

1 rate order on its property. Inconsistencies in one aspect of the methodology have
2 no constitutional effect of the utility's property if they are compensated by
3 countervailing facts in some other respect.”²

3 The Public Utility Commission of Oregon Staff (Staff) submits that it is imperative to
4 consider traditional ratemaking and the end result when deciding these remaining five issues.
5 From the very beginning of this rate proceeding, Staff testified that re-authorization of
6 decoupling and WARM, which were set to expire October 30, 2012 (the day before effective
7 rates in this case), were the drivers to file a general rate proceeding.³ Furthermore, Staff noted
8 that between rate cases NW Natural had actually improved earnings even in a depressed
9 economy.⁴

10 Pursuant to the settlement in principle and pending partial stipulation, the parties support
11 continuation of decoupling and Weather Adjusted Recovery Mechanism (WARM), as well as
12 favorable regulatory lag reducing programs such as the System Integrity Program (SIP) and
13 Purchased Gas Adjustment mechanism (PGA). In spite of the settlement on these drivers of the
14 rate proceeding, NW Natural continues to argue for an unsupported return on equity (ROE)
15 based upon additional risk, yet another risk reducing automatic adjustment clause for
16 environmental remediation, as well as collection of out-of-period expenses for periods when it
17 had generally earned more than its authorized ROE. Fundamental to the Commission's decision
18 in this case on the remaining issues are consideration of the holistic nature of ratemaking - the
19 risk of NW Natural and whether or not they should be allowed to include expenses going-
20 forward for expenses paid during past periods when its earnings were solid.

21 **II. STANDARD OF REVIEW**

22 ORS 757.210(1)(a) makes it clear that the “utility shall bear the burden of showing that
23 the rate or schedule of rates proposed to be established or increased or changed is fair, just and
24 reasonable.” *See also* ORS 756.040(1). Over the years, the Commission has clarified what it

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26 ² *Duquesne Light Co. v. Barasch*, 488 US 299 (1989).

³ *See* Staff/200; Johnson/2 line 11 through Johnson/3, line 16.

⁴ *See* Staff/200; Johnson/3 line 17 through Johnson/4, line 4.

1 means for the utility to bear the burden of demonstrating its rates are fair, just and reasonable.

2 The Commission directly addressed the standard in ORS 757.210(1)(a) when it stated that:

3 The burden of showing that the proposed rate is just and reasonable is borne by
4 the utility throughout the proceeding. Thus, if PGE makes a proposed change that
5 is disputed by another party, PGE still has the burden to show, by a
6 preponderance of the evidence, that the change is just and reasonable. If it fails to
meet that burden, either because the opposing party presented compelling
evidence in opposition to the proposal, or because PGE failed to present
compelling information in the first place, then PGE does not prevail.⁵

7 The Commission has also noted that “[a]lthough the burden of production shifts, the
8 burden of persuasion is always on the utility.”⁶ The Commission has also stated that “[t]he
9 ultimate burden of producing enough evidence to support its claims is also with the utility.”⁷ In
10 total, NW Natural retains the burden of persuasion and production throughout the proceeding.

11 Finally and as discussed above, Staff notes that NW Natural’s burden is to demonstrate
12 that overall rates are fair, just and reasonable. Thus, the Company has to do more than show
13 each adjustment is fair, just and reasonable. The Company also has the burden to demonstrate
14 that the overall results are fair, just and reasonable. Because of the types of mechanisms and
15 relief the Company already has in place, in addition to the new ones requested, it is important to
16 consider the holistic nature of ratemaking in determining what is fair, just and reasonable.

17 These standards are so well established through Commission orders that Staff assumes
18 that NW Natural agrees that it has the burden of persuasion and production throughout the
19 proceeding. However, NW Natural did not discuss the overall standard of review in its opening
20 brief. In the event that NW Natural suggests it does not agree it retains the burden of persuasion
21 and production throughout this proceeding, Staff will further comment on the standard of review
22 in its reply brief.

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⁵ Docket UE 115, Order No. 01-777 at 6.

⁶ Docket UE 228, Order No. 11-432.

⁷ Docket UE 196, Order No. 09-046 at 7

1 **III. COST OF CAPITAL**

2 Staff recommends in rebuttal testimony an ROE of 9.4 percent in an 8.8 percent to 9.5
3 percent range of ROE values recommended for the Commission’s consideration.⁸ NW Natural’s
4 surrebuttal testimony requests an ROE of 10.0 percent and recommends a range of ROE values
5 from 9.4 percent to 10.1 percent.⁹

6 Staff witness Mr. Steven Storm bases his ROE recommendations on results obtained
7 using two multistage (three-stage) DCF models and three estimates of long-term growth in
8 dividends for the peer utilities to NW Natural used by Staff in each of the two DCF models; i.e.,
9 Staff’s results are from a total of six combinations of multistage DCF models and long-term
10 growth rates.¹⁰

11 NW Natural witness Dr. Samuel Hadaway uses a single-stage, or “constant growth” DCF
12 model with two alternative growth rates. Dr. Hadaway’s constant growth DCF model provides
13 both the extreme low (9.4 percent) and the extreme high (10.1 percent) values in his “indicated
14 DCF range”¹¹ of ROE values in surrebuttal testimony. Dr. Hadaway uses a multistage (two-
15 stage) DCF model with one long-term growth rate, which provides a result of 9.7 percent for
16 both average (mean) and median values in his surrebuttal testimony.¹²

17 1. The Multistage DCF Models Used by NW Natural and Staff Produce Identical Results

18 Exhibits in Staff’s rebuttal testimony include, for each of Mr. Storm’s two multistage
19 DCF models, a variant using Dr. Hadaway’s 5.7 percent annual rate of long-term growth in
20 dividends¹³ to enable comparisons of results using such a high growth rate in the parties’
21 multistage DCF models.¹⁴ Not otherwise used by Mr. Storm, the results of using Dr. Hadaway’s

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23 ⁸ See Exhibit Staff/2200; Storm/3.
⁹ See; e.g., Exhibit NWN/3200; Hadaway/3.
24 ¹⁰ See Exhibit Staff/2201; Storm/1 through Storm/6.
¹¹ Exhibit NWN/3200; Hadaway/5.
¹² See Exhibit NWN/3202; Hadaway/4.
25 ¹³ See Exhibits Staff/2201; Storm/7 and Storm/8. Dr. Hadaway used 5.7 percent in his rebuttal
26 ¹⁴ See Exhibit Staff/2201 Storm/7 and Storm/8.

