 12.3% in 2002 (due in part to the bursting of the technology/Internet bubble and failures of a large number of telecom start-ups). (Sources: "2012 Annual Global Corporate Default Study," published March 18, 2013, and "Understanding Standard & Poor's Rating Definitions," published June 3, 2009.)

Additional guidance can be found in "Methodology: Industry Risk," published Nov. 19, 2013, Appendix 1 where we considered sensitivity to economic cycles, as measured by the historical cyclical peak-to-trough decline in profitability and revenues for major recessions ('BBB' and 'BB' stress) mapped to specific industry sectors.

B. Profitability

If a company operates in a region or in a country where local inflation is high, and you believe that this affects the comparability of its profitability measures with industry peers', how do you incorporate this in your assessment?

When analyzing level of profitability, we use, where available, the numeric guidance provided in key credit factors (KCF) articles. These thresholds apply globally irrespective of the underlying level of inflation, although we also consider trends in the profitability ratio to determine the level of profitability assessment. However, high inflation environments are often associated with exposure to countries with a high country risk, in which case as per paragraph 87 we may adjust the volatility of profitability assessment to account for this exposure. Finally, to the extent not captured elsewhere in the analysis, we may incorporate this factor as part of the comparable ratings analysis.

REVISIONS AND UPDATES

This article was originally published on Nov. 19, 2013. These criteria became effective on the date of publication.

Changes introduced after original publication:

- Following our periodic review completed on Oct. 16, 2015, we deleted paragraphs 9 and 10, which were related to the initial publication of our criteria and no longer relevant. We also made some adjustments to language. These adjustments have no impact on our ratings or the effective date of the criteria.
- Following our periodic review completed on Oct. 14, 2016, we updated criteria references, the contact list, and the definitions of financial sponsor-owned companies and financial sponsors to be consistent with those in the article "The Treatment Of Non-Common Equity Financing In Nonfinancial Corporate Entities," published April 29, 2014.
- On Feb. 8, 2017, we republished the article to correct an error in the regional grouping for the countries of Bhutan, Grenada, and Eritrea introduced after the periodic criteria review closed on Oct. 14, 2016.
- Following our periodic review completed on Oct. 11, 2017, we updated criteria references.
- On April 23, 2018, we updated the definition of a financial sponsor-owned company in table 23. We also updated the contact information.

Sectors that fall in the scope of these criteria since the original publication include:

- Agricultural cooperatives following publication of "Key Credit Factors For Agricultural Cooperatives" on March 17, 2015;
- Entities engaged in commodities trading activities that generate less than 70% of expected earnings from commodities trading following publication of "Commodities Trading Industry Methodology," published Jan. 19, 2017;
- Master limited partnerships and general partnerships of master limited partnerships trading following publication of "Methodology: Master Limited Partnerships And General Partnerships" on Sept. 22, 2014; and
- Transportation equipment leasing and car rental companies following publication of "Key Credit Factors For The Operating Leasing Industry," published on Dec. 14, 2016.

RELATED CRITERIA AND RESEARCH

Superseded Criteria

- Companies Owned By Financial Sponsors: Rating Methodology, March 21, 2013
- Methodology: Business Risk/Financial Risk Matrix Expanded, Sept. 18, 2012
- How Stock Prices Can Affect An Issuer's Credit Rating, Sept. 26, 2008

- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008
- Credit FAQ: Knowing The Investors In A Company's Debt And Equity, April 4, 2006

Related Criteria

- Reflecting Subordination Risk In Corporate Issue Ratings, Sept. 21, 2017
- Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- The Treatment Of Non-Common Equity Financing In Nonfinancial Corporate Entities, April 29, 2014
- Corporate Criteria: Ratios And Adjustments, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Group Rating Methodology, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Principles Of Credit Ratings, Feb. 16, 2011
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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S&P Global
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General Criteria:

Principles Of Credit Ratings

February 16, 2011

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*(**Editor's Note:** We're republishing this article following our periodic review completed on Dec. 15, 2017. See the "Revisions And Updates" section for details.)*

1. S&P Global Ratings uses a principles-based approach for assigning and monitoring ratings globally. These broad principles apply generally to ratings of all types of corporates, governments, securitization structures, and asset classes. However, for certain types of issuers, issues, asset classes, markets, and regions, S&P Global Ratings complements these principles with specific methodologies and assumptions.

2. Readers should read this article in conjunction with "Understanding Standard & Poor's Rating Definitions," published June 3, 2009, and "Methodology: Credit Stability Criteria," published May 3, 2010.

