Oregon
Theodore R. Kulongoski, Governor

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July 29, 2009

Filing Center
Public Utility Commission of Oregon
550 Capital Street NE, Ste 215
Salem, OR 97301

RE: Docket No. 210 – Staff Errata Filing

Dear Filing Center:

Enclosed for filing are five pages that replace Staff testimony in this proceeding, with changes as indicated below. Additionally, five "strikeout" pages illustrating the change(s) are also provided. The replacement pages, with a brief description of the changes, are:

Staff/800 Storm/15 Line 20: replace "12" with "15"

Staff/800 Storm/21 Line 10: replace "8%" with "2.8%"

Staff/800 Storm/23 Line 3: replace "4" with "3"

Staff/800 Storm/40 percents changed as follows:

Line 2: "10.7%" to "10.4%" and "5.2%" to "4.9%"

Line 3: "10.7%" to "10.4%" and "5.0%" to "5.1%"

Line 4: "10.7%" to "10.4%" and "7.0%" to "6.7%"

Line 6: "3.29%" to "3.51%"

Line 9: "5.2%" to "4.9%" and "9.6%" to "9.3%"

Line 10: the 1st "5.0%" to "5.1%", the 2nd "5.0%" to "3.5%", and "10.0%" to "8.6%"

Line 11: "7.0%" to "6.7%" and "7.2%" to "6.9%"; and

Line 13: "9.8%" to "8.95%"

Staff/800 Storm/40 Footnote 109: replace

"the 3-month Treasury bill (secondary market), the 10-year Treasury note, and the 30-year Treasury bond." with

"the 30-year Treasury bond, the 10-year Treasury note, and the 3-month Treasury bill (secondary market)."

Staff/1000 Clark/2 Table A values: replace

Staff Forecast values for Utah January "3371.6" with "3371.1"

change value for Utah January "191.7" with "191.2"

Staff Forecast values for Utah October "2922.7" with "2922.9"

change value for Utah October "200.2" with "200.4"; and

change value for Utah Total "1178.4" with "1178.1"

The replacement and "strikeout" pages will be sent to the parties in this proceeding.

Sincerely,

Judy Johnson

Judy Johnson
Program Manager – Revenue Requirements
(503) 378-6636
Fax: (503) 373-7752

Enclosures

UE 210

Staff Opening Testimony

Errata Filing

Replacement Pages

earnings and dividends (investor "cash flows") over the period 2015 through 2048.

Additionally, my multistage DCF model is somewhat sensitive to the stock price parameter. As an example, making no other adjustments other than reducing the stock prices for the comparable companies by 10% increased the ROE from my recommended 9.4% value to 10.0%; alternatively, increasing the stock prices by 10% reduced the ROE from 9.4% to 9.0%.

Q. HOW DID YOU ESTIMATE THE APPROPRIATE LONG-TERM SUSTAINABLE GROWTH RATE?

A. I considered alternative approaches to estimating a long-term sustainable earnings growth rate. First, historical earnings per share growth were examined for the cohort group of companies. For all but two of my comparable companies, earnings per share (EPS) data from Value Line were available for 1993 forward. The remaining two companies had Value Line earnings available from 1999 forward. I developed compound average annual growth rates in EPS from this data. The 12 comparable companies, on average, experienced an average annual growth rate in earnings per share of 2.4%, using both timeframes of 9 and 15 years.[40] The average growth rate for the 10 companies' earnings per share over the 15 year (1994 – 2008) period

[40] This rate is the average for all 12 of the comparable companies of the historical average annual growth rate regardless of the length of time over which any companies' rate was computed; i.e., two of the companies had only a nine year history.

the later. (*See* John Cochrane's "How Big is the Random Walk in GNP" from the October, 1988 *Journal of Political Economy* in Exhibit Staff/809 for an assessment of real GNP[58] growth having mean-reversionary versus random walk qualities.)

Also, note that the 1979 through 2008 period captures several business cycles, with peaks identified by the National Bureau of Economic Research in January, 1980; July, 1981; July, 1990; March, 2001; and December, 2007.[59]

The combination of the 2.3% projected annual inflation rate for the 2015 – 2048 period and the projected 2.8% annual rate of real GDP growth over the same period provides a nominal GDP annual growth rate of 5.16%.[60]

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[58] While Cochrane's paper pertains to fluctuations in real per capita Gross National Product (GNP) (*see* page 898), I assume the same or very similar assessments hold for my estimated trend for real Gross Domestic Product (GDP). The key difference between the two measures revolves around "who does what where;" i.e., GDP is the total output of a region (e.g., the U.S.), and GNP is the total output of all nationals of a region (e.g., of all Americans).

