AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/11/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Margie Stevens
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 1.10	TELEPHONE:	(509) 495- 8978
		EMAIL:	margie.stevens@avistacorp.com

REQUEST:

In an electronic spreadsheet with all formulas intact, please provide the five-year projected and five-year historical capital structure, capital expenditures and capital funding.

RESPONSE:

Please see the Company's response in NWIGU/CUB_DR_1.10C for the requested information. NWIGU/CUB_DR_1.10C is **CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER**.

Please see NWIGU-CUB_DR_1.10C Confidential Attachment A for the five-year historical capital structure, capital expenditures and capital funding.

NWIGU - CUB Exhibit 200, Attachment A is confidential and will be provided to those parties who have signed the protective order in this docket.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/10/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Jason Lang
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB - 1.11	TELEPHONE:	(509) 495-2930
		EMAIL:	Jason.lang@avistacorp.com

REQUEST:

Please provide a detailed explanation of Avista Corporation's dividend payment and debt financing plans through the test period.

RESPONSE:

Avista Corporation's current financial forecast for 2016 includes a quarterly dividend payment of $0.34 per share on the company's common stock. The dividend is reviewed each quarter and the declaration of dividends is at the sole discretion of the board of directors. The board considers the level of dividends on a regular basis, taking into account numerous factors, including financial results, business strategies, and economic and competitive conditions.

Avista Corporation's debt financing plans include issuing $100 million of long-term debt in 2015 and $170 million in 2016. There is $90 million of debt that matures in 2016.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/04/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Lauren Pendergraft
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 1.12	TELEPHONE:	(509) 495-2998
		EMAIL:	lauren.pendergraft@avistacorp.com

REQUEST:

Do any of Avista Corporation's outstanding long-term debt issues have call provisions? If the answer is "yes," please provide a list of the callable issues with the following: a) outstanding balance, b) issuance date, c) maturity date, d) coupon payment percent, e) annual interest expense, and f) call price (as a percent of par).

RESPONSE:

Please see NWIGU-CUB_DR_1.12 Attachment A.

Attachment A

Date			4/20/2015								
30 year treasury			2.572%								
	Coupon/ Dividend	CUSIP	Amount Outstanding	Issue Date	Final Maturity Date	Next Interest Payment		Annual Interest Expense	Call provision	1	estimated Call price
FMB's											
	5.70%	05379BAM9	150,000,000	12/15/2006	7/1/2037	7/1/2015	$	8,550,000	Make whole +	0.200%	155.74%
	5.45%	05379BAH0	90,000,000	11/23/2004	12/1/2019	6/1/2015	$	4,905,000	Make whole +	0.200%	119.50%
	6.25%	05379BAK3	150,000,000	11/17/2005	12/1/2035	6/1/2015	$	9,375,000	Make whole +	0.250%	161.21%
	5.95%	05379BAN7	250,000,000	4/3/2008	6/1/2018	6/1/2015	$	14,875,000	Make whole +	0.375%	116.65%
	5.125%	05379BAP2	250,000,000	9/22/2009	4/1/2022	10/1/2015	$	12,812,500	Make whole +	0.300%	120.78%
	3.89%	05379BA@6	52,000,000	12/20/2010	12/20/2020	6/1/2015	$	2,022,800	Make whole +	0.500%	112.44%
	5.55%	05379BA#4	35,000,000	12/20/2010	12/20/2040	6/1/2015	$	1,942,500	Make whole +	0.500%	146.11%
	4.45%	05379BB@5	85,000,000	12/14/2011	12/14/2041	6/1/2015	$	3,782,500	Make whole +	0.500%	126.88%
	4.23%	05379BB#3	80,000,000	11/30/2012	11/29/2047	8/1/2015	$	3,384,000	Make whole +	0.500%	125.00%
	4.11%	05379BC*6	60,000,000	12/18/2014	12/1/2044	6/1/2015	$	2,466,000	Make whole +	0.500%	121.92%
Subordinated Debt:											
Floating Rate	varies *	05379HAA2	51,547,000	06/03/97	06/01/37				Callable at par		
	TOTAL:		**1,253,547,000**								

1 Series shall be redeemable in whole at any time, or in part from time to time, at the option of the Company at a redemption price equal to the greater of
(A) 100% of the principal amount of the Bonds being redeemed, and
(B) the sum of the present values of the remaining scheduled payments of principal of and interest (not including any portion of any scheduled payment of interest which accrued prior to the redemption date) on the Bonds being redeemed discounted to the date of redemption on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months) at a discount rate equal to the Treasury Yield (as hereinafter defined) plus ___ basis points,
plus, in the case of either (A) or (B) above, whichever is applicable, accrued interest on such Bonds to the date of redemption.

Attachment A

Date 4/20/2015

Treasury Yields @ 4/20/15	
1 year	0.254%
3 year	0.860%
5 year	1.330%
7 year	1.650%
10 year	1.900%
20 year	2.310%
30 year	2.560%

	Coupon#	CUSIP	Amount Outstanding	Issue Date	Final Maturity Date	Next Interest Payment	Annual Interest Expense	Call provision (1)		full semi-annual periods between interest payment and maturity	days between interest payment and today	applicable treasury yield (2)	applicable treasury yield rate	estimated PV at next interest date	estimated PV at 4/20/15	estimated Call price
FMB's																
	5.70%	05378BAM9	150,000,000	12/15/2006	7/1/2037	7/1/2015	$ 8,550,000	Make whole +	0.200%	44	72	20	2.310%	234,788,143.14	$233,642,500.97	155.74%
	5.45%	05378BAH0	90,000,000	11/23/2004	12/1/2019	6/1/2015	$ 4,905,000	Make whole +	0.200%	9	42	5	1.330%	107,737,693.28	$107,545,756.75	119.50%
	6.25%	05378BAK3	150,000,000	11/17/2005	12/1/2035	6/1/2015	$ 9,375,000	Make whole +	0.250%	41	42	20	2.310%	242,545,357.64	$241,822,071.85	161.21%
	5.95%	05378BAN7	250,000,000	4/3/2006	6/1/2018	6/1/2015	$ 14,875,000	Make whole +	0.375%	6	42	3	0.860%	292,048,140.26	$291,627,657.78	116.65%
	5.125%	05378BAP2	250,000,000	9/22/2009	4/1/2022	10/1/2015	$ 12,812,500	Make whole +	0.300%	13	164	7	1.650%	304,643,909.43	$301,949,713.44	120.78%
	3.69%	05378BAQ0	52,000,000	12/20/2010	12/20/2020	6/1/2015	$ 2,022,600	Make whole +	0.500%	11	42	5	1.330%	58,591,976.20	$58,467,016.95	112.44%
	5.55%	05378BAE4	35,000,000	12/20/2010	12/20/2040	6/1/2015	$ 1,942,500	Make whole +	0.500%	51	42	30	2.560%	51,322,823.38	$51,199,736.03	146.11%
	4.45%	05378BAB5	65,000,000	12/14/2011	12/14/2041	6/1/2015	$ 3,782,500	Make whole +	0.500%	53	42	30	2.560%	108,235,641.70	$107,849,945.73	126.68%
	4.23%	05378BBB3	60,000,000	11/30/2012	11/29/2047	6/1/2015	$ 3,384,000	Make whole +	0.500%	65	103	30	2.560%	100,879,855.49	$100,000,544.52	125.00%
	4.11%	05378BC16	60,000,000	12/18/2014	12/1/2044	6/1/2015	$ 2,466,000	Make whole +	0.500%	59	42	30	2.560%	73,415,991.05	$73,154,374.34	121.92%
Subordinated Debt:																
Floating Rate	varies *	05378HAA2	51,547,000	06/03/97	06/01/37			Callable at par								
	TOTAL:		1,253,547,000													

1 Series shall be redeemable in whole at any time, or in part from time to time, at the option of the Company at a redemption price equal to the greater of
(A) 100% of the principal amount of the Bonds being redeemed, and
(B) the sum of the present values of the remaining scheduled payments of principal of and interest (not including any portion of any scheduled payment of interest which accrued prior to the redemption date) on the Bonds being redeemed discounted to the date of redemption on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months) at a discount rate equal to the Treasury Yield (as hereinafter defined) plus ___ basis points,
plus, in the case of either (A) or (B) above, whichever is applicable, accrued interest on such Bonds to the date of redemption

2 Estimated comparable treasury yield

Resource Center

Daily Treasury Yield Curve Rates

Get updates to this content.