3. S&P Global Ratings assigns credit ratings to both issuers and issues, and strives to maintain comparability of ratings across sectors and over time. That is, S&P Global Ratings intends for each rating symbol to connote the same general level of creditworthiness for issuers and issues in different sectors and at different times. Enhancing comparability requires calibrating the criteria for determining ratings. S&P Global Ratings calibrates criteria through various means including measuring default behavior across sectors and over time, applying common approaches to risk analysis, and using a common set of macroeconomic scenarios associated with the different rating levels. The scenario associated with the 'AAA' rating level is one of extreme macroeconomic stress--on par with the Great Depression of the 1930s. The scenarios associated with the lower rating levels are successively less stressful. Credits rated in each category are intended to be able to withstand the associated level of macroeconomic stress without defaulting (although we might significantly lower the ratings on those credits as economic stresses increase).

SCOPE OF THE CRITERIA

4. These criteria apply to ratings of all issuers and issues rated by S&P Global Ratings.

SUMMARY OF CRITERIA UPDATE

5. The analytic framework for structured finance securitization ratings includes five key areas:

- Credit quality of the securitized assets;
- Legal and regulatory risks;
- Payment structure and cash flow mechanics;

- Operational and administrative risks; and
- Counterparty risk.

6. The analytic framework for corporate and government ratings includes three key areas:

- Creditworthiness before external support;
- External support; and
- Analysis of specific instruments.

EFFECTIVE DATE AND TRANSITION

7. These criteria are effective for all new and outstanding ratings.

FUNDAMENTAL PRINCIPLES OF STRUCTURED FINANCE RATINGS AND CRITERIA

Credit Quality Of The Securitized Assets

8. In most securitization transactions, the first key step in analyzing the credit quality of the securitized assets is determining the amount of credit support necessary, in our opinion, to maintain a rating at the 'AAA' level. That determination is equivalent to estimating the amount of losses that the assets would suffer under conditions of extreme stress. The estimation can include reference to historical studies of the subject asset class or, when such studies are not available and as we deem appropriate, comparison or benchmarking relative to asset classes for which such studies do exist.

9. For some asset classes, the estimation may proceed in stages: We might separately estimate asset default frequencies and loss severities under extreme stress conditions and then combine those components to form the overall loss estimate. Similarly, for some asset classes, the estimation may use generalizations based on historical studies, such as the notion that losses under extreme stress conditions can be estimated as a multiple of expected losses, with the multiple potentially varying for different asset classes.

10. For some asset classes, S&P Global Ratings defines an archetypical asset pool and uses it as a comparison benchmark for gauging the estimated losses under extreme stress for pools underlying actual transactions in such asset classes. In some cases, the maximum rating for the highest rated security may be below 'AAA' based on our assessment of factors such as country risk, or transfer and convertibility risk, and we would adjust the analysis accordingly.

11. In many securitization transactions, a key step in analyzing the credit quality of the securitized assets is estimating the level of expected losses. The level of expected losses generally corresponds to the amount of credit enhancement associated with the 'B' rating level. Estimation of expected losses generally uses the recent performance of similar assets as a guide. The estimation may include adjustments based on our assessment of current trends, as well as evolving market practices.

12. Interpolation is one of the methods we may use when we analyze the amount of credit enhancement associated with the rating levels between 'AAA' and 'B' for transactions in certain asset classes. For other asset classes, we create specific benchmarks, such as coverage multiples or simulated default rates, within a mathematical simulation model.

13. Our view on the credit quality of a pool of assets may change over time. The performance of the pool may diverge from expectations and that divergence may reveal credit strengths or weakness that were not previously apparent. Through our surveillance processes, we reassess the credit quality of the pool based on certain information regarding the observed performance and other factors we deem relevant.

Legal And Regulatory Risks

14. S&P Global Ratings' assessment of legal and regulatory risks focuses primarily on the degree to which a securitization structure isolates the securitized assets from the bankruptcy or insolvency risk of entities that participate in the transaction. Typically, our analysis focuses on the entity or entities that originated and owned the assets before the securitization, although the creditworthiness of other entities also may be relevant. A true sale of the subject assets from the originator/seller to a special purpose entity (SPE) is one method commonly used by an arranger seeking to achieve asset isolation in a securitization. From a legal perspective, a true sale is generally understood to result in the assets ceasing to be part of the seller's bankruptcy or insolvency estate. There may also be other legal mechanisms, apart from true sale, that may achieve analogous comfort. SPEs are entities that typically are used in a securitization transaction to "house" the assets that will back the payment obligations usually represented by the securities issued by the SPE. In the context of our analysis, S&P Global Ratings forms an opinion about the insolvency remoteness of an SPE based on our evaluation of the specific facts and circumstances that we view as applicable to a particular transaction. Among other things, the analysis considers whether the separate legal identity of the SPE would be respected by bankruptcy courts or bodies charged with similar functions. In addition, we assess the presence of features intended to minimize the likelihood that the SPE itself becomes the subject of bankruptcy.