1 5.7 percent long-term growth rate in Staff’s first multistage DCF model (Model 1) are 9.8
2 percent (average and median) for Mr. Storm’s peer utilities and 9.6 percent (average) and 9.7
3 percent (median) for Dr. Hadaway’s peer utilities. The results of using Dr. Hadaway’s long-term
4 growth rate in Staff’s second multistage DCF model are 9.8 percent (average) and 9.9 percent
5 (median) for Mr. Storm’s peer utilities and 9.6 percent (average and median) for Dr. Hadaway’s
6 peer utilities. These values compare with Dr. Hadaway’s multistage DCF model’s estimated
7 ROE values of 9.8 percent (average) and 9.9 percent (median) in his rebuttal testimony.

8 Differences in the ROE estimates between Mr. Storm’s results (9.6 percent average) and
9 Dr. Hadaway’s results (9.8 percent average) in their respective rebuttal testimonies using the
10 same peer utilities, are largely due to “timing;” i.e., differences in the stock price and, to a much
11 lesser extent, dividends used for the same peer utility between the two witnesses. This can be
12 clearly seen in Table 13 of Exhibit Staff/1300; Storm/74, where an update to Dr. Hadaway’s
13 prices (and dividends), *using Dr. Hadaway’s multistage DCF model and peer utilities*, produced
14 an average ROE of 9.6 percent, a reduction of 40 basis points from Dr. Hadaway’s 10.0 percent
15 average ROE result.¹⁵ Using Dr. Hadaway’s peer utilities in each of Mr. Storm’s two multistage
16 DCF models with the 5.8 percent growth rate used in Dr. Hadaway’s opening testimony *results*
17 *in the same 9.6 percent average ROE.*¹⁶

18 In other words, using Dr. Hadaway’s long-term growth rate in Mr. Storm’s multistage
19 models with Dr. Hadaway’s peer utilities and the same stock prices and dividends for each
20 results in estimated ROEs (9.6 percent average) identical to that obtained using Dr. Hadaway’s
21 multistage DCF.¹⁷

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23 ¹⁵ See Exhibit NWN/504; Hadaway/4.

24 ¹⁶ See also Exhibit Staff/1304; Storm/5-6.

25 ¹⁷ See also Table 3 at Exhibit/Staff/2200; Storm/18, where using Mr. Storm’s two multistage
26 DCF models with Dr. Hadaway’s 5.7 percent long-term growth rate results in average
estimated ROEs of 9.8 percent in both Model 1 and Model 2, which is identical to the 9.8
percent average result Dr. Hadaway obtains with a 5.7 percent long-term growth rate in his
two-stage DCF model at Exhibit NWN/2106; Hadaway/4.

1 This outcome, of identical estimated ROE results using Dr. Hadaway’s long-term growth
2 rate and peer utilities in Mr. Storm’s multistage DCF models as compared with Dr. Hadaway’s
3 multistage DCF model results, confirms that the two witnesses’ different approaches in this
4 proceeding to developing ROE estimates using multistage DCF models, other than those
5 methodologies related to long-term growth rates, collectively provide for essentially the same
6 results. Both Dr. Hadaway (“...[w]ith respect to our analytical models, in the Commission’s
7 preferred multi-stage DCF approach, the only substantive difference in our analytical results
8 stems from the alternative long-term growth rates in GDP”)¹⁸ and Mr. Storm (“To be clear, my
9 models replicate Dr. Hadaway’s multistage DCF model’s results when I use Dr. Hadaway’s
10 assumptions”) acknowledge this outcome.¹⁹

11 2. Methodologies Used by Staff are Sound and Well-supported

12 Mr. Storm bases his ROE recommendations in Staff’s rebuttal testimony on the results of
13 his two multistage DCF models (“Model 1” and “Model 2”), using three different estimated
14 long-term dividend growth rates applied to the 30-year stage 3 period 2023 through the second
15 quarter of 2052. The period through 2017 (“stage 1”) uses Value Line’s estimated dividends²⁰
16 and the period 2018 through 2022 (“stage 2”) uses growth rates that converge from those implied
17 by Value Line’s estimated dividends to Mr. Storm’s long-term estimated GDP growth rates.

18 Mr. Storm uses Model 2 to “incorporate the fact that most companies have estimates of
19 EPS [earnings per share] and future dividends growing at different rates. While it is only
20 dividends the investor receives until he or she sells the stock, using EPS growing on a separate
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¹⁸ Exhibit NWN/2100; Hadaway/12.

23 ¹⁹ Exhibit Staff/2200; Storm/7. *See also* Exhibit Staff/2200; Storm/9, including Table 2 and
24 that “[m]y DCF models, using the 5.7 percent long-term growth rate used by Dr. Hadaway
25 [in his rebuttal testimony], provide[s] exactly the same 9.8 – 9.9 percent results as his
multistage DCF model; i.e., the difference between these results [in Table 2] is entirely due
to his use of an unsupportable growth rate of 5.7 percent.”