These data are also available in XML format by clicking on the XML icon.
The schema for the XML is available in XSD format by clicking on the XSD icon.

If you are having trouble viewing the above XML in your browser, click here.

To access interest rate data in the legacy XML format and the corresponding XSD schema, click here.

Select type of Interest Rate Data: Daily Treasury Yield Curve Rates — Go

Select Time Period: Current Month — Go

Date	1 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
04/01/15	0.02	0.03	0.12	0.27	0.55	0.86	1.32	1.65	1.87	2.23	2.47
04/02/15	0.02	0.02	0.10	0.25	0.55	0.87	1.35	1.69	1.92	2.29	2.53
04/03/15	0.04	0.02	0.10	0.21	0.49	0.80	1.26	1.60	1.85	2.24	2.49
04/06/15	0.02	0.03	0.10	0.21	0.51	0.83	1.31	1.67	1.92	2.31	2.57
04/07/15	0.02	0.02	0.10	0.22	0.52	0.85	1.32	1.66	1.89	2.27	2.52
04/08/15	0.02	0.03	0.10	0.22	0.54	0.86	1.35	1.68	1.92	2.28	2.53
04/09/15	0.02	0.03	0.10	0.22	0.56	0.89	1.40	1.73	1.97	2.35	2.61
04/10/15	0.01	0.02	0.09	0.24	0.57	0.91	1.41	1.73	1.96	2.33	2.58
04/13/15	0.02	0.03	0.11	0.23	0.54	0.89	1.38	1.71	1.94	2.33	2.58
04/14/15	0.02	0.02	0.10	0.23	0.53	0.85	1.34	1.67	1.90	2.29	2.54
04/15/15	0.02	0.02	0.09	0.23	0.51	0.85	1.33	1.66	1.91	2.30	2.55
04/16/15	0.03	0.02	0.08	0.22	0.50	0.81	1.31	1.64	1.90	2.31	2.56
04/17/15	0.03	0.01	0.08	0.23	0.51	0.84	1.31	1.63	1.87	2.26	2.51
04/20/15	0.03	0.03	0.10	0.24	0.55	0.86	1.33	1.65	1.90	2.31	2.56

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/11/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Lauren Pendergraft
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 1.13	TELEPHONE:	(509) 495-2998
		EMAIL:	lauren.pendergraft@avistacorp.com

REQUEST:

Has Avista Corporation performed any debt refinancing feasibility studies on its outstanding debt issues? If the answer is "yes," please provide the following:

a. A detailed description of the results from the study.

b. A detailed description of the conclusion(s) made based on the results of these studies.

c. All debt refinancing feasibility studies in an electronic spreadsheet with all formulas intact.

RESPONSE:

While Avista has not performed formal debt refinancing feasibility studies on its outstanding debt issuances, it continuously monitors market conditions to assess interest rate trends and opportunities.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/11/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Lauren Pendergraft
TYPE:	Data Request	DEPT:	Finance and Treasury
REQUEST NO.:	NWIGU/CUB – 1.15	TELEPHONE:	(509) 495-2998
		EMAIL:	lauren.pendergraft@avistacorp.com

REQUEST:

Concerning Mr. Mark Thies's proposed capital structure at page 14 of his testimony, please provide the following:

a. A copy of the Company's actual capital structure each year starting June 2015 and as reported each quarter over the last four years.
b. Please identify the Company's earnings and common dividends recorded each period on an annualized basis at June 30 of each year over the last five years.
c. Please provide a copy of the Company's dividend payment policy in terms of targeted payout ratios, amount, and other metrics, if any.

RESPONSE:

a. and b.: See NWIGU-CUB_DR_1.15 Attachment A.

c. See NWIGU_DR_1.11 for the dividend payment policy.

Dollars in thousands

	6/30/2015	3/31/2015	12/31/2014	9/30/2014	6/30/2014	3/31/2014	12/31/2013	9/30/2013	6/30/2013
Total Debt	$ 1,393,000,000	$ 1,393,000,000	$ 1,393,000,000	$ 1,333,000,000	$ 1,333,000,000	$ 1,333,000,000	$ 1,333,000,000	$ 1,383,000,000	$ 1,293,000,000
Total Equity	1,442,018,605	1,435,968,946	1,415,263,011	1,405,578,055	1,429,304,238	1,309,303,837	1,272,689,300	1,262,055,630	1,264,244,640
Total Capitalization	$ 2,835,018,605	$ 2,828,968,946	$ 2,808,263,011	$ 2,738,578,055	$ 2,762,304,238	$ 2,642,303,837	$ 2,605,689,300	$ 2,645,055,630	$ 2,557,244,640
Total Debt (%)	49.1%	49.2%	49.6%	48.7%	48.3%	50.4%	51.2%	52.3%	50.6%
Total Equity (%)	50.9%	50.8%	50.4%	51.3%	51.7%	49.6%	48.8%	47.7%	49.4%
Total Capitalization (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%
Earnings (annualized)	$ 114,368,000				$ 102,448,000				$ 69,642,000
Dividend (annualized)	$ 81,255,000				$ 74,388,000				$ 71,118,000

	3/31/2013	12/01/2012	9/30/2012	6/30/2012	3/31/2012	12/31/2011	9/30/2011	6/30/2011	6/30/2010
Total Debt	$ 1,293,000,000	$ 1,293,000,000	$ 1,213,000,000	$ 1,213,000,000	$ 1,224,100,000	$ 1,224,100,000	$ 1,139,100,000	$ 1,139,100,000	
Total Equity	1,251,352,151	1,220,966,489	1,279,243,850	1,236,570,565	1,228,033,112	1,205,702,781	1,189,355,873	1,186,635,924	
Total Capitalization	$ 2,544,352,151	$ 2,513,966,489	$ 2,492,243,850	$ 2,449,570,565	$ 2,452,133,112	$ 2,429,802,781	$ 2,328,455,873	$ 2,325,735,924	
Total Debt (%)	50.8%	51.3%	48.7%	49.5%	49.9%	50.4%	48.9%	49.0%	
Total Equity (%)	49.2%	48.7%	51.3%	50.5%	50.1%	49.6%	51.1%	51.0%	
Total Capitalization (%)	100%	100%	100%	100%	100%	100%	100%	100%	
Earnings (annualized)				$ 91,871,000				$ 102,993,000	
Dividend (annualized)				$ 68,100,000				$ 59,678,000	

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/10/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Jason Lang
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB - 1.11	TELEPHONE:	(509) 495-2930
		EMAIL:	Jason.lang@avistacorp.com

REQUEST:

Please provide a detailed explanation of Avista Corporation's dividend payment and debt financing plans through the test period.

RESPONSE:

Avista Corporation's current financial forecast for 2016 includes a quarterly dividend payment of $0.34 per share on the company's common stock. The dividend is reviewed each quarter and the declaration of dividends is at the sole discretion of the board of directors. The board considers the level of dividends on a regular basis, taking into account numerous factors, including financial results, business strategies, and economic and competitive conditions.

Avista Corporation's debt financing plans include issuing $100 million of long-term debt in 2015 and $170 million in 2016. There is $90 million of debt that matures in 2016.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/21//2015
CASE NO.:	UG 288	WITNESS:	Jennifer Smith
REQUESTER:	NWIGU/CUB	RESPONDER:	Larry La Bolle
TYPE:	Data Request	DEPT:	State & Federal Regulation
REQUEST NO.:	NWIGU/CUB – 2.3	TELEPHONE:	(509) 495-4710
		EMAIL:	larry.labolle@avistacorp.com

REQUEST:

Please provide the following regarding the Company's new CIS system referred to on page 22 of the Direct Testimony of Jennifer S. Smith:

a. A detailed description of the costs that are being included in the revenue requirement in this case – expense, depreciation, return, etc.;

b. The amount of (a) by component;

c. Specifically identify any implementation cost, the year incurred and how the costs were charged, on a total company basis and an Oregon jurisdictional basis;

d. The amount, the accounting treatment of the cost and the year incurred associated the old system, on a total company basis and an Oregon jurisdictional basis; and

e. The amount of savings that are expected to be realized from the new system, by year, on a total company basis and an Oregon jurisdictional basis the portion.

RESPONSE:

a. A total asset amount on an Oregon basis of approximately $8.3 million is included, along with the associated accumulated depreciation and accumulated deferred federal income taxes of $593,000 and $722,000, respectively. The Company also included the associated depreciation expense of $695,000. Please see the table below for the calculation details (dollars shown in 1000's).