Payment Structure And Cash Flow Mechanics

15. The rating analysis for structured finance typically includes an analysis of payment structure and cash flow mechanics. This portion of the analysis may involve both assessing the documentation for a security and testing the cash flows using quantitative models. In both cases, the objective is to assess whether the cash flow from the securitized assets would be sufficient, at the applicable rating levels, to make timely payments of interest and ultimate payment of principal to the related securities, after taking account of available credit enhancement and allowing for transaction expenses, such as servicing and trustee fees. The analysis may encompass diverse features of the payment structure and cash flow mechanics, ranging from the basic payment priorities inherent in a deal (i.e., the subordination hierarchy of tranches) to the impact of performance covenants (i.e., so-called "triggers") that may operate as switches that materially change the distribution priorities if they are breached. Finally, for securities that embody support facilities from third parties, such as insurance policies, guarantees, bank credit and liquidity facilities, and derivatives instruments, the analysis focuses on the payment mechanics for those obligations.

Operational And Administrative Risks

16. The analysis of operational and administrative risks is another part of the structured finance rating analysis. This part of the analysis focuses on key transaction parties to determine whether they are capable of managing a securitization over its life. Key transaction parties may include a transaction's servicer or manager, the asset manager of a collateralized debt obligation (CDO), the trustee, the paying agent, and any other transaction party; herein we collectively refer to these parties as servicers.

17. In securitizations involving many asset classes, the analysis focuses on evaluating a servicer's or manager's ability to perform its duties, such as receiving timely payments, pursuing collection efforts on delinquent assets, foreclosing on and liquidating collateral, tracking cash receipts and disbursements, and providing timely and accurate investor reports. For transactions that involve revenue-producing assets (e.g., commercial property), the analysis may include, as we deem appropriate, assessment of certain incremental risks associated with managing the assets. For actively managed portfolios, the analysis considers the asset manager's capabilities and past performance as an asset manager.

18. The analysis of operational and administrative risks generally considers the possibility that a servicer may become unable or unwilling to perform its duties during the life of the transaction. In that vein, the analysis may consider both the potential for hiring a substitute or successor servicer and any arrangements that provide for a designated backup servicer. That portion of the analysis would typically consider the sufficiency of the servicing fee to attract a substitute, the seniority of the fee in the payment priorities, and the availability of substitute servicers.

Counterparty Risk

19. The fifth part of the rating analysis is the analysis of counterparty risk. That analysis focuses on third-party obligations to either hold assets (including cash) or make financial payments that may affect the creditworthiness of structured finance instruments. Examples of counterparty risks include exposures to institutions that maintain key accounts and exposures to the providers of derivative contracts such as interest rate swaps and currency swaps. The counterparty risk analysis considers both the type of dependency and the rating of the counterparty for each counterparty relationship in a transaction.

FUNDAMENTAL PRINCIPLES OF CORPORATE AND GOVERNMENT RATINGS AND CRITERIA

Creditworthiness Before External Support

20. The most important step in analyzing the creditworthiness of a corporate or governmental obligor is gauging the resources available to it for fulfilling its commitments relative to the size and timing of those commitments. Assessing an obligor's resources for fulfilling its financial commitments is primarily a forward-looking exercise. It may entail estimating or projecting future income and cash flows. It may include consideration of economic conditions, the regulatory environment, and economic projections and forecasts. For business entities, future income and cash flows may come primarily from ongoing operations or investments. For governmental entities, income and cash flows may come primarily from taxes. In some cases, other resources, including liquid assets or, in the case of a sovereign obligor, the ability to print currency, may be relevant.

21. The assessment of resources considers both the expected level of future income and cash flows and their potential variability. For all types of obligors, the assessment includes both qualitative and quantitative factors.

22. The quantitative side of the analysis focuses primarily on financial analysis and may include an evaluation of an obligor's accounting principles and practices.

23. For business entities, key financial indicators generally include profitability, leverage, cash flow adequacy, liquidity, and financial flexibility. For financial institutions and insurers, other critical factors may include asset quality, reserves for losses, asset-liability management, and capital

adequacy. Off-balance sheet items, such as securitizations, derivative exposures, leases, and pension liabilities, may also be part of the quantitative analysis. Cash flow analysis and liquidity assume heightened significance for firms with speculative-grade ratings ('BB+' and lower).

24. For governmental entities, the quantitative factors we assess are different from the factors we assess for business entities; they generally include both economic factors and budgetary and financial performance, as well as additional items for sovereign obligors. The economic side of the analysis typically encompasses demographics, wealth, and growth prospects. The budgetary and financial side generally includes budget reserves, external liquidity, and structural budget performance. For sovereign obligors, additional quantitative factors that may, in our view, be relevant to our analysis include fiscal policy flexibility, monetary policy flexibility, international investment position, and contingent liabilities associated with potential support for the financial sector.

25. Trends over time and peer comparisons may be part of the quantitative analysis for both business and governmental entities.

26. On the qualitative side, the analysis of business entities focuses on various factors, including: country risk, industry characteristics, and entity-specific factors. We intend for our analysis of the country risk factor to capture our assessment of the financial and operating environment that applies broadly to businesses in a particular country, including a country's physical, legal, and financial infrastructure. Historically, this assessment has often operated to constrain the ratings of business entities in countries that have high country risk.