26 ²⁰ This applies to both Mr. Storm’s Model 1 and Model 2. *See* descriptions of Mr. Storm’s two
multistage DCF models at Exhibit Staff/1300; Storm/57 through Storm/60 and Exhibit
Staff/2200; Storm/10-18.

1 trajectory than dividends provides the foundation for an alternative means of terminal
2 valuation.”²¹ Model 2 uses Value Line estimates for EPS as well as dividends for “stage 1.”

3 The two multistage DCF models Mr. Storm uses in his rebuttal testimony incorporate
4 cash flows at a quarterly frequency, versus the annual frequency of his DCF models in opening
5 testimony and Dr. Hadaway’s multistage DCF model in his opening testimony, rebuttal
6 testimony, and surrebuttal testimony.²² This approach provides “greater precision as to the timing
7 of dividend increases and more closely represents the timing of an investor’s receipt of stock
8 dividends on a quarterly basis.”²³ In other words, Mr. Storm’s quarterly multistage DCF models
9 closely model actual dividend payments by a peer utility in that each model increases the dollar
10 amount of quarterly dividend by the annual rate of growth once each year in the quarter each
11 peer utility has historically increased its dividend. This replicates the quarterly timing of
12 dividend receipt by investors, with the dollar amount changing in the quarter each peer utility has
13 historically changed its dividend.

14 Mr. Storm incorporates an explicit adjustment to ROE for each peer utility’s capital
15 structure which differs from the 50 percent common equity 50 percent long-term debt proposed
16 by NW Natural. This adjustment reflects the Commission’s reasoning in other proceedings that,
17 all else being equal, a relatively higher (lower) proportion of common equity in the capital
18 structure serves to decrease (increase) returns required by investors, which warrants an
19 adjustment to ROE for each peer utility having a capital structure that differs in the proportion
20 represented by common equity from that of the base (or target) utility.²⁴ In each of Mr. Storm’s
21 multistage DCF models this results in an *upward* adjustment to the average ROE, as his peer
22

23 ²¹ See Exhibit Staff/1300; Storm/59 lines 11-15 and generally Storm/58 through Storm/60,
24 including footnotes. See also, in Docket No. 233, Staff’s discussion of the motivation for
and approach used with Model 2 at Exhibit Staff/800; Storm/57 through Storm/70.

25 ²² Staff used the quarterly frequency approach in a prior proceeding. See, in Docket No. UE
246, Exhibit Staff/200; Storm/7-8.

26 ²³ See Exhibit Staff/2200; Storm/10. Publicly traded U.S. corporations pay regular dividends
predominantly on a quarterly basis.

²⁴ See; e.g., Order No. 01-777 at 36 in Docket No. UE 115.

1 utilities are, on average, more “equity rich” than a 50 percent common equity 50 percent long-
2 term debt capital structure.²⁵

3 The use of estimated nominal GDP growth rates by Mr. Storm in stage 3 of each of his
4 multistage DCF models for the growth rate in dividends is a conservative approach in that it
5 likely overstates long-term dividend growth rates and, therefore, estimated ROEs.²⁶ Retail
6 natural gas expenditures, which are natural gas local distribution utilities’ revenues, have
7 declined as a percent of nominal GDP over the 30-year period since 1982. This means the
8 aggregate revenue of natural gas utilities has grown at a slower rate than nominal GDP over the
9 30-year period since 1982. The Energy Information Administration (EIA) of the U.S.
10 Department of Energy forecasts that retail natural gas expenditures will continue to decline as a
11 percent of nominal GDP over the agency’s forecast horizon through 2035. Both the historical
12 (last 30 years) fact of slower than nominal GDP rates of growth and EIA’s forecast of continued
13 decline in retail natural gas expenditures as a percent of nominal GDP through 2035 are depicted
14 in Figure 9 of Mr. Storm’s opening testimony.^{27, 28} Revenues growing more slowly than nominal
15 GDP implies, over a period of sufficient length, EPS and dividends growing more slowly than
16 nominal GDP and, therefore estimated ROEs that are lower than those obtained using estimated
17 long-term nominal GDP growth rates as a long-term growth rate for dividends²⁹ in multistage
18 DCF models.

19

20 ²⁵ See Exhibits Staff/1304 and Staff/2201. Staff has used the Hamada equation in proceedings
21 other than the one at hand. See; e.g., the Errata filing of Exhibit Staff/800 Storm/55,
including footnotes 116 through 120.

22 ²⁶ Exhibit Staff/1300; Storm/62-63.

23 ²⁷ See Figure 9 at Exhibit Staff/1300; Storm/63, including footnote 89. Note that the figure is
of a 3-year moving average, which “peaked” in 1984. Examination of the underlying data
provides the actual “peak” on an annual basis was in 1982.

24 ²⁸ Staff has discussed this result of slower than nominal GDP rates of historical and forecasted
growth in prior proceedings in the context of developing ROE estimates for electric utilities.
See; e.g., the Errata filing of Exhibit Staff/800; Storm/35 through Storm/46, including
25 footnotes, in Docket No. 233.

26 ²⁹ This is true for EPS as well as for dividends in Mr. Storm’s multistage DCF Model 2.