Avista
Oregon Compass
In 00's

	Hardware	Software	Total
System	9,539	85,847	95,386
Allocation %	8.702%	8.702%	8.702%
Oregon Share:			
Plant	830	7,470	**8,300**
A/D	(168)	(425)	**(593)**
ADFIT	1	(723)	**(722)**

Net Plant	**663**	**6,322**	**6,985**
Rate of Return			7.72 %
Depreciation Expense	197	498	**695**

b. Please see part (a) above.

c. The capital implementation costs for Project Compass were incurred as follows:

Year	System Capital	Allocation	Oregon Capital
2012	$14,167,614	8.067%	$1,141,901
2013	$43,404,582	8.253%	$3,582,180
2014	42,053,397	8.888%	$3,737,706
2015	15,774,399	8.702%	$1,372,688

d. The most-recent cost information for the Company's legacy customer service and work management application includes the annual operating expense for 2014 of $2,357,670, of which $209,550 would be allocated to Oregon. Since the investment in the original applications has long-since been depreciated, there was no associated capital cost included in rates for development of the original applications.

e. In the Company's 2013 general rate case in Oregon, Avista described in detail the program to replace its legacy customer information and work management systems, which had been in service since 1994. The effort, known as Project Compass, replaced our legacy applications with Oracle's Customer Care & Billing system, and IBM's Maximo work and asset management application. The business case for replacing these systems was described in the Company's testimony in that case, which is provided as NWIGU/CUB_DR_2.3 Attachment A. The key driver of the need for replacement, as described beginning on page 9 in Attachment A, was the increasing business risk associated with the many obsolete technologies supporting the legacy system. While the replacement applications have many advantages over the old system, as described in the testimony, the need for replacement was inevitable. As such, the replacement did not rely on the costs or benefits of the new systems compared with the legacy system. Finally, because the legacy systems had been depreciated, and customers were paying only the annual operating costs, the net cost associated with the implementation and operation of the new systems has increased.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

DOCKET NO. UG-246

DIRECT TESTIMONY OF LARRY D. LA BOLLE
REPRESENTING AVISTA CORPORATION

Aldyl A Natural Gas Pipe Replacement and Project Compass

I. INTRODUCTION

Q. Please state your name, employer and business address.

A. My name is Larry La Bolle and I am employed as the Director of Federal and Regional Affairs for Avista Utilities, at 1411 East Mission Avenue, Spokane, Washington.

Q. Would you briefly describe your educational background and professional experience?

A. Yes. Prior to joining the Company in 1990, I earned a Bachelor of Science Degree in Fisheries Science from the University of Idaho. I have also earned a Master's Degree in Fisheries Science from Oregon State University. Prior to joining the Company, I was employed by the Idaho Department of Fish and Game as a fishery research biologist, and later as regional fishery manager. I spent approximately nine years in the Environmental Affairs Department and managed the Company's federal relicensing of its Clark Fork Hydroelectric projects. Since 1999, I have managed economic and community development, led a pilot joint-venture subsidiary operation with Chelan County PUD, and managed gas and electric operations for Idaho and Southeast Washington. I have worked in my present capacity since 2005. I serve on several boards, including Northwest River Partners, Pacific Northwest Utilities Conference Committee, Governor Otter's Idaho Strategic Energy Alliance, and the College of Natural Resources Alumni Board of Trustees for the University of Idaho.

Q. What is the scope of your testimony?

A. I will discuss the status of the Company's ongoing program to replace early-vintage Aldyl A piping in our natural gas distribution system, as well as the

ongoing effort to replace the Company's legacy Customer Information System (Project Compass).

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring Exhibit Nos. 501 and 502. Exhibit No. 501 is a Company report documenting its development of a protocol for managing select vintages of Aldyl A natural gas pipe, providing the rationale for the Company's Aldyl A Pipe Replacement Project. Exhibit No. 502 includes a report and attachments that provide an overview of Project Compass, the Company's ongoing project to replace its legacy Customer Information System.

II. ALDYL A PIPE REPLACEMENT PROGRAM

Q. Please describe Avista's plan for managing its Aldyl A polyethylene natural gas pipe?

A. The Company has undertaken a twenty-year program to systematically replace select portions of the DuPont Aldyl A medium density polyethylene pipe in its natural gas distribution system in the States of Oregon, Idaho and Washington. None of the subject pipe is "high pressure main pipe," but rather consists of distribution mains at maximum operating pressures of 60 psi and pipe diameters ranging from 1¼ to 4 inches. As part of this program, Avista is also replacing the connections where Aldyl A service piping, in ½ and ¾ inch diameters, is tapped to steel main pipe (transition tees).

Q. How many miles of main pipe and number of transition tees did the Company initially identify for replacement?

A. In 2011, Avista identified approximately 721 miles of Priority Aldyl A main pipe and approximately 16,000 transition tees for replacement across its three

State jurisdictions. Replacement of main pipe commenced in 2011, and by the close of construction in 2012, approximately 22 miles of main had been replaced. Only nominal numbers of transition tees were replaced in 2011-12. The miles of main pipe and number of transition tees remaining for replacement, at the close of construction in 2012, as well as the cumulative capital expenditures, by jurisdiction, are summarized in the table below.

State	Remaining **Main Pipe** (miles)	Remaining **Tees** (number)	Replacement **Cost** (to date)
Oregon	246.2	5,344	$1,507,495.93
Idaho	130.5	3,124	$62,177.47
Washington	332.4	7,169	$5,841,701.04
Totals	709.1	15,637	$7,411,375.44

Q. Has Avista sought recovery of the expenditures made under this program in Idaho and Washington?

A. Yes. The Company received approvals in both jurisdictions for the costs included in the recent general rate cases.

Q. Why did the Company initiate this replacement program?

A. In recent years, Avista experienced incidents on its natural gas system that prompted the formal assessment of the long-term reliability of certain vintages of its Aldyl A piping. These vintages have been shown to have an increased propensity for brittleness and cracking over time. Results of the investigations, which were aided by new tools developed for Avista's Distribution Integrity Management Plan, corroborated reports for similar Aldyl A piping around the Country, and supported the development

of a protocol for managing this natural gas pipe, which Avista refers to as "Priority Aldyl A." The report documenting the Company's evaluation of this piping, and the development of its management protocol, titled: "Proposed Protocol for Managing Select Aldyl A Pipe in Avista Utilities' Natural Gas System" (or Protocol), is attached to this testimony as Exhibit No. 501. The Protocol explains in detail the nature of the failures in this pipe, how the Company assessed its long-term integrity, and the rationale for its decision to replace this piping.

Q. Why did the Company elect to carry out this pipeline replacement program over 20 years?

A. Avista modeled various time horizons for removing and replacing this pipe, between 10 and 30 years, and determined a replacement horizon in the range of twenty years represented an optimum timeframe. Shortening the timeline was found to increase costs for customers but with little improvement in the numbers of expected Aldyl A failures (or leaks). Lengthening the timeline past twenty years, however, resulted in a substantial increase in the number of expected material failures. A replacement timeline of 25 years, for example, resulted in more than a doubling of the number of leaks expected when compared with the 20-year horizon.

Q. Could the 20-year replacement time change as the work proceeds?

A. Yes. The current approach, based on the 20-year replacement horizon, was an optimization based on the information available at the time the Protocol was developed. At that time, the Company noted that as the initial work proceeded, any number of factors could influence the modeling results toward either a shorter or longer optimum time horizon.

Q. Has Avista continued to collect new information needed to re-evaluate its forecast of the optimum time horizon?

A. Yes. As mentioned above, the Company has collected and analyzed new leak survey and other data each year, as well as continuing to better understand the risks on its distribution system through the ongoing implementation of its Distribution Integrity Management Plan. Avista will continue to evaluate this information in determining whether to accelerate the replacement program.

Q. Has the Company made any adjustments to the program since it began?

A. Yes. Avista has been conducting leak surveys of its Priority Aldyl A main pipe, annually, rather than the conventional five-year cycle. The Company elected in the fall of 2012 to also initiate annual leak surveys of its Aldyl A transition tees. Though annual survey of transition tees is complicated and costly compared with the conventional five-year cycle, Avista believes it will provide a prudent added margin of safety during the period of time these services are being remediated.

In addition, the Company has also accelerated the replacement of Aldyl A transition tees. Avista initially anticipated that the replacement of main pipe and transition tees would be conducted together. But, it became evident that mixing these activities would create inefficiencies and add to costs. Accordingly, the Company focused its initial effort on main pipe replacement using crews that were specialized in this activity. Avista now has specialized contract crews dedicated to replacement of the transition tees. The acceleration of this work reflects the Company's assessment of transition tees as potentially having a higher forecast failure rate than main pipe.