27. Industry characteristics typically encompass growth prospects, volatility, and technological change, as well as the degree and nature of competition. Broadly speaking, the lower the industry risk, the higher the potential credit rating for an obligor in that sector. The analysis also considers certain entity-specific factors that we believe can distinguish an individual obligor from its peers. These may include diversification of the obligor's products and services as well as risk concentrations, particularly for a financial institution. Obligor-specific factors also may include operational effectiveness, overall competitive position, strategy, governance, financial policies, risk management practices, and risk tolerance.

28. Qualitative factors for governmental entities are somewhat different from the factors for business entities. Our analysis may encompass political risks, including the effectiveness and predictability of policymaking and institutions and the transparency of processes and data and the accountability of institutions. In addition, for sovereign obligors, consideration of political risks may include an assessment of the potential for war, revolution, or other security-related events to affect creditworthiness. Other qualitative considerations that may be part of an analysis of a governmental obligor include revenue forecasting, expenditure control, long-term capital planning, debt management, and contingency planning. Finally, the assessment of a governmental obligor focuses on the potential that the obligor might default even when it has the resources to meet its financial commitments.

External Influence

29. In addition to our assessment of an obligor's stand-alone creditworthiness, S&P Global Ratings' analysis considers the likelihood and potential amount of external support (or influence) that could enhance (or diminish) the obligor's creditworthiness. When an obligor's creditworthiness have the benefit of contractual support, such as a guarantee from a higher-rated guarantor, the analysis may assign the guarantor's rating to the supported issue or issuer. However, this occurs only when the guarantee satisfies stringent conditions and guarantees full and timely payment of the underlying obligation.

30. Apart from formal guarantees, the analysis considers the potential for other support from affiliated business entities, governments, and multilateral institutions. For affiliated business entities, the analysis considers both the degree of strategic importance of subsidiaries or affiliates to determine the likelihood and degree of support by a stronger parent and - the parent's capacity to provide such support.

31. For governmental support, the analysis considers the potential for various forms of support. For example, the analysis considers potential support for government-related entities (GREs), such as certain public utilities, transportation systems, and financial companies. The analysis of a GRE considers the role that the entity plays and the nature of its links to its government. A similar line of analysis applies to the potential for extraordinary government support to banks that, in our view, have systemic importance in a national economy. In the case of a sovereign obligor, the analysis considers the potential for support from multilateral institutions (e.g., the International Monetary Fund [IMF]).

32. The assessment of potential external support generally does not include the benefits that an obligor receives merely by being part of a system or framework. We consider those benefits in the assessment of industry characteristics or otherwise in the analysis of stand-alone creditworthiness. For example, the stand-alone analysis of a bank includes consideration of benefits that we believe it may receive from supervision within its regulatory framework and from access to low-cost borrowings from its central bank. Likewise, the analysis of governments (e.g., a school district) may include an evaluation of system support provided by a higher level entity (e.g., a city or state).

33. In some cases, external support can have a negative influence on an entity's creditworthiness. For example, this can happen when a weaker parent company drains cash flows or assets from a stronger subsidiary through dividends or in other ways. Similarly, a sovereign government can be a negative factor for a company's creditworthiness if it intervenes by withdrawing resources or limiting the company's financial flexibility.

Notching And Analysis Of Specific Instruments

34. The analysis of specific instruments includes consideration of priorities within an obligor's capital structure and the potential effects of collateral and recovery estimates in the event of the obligor's default. The analysis may apply notching to instruments that rank above or below their obligor's senior, unsecured debt. For example, subordinated debt would generally receive a rating below the senior debt rating. Conversely, secured debt may receive a rating above the unsecured debt rating.

35. Notching also applies to the structural subordination of debt issued by operating subsidiaries or holding companies that are part of an enterprise viewed as a single economic entity. For example, the debt of a holding company may be rated lower than the debt of its subsidiaries that have the enterprise's assets and cash flows. We extend the notching approach to analyzing the creditworthiness of instruments involving payment priority. For example, we would generally rate preferred stock and so-called hybrid capital instruments lower than senior debt to indicate that payment could be deferred.

REVISIONS AND UPDATES

This article was originally published on Feb. 16, 2011.

Changes introduced after original publication:

- We republished this article following our periodic review completed on Dec. 22, 2015. This article fully supersedes (but does not make substantive changes to) "Principles Of Corporate And Government Ratings," published June 26, 2007, and "Principles-Based Rating Methodology For Global Structured Finance Securities," published May 29, 2007. It also supersedes "Structured Investment Vehicle Criteria," published March 13, 2002, "Corporate Securitizations: The Role Of Risk Capital In Aligning Stakeholder Interests," published Sept. 18, 2003, and "CDO Spotlight: Quantitative Modeling Approach To Rating Index CPDO Structures," published March 22, 2007.
- Following our periodic review completed on Dec. 21, 2016, we updated the contact information.
- Following our periodic review completed on Dec. 15, 2017, we updated the contact information and updated the heading above paragraph 29 to "External Influence" from "External Support."