1
2 3. Staff Uses Robust Long-term Growth Rates Including Averages of Published Long-term
3 GDP Forecasts from Multiple Credible Institutions

4 Mr. Storm uses two different methods in his rebuttal testimony for developing estimates
5 of nominal GDP growth rates applicable in his multistage DCF models to years 2023 through
6 second quarter 2052. The first averages the most recent estimates³⁰ of nominal GDP growth rates
7 from the Blue Chip Consensus, the Congressional Budget Office (CBO), the Energy Information
8 Administration (EIA), the Office of Management and Budget (OMB), and the Social Security
9 Administration (SSA); i.e., this growth rate is an average of five forecasts independently
10 developed by credible institutions from both the private (Blue Chip Consensus, reflecting the
11 consensus forecasts of over 50 top business economists in the private sector³¹) and public
12 sectors. In each case, Mr. Storm uses the organization's nominal GDP growth rate forecast for
13 the period most closely matching the years to which the long-term nominal GDP growth rate is
14 applied (2023 through 2052) in his two multistage DCF models.³² The average of these estimated
15 annual rates of long-term nominal GDP growth is 4.51 percent.

16 Mr. Storm bases his second nominal GDP growth rate on his analysis of historical data.
17 He decomposes future GDP growth into two separate parts: growth in real economic activity and
18 inflation. Mr. Storm develops forecasts of these separately so as to facilitate “understanding
19 regarding whether it is the real growth rate or the inflation rate responsible for an anomalous-
20 appearing nominal rate.”³³ This approach also allows using a rate of future inflation expected by
21 participants in financial markets; i.e., a forward-looking, “real-world” inflation forecast “made”
22 by actual investors. Dr. Hadaway asserts that “most econometric forecasts are derived from the

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24 ³⁰ These are the most recent estimates available to Staff at the time Mr. Storm wrote his
rebuttal testimony.

25 ³¹ See; e.g., at
http://www.aspenpublishers.com/product.asp?catalog_name=Aspen&product_id=SS01934600&cookie%5Ftest=1.

26 ³² See Exhibit Staff/2200; Storm/13 through Storm/14.

³³ Exhibit Staff/2200; Storm/17.

1 trending of historical data or the use of weighted averages.”³⁴ Staff uses the former, while Dr.
2 Hadaway uses an ad hoc approach in developing the later.

3 Mr. Storm uses ordinary least squares (OLS) regression analysis to develop his trend
4 model for real GDP in rebuttal testimony, incorporating the findings of recent research that a
5 structural break occurred in U.S. real GDP in 1973.³⁵ He uses the same 1951 through 2011
6 historical timeframe used by Dr. Hadaway and uses a standard quantitative criterion (the
7 Schwarz Information Criterion) to determine which of various regression model specifications is
8 “better.” As may be verified by visual inspection, his trend model “explains” real GDP over the
9 period 1951 through about 2007 quite well.^{36, 37} This approach results in a 2.96 percent
10 estimated average annual rate of long-term growth in real GDP.³⁸

11 Mr. Storm applies two inflation rate forecasts to his estimate of long-term real GDP
12 growth based on history, and averages the two results to arrive at an estimated average annual
13 rate of long-term growth in nominal GDP. The first inflation rate forecast uses the TIPS break-
14 even inflation rate approach,³⁹ used to forecast inflation as measured by the Consumer Price
15 Index (CPI). Mr. Storm’s forecast is not for a period beginning in the first year of his DCF
16 models, but for the 20-year period beginning in the second quarter of 2023 or approximately at
17 the beginning of “stage 3” of his multistage DCF models; i.e., it is a forward rate. The TIPS
18 break-even inflation rate analysis results in an estimated 2.33 percent average annual long-term
19 growth rate (inflation rate) in the CPI.⁴⁰ As the price (inflation rate) index used to convert real
20 GDP to nominal GDP is the GDP Price Deflator and not the CPI, Mr. Storm develops an

21 _____

22 ³⁴ See Exhibit NWN/500; Hadaway/36.
³⁵ See Exhibit Staff/2200; Storm/14-15, including footnotes.
³⁶ See Figure 2 in Exhibit Staff/2200; Storm/16.
23 ³⁷ Mr. Storm reports standard statistics on his regression model at Exhibit Staff/2200;
Storm/15 lines 3 – 4.
24 ³⁸ Not shown in testimony, 2.33 percent can be reverse-calculated as the result of 2.13%
divided by 91.3%.
25 ³⁹ See Exhibit Staff/2200; Storm/11. Staff has used a version this methodology in previous
proceedings. See; e.g., Staff’s discussion in the errata filing of Exhibit Staff/800; Storm/50-
26 51 in Docket No. UE 233, including footnotes.
⁴⁰ See Table 4 at Exhibit Staff/2200; Storm/20.

1 historical relationship between the two price indices since 1956. His research shows that a
2 reasonable estimate of the historical relationship between the two is that the average annual rate
3 of change in the GDP Price Deflator equals 91.3 percent of the average annual rate of change in
4 the CPI.⁴¹ Therefore, the relevant forecast of average annual rate of long-term inflation using this
5 approach is 91.3 percent of 2.33 percent, or 2.13 percent. This provides a forecast of average
6 annual long-term nominal GDP growth of 5.15 percent.⁴²

7 The second inflation rate forecast results from averaging the average annual long-term
8 estimated rate of change (“growth rate”) in the GDP Price Deflator forecasts made by Blue Chip,
9 CBO, EIA, OMB, and SSA.⁴³ This average is 2.11 percent, which provides a 5.13 percent⁴⁴
10 estimated average annual long-term nominal GDP growth rate. The 2.11 percent average
11 estimate from these organizations of average annual the long-run rate of inflation, as measured
12 by the GDP Price Deflator, is essentially identical with the 2.13 percent rate obtained using the
13 TIPS break-even inflation rate method. The average of the two long-term nominal GDP growth
14 rate estimates is 5.14 percent.⁴⁵

15 The third forecast of the average annual long-term nominal GDP growth rate is simply an
16 average of the other two; i.e.,⁴⁶ an average of 4.51 percent and 5.14 percent, which is
17 4.83 percent.