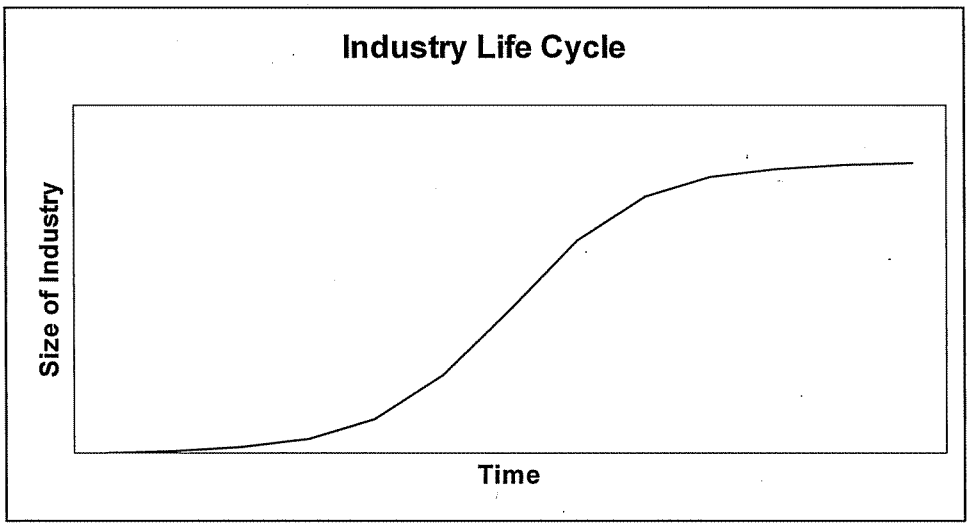
[59] See "US Business Cycle Expansions and Contractions," at http://wwwdev.nber.org/cycles/cyclesmain.html .

[60] By "compounding," or multiplying, the two rates; i.e., (1 + 0.023) X (1 + 0.028) – 1 = 0.0516, or 5.16% (rounded to two decimal places).

Q. IS 5.16% YOUR ESTIMATED LONG-TERM SUSTAINABLE ANNUAL GROWTH RATE FOR THE COMPARABLE COMPANIES?

A. No. The electric utility industry in the U.S. is a mature industry. Chart 3 is a conceptual graph of the successive phases of growth through which a product or service, a product (or service) line, or an industry pass.[61]

Chart 3



The U.S. electric utility industry is well past the "high growth"[62] phase of the industry's lifecycle and is in the "mature" phase; i.e., the right-hand portion of the graph in Chart 3. This phase is characterized by slower growth and is well represented in the graph in Exhibit

[61] The functional (mathematical) form of the equation producing this graph is a logistic function.

[62] The "high growth" phase is the steep section of the curve in the middle of the graph. Slower rates of growth pertain to both a nascent and to a mature industry, which are respectively positioned on the left and right portions of the curve.

premium of "large company stocks" when compared with "long-term government bonds" was (10.4% - 5.5% =) 4.9%, with "intermediate government bonds" was (10.4% - 5.3% =) 5.1%, and with U.S. Treasury Bills was (10.4% – 3.7% =) 6.7%. Averages of the May and June, 2009 monthly averages for these securities were, respectively, 4.38% (5.5%), 3.51% (5.3%), and 0.18% (3.7%) (parenthetical values are the long-term average values from the Morningstar data).[109] These imply, with the equity premia calculated above, estimated returns on equity of (4.9% + 4.4% =) 9.3% using long-term government bonds, (5.1% + 3.5% =) 8.6% using intermediate government bonds, and (6.7% + 0.2% =) 6.9% using U.S. Treasury bills. The average of the two ROE estimates based on equity risk premia over the two longer-term maturities is 8.95%.[110]

Dr. Hadaway presents no supporting rationale, analysis, or quantitative evidence that indicate using single-A utility bond yields,[111] as a basis to which a risk premium is added to derive an estimated electric utility ROE, is a superior approach or result to any of the above methods and results.[112]

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[109] Source: Federal Reserve Statistical Release H.15. Average yields are for, respectively, the 30-year Treasury bond, the 10-year Treasury note, and the 3-month Treasury bill (secondary market).

[110] Note this result is unadjusted for electric utilities (e.g., comparable companies) having less risk than the "average stock." Nor is any consideration provided for divergent capital structures.

[111] *See* Exhibit PPL/203 Hadaway/2.

[112] I do acknowledge that yields on the short end of the yield curve (T-bills) are currently impacted by atypical governmental policy actions.