Q. What are the expected capital costs associated with the overall Aldyl A replacement program?

A. Avista's initial estimate of the annual capital cost was approximately $10 million, excluding inflation, to be spent across all its natural gas jurisdictions, from 2013 – 2032. In addition to annual variability in spending, based on factors such as the priority-grouping of projects slated for replacement each year, Avista also understood that its initial estimates would be refined by actual replacement cost experience as the program moved forward.

Q. What challenges has the Company experienced during the initial years of this program?

A. Avista has completed the majority of its Aldyl A replacement work using contract crews and equipment, since this effort is additive to the normal workload and staffing levels associated with the Company's ongoing natural gas operations. Contrary to Avista's initial assessment in 2011, however, securing qualified contract crews for such a large, diverse, and long-term project has been a challenge. This is due in part to the national demand for skilled craft labor and equipment driven by similar-type pipe replacement programs, and the significant demands created by shale oil and natural gas exploration and production. A related challenge is the need to keep contractors fully engaged year-round. Contract crews that would have once been seasonally idled due to winter conditions, must now be employed full time in order to prevent them from naturally moving to other year-round work opportunities.

Q. How has the Company been able to address this challenge?

A. In order to provide greater security related to contract resources, the Company initiated a request for proposals, which ultimately resulted in Avista's

selection of Northern Pipeline Construction Company (Northern Pipeline)[1] in March 2013. Northern Pipeline will be engaged for a 5-year term to perform the Company's Aldyl A main pipe replacement and transition tee replacements. One of the attributes Avista considered in selecting NPL is their proven expertise and capability to perform "pipe splitting"[2] and "keyhole"[3] construction techniques. In certain applications, these techniques can provide very cost-effective alternatives to conventional practices requiring street-cutting and excavation.

Q. What other issues has Avista faced in conducting its Aldyl A replacement program?

A. Among a range of other issues, the predominant challenge is the rise in construction costs caused by the increasing restrictiveness of pavement cutting and remediation policies of local jurisdictions. In addition to added direct cost, these policies also impact project scheduling and logistics. Avista has experienced a broad trend among jurisdictions to establish more restrictive moratoria on pavement cutting in newer arterials and streets, and more costly requirements for the backfilling, patching and repaving of streets cut for pipe replacement. The driver appears to be local jurisdictions seeking ways to maintain and improve streets under tighter operating budgets associated with the broad economic recession. This added cost is particularly

[1] NPL has a national reputation for safe, high quality, cost-effective solutions and customer satisfaction, installing and replacing over ten million feet of pipe, wire, and information systems annually. NPL Corporate Headquarters is located in Phoenix Arizona.

[2] Pipe Splitting is a technique that enables a section of plastic pipe to be replaced with only limited street cutting and excavation. Under this technique, two endpoints of a given length of pipe to be replaced are excavated. This provides access for a specialized head to be pulled through the pipe from one end to the other. This action simultaneously splits the existing pipe and pulls the new pipe into position in its place, without disturbing the surface along the length of the pipe section.

[3] Keyhole technology allows the work on underground facilities through an 18 inch-diameter hole in a street's pavement. When the job is complete, the street is restored by putting the pavement core back into place with no waste from asphalt mixing. Cost reductions also come from eliminating the need for a backhoe and asphalt hot-patch crew or replacing concrete.

significant, because in the Company's recent experience, it can result in street repair costs accounting for up to 70% of the total replacement program cost (i.e. 30% for pipe replacement and 70% for street cutting and repair).

Q. What range of replacement costs has the Company been experiencing?

A. In the past two years, unit replacement costs for main pipe have ranged from $69 to $83 per foot. These costs, which are due in part to the more restrictive street cutting, backfilling, patching and repaving policies explained above, are higher than the preliminary estimates made at the time Avista developed its Aldyl A Protocol. And if they persist, these higher unit costs will substantially increase the overall cost of the program.

Q. What steps is Avista taking to better understand and manage these costs?

A. The Company recognizes the need to continue to assess and forecast trends in unit costs and to understand and, to the extent possible, manage these factors. A key approach is focused on optimizing the specialized construction capabilities of Northern Pipeline to help Avista avoid expensive street cutting and repair costs. Another effort is directed to working with local authorities to explore street repair solutions that are less costly than current requirements, and in the meantime, targeting replacement activities in areas where the pipe replacement does not require pavement cutting.

Q. Has the Company provided details of the current and expected capital investment it is seeking to recover in this case?

A. Yes. The capital investment for the Project is referenced on pages 11 and 12 of the direct testimony of Company witness Mr. DeFelice, and these costs are included in the revenue requirement as noted on page 6 of the direct testimony of Company witness Ms. Andrews.

II. CUSTOMER SERVICE INFORMATION SYSTEM REPLACEMENT

Q. Please summarize the ongoing replacement project for Avista's Customer Information System?

A. Avista's legacy Customer Information System (System) has served the Company and our customers well for nearly 20 years. The term 'legacy' applies to computer hardware and software systems like Avista's that are no longer manufactured, used in contemporary applications, commercially available, or technically supported. The longevity of the Company's legacy system is unusual in the industry, and has been achieved by linking the system over time with commercial and Avista-developed applications that added functionality to the original architecture. This technology strategy has been the foundation of Avista's customer service program. While extending the life of the System has delivered value for customers, our ability to continue to add additional functionality is constrained, and there is mounting business and service risk associated with the many older technologies on which this system depends. Technical assessments of the System highlighted these risks, as well as identifying the pending need for its replacement. In 2010, Avista began the research and planning for replacing its legacy System. The replacement effort, named "Project Compass," was planned for a four-year period. An overview of Project Compass, containing a detailed project narrative, as well as supporting documentation, is provided as Exhibit 502.

Q. Please describe the systems being replaced as part of Project Compass?

A. Avista's legacy Customer Information System is composed of three highly-connected applications, which include:

- Customer Service System – this application supports the traditional utility business functions of meter reading, customer billing, payment processing, credit, collections, field requests and customer service orders;
- Work Management System – this application is used to create orders for service and emergency calls and for construction jobs for customers and Company operations; and
- Electric & Gas Meter Application – this application hosts the data for the Company's in-service electric and gas meters.

Together, these three applications, also referred to as the Avista "Workplace", have been connected over time with many other applications and systems required to conduct all aspects of our customer service and gas and electric business operations. These three Workplace applications are being replaced by Oracle's 'Customer Care & Billing' solution, and IBM's 'Maximo' asset management application.

Q. What are the factors driving the need for replacement of Avista's Customer Information System?

A. The rapid evolution of information science technologies has impacted the life cycle availability of older software and hardware products and services, eroding the underlying integrity of our legacy technology. At the same time, each new generation of technology gives software systems more flexibility and functionality than our legacy system could easily provide. This dual impact adds cost, complexity and risk to the ongoing operation of our legacy technology, and drives the ever-increasing service expectations of customers for all businesses they use, including their utility.

Q. Please describe what you mean when you say 'eroding the underlying integrity' of the Company's legacy technology?

A. The Company's legacy system is supported by a network of older technologies, many of which are expensive to operate and/or are no longer sold, maintained or supported. As a result, Avista and its primary support contractor (Hewlett-Packard) employ many technical 'workarounds' required to continue using the legacy System. Key limitations associated with these technologies are briefly described below:

Platform – The Company's Customer Information System is dependent on a mainframe-computing platform because it uses databases and program applications developed for that environment. While a mainframe was the only platform with enough power to support the System when it was designed, it is more expensive to operate today than mid-range computers with ample capability to support a similar sized system. Because mainframe platforms are far less common today, the expertise required to manage, maintain and update these systems is becoming more limited. In addition to the realtime execution of programs on the mainframe, required by the Workplace applications, the programs and data stored there must be updated every night in what is known as a 'batch' program. The batch updates base data and performs other functions such as producing customer bills.

Computer Languages – Avista's Workplace applications are written in COBOLv2, a mainframe-dependent programming language that has not been used in applications, or sold or supported for many years. In addition, this language is not compatible with current mainframe operating systems. Consequently, for many years the Company has used another software application, Micro Focus COBOL, to create a

virtual transcription of the original code into a more contemporary language that is mainframe compatible. This process results in some errors to the program code that are unavoidable with this technology, which necessitates additional processing to find and eliminate them each time this replication is performed.