18 Mr. Storm designates his 4.51 percent average annual long-term nominal GDP growth
19 rate⁴⁷ as “low growth;” his 5.14 percent growth rate as “high growth;” and his third growth rate
20 of 4.83 percent, which is the average of the first two growth rates, as “moderate growth.”⁴⁸

21

22

41 See Exhibit Staff/2200; Storm/11-12, including Figure 1.

23 42 This is $(1.0296 \times 1.0213) - 1$.

24 43 See Table 4 of Exhibit Staff/2200; at Storm/20.

44 This is $(1.0296 \times 1.0211) - 1$.

25 45 See; e.g., Table 3 of Exhibit Staff/2200; Storm/18

46 See Exhibit Staff/2200; Storm/7.

26 47 These values are represented in multiple locations in Exhibit Staff’s rebuttal testimony. See;
e.g., Table 3 at Storm/18.

48 See Table 2 of Exhibit Staff/2200; Storm/9.

1 4. Discussion of Certain Facets of NW Natural's Prehearing Brief

2 The use of single-stage, "constant growth" DCF models does not make Dr. Hadaway's DCF
3 modeling "more robust."⁴⁹

4 Staff considers the Commission's reasoning on single-stage DCF models in Docket
5 No. UE 115 to be eminently reasonable and notes that Dr. Hadaway has not affirmatively
6 "...show[n] that the required industry stability is present."⁵⁰ In fact, considerable portions of his
7 testimony suggest quite the opposite; i.e., a present and ongoing lack of stability in financial
8 markets generally according to Dr. Hadaway.

9 Staff's rebuttal testimony includes an average dividend yield for Staff's peer utilities of
10 3.9 percent and average annual long-term dividend growth rates of 4.51 percent, 4.83 percent,
11 and 5.14 percent.⁵¹ These values, by simple addition,⁵² directly equate to "constant growth" DCF
12 model estimated ROEs of, respectively, 8.4 percent, 8.7 percent, and 9.0 percent, which values
13 are rounded to the nearest 10 basis points and in all cases (results of both Models 1 and 2) are
14 within 10 basis points of Staff's average "unadjusted ROE (IRR)" in columns A of Exhibit
15 Staff/2201; Storm/1 through Storm/6. Adjusting for divergent capital structures, as discussed
16 above and in Mr. Storm's testimony,⁵³ results in estimated ROEs of 8.9 percent, 9.2 percent, and
17 9.5 percent, respectively.

18 Staff recommends the Commission give little weight to the results of Dr. Hadaway's
19 constant growth DCF models and notes that Dr. Hadaway's "constant growth" DCF models in
20
21

22 ⁴⁹ See NW Natural's Prehearing Brief at 5 ("more complete") and at 6. Dr. Hadaway's
23 thoughts regarding single-stage versus multistage DCF models are at Exhibit NWN/500;
24 Hadaway/26 lines 15-20, including that "[u]nder circumstances where growth rates are
25 expected to fluctuate or when future growth rates are highly uncertain, [estimated ROE
26 results from] the constant growth model may be questionable").

⁵⁰ See, In Docket No. UE 115, Order No. 01-77 at 27 and NW Natural's Prehearing Brief at 6-
7, including footnote 27.

⁵¹ See Exhibit Staff/2201.

⁵² See Exhibit NWN/500; Hadaway/26, lines 9-14.

⁵³ This is the 50 basis point upward adjustment show in Exhibit Staff/2201.

1 surrebuttal testimony provide average ROE estimates of 9.6 percent (“analyst’s growth rates”)
2 and 10.0 percent (“long-term GDP growth”).^{54 55}

3 NW Natural is incorrect in stating Mr. Storm used a 5.65 percent annual growth rate in
4 the first stage of his multistage DCF models.⁵⁶ Mr. Storm clearly shows the *dividend* growth
5 rates for the first stage of his two multistage DCF models in his opening testimony average 3.1
6 percent, with the rate for only one peer utility exceeding 3.2 percent.⁵⁷ Mr. Storm clearly shows
7 the *dividend* growth rates for the first stage of his two DCF models in his rebuttal testimony
8 average 3.1 percent, with the rate for only one peer utility exceeding 3.2 percent.⁵⁸ Mr. Storm
9 describes this aspect of his methodology in his opening testimony, including that, for his two
10 multistage DCF models, “[e]ach model has three stages, in the first of which I use *Value Line’s*
11 *dividend per share estimates*”⁵⁹ and not Value Line’s estimated EPS growth rates. Mr. Storm’s
12 two multistage DCF models appropriately use *dividends* as cash flows, with the exceptions of the
13 initial cash outflow for purchase of each peer utility’s stock (both Models 1 and 2) and the
14 terminal valuation at the investment horizon (both Models 1 and 2).

15 Dr. Hadaway’s surrebuttal testimony, as cited in the Company’s Prehearing Brief on this
16 point,⁶⁰ is more nearly correct when carefully read and suitably interpreted. According to
17 Dr. Hadaway, Mr. Storm “fails to report the similarity between my GDP growth rate forecast and
18 the *earnings growth forecasts* reported in the Value Line data he uses in his DCF models.”⁶¹ Mr.
19 Storm describes this aspect of his methodology used in Model 2 in his opening testimony,

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⁵⁴ Exhibit NWN/3202; Hadaway/2-3.

21 ⁵⁵ Exhibit Staff/1300 Storm/73.

22 ⁵⁶ NW Natural’s Prehearing Brief, page 8 lines 11 through 13: “This is the same [5.65 percent]
growth rate used by Mr. Storm in the first stage of his DCF models.”

23 ⁵⁷ See, e.g. column E of Exhibits Staff/1304 Storm/2.