RELATED CRITERIA AND RESEARCH

Related Criteria

- Methodology: Credit Stability Criteria, May 3, 2010
- Understanding Standard & Poor's Rating Definitions, June 3, 2009

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as S&P Global Ratings assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

REDACTED

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UM 1897

INDEPENDENT REPORT OF TODD A. SHIPMAN,
CONCENTRIC ENERGY ADVISORS, ON BEHALF OF HYDRO ONE LTD.
AND AVISTA CORPORATION

I. INTRODUCTION

My name is Todd A. Shipman. I am an Executive Advisor to Concentric Energy Advisors, Inc. ("Concentric"), which has its headquarters at 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752. I have prepared this report on behalf of Hydro One Limited ("Hydro One") and Avista Corporation ("Avista"). Hydro One filed an Application seeking an order authorizing Hydro One, acting through its indirect subsidiary Olympus Equity LLC, to exercise substantial influence over the policies and actions of Avista (the "Proposed Transaction" and "Application for Approval of Transaction"). Hydro One and Avista subsequently executed an all-party stipulation ("Settlement Stipulation") with the Staff of the Public Utility Commission of Oregon ("Staff"), the Oregon Citizens' Utility Board ("CUB"), the Alliance of Western Energy Consumers ("AWEC"), and the Laborers' International Union of North America with its affiliated District Counsel and Local Unions ("LiUNA") (individually a "Party" and collectively the "Parties"). The Settlement Stipulation was filed with the Public Utility Commission of Oregon ("Commission") on May 25, 2018.

A table of contents for my report is as follows:

Description **Page**

II. EDUCATION AND BUSINESS EXPERIENCE

I was graduated from Texas Christian University with a Bachelor of Business Administration (B.B.A.) degree with a major in economics and from Texas Tech University School of Law with a Juris Doctor (J.D.) degree. I was awarded the Chartered Financial Analyst (C.F.A.) designation in 1989. I have over 33 years of experience in the financial and utility industries. I began in the financial industry as an analyst with a research firm that specialized in analyzing and reporting the investment implications of the actions and behavior of utility regulators. Subscribers to the research included investment bankers and analysts at major Wall Street firms, large institutional investors such as insurance companies and mutual funds, utilities, and regulators.

I then joined an independent power producer. My primary responsibility was in regulatory affairs. I coordinated and managed its interventions in state regulatory proceedings. I also assisted in its development efforts, analyzing avoided-cost rates and regulatory policies toward non-utility power production, and in its investor relations.

I spent the last 21 years of that stage of my career at S&P Global Ratings (S&P), a major ratings agency that has been in business over 150 years and issues more than 1 million ratings on over $46 trillion of debt across all global capital markets. I performed credit surveillance of utilities, pipelines, midstream energy, and diversified energy companies. In the final approximately ten years at S&P, I was the Sector Specialist on the U.S. and, later, North American utilities team. In that role I was the lead analyst on the team, charged with ensuring ratings quality, assisting in the training and development of new analysts, and creating the criteria used to establish ratings on utilities. I also led outreach efforts to investors and the regulatory community and performed a lead analytical role in the development and application of global ratings criteria for hybrid capital securities.

After retiring from S&P this year, I became a management consultant specializing in advising utilities and other entities on credit and ratings issues, balance sheet management, and capital markets strategies. I joined Concentric in August 2018 as an Executive Advisor.

A copy of my resume is **Attachment A** to this report.

III. PURPOSE OF THE REPORT

In this report I address Staff's recommendation to change Stipulated Commitment No. 5 in response to market reactions to recent political developments in the Province of Ontario (the "Province") and changes in Hydro One's executive management and board of directors.[1] My conclusion is that the Staff-proposed amendment to Stipulated Commitment No. 5 is unnecessary and in fact counterproductive to achieving their objective. I also address several other assertions made by Staff witnesses in their testimonies that I believe are flawed.

In order to place the following report in perspective, it is important to have an understanding of Avista's and Hydro One's bond ratings. Immediately before the proposed transaction was announced, Avista's S&P issuer credit rating was 'BBB' with a stable outlook. Hydro One's S&P issuer credit rating was 'A' with a stable outlook. Immediately after the transaction was announced, S&P changed its outlook on Avista to positive and later placed it on CreditWatch with positive implication, signaling a potential upgrade. After the Ontario elections and resulting changes at Hydro One, S&P downgraded Hydro One by one

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1 Reply Testimony of Ms. Rose Anderson to Avista and Hydro One Supplemental Testimony, Exhibit 700, September 20, 2018, at 8-11 ("Anderson Exh. 700 Reply").

notch, to A-. Even with this potentially reversible downgrade, Hydro One retains a stronger credit rating than Avista, and Avista remains on Credit Watch positive.