Another computer language key to Avista's legacy system is known as Smalltalk. This language is used to generate the display information on network computers used by our customer service representatives. And like COBOLv2, Smalltalk is also no longer sold or supported.

Supporting Applications – When Avista's legacy applications require repair or modification to add functionality, the original programming language can only be changed using a specialized software product known as Application Development Workbench, or ADW, which is no longer manufactured or supported. In addition, ADW can only run on the OS/2 operating system that likewise has not been sold or supported for many years.

Technical Resources – Maintaining the Company's legacy system requires training and support of technical staff competent in these older programming languages, applications, and computer operating systems. The Avista-Hewlett-Packard support staff, many of whom grew up with these legacy technologies when they were mainstream, have either retired, or are anticipated to do so in the next few years. Replacing knowledgeable staff has become extremely difficult because there is no longer technical training or schooling available for these old languages, applications and systems. Younger technicians must be trained in house, and in addition, it is difficult to channel these employees into career tracks that have very-limited and diminishing future application.

Q. Are there risks associated with the continued operation of the Company's legacy system?

A. Yes, as described above, many of the obsolete elements of the Customer Information System are supported by very-specialized applications, which themselves are obsolete and no longer supported, or by complex technology workarounds. Each of these introduces a level of risk that is greater than that associated with contemporary hardware, operating systems, technical support, and business applications. And because these risks increase as the technology continues to age, the cumulative risk to the Company grows as the longevity of the System is extended.

Q. Are these risks unique to Avista's legacy system?

A. No, this discussion illustrates the general technology principle shared by many legacy systems like the Company's. Even though they may continue to perform their intended functions, they are subject to greater and greater risk over time, and consequently, are considered to be problematic.

Q. Beyond increasing business risks, are there other considerations for replacing the system?

A. Yes, there are several which I describe below:

System Modifications – The legacy architecture of the Company's System makes it cumbersome and expensive to modify or to add new functionality. This arises because the linkages between the applications of Avista's Workplace, along with the software applications that connect Workplace with the many other applications and systems required to support the Company's operations, are 'hardwired' together. The result is that a programming change made to one application often requires complementary changes in both the connecting software and the other applications

themselves. Because the system has been stretched over time so far beyond its original design considerations, these layers of changes have geometrically increased the complexity of the entire system. Finally, because the legacy System is used only by Avista, these application development costs must be borne entirely by our customers.

System Replacement Costs – Continuing to add complexity to the legacy System can also make its eventual replacement more expensive. This is because the functionality that's been programmed into the legacy System must also be programmed or 'configured' in the new replacement applications when they are installed. Generally, as the complexity of the legacy System increases, then the cost, complexity and technical competence required to install the replacement system increases as well.

Constrained Capability – In addition to the risks and costs of extending its service life, the ultimate flexibility of the platform has been largely exhausted. Designed as a meter-based billing system, the Company has cost-effectively expanded its capability by seamlessly integrating technologies barely imagined when the system was designed; home computers were uncommon, the internet was in its infancy, there were no e-mail services, few cell phones, no text or SMS messaging, and no mobile computing, as supported by today's smart phones and tablets. However, while the System has been able to accommodate many significant developments over time, it still lacks the fundamental capabilities required today to support the new service options viewed by customers as 'basic service', or the many utility product offerings becoming more common in our region and around the Country.

Q. Did the Company consider other options to reinforce its legacy System, short of replacement?

A. Yes. Periodically, Avista and its support partner, EDS/Hewlett-Packard, evaluated the System's capabilities as well as options for its possible modernization. In 2002, as some of the technologies supporting Avista's System, such as ADW, were becoming unsupported, an assessment was made of the feasibility of moving the Company's system from the mainframe platform to a contemporary mid-range platform and operating system. The benefits of such a process, commonly known as 'replatforming', were forecast over time and were compared with the estimated costs for completing the work. Results of this work indicated that replatforming the System at that time was not cost-effective, and as a result, this work did not proceed.

The next assessment was made in 2003 and focused on ways to reduce the risk associated with the ADW application, at the time running on aging desktop computers using the OS/2 operating system. The project report recommended Avista purchase specialized software to emulate the OS/2 system on contemporary computers and operating systems. This recommendation was implemented.

The legacy System was reviewed again in 2006 as part of a larger information technology review conducted for the entire Company. The report noted the Company's Customer Information System as a 'high risk' application that was a candidate for either replacement or "refactoring." The latter refers to a process of changing the internal structure of the existing application code to reduce its complexity and improve its readability. While this process helps reduce the risk associated with legacy software, it does not markedly change its basic properties or performance. Refactoring of the Customer Service System was not evaluated further at that time.

Most recently, in 2010, the Company again considered reinvesting in its legacy System as a means to delay its ultimate replacement. As a prelude to requesting vendor proposals to support such an effort, the Company sent a Request for Information to several major information technology vendors to describe the legacy System, and to gauge their interest in participating in next steps. As Avista continued to weigh the possibility of this approach being feasible, as a way to delay the replacement of its System, it ultimately determined that commencing with the research and planning for the current replacement project was a prudent course of action.

Q. Why did Avista consider the current timing of the replacement project to be appropriate?

A. The decision on timing was influenced by many factors, including, among other considerations: the window of availability of employee and contract technical resources; the timing of the expiration of the long-term services contract with Hewlett – Packard for System support; the continued accumulation of business and service risks associated with operating the legacy System; the increasing complexity and replacement costs associated with its continued operation, and the very-limited capability of the legacy System to deliver additional customer service options, both present, and into the future.

Q. Is the Company's replacement project unique among peer utilities?

A. No. Nationwide, many utilities have undertaken the same approach in replacing their Customer Information Systems, and many are replacing systems installed around the year 2000, a 'generation' even newer than Avista's. Several utilities in the Northwest are among those engaged in some phase of a major replacement project. Avista's understanding of the status of these efforts is summarized below:

Company	State(s)	Status
Cascade Natural Gas & Intermountain Gas	OR/WA/ID	Currently using Oracle's Customer Care & Billing application in Oregon and Washington, which replaced their prior system installed in 1999. Planning to install this system in their Idaho service area in late 2014-2015.
Northwest Natural Gas	OR/WA	Currently using commercial system installed around year 2000. Now in the process of evaluating potential for upgrades and/or system replacement in near future.
Puget Sound Energy	WA	Recently placed in service new SAP and Outage Management applications in April 2013. Now engaged in system stabilization.
Portland General Electric	OR	Beginning evaluation phase for the replacement of their customer information and meter data management applications, expected to be completed in next 5 years.
Idaho Power	ID	Planning to place in service a new SAP customer information system in September 2013.
PacifiCorp	ID/OR/WA	Currently evaluating systems for possible installation over the coming five years.
Seattle City Light	WA	Engaged in the early installation work of their recently selected Oracle Customer Care & Billing system.

Q. Did the Company assess the experience of others to avoid some of the pitfalls associated with replacing these large information technology Systems?

A. Yes. The Company took advantage of shared industry knowledge, reviewed case studies, and conducted its own in-depth interviews with several peer utilities to gather a base of 'lessons learned.' This pre-project research helped Avista identify and incorporate key measures into the design and management of its replacement project, to both circumvent and help mitigate these challenges.

Q. What initial steps did the Company take in researching and evaluating potential replacement software solutions?

A. An early step involved retaining a firm with proven expertise in this discipline to assist the Company with the complex process of developing a detailed list of business requirements and then evaluating and selecting the right combination of

products and vendors to best meet them. A detailed request for proposals was developed from this initial work and sent to leading application and services vendors in September 2010. Avista selected Five Point Partners[4] from those firms submitting proposals.

Q. What additional activities were required to support this evaluation?

A. The Company completed a comprehensive inventory and evaluation of each existing Customer Information System work process, known as the Current State Map. The purpose of this work was to ensure that every work process in the business, and every technology requirement needed to support it, was identified and included in the technical specifications that accompanied the Request for Proposals sent to vendors. The current-state map included over 200 work processes and approximately 3,500 individual process steps or system requirements.

Q. What replacement applications did Avista select?

A. With the assistance of Five Point Partners, responsive proposals were evaluated and scored against a broad range of detailed criteria forming the basis of Avista's final selection of vendors. The systems selected were Oracle's Customer Care & Billing application to replace our legacy Customer Service module, and IBM's Maximo asset management application to replace the Company's Work Management System and its Electric and Gas Meter Application. Together, these two new applications would replace the Avista Workplace environment.