24 ⁵⁸ See; e.g. column E of Exhibits Staff/2201 Storm/2.

25 ⁵⁹ Exhibit Staff/1300; Storm/57 lines 12-15; emphasis added. Note that the Company’s citation
of essentially the same language in its prehearing brief as support for its incorrect statement
(footnote 40) is obviously the result of misunderstanding “Value Line’s dividend per share
estimates.” Staff apologizes for any lack of clarity regarding distinction between Staff’s
phrase and the Company’s phrase “Value Line [EPS] growth rate.”

26 ⁶⁰ See NW Natural’s Prehearing Brief at 8, footnotes 39 and 40.

⁶¹ Exhibit NWN/3200; Hadaway/10 lines 1 through 4; emphasis added.

1 including that “I estimate the 2042 EPS analogously with methods used to estimate the 2042
2 dividend in both models; i.e., *based on Value Line estimates* to which multiple growth rates are
3 sequentially applied.”⁶² As EPS estimates only apply in Model 2, Dr. Hadaway’s use of the
4 plural “DCF *models*” can logically only refer to Model 2 as used with different inputs and
5 parameters in Mr. Storm’s opening and rebuttal testimonies; i.e., Dr. Hadaway’s statement has
6 no applicability to Mr. Storm’s Model 1 whatsoever.

7 Mr. Storm shows in his opening testimony the *EPS* growth rates for the first stage of his
8 DCF Model 2 average 5.4 percent, with two peer utilities at or above 7.7 percent and three peer
9 utilities at or below 3.6 percent.⁶³ Mr. Storm clearly shows in his rebuttal testimony the *EPS*
10 growth rates for the first stage of his DCF Model 2 average 5.7 percent, with two utilities above
11 4.2 percent and two utilities below 4.2 percent.⁶⁴ Presumably this is what Dr. Hadaway means,
12 although others may interpret his statement that “...the earnings growth forecasts reported in the
13 Value Line data he uses in his DCF models” in some different way. Arguably, and contrary to
14 Dr. Hadaway’s assertion, Mr. Storm did report the similarity to which Dr. Hadaway refers: his
15 exhibits clearly show his *growth rate for both his EPS and dividend growth in stage 1 of his*
16 *multistage DCF models*. Viewers of these exhibits can assess the similarity of Mr. Storm’s 5.4
17 percent and 5.7 percent EPS growth rates with the 5.7 percent dividend growth rate in Dr.
18 Hadaway’s rebuttal testimony.

19 Dr. Hadaway’s remark that “[i]n this context, had Mr. Storm simply extended the Value
20 Line growth rate into the later years of his models, rather than replacing that rate with his lower
21 GDP growth estimates, his results would have been more like mine than the 9.4 percent he
22 recommends,”⁶⁵ is a *non sequitur* of the affirming the consequent form.⁶⁶ First, by “Value Line

23

⁶² Exhibit Staff/1300; Storm/59 lines 6 through 9; emphasis added.

24 ⁶³ See columns D of Exhibits Staff/1304; Storm/1 through Storm/6.

25 ⁶⁴ See columns D of Exhibits Staff/2201; Storm/1 through Storm/6.

26 ⁶⁵ Exhibit NWN/3200; Hadaway/10 lines 4 through 7.

⁶⁶ Staff acknowledges that using higher growth rates for EPS in stages 2 and 3 of Mr. Storm’s
Model 2 multistage DCF model will result in higher estimated ROEs, all else being equal.

On this narrow basis Dr. Hadaway is correct: in that, as his ROEs are generally higher than

1 growth rate “Dr. Hadaway is, in context, either referring to either Value Line’s *estimated EPS*
2 *growth rate* over some future period, or the *EPS* growth rate derived from Value Line’s dollar
3 value *estimates of EPS* for some future periods⁶⁷ (the two are not always equivalent⁶⁸ and Mr.
4 Storm uses the latter approach, as discussed above); i.e., Dr. Hadaway is not referring to Value
5 Line’s *estimated dividend growth rate*, nor to Value Line’s dollar value *estimates of future*
6 *dividends*. It is *dividends* that are all cash flows in discounted dividend multistage DCF models
7 such as those used both by Dr. Hadaway and Mr. Storm, other than the initial cash outflow for
8 purchase of each peer utility’s stock (both Mr. Storm’s Models 1 and 2 and Dr. Hadaway’s
9 multistage DCF model) and the terminal valuation at the end of the investment horizon (in Mr.
10 Storm’s Model 2; discussion of Dr. Hadaway’s approach vis-a-vis terminal valuation in his
11 multistage DCF model is below).⁶⁹ Staff believes dividend growth rates apply to dividends and
12 EPS growth rates apply to EPS and the two rates are often different for any given company (as
13 are reflected in the averages in the discussion above).⁷⁰

14 As Staff understands Dr. Hadaway to be using “Value Line [EPS] growth rate” in the first
15 sense above, this constitutes the *non sequitur*, in that Mr. Storm did not use these anywhere in his
16 DCF models, instead using Value Line’s estimated dollar values of EPS in his Model 2, as
17 discussed above. Therefore there was nothing to “extend.”

18

19

20 Mr. Storm’s, the use of higher growth rates by Mr. Storm, whether for dividends (Models 1
21 and 2) or EPS (Model 2) and all else being equal, serves to increase the estimated peer
22 utilities’ ROEs individually and on average.

23 ⁶⁷ Value Line provides both growth rates over a specified future period and estimates of dollar
24 values for, typically, the current year, the following year, and the average of three future
25 years. Mr. Storm discusses his methodology on this point at Exhibit Staff/1300; Storm/57
26 line 14 through Storm/58 line 2.