IV. STAFF'S PROPOSED MODIFICATION TO STIPULATED COMMITMENT NO. 5

Staff's interpretation of the market reaction to the recent events in the Province led them to conclude that the effect of the Proposed Transaction on Avista changed from a possible one notch credit ratings upgrade to neutral. They described S&P as only assuring that its current negative credit outlook for Hydro One would not apply to Avista. I do not agree with Staff's characterization of the effect of the S&P action on the possibility of ratings uplift for Avista from Hydro One. S&P's position on Avista's ratings remains positive.[2] Its positive CreditWatch listing was untouched in the wake of its downgrade of Hydro One and leaves open the likelihood (greater than 50% chance) of a ratings upgrade upon the completion of the merger. In my opinion, if the effect of the Proposed Transaction had been more neutral on Avista's ratings, S&P would have removed Avista from CreditWatch. Moreover, the means by which S&P took its latest rating action is inherently transient.[3] The management and governance modifier that was invoked is not often employed, and indeed is not likely to have a significant effect on Hydro One's rating for an extended time. The modifier is just that, a modification to the basic rating (which S&P calls the "anchor score") derived from the fundamental credit analysis of the issuer. Most modifiers are invoked infrequently to address specific, often transient, situations. I am very familiar with the management and governance modifier from my work at S&P, and I have used that modifier in ratings actions that I have

[2] S&P Global Ratings, RatingsDirect, Avista Corp., June 27, 2018.
[3] UM 1897 - Fifth Supplemental Report to Hydro One Limited's Response to June 14, 2018 Bench Request (September 14, 2018).

undertaken. In this case, this modifier was used to reduce Hydro One's rating by one notch from its anchor score.

A. Rating A Parent Company and Its Subsidiary

Understanding the analytical approach and criteria behind an S&P determination of an "upward lift" (as it is described by Staff witness Muldoon[4]) in its credit ratings of a subsidiary like Avista is important to understanding the Staff's misinterpretation of the S&P reaction to the events in the Province and why the Staff-proposed modification to Stipulated Commitment No. 5 should not be adopted. When a rated subsidiary is part of a larger group of companies within a corporate structure, the S&P ratings of the subsidiary are often affected by the credit profile of the whole group. *See, generally*, S&P Global Ratings, "General Criteria: Group Ratings Methodology," Nov. 19, 2013, which is included as **Attachment B** to my report (hereinafter, "S&P Group Rating Methodology"). After determining the individual credit profile of a subsidiary, the influence of the group credit profile is analyzed and incorporated into the rating by notching that preliminary, stand-alone determination upwards or downwards to arrive at a final rating. The effect of the group on the subsidiary depends on two and sometimes three factors. The credit profiles of each company individually and relative to each other is the first factor. The second is S&P's view of the subsidiary's strategic status within the group. In the presence of legal or regulatory provisions that lead S&P to view the subsidiary as insulated from the parent company, a third factor enters into the analysis. The degree of insulation of the subsidiary from the group can affect how many notches above the

[4] Reply Testimony of Mr. Matt Muldoon to Avista and Hydro One Supplemental Testimony, Exhibit 600, September 20, 2018, at 4 ("Muldoon Exh. 600 Reply").

group credit profile the subsidiary can be rated if the subsidiary's stand-alone profile warrants that kind of uplift.

B. The Effect of Staff's Proposed Modification to Stipulated Commitment No. 5 on Avista's Ratings

Stipulated Commitment No. 5 requires that a majority of the Board of Directors of Avista (5 of the mandated 9 directors) be independent as defined by the NYSE. Staff proposes to modify Stipulated Commitment No. 5 to require that those five directors be designated by a Governance Committee of the Board consisting entirely of independent directors. If an independent director leaves the Board, only the Governance Committee would be able to nominate a new independent director. Further, only the Governance Committee would be able to recommend the removal of an independent director.

The proposed modification to Stipulated Commitment No. 5 is not conducive to achieving a credit rating upward lift at Avista. In my opinion, based on the ratings approach and criteria cited above, and based on my training and experience, it would harm the prospects for the desired ratings uplift. The Staff proposal is unrelated to the explicit uplift that occurs from insulating a subsidiary from its parent (the occasional third factor mentioned above). That is applicable only when the subsidiary would qualify for a higher rating than the rest of the group, which is not the case for Avista. The Staff-proposed modification could negatively affect Avista's prospects for the uplift that Staff is looking for, and to the detriment of ratepayers, in two ways. Directly, S&P's determination of Avista's status within the Hydro One group could be weakened by offering evidence of greater separation between Hydro One and Avista. If Avista's status suffers sufficiently from the additional independence of Avista in the eyes of S&P, Avista could forego any opportunity at its current rating to benefit from being owned by a parent with a better credit rating. Indirectly, if Hydro One emerges from the acquisition of Avista with a credit profile that is even marginally compromised by greater independence at Avista, the entire group profile could suffer and lead to lower ratings at Hydro One than would otherwise have resulted.