Q. When did the actual replacement activities begin?

[4] Five Point Partners is a consulting organization serving the utility, mining, revenue management, and transportation industries, offering a full life cycle of highly-focused enterprise consulting services from IT assessment and analysis, to implementation and post go-live support services.

A. When the selection process had closed, planning continued for the Implementation Phase. Final purchase agreements for selected software applications and 'integration services' were negotiated with vendors and signed in May 2012.

Q. What is Avista's budget for the overall replacement project?

A. A final project budget was approved on December 6, 2012 for the overall capital replacement costs associated with Project Compass. The budget amount, including the initial allocation among key Project activities, is provided in Exhibit 502, Confidential Attachment 15.

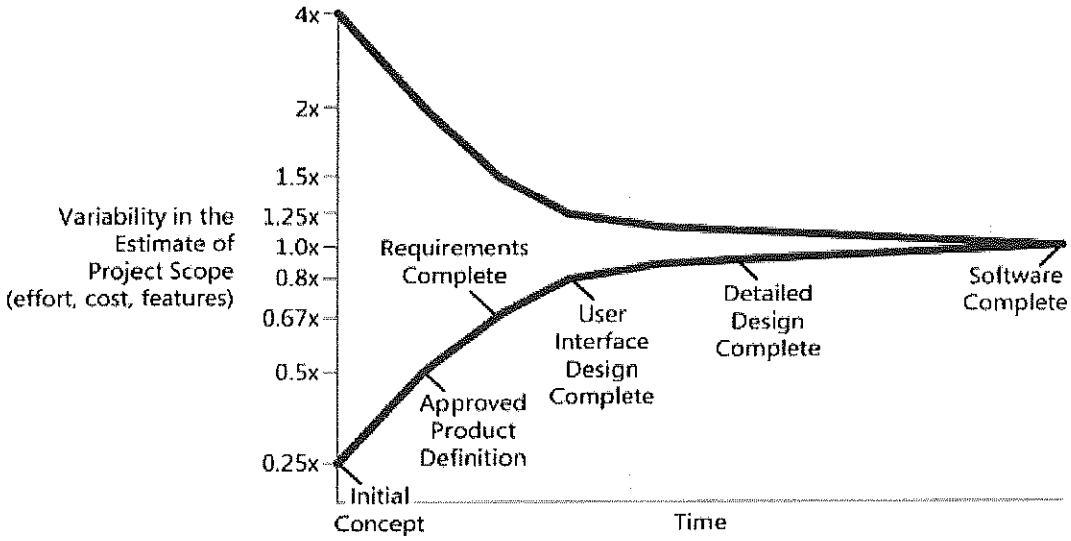
Q. Why didn't the Company authorize a final project budget at the time it decided to replace its legacy System?

A. Although Avista discussed potential costs of the project early in its inception, and approved preliminary budgets through the course of Project development, it did not establish a final capital budget until the Project was well-enough defined to do so with confidence. Avista has learned through its peer utility interviews, and from the support and advice of outside experts, that organizations commonly undermine the success of their software projects by making cost commitments too early in the development stages. This mistake undermines predictability, increases risk and project inefficiencies, and generally impairs the ability to manage a project to a successful conclusion.

Q. Is this typical of enterprise software projects?

A. Yes. Typically, early in the scoping of a software project, particular details of the application being designed/installed, detailed knowledge of the Company's specific business requirements, details of the solution sets, as well as the management plan, identified staffing needs, and many other variables are simply

unclear. Accordingly, estimates of the potential cost of the project are highly variable. As these sources of variability are further investigated and resolved, the uncertainty in the project decreases; likewise, so does the variability in estimates of the project cost. This phenomenon, widely discussed in the literature and often associated with author Steve McConnell[5], is known as the "Cone of Uncertainty", presented in Figure 1[6], below.



As the figure illustrates, significant narrowing of the uncertainty generally occurs during the first 20-30% of the total calendar time for the project. The uncertainty will only decrease, however, through deliberate and active project research and design, required to further define the scope, requirements, implementation details and estimates of component costs. And, this uncertainty must continue to be constrained throughout the course of the project by the use of effective project controls.

[5] Software Estimation: Demystifying the Black Art. Steve McConnell, Microsoft Press, 2006

[6] id. Figure 4.2, 96.1/751.

Q. In light of this cost uncertainty, how could Avista determine that replacing its legacy system was 'cost effective' for customers well before the final project scope and budget were developed?

A. The decision point for the Company in 2010 was whether to significantly reinvest in its legacy technology as the means to defer its ultimate replacement, or instead, to invest in the planning and exploration of options needed to support its replacement. The Company determined, as explained in more detail in Exhibit 502, that it was time to replace the System. The Company's focus then was to assess its needs, evaluate options, and select a set of solutions that would meet the long-term needs of the Company and its customers at the lowest possible cost. At that point, the Company engaged in the progressive stages of project design needed to prudently define its likely scope and potential cost. Through this work, uncertainty around the project was narrowed and potential costs were further refined, to the point that Avista was confident purchasing the selected applications and proceeding with the work of implementation. Even though this was several months before the final budget was approved, Avista had by this time built the foundation needed to initiate a successful project: the ability to deliver a solution that would meet its long-term customer service and business requirements in an optimized approach, and in a manner that would achieve the least cost for its customers.

While Avista believes its estimates of scope, timeline and budget for the project are reasonable, and is committed to control the Project to best meet each estimate, it is also cognizant that its success will not be defined by whether or not each estimate, including the budget, is precisely met. In contrast with a 'not-to-exceed' metric, the

software budget is a management tool that allows senior leaders to make informed enterprise-level decisions, and that provides an effective tool for the project manager to control project activities in an effort to meet the estimates of each deliverable (timeline, scope, functionality, and cost). In describing the relationship between software project estimates and final results, McConnell states:

> "The primary purpose of software estimation is not to predict a project's outcome; it is to determine whether a project's targets are realistic enough to allow the project to be controlled to meet them."[7] "Typical project control activities include removing noncritical requirements, redefining requirements, replacing less-experienced staff with more-experienced staff, and so on."[8] "In practice, if we deliver a project with about the level of functionality intended, using about the level of resources planned, in about the time frame targeted, then we typically say that the project "met its estimates," despite all the analytical impurities implicit in that statement. Thus, the criteria for a "good" estimate cannot be based on its predictive capability, which is impossible to assess, but on the estimate's ability to support project success…[9]

Avista believes it has designed and developed such an implementation plan and budget for Project Compass. By this, we mean that the overall Project record will demonstrate its proper research and design, robust planning and estimating, effective management and controls, and that its delivered scope, timeline and cost, are reasonable, cost effective and prudent.

Q. What are the key activities currently underway in the Project?

A. Avista is currently in the Implementation Phase, which encompasses the activities of installing and configuring the new vendor software, and developing and delivering the specialized training modules for the new Systems. Configuring a software application involves the programming required to code its generic capabilities to

[7] id. At 42/751.
[8] id. At 39/751.
[9] id. At 41/751.

execute the steps needed to match each of the Company's work processes. In addition, there are many Avista process steps that cannot be executed within the generic capability of the new applications, without customization. This involves the addition of customized programming that is outside the bounds of the 'off the shelf' capability of the application. Significant customization renders the process of installing the periodic vendor updates of the applications, both complex and expensive. Avista is committed to capturing the value delivered by 'off the shelf' implementation, and accordingly, our goal is to minimize the need for customization. What this requires, however, is that Avista organize employee teams to accomplish the significant tasks of developing new internal business processes that are supported by the vendor application, as well as the work of developing the new employee training programs required to successfully implement the new processes. Work in this Phase also includes the significant programming required to integrate the new vendor applications with approximately 100 other applications and systems required to support the Company's customer service and allied business operations. Finally, this Phase of the Project encompasses the development of employee training programs and systems for the new applications, and the extensive testing of the system needed to confirm the technical performance of the new applications as configured to Avista's design.

Q. When will these new systems be 'used and useful'?

A. The final steps in the Implementation Phase involve 'migrating' the Company's customer service and business operations from the legacy systems and platform to the new applications and systems. The step of disabling the existing System and placing the new System into service is known as the "Go-Live." A portion of the Maximo asset management application will Go-Live in the fall of 2013, and the

remainder of the Maximo application and the Oracle Customer Care & Billing System is expected to Go Live in July 2014.

Q. Are there any Project activities that continue after the new Systems are serving Avista's customers?

A. Yes. The Company will keep technical teams in place for approximately six to twelve months to support the new applications, information technology staff, customer service and other employees, and customers, in the activity known as "project stabilization."