27 ⁶⁸ Value Line “rounds” the estimated growth rates over future periods to the nearest one-half
28 (0.5) percent. *See* examples of this in columns 4 of Exhibits NWN/504; Hadaway/2,
29 NWN/2106; Hadaway/2, and NWN/3202; Hadaway/2.

30 ⁶⁹ *See* Exhibit Staff/1300; Storm/59 lines 13-15.

31 ⁷⁰ *See* Staff’s discussion of EPS, dividends, and payout ratios in Docket No. UE 233, the errata
32 filing of Exhibit Staff/800; Storm/57-66. The important point is that corporations do not use
33 a simple “fixed” or constant payout ratio, because dividends and EPS do not grow at the
34 same rate in the same period and they want a “smooth” payout in dollars.

1 Mr. Storm uses three average annual long-term nominal GDP growth rates in his opening
2 testimony to forecast stage 3 dividends for each peer utility, not two as stated in the Company’s
3 Prehearing Brief.⁷¹ These rates are 4.96 percent, 5.43 percent, and Dr. Hadaway’s 5.8 percent.
4 Mr. Storm uses the third of these growth rates—Dr. Hadaway’s 5.8 percent—“primarily for
5 illustrative purposes.”⁷² Therefore the estimated average annual long-term nominal GDP rate of
6 growth Mr. Storm uses in his opening testimony in support of his recommended ROE of 9.2
7 percent averaged 5.20 percent. Mr. Storm’s rebuttal testimony also provided three nominal GDP
8 growth rate forecasts: 4.51 percent, 4.83 percent, and 5.14 percent.⁷³ These average 4.83 percent
9 and Mr. Storm used all three in support of the 9.4 percent ROE recommended in his rebuttal
10 testimony.

11 Mr. Storm made several well-documented changes in his methodologies after reviewing
12 Dr. Hadaway’s rebuttal testimony,⁷⁴ some of which impacted his estimated nominal GDP growth
13 rates. Each methodological change made between Mr. Storm’s opening testimony and his
14 rebuttal testimony serves to make his ROE analysis more robust.

15 Table 3 of Mr. Storm’s rebuttal testimony clearly shows that the nominal GDP growth
16 rate used by Mr. Storm in his rebuttal testimony that results in estimated ROE values most
17 similar to his recommended 9.4 percent ROE (9.3/9.4 percent and 9.4/9.5 percent for the
18 average/median values, respectively, for Models 1 and 2, respectively) is the growth rate entirely
19 based on historical data for its real growth rate component.⁷⁵ Mr. Storm also includes in his
20 rebuttal testimony a table, repeated below, decomposing the various estimates of long-term
21
22
23

24 ⁷¹ “Staff also used GDP data in two of the three different growth rates...” NW Natural’s
25 Prehearing Brief page 7, lines 11-19 and Exhibit Staff/1300 Storm/60 through Storm/62.

⁷² See Exhibit Staff/1300; Storm/61.

⁷³ See; e.g., Table 3 at Exhibit Staff/2200; Storm/18.

⁷⁴ See Exhibit Staff/2200; Storm/10 through Storm/19.

⁷⁵ See Table 3 of Exhibit Staff/2200; Storm/18.

1 growth rates in nominal GDP into estimates of the long-term growth rate in real GDP (without
 2 inflation) and estimates of long-term rates of inflation as measured by the GDP Price Deflator.⁷⁶

3 **Table 4 of Exhibit Staff/2200**

Source	Real GDP	GDP Price Inflator	Nominal GDP
Blue Chip Consensus	2.5%	2.1%	4.65%
CBO	2.15%	2.2%	4.4%
EIA	2.56%	2.06%	4.67%
OMB	2.46%	1.8%	4.3%
SSA	2.1%	2.4%	4.55%
Historical (Staff)	2.96%	2.13%	5.15%
Average of estimates used by Staff	2.45%	2.11%	4.62%
Hadaway (UG 221 Rebuttal)	2.62%	3.0%	5.7%
Hadaway vs. average of other estimates	+0.17%	+0.89%	+1.08%

17 As can be seen in this table, the 5.7 percent growth rate Dr. Hadaway uses in his rebuttal
 18 testimony in one of his constant growth DCF models and in his multistage DCF model can be
 19 decomposed into a 2.62 percent average annual growth rate in real GDP and a 3.0 percent
 20 inflation rate (average annual rate of change in the GDP Price Deflator), which rate of inflation is
 21 shown in Dr. Hadaway’s rebuttal testimony at Exhibit NWN/2105. In other words, Dr.
 22 Hadaway’s 5.7 percent weighted average estimated annual long-term nominal GDP growth rate
 23 embeds a 3.0 percent weighted average estimated annual long-term rate of inflation (as measured
 24

25 ⁷⁶ See Table 4 of Exhibit Staff/2200; Storm/20. Mr. Storm uses the terms “GDP Price Inflator”
 26 and “GDP Price Deflator” interchangeably. See additional information regarding GDP price
 indices at <http://www.bea.gov/national/nipaweb/NIPAHelp.htm> .

1 by the GDP Price Deflator) and a 2.62 percent weighted average estimate of annual long-term
2 rate of growth in real GDP. Mr. Storm's estimated real GDP growth rate based upon history of
3 2.96 percent *exceeds* Dr. Hadaway's 2.62 percent estimate by 34 basis points.

4 This means that over 100 percent of the 56 basis point difference ("more than all," or 90
5 basis points⁷⁷) between Dr. Hadaway's 5.7 percent growth rate and Mr. Storm's 5.14 percent
6 growth rate is due to the witnesses' different estimates of future inflation, and not on their views
7 with respect to growth in real economic activity. Mr. Storm's 2.96 percent estimate of the long-
8 term growth rate in real GDP, which results in his recommended 9.4 percent ROE, *exceeds* Dr.
9 Hadaway's embedded but easily computed 2.62 percent estimate of the long-term growth rate in
10 real GDP. If the witnesses shared the same view of future inflation, Mr. Storm's estimated ROE
11 using his historical GDP growth rate would be *higher* than Dr. Hadaway's estimated ROE.