(i.) *Direct Effect*

The direct harm of Staff's proposed modification to Stipulated Commitment No. 5 to the potential ratings uplift for Avista comes from S&P's determination of how the preliminary ratings of Avista and Hydro One interact to arrive at the final ratings. Avista's status within the Hydro One group is informed by the criteria set forth in the S&P Group Rating Methodology (Attachment B hereto). Five status levels range from "core" to "nonstrategic," and the status level leads to a subsidiary rating that ranges from as high as the group rating to as low as the subsidiary's stand-alone rating. The status depends on (1) the likelihood of the subsidiary being sold, (2) the alignment of the subsidiary's business activities with those of the group, (3) the strength and duration of the group's commitment to the subsidiary, especially when the subsidiary is under financial stress, (4) the financial performance of the subsidiary as compared to the group's, (5) the subsidiary's relative size and integration with the group, (6) the perceived linkage of the subsidiary to the group, and (7) the historical longevity of the subsidiary's operations. In some status determinations, other factors such as the subsidiary's name and brand and its capitalization can affect the outcome.

S&P's perception of Hydro One's commitment to Avista post-merger would also be vulnerable to being altered by the Staff's proposed governance modification. While a majority independent Board of Directors of a subsidiary has not jeopardized the credit benefit of a more highly rated parent on a subsidiary, a Governance Committee, as recommended by Staff, that would prohibit the 100% owner from nominating a majority of the directors would be such an anomaly that it would certainly attract the attention of S&P. The agency would question the commitment of a parent company to a subsidiary with a Board that did not have its own designees as a majority. The strategic importance of the subsidiary underlies all of these factors, especially this one, and the inability to directly influence Board decisions would be an important indication to S&P that Hydro One is less committed to Avista than what S&P is used to seeing in utility mergers. It is certainly not the norm for a company to leave strategically important subsidiaries in the hands of a majority of directors that it had no role in choosing.

(ii.) Indirect Effect

In conjunction with the direct effect, the Staff's ill-advised proposal could imperil Hydro One's ratings and diminish its ability to provide ratings uplift to Avista. The indirect effect would be on the group's credit profile. In that assessment, S&P evaluates Hydro One by analyzing its business risk and financial risk.[5] The latter is determined mainly through objective, quantifiable means such as credit metrics. The former, however, is more subjective and is based essentially on a concept generically referred to as the "quality of cash flow." In other words, to arrive at a basic credit rating used as the starting point of its ratings process, S&P assesses the dependability of the cash flows (which affects the business risk profile) it projects an issuer to produce (which affects the financial risk profile). The analysis of a utility's business risk fundamentally focuses on matters like regulatory risk, the scale and scope and diversity of its business, and the efficiency of its operations. In this inherently

[5] In that assessment, S&P evaluates Hydro One by analyzing its business risk and financial risk. *See, generally*, S&P Global Ratings, "Criteria/Corporates/General: Corporate Methodology," Nov. 19, 2013, included as **Attachment C** to my report.

subjective part of the analysis, though, the business risk assessment is also affected by S&P's view of the source of the cash flows in cases where there is a complex corporate structure with various subsidiaries. Introducing more and more stringent barriers between Hydro One and Avista risks a weaker S&P assessment of Hydro One's business risk and therefore a lower group credit profile. A lower rating at Hydro One works against Staff's desire for a ratings uplift for Avista.

(iii.) Possibility of a Greater Detrimental Effect

Even more unfavorably, the proposed revisions to the Board composition could lead S&P to "de-link" the ratings of Avista and Hydro One due to the parent company's lack of control over the subsidiary. This was the result in the proposed NextEra/Oncor merger when essentially this same provision was proposed by Staff; NextEra faced an inability to incorporate Oncor into a Group Credit Profile, which essentially derailed that proposed transaction.[6] If that were to result in this case, Avista would be rated based solely on its own stand-alone credit profile, without any regard for the advantages it would enjoy from being owned by a larger, stronger, and more diverse parent company. Given the current 'BBB' stand-alone credit profile of Avista and S&P's indication that its potential for a better post-merger rating rests with the higher rating of Hydro One, a de-linking of the two companies by S&P would ensure that Avista would receive no ratings uplift.

[6] Texas Regulators Shoot Down NextEra's $18.7 billion offer for Oncor Again, Dallas News, June 2017.

V. STAFF'S MISPLACED CONCERNS LEADING TO ITS PROPSAL

In several places in their testimonies, Staff witnesses cite matters to support their governance proposal that I believe are in error or do not establish a predicate for adopting this proposal.

(i.) Comparison to the Sempra/Oncor Transaction

Staff posits the Sempra Energy ("Sempra")/Oncor Electric Delivery Company, LLC ("Oncor") merger and its governance provisions as a good point of comparison with the Proposed Transaction.[7] This comparison is faulty and does not offer an appropriate template for the Commission to consider the relationship between Avista and Hydro One. Among the many differences, the most important in terms of capital access and cost are that Sempra was purchasing a less than 100%, non-controlling stake in an Oncor that was already de-linked from any of its owners, and the purchaser (Sempra) carried a lower credit rating than the utility it was acquiring. This made de-linking the credit profile of the acquirer and the utility beneficial.