Q. Has the Company provided details of the current and expected capital investment it is seeking to recover in this case?

A. Yes. The capital investment for the Project is referenced on page 8 of the direct testimony of Company witness Mr. DeFelice, and these costs are included in the revenue requirement as noted on page 6 of the direct testimony of Company witness Ms. Andrews.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/11/2015
CASE NO.:	UG 288	WITNESS:	Jennifer Smith
REQUESTER:	NWIGU/CUB	RESPONDER:	Jeanne Pluth
TYPE:	Data Request	DEPT:	State & Federal Regulation
REQUEST NO.:	NWIGU/CUB – 2.4	TELEPHONE:	(509) 495-2204
		EMAIL:	jeanne.pluth@avistacorp.com

REQUEST:

Please provide the following regarding the $6,134,000 adjustment to reflect the "correction" of the ADFIT balance within the general ledger, as referred to on page 20 of the Direct Testimony of Jennifer S. Smith:

a. A detailed explanation of the adjustment;

b. The circumstances that justify the need for the correction;

c. Cites to relevant tax code sections; and

d. Supporting documentation and calculations.

RESPONSE:

The Company uses the Power Tax software to compute tax depreciation and its deferred federal income taxes on its plant investment. This software also tracks the accumulated deferred federal income taxes (ADFIT) on its plant investment. The Company records plant ADFIT in FERC Account No. 282900. This FERC account was reconciled to the ADFIT balance per the Power Tax records on a system level on a regular basis. In 2014, the Company completed a more time-consuming, detailed reconciliation of the ADFIT balance at a service and jurisdiction level. This reconciliation identified a variance in the ADFIT balances between the Power Tax records and the general ledger between service and jurisdiction (and like previous reconciliations, there was no variance in total.) Additional work was performed in late 2014 to ensure the Power Tax records were appropriately stated. The general ledger was adjusted in February 2015 so the Power Tax records and the general ledger at a service and jurisdictional level agreed.

Please see NWIGU/CUB_DR_2.4 – Attachment A for the reconciliation and backup to the general ledger adjustment.

Attachment A

	Per G/L					Allocations of Variance			
	12/31/2012 Before Tax Return True-up	Tax Return True-up 2012	12/31/2012 Adjusted	Power Tax Actuals 12/31/2012	Variance between GL and Power Tax	E	GN	OR	Non-Utility
282190.ZZ.ZZ	(63,773)	9,011	(54,762)	-	54,762				54,762
282380.ZZ.ZZ	288,948	(18,770)	270,178	(1,282,567)	(1,552,745)				(1,552,745)
282680.GD.OR	(858,783)		(858,783)	-	858,783				858,783
282900.CD.AA	(35,556,263)	(2,726,109)	(38,282,372)	(50,161,643)	(11,879,271)	(8,499,262)	(2,346,275)	(1,033,734)	
282900.CD.AN	(1,901,094)		(1,901,094)	(451,125)	1,449,969	1,141,764	308,205		
282900.ED.AN	(283,643,453)	138,792	(283,504,661)	(288,319,081)	(4,814,420)	(4,814,420)			
282900.GD.AN	(62,634,972)	(146,774)	(62,781,746)	(54,066,092)	8,715,654		8,715,654		
282900.GD.OR	(34,847,223)	104,568	(34,742,655)	(27,575,386)	7,167,269			7,167,269	
	(419,216,613)	(2,639,282)	(421,855,895)	(421,855,894)	1	(12,171,918)	6,677,585	6,133,535	(639,200)
					7	71.55%	19.75%	8.70%	
					8		69.08%	30.92%	
					9	78.74%	21.26%		

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/17/2015
CASE NO.:	UG 288	WITNESS:	Jennifer Smith
REQUESTER:	NWIGU/CUB	RESPONDER:	Annette Brandon
TYPE:	Data Request	DEPT:	State & Regulatory Regulation
REQUEST NO.:	NWIGU/CUB – 2.7	TELEPHONE:	(509) 495-4324
		EMAIL:	annette.brandon@avistacorp.com

REQUEST:

Please provide the following regarding pensions and other post retirement benefits:

a. The total level of each type of cost included in the revenue requirement in this case;

b. A detailed explanation and justification for the increases from the base year costs;

c. Any updates to subparts (a) and (b) received in 2015;

d. The latest actuarial reports available; and

e. Other documentation and reports supporting the responses to subparts (a) through (c).

RESPONSE:

Please see the Company's response in NWIGU/CUB_DR_2.7C for the requested information. NWIGU/CUB_DR_2.7C is **CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER.**

a. The amount of pension expense included in the Company's direct filing is approximately $21.011 million and $8.798 million in post retirement income. Please see the Company's response to Staff_DR_059C Confidential Attachment A for the actuarial summary for these amounts.

b. The increase in Pension expense from $12.4 million in 2014 to $21.011 million (prior to administrative expenses) in 2016 is primary due to:

1) A reduction in the discount rates from 5.10% to 4.2% due to declines in market interest rates (lower discount rate results in a higher liability and thus higher periodic pension costs);

2) During 2014 the Company increased the amount allocated to fixed income from 31% to 58%. This change was made to reduce the volatility related to return on pension assets and the associated impact on future pension costs and customers' rates. This

change, combined with the decrease in interest rates, resulted in a reduction in expected return on assets from 6.6% in 2014 to 5.9% in 2016.

3) Updated mortality rates which resulted in an increase of approximately $2.9 million from 2014 to 2016. (See Staff_DR_148)

The increase in Post-Retirement Medical expenses from $8.1 million to $8.8 million.

1) Post Retirement Medical expenses increased due to the reduction in discount rates from 5.00% to 4.4% due to declines in market interest rates (as with Pension, lower discount rates result in higher costs).

c. Update to the Pension amount is provided in the Company's response to Staff_DR_143 (revised pension amount $23.7 million) and an update to the Post-Retirement Medical (revised amount $9.3 million) expenses is provided in the Company's response to Staff_DR_149 Supplemental. The primary drivers for the changes in expense are updated assumptions regarding the discount rate and expected return on assets.

d. See part (c)

e. Please see NWIGU/CUB_DR_2.7C Confidential Attachment A for the Actuarial Report which includes assumptions for the Pension Plan Assets.

Please see NWIGU/CUB_DR_2.7C Confidential Attachment B for correspondence between the Company and the actuary regarding assumptions for the revisions noted in response to part (c).

NWIGU - CUB Exhibit 207, Attachment A is confidential and will be provided to those parties who have signed the protective order in this docket.

NWIGU - CUB Exhibit 207, Attachment B is confidential and will be provided to those parties who have signed the protective order in this docket.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	09/11/2015
CASE NO.:	UG 288	WITNESS:	Jennifer Smith
REQUESTER:	NWIGU/CUB	RESPONDER:	Jeanne Pluth
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 2.12	TELEPHONE:	(509) 495-2204
		EMAIL:	jeanne.pluth@avistacorp.com

REQUEST:
Please provide the following regarding Oregon state income tax as discussed on pages 28 and 29 of the direct testimony of Jennifer S. Smith:

a. a copy of the 2014 Oregon state income tax filing and all supporting documentation; and

b. A detailed explanation and supporting documentation regarding the deductions and credits that were available in 2014 and 2015, but will not be available in 2016.

RESPONSE:

a.) The Company is in the process of preparing the Federal income tax return for 2014, which is the starting point for preparing the Oregon state income tax return. The 2014 Oregon state income tax return will not be available until after October 15, 2015 and will be provided as a supplement to this data request at that time.

b.) The Company's calculation of the 2016 Oregon state income tax return was provided in Company witness Ms. Smith's workpapers, Adjustment 3.02.

There are two deductions that were taken in 2014 that have not been included in the 2016 state income tax calculation. First, 2014 had a large deduction for repairs that related to 2011 through 2013 plant activity. This was a one-time deduction in 2014 so it will not be available in 2016. The second deduction made in 2014 not available in 2016 is bonus depreciation. As described in Staff_DR_135 and Staff_DR_179, bonus depreciation has not been approved by Congress and is therefore, not available after 2014, explained as follows:

> Bonus depreciation was enacted as a temporary measure to help the ailing U.S. economy. It was originally scheduled to expire on December 31, 2008. However, due to the continuing bad economy, it had been continually extended by Congress, which enacted annual "tax extender" bills to continue it and certain other popular tax breaks each year. Congress failed to pass a tax extender bill in 2013 and 50% bonus depreciation expired at the end of 2013. Congress passed a tax extender package on December 16, 2014 which included an extension of 50% bonus depreciation through the end of 2014.
>
> Because the credit expired, the Company has not incorporated any bonus depreciation for 2015 or 2016 in its filing.