II. Methods used for developing Staff's changes to PPL's forecast coincident peak

III. Discussion of these recommended changes on a month-by-month basis

Q. PLEASE PROVIDE A SUMMARY OF STAFF'S PROPOSED COINCIDENT PEAK FORECAST CHANGES BY STATE AND MONTH.

A. Table A presents staff's proposed changes to the Company's coincident peak forecast by state and month.

Table A
Coincident Peaks Under Staff's Proposal

State	Month *	PPL Forecast	Staff Forecast (Megawatts)	*change*
Oregon				
	January	2712.7	2561.4	-151.3
	February	2587.0	2486.2	-100.8
	September	2191.4	2035.8	-155.6
	Total			-407.7
Utah				
	January	3179.9	3371.1	191.2
	March	2860.2	2938.6	78.4
	April	2793.6	2983.4	189.8
	May	3590.8	3662.1	71.3
	June	4141.8	4320.3	178.5
	July	4466.0	4544.1	78.1
	September	3996.7	4086.4	89.7
	October	2722.5	2922.9	200.4
	November	3456.4	3557.1	100.7
	Total			1178.1

* Staff proposes no changes to other states or months.

Q. HOW WOULD YOUR PROPOSED REVISIONS CHANGE REVISED ALLOCATION PROTOCOL FACTOR VALUES AND OREGON DOLLAR AMOUNTS?

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Staff Opening Testimony

Errata Filing

"Strikeout" Pages

earnings and dividends (investor "cash flows") over the period 2015 through 2048.

Additionally, my multistage DCF model is somewhat sensitive to the stock price parameter. As an example, making no other adjustments other than reducing the stock prices for the comparable companies by 10% increased the ROE from my recommended 9.4% value to 10.0%; alternatively, increasing the stock prices by 10% reduced the ROE from 9.4% to 9.0%.

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the later. (*See* John Cochrane's "How Big is the Random Walk in GNP" from the October, 1988 *Journal of Political Economy* in Exhibit Staff/809 for an assessment of real GNP[58] growth having mean-reversionary versus random walk qualities.)

Also, note that the 1979 through 2008 period captures several business cycles, with peaks identified by the National Bureau of Economic Research in January, 1980; July, 1981; July, 1990; March, 2001; and December, 2007.[59]

The combination of the 2.3% projected annual inflation rate for the 2015 – 2048 period and the projected ~~8%~~ 2.8% annual rate of real GDP growth over the same period provides a nominal GDP annual growth rate of 5.16%.[60]

[58] While Cochrane's paper pertains to fluctuations in real per capita Gross National Product (GNP) (*see* page 898), I assume the same or very similar assessments hold for my estimated trend for real Gross Domestic Product (GDP). The key difference between the two measures revolves around "who does what where;" i.e., GDP is the total output of a region (e.g., the U.S.), and GNP is the total output of all nationals of a region (e.g., of all Americans).

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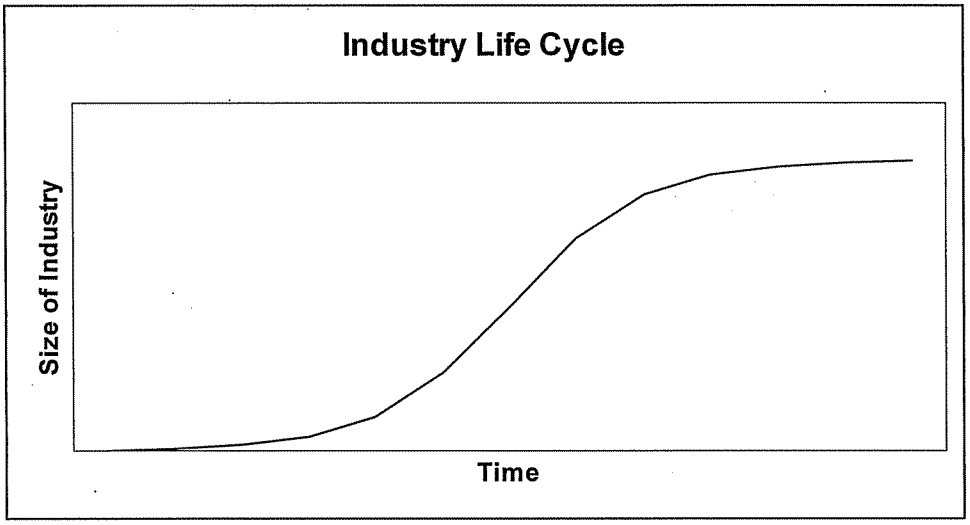

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	November	3456.4	3557.1	100.7
	Total			1178.~~4~~*1*

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Q. HOW WOULD YOUR PROPOSED REVISIONS CHANGE REVISED ALLOCATION PROTOCOL FACTOR VALUES AND OREGON DOLLAR AMOUNTS?

UE 210
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CERTIFICATE OF SERVICE

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Errata Pages

I certify that I have this day served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-13-0070, to the following parties or attorneys of parties.

Dated at Salem, Oregon, this 29th day of July, 2009.

Kay Barnes

Kay Barnes
Public Utility Commission
Regulatory Operations
550 Capitol St NE Ste 215
Salem, Oregon 97301-2551
Telephone: (503) 378-5763