Oncor was already ring-fenced when Sempra entered the picture. Sempra knew from the outset that Oncor was not going to be its direct subsidiary that it could manage and control on its own. Sempra could base all of its decisions regarding its bid for Oncor, from the price it would offer to gauging its ability to access the capital markets to complete the transaction, on that set of facts, including the pre-existing governance provisions. Sempra also understood the probability that the Public Utility Commission of Texas ("PUCT") would insist on retaining those or similar provisions based upon its history with Oncor. The comparison to Avista is inapt because Avista's and Hydro One's circumstances are entirely different than

[7] Muldoon Exh. 600 Reply at 31-32; Anderson Exh. 700 Reply at 12-13.

Oncor's and Sempra's. Unlike the acquisition of Oncor, the acquisition of Avista is for a 100% interest with no legacy ring-fencing or minority-owner veto rights. Hydro One contemplated a transaction that made it the sole owner of Avista and based its decisions, including the cost and access to capital to complete it, on expectations that it would have governance and ring-fencing commitments that were consistent with industry norms and that permitted the acquirer to exercise reasonable control and governance. In the Stipulated Commitments Hydro One has in fact committed to ring-fencing and governance terms that go well beyond industry norms, and it remains committed to honoring those commitments and subjecting its performance to the jurisdiction of the Commission and courts.

Hydro One's higher credit rating than Avista's matters significantly when comparing the Proposed Transaction to Sempra/Oncor. A regulator's need to impose measures to insulate or ring-fence Avista are markedly different from those of the PUCT's in the case of Sempra/Oncor. The PUCT was motivated to continue to protect Oncor from Sempra's influence because Sempra's lower ratings would potentially cause an Oncor ratings downgrade that would directly affect Oncor's access to and cost of capital. Avista and its ratepayers are in contrast poised to benefit from being owned by a parent company with superior credit characteristics. On its face, Hydro One's higher rating suggests that the Commission should erect as few barriers between Hydro One and Avista as possible while maintaining the independence of Avista to the benefit of ratepayers. It does not need to nor should look to Texas for guidance on how to address the influence of Hydro One on Avista.

(ii.) The "Principle" of Downward Ratings Bias

In his confidential testimony, Witness Muldoon evinces a "principle" that he believes has not been recognized by the Ontario Provincial leadership.[8] I am unaware of any such "principle," and conversely can point to numerous statements by credit rating agencies and personal experience that credit rating agencies strive to assign timely ratings that are forward-looking in nature. For instance, S&P's criteria entitled "Principles of Credit Ratings" states, "Assessing an obligor's resources for fulfilling its financial commitments is primarily a forward-looking exercise."[9] A forward-looking rating would not incorporate outdated information that unnaturally suppresses a rating. In addition, the rating agencies believe ratings performance over time supports the predictive accuracy of ratings on default risk. Any negative bias in ratings by being slower on upgrades than downgrades would skew the ratings performance in the direction of lower ratings. That would degrade their arguments on the usefulness of ratings, so I believe they guard against the kind of bias that Witness Muldoon is speculating about.

(iii.) Rating Agency Interactions with Part-Owners

Witness Muldoon also expresses his opinion in his Reply testimony that "Provincial leadership and the Hydro One BOD Chair have not yet started to communicate consistently and regularly with credit rating agencies, market analysts, and stakeholders showing Provincial support of the Proposed Transaction."[10] He includes the Ontario Provincial

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[8] [redacted]

[9] S&P's criteria entitled "Principles of Credit Ratings" states, "Assessing an obligor's resources for fulfilling its financial commitments is primarily a forward-looking exercise." See paragraph 20, S&P Global Ratings, "General Criteria: Principles of Credit Ratings," Feb. 16, 2011, included as **<u>Attachment D</u>** to my report.)

[10] Muldoon Exh. 600 Reply at 4.

leadership as part of the leadership responsible for communicating with the rating agencies. This betrays a lack of familiarity with the ratings process in regard to the interactions of the agencies with owners. In my experience, at most a whole or majority owner with control may participate in meetings with a ratings agency, and then only to reinforce their views on ownership matters that could affect ratings like those discussed earlier in this report. Rating agencies normally rely on management to convey important operating and financial information like the metrics and mile-markers that Witness Muldoon expects from Hydro One to the rating agencies. In the cases of Hydro One and Avista, I would certainly not expect the Province to have a role in credit rating agencies presentations or communications for either issuer.[11] This would be as unusual as having a provincial or state regulator participate in such presentations, which I have never seen.

[11] *See also* Hydro One Rebuttal Testimony of Christopher Lopez, Exhibit 2500; Hydro One Rebuttal Testimony of Thomas Woods, Exhibit 2300.