There was one tax credit that was available in 2014 that will be almost completely used in 2015. Therefore, only a very small BETC credit (approximately $12,000) was available to be used in the 2016 calculation.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	11/23/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Lauren Pendergraft
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 4.1	TELEPHONE:	(509) 495-2998
		EMAIL:	lauren.pendergraft@avistacorp.com

REQUEST:

Please refer to NWIGU-CUB/102, Pages 2* and 3*. Please confirm or deny that the balance sheet data, including long-term debt presented on line 1 and common equity presented on line 2 as shown on that exhibit is the same as the data filed by Avista with the Federal Energy Regulatory Commission ("FERC") and the Security and Exchange Commission ("SEC") for the period referenced in the footnote of that exhibit. If negative, please provide the correct data filed with FERC and the SEC for the same time frame.

*Please note that the long-term debt balance presented on line 1, page 3, includes current portion of long-term debt, long-term debt and long-term debt to affiliated trusts. Also, the common equity balance presented on line 2, pages 2 and 3, adds back the accumulated other comprehensive income.

RESPONSE:

The balance sheet data as shown on to NWIGU-CUB/102, Pages 2* and 3* is the same as the data filed by Avista with the Federal Energy Regulatory Commission ("FERC") and the Security and Exchange Commission ("SEC") for the period referenced in the footnote of that exhibit.

It is important to note that these balances are not the same balances that have consistently been used when calculating ratemaking capital structure. For example, long-term debt at 6/30/15 on NWIGU-CUB/102, Page 3, is $1,549,594,000, but long-term debt for ratemaking capital structure was $1,393,000,000. Some examples of differences between the two numbers are 1) debt associated with the Company's Alaska operations are included in the SEC balance sheet, but are not included in ratemaking capital structure and 2) only $40,000,000 of the long-term debt to affiliated trusts is included in ratemaking capital structure (vs. $51,547,000) as $40,000,000 is the amount outstanding to third parties since Company holds $11,547,000 as an investment in affiliated trust.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	11/23/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Rich Stevens
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 4.2	TELEPHONE:	(509) 495-4330
		EMAIL:	Rich.Stevens@avistacorp.com

REQUEST:

Does Avista agree that, as presented on page 109 of its 2014 10K Securities and Exchange Commission filing, its pension funding status at the end of 2014 was approximately 85%? If Avista's response is anything other than a non-qualified yes, please provide a detailed explanation, documentation and calculations supporting the response.

RESPONSE:
Yes, the pension funding status at the end of 2014 was approximately 85%. Please see Avista/1100 Thies/Pages 15-16 for a discussion of the factors which contributed to this funding level.

See also the Company's response to NWIGU/CUB_DR_4.3.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	11/23/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Rich Stevens
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 4.3	TELEPHONE:	(509) 495-4330
		EMAIL:	Rich.Stevens@avistacorp.com

REQUEST:

Does Avista agree that, as presented on page 109 of its 2014 10K Securities and Exchange Commission filing, its pension funding status at the end of 2013 was approximately 91%? If Avista's response is anything other than a non-qualified yes, please provide a detailed explanation, documentation and calculations supporting the response.

RESPONSE:

Yes, the pension funded status at the end of 2013 was approximately 91%. Please see Avista/100 Thies/Pages 15-16 for a discussion of the factors which contributed to this funding level.

See also the Company's response to NWIGU/CUB_DR_4.4.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	11/24/2015
CASE NO.:	UG 288	WITNESS:	Mark Thies
REQUESTER:	NWIGU/CUB	RESPONDER:	Rich Stevens
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 4.4	TELEPHONE:	(509) 495-4330
		EMAIL:	Rich.Stevens@avistacorp.com

REQUEST:

Does Avista agree that, as presented on page 30 of its 2015 10Q Securities and Exchange Commission filing for the quarter ending September 30, 2015, its net periodic pension benefit cost for the nine months ended September 30, 2015 has increased by approximately 88% compared to the net periodic pension benefit cost for the nine months ended September 30, 2014? If Avista's response is anything other than a non-qualified yes, please provide a detailed explanation, documentation and calculations supporting the response.

RESPONSE:

Yes, the Company's net periodic pension benefit cost for the nine months ended September 30, 2015 ($20.528 million system) has increased approximately 88% compared to the net periodic pension benefit cost for the nine months ended September 30, 2014 ($10.894 million system) due to a range of factors, as discussed in Mr. Thies' Reply Testimony Avista/1100, pages 14-15.

As noted by Mr. Thies, the primary factors which contributed to the change in net periodic pension costs between 2014 and 2015 are as follows:

- Of greatest significance, the discount rate fell to 4.21 percent at the end of 2014 compared to 5.10 percent at the end of 2013. Hence, the one-year improvement in the discount rate reduced the annual pension costs for <u>one</u> year, but was not sustained going into 2015.[1]

- The Society of Actuaries (SOA) published new mortality tables in 2014 that superseded the prior tables published in 2000. This resulted in an increase of approximately $2.3 million between 2014 and 2015

- The change in the expected return on assets (EROA) is estimated to be 5.3% in 2015 versus 6.6% in 2014.[2]

[1] As noted in the Avista Corporation 2014 10K Securities and Exchange Commission filing, page 53. A reduction in discount rate of approximately .5% results in approximately $3.232 million (system) change in pension cost.

[2] As noted in the Avista Corporation 2014 10K Securities and Exchange Commission filing, page 53. A reduction in expected long-term return on assets of approximately .5% results in approximately $2.434 million (system) change in pension cost

The EROA is an average of estimates developed based on the informed judgment of three independent compensation consultants. The LDI strategy implemented by the Company in 2014 is intended to reduce the volatility, supporting the objective of reducing net periodic pension cost. As stated by Mr. Thies' testimony, less cost volatility is a benefit to utility customers.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	11/24/2015
CASE NO.:	UG 288	WITNESS:	Don Falkner
REQUESTER:	NWIGU/CUB	RESPONDER:	Jeanne Pluth
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	NWIGU/CUB – 4.5	TELEPHONE:	(509) 495-2204
		EMAIL:	jeanne.pluth@avistacorp.com

REQUEST:

Does Avista agree that, based on the assumption that bonus depreciation is extended for 2015, it will record 2015 bonus depreciation related deferred income taxes associated with 2015 plant additions? If Avista's response is anything other than a non-qualified yes, please provide a detailed explanation, documentation and calculations supporting the response.

RESPONSE:

When preparing the federal tax return, there are many variables (i.e. net income, production tax credits, bonus depreciation, repairs deductions etc.) that will impact what deductions the Company will ultimately use on the federal tax return to determine taxable income. These decisions are typically not made until 6-9 months after the close of the tax year. Therefore, the Company cannot respond with a "non-qualified yes" at this point in time when the tax year has not been closed. Based on the information that the Company knows today, it appears that the Company would use bonus depreciation for the 2015 tax year, if bonus depreciation is approved by Congress, which is not known at this time.

As described by Company witness Mr. Falkner (Exhibit 1600), Avista is required to estimate its 2015 Federal tax expense and make quarterly deposits of the estimated amount of tax expense so that by December 15, 2015, the entire 2015 estimated tax liability has been paid to the IRS. Avista estimates the amount of the tax liability using forecasted taxable income for the year. Taxable income is forecasted by using only known, approved tax deductions. Therefore, Avista's 2015 estimated tax payments that have been paid to the IRS in 2015 do not include a bonus depreciation deduction for 2015. Therefore, it is not appropriate to reduce rate base for rates that will be in effect in early 2016 because Avista has not had the benefit of lower tax payments to the IRS during 2015. If bonus depreciation is ultimately approved for 2015, the Company can make a refund request from the IRS in 2016, but the Company would not receive any refund until mid-March 2016, at the earliest. The Company has not had the benefit of lower tax payments to the IRS during 2015 nor will it before rates are in effect in this case. The Company did not pro form 2016 capital additions (except the capital to hookup new customers) in this case because they would not be in service before rates are in effect. The Commission Staff and other parties have opposed rate base additions after the date new retail rates go into effect. Therefore, it would be inconsistent and not appropriate to reduce rate base for 2015 bonus depreciation, because the benefit would be received, if it is received at all, after rates are in effect from this case.