12 Between Mr. Storm's opening and rebuttal testimony, and after reviewing Dr. Hadaway's
13 rebuttal testimony, Mr. Storm's average long-term growth rate based on history *declined by 37*
14 *basis points*, while his recommended ROE *increased by 20 basis points*. The 37 basis point
15 decline was largely a result of changes in the inflation forecast stimulated by Dr. Hadaway's
16 rebuttal testimony. In Table 8 of Exhibit Staff/1300; Storm/62 the inflation rate used in the
17 growth rate based on history is 2.44 percent. In Staff's rebuttal testimony, it is 2.13 percent, or a
18 reduction of 31 basis points, 20 of which⁷⁸ are the result of Staff reviewing Dr. Hadaway's
19 rebuttal testimony. It is not clear to Staff why the Company takes issue with this.

20 The Company's Prehearing Brief includes that "Dr. Hadaway's use of weighted, long-
21 term historical data for his forecast growth rate is consistent with the derivation of most
22 econometric forecasts."⁷⁹ Mr. Storm's use of regression-based trend analysis to estimate an

23

⁷⁷ This is $(5.7 - 5.14) - (2.62 - 2.96)$, or 0.90 percent, or 90 basis points.
24 ⁷⁸ Staff's TIPS break-even rate inflation in opening testimony is 2.44 percent and in rebuttal
25 testimony is 2.33, or a reduction of 11 basis points reduced expectation of future inflation as
26 measured by the CPI. The remaining change of 20 basis points, from 2.33 percent to 2.13
percent, is the result of the conversion from CPI to GDP Price Deflator.

⁷⁹ At page 8.

1 average annual long-term growth rate in real GDP is an econometric forecast, albeit a very
2 simple one.

3 NW Natural asserts in the Company's Prehearing brief that:

4 "Staff's analysis fails to consider the government's ongoing intervention in the
5 capital markets. Instead, Staff mechanically ran the traditional analyses, without
6 any consideration of current market conditions. Had Staff considered the current
7 market conditions in its analysis, the results would have been significantly
8 higher."⁸⁰

9 The Company's assertion that "Staff's analysis fails to consider..." is mistaken. Staff *did*
10 consider "current market conditions"⁸¹ (including "current market conditions" as reflective of
11 "the government's ongoing intervention..."), the results of which in Mr. Storm incorporates into
12 his recommendations. The related assertion that "[h]ad Staff considered the current market
13 conditions in its analysis, the results would have been significantly higher represents another
14 logical fallacy. Mr. Storm *did* consider "the current market conditions," *which considerations*
15 *are incorporated into Staff's recommendations*; therefore it is not possible that his "...results
16 would have been significantly higher." Presumably assertions by the Company and by Dr.
17 Hadaway on this point⁸² stem from the fact that Mr. Storm arrives at a different conclusion than
18 does Dr. Hadaway.

19 ⁸⁰ At page 9; footnotes present in the original are omitted.
20 ⁸¹ See; e.g., in Exhibit Staff/1300; Storm/58 lines 14 – 19; Storm/59 lines 4 – 7; Storm/71 lines
21 10 – 12, including footnote 95; Storm/80 line 6 through Storm/81 line 3; and, in Exhibit
22 Staff/2200, Storm/8 lines 11 – 15; Storm/9 line 9 through Storm/10 line 7, including that
23 "...[t]hese risks are unforeseen by both me and by the market at this time"; Storm/11 lines 9
24 – 15; Storm/17 lines 6 – 8 and 15 - 21; Storm/21 lines 11 – 17; Storm/23 line 1 through
25 Storm/24 line 18; and Storm/25 line 14 through Storm/34 line 16, including footnote 40. See
26 in particular Exhibit Staff/2200; Storm/26 line 5 through Storm/27 line 15; Storm/28 line 14
through Storm/31 line 12; Figure 3 at Staff/2200 Storm/30; and Figure 4 at Staff/2200;
Storm/32. The careful reader of cost of equity testimony in this docket will conclude Mr.
Storm's consideration of "current market conditions" is more quantitative than Dr.
Hadaway's and the results of his consideration more closely integrated into his analysis than
is true of Dr. Hadaway's analysis.

⁸² The Company's Prehearing brief at 9 provides citations regarding these assertions by Dr.
Hadaway. See in particular Exhibit NWN/3200; Hadaway/9.

1 The Company asserts that Dr. Hadaway demonstrates the appropriateness of “an ROE in
2 the upper end of his DCF range...in his alternative approach to Staff’s Multistage DCF 2
3 model...,” further asserting that “[i]nstead of lengthening the time horizon of the model as Mr.
4 Storm proposed in his rebuttal testimony, Dr. Hadaway shortened it to *more accurately capture*
5 *current market conditions.*”⁸³ Reducing the investment horizon is a novel approach to “more
6 accurately capture current market conditions” and Dr. Hadaway provides no explanation of why
7 this approach does so or the extent to which it does, other than offering that “[i]n my opinion, use
8 of a shorter time horizon increases the accuracy of the analysis.”⁸⁴

9 Computation of a terminal value in 2016, after a four-year investment horizon, makes the
10 terminal value a very large portion of the current valuation (the stock price). Dr. Hadaway does
11 not provide this information, but simply looking at the averages in Exhibit NWN/3202
12 Hadaway/5 suggests that his average terminal value of \$54.11 in column 35 is approximately 90
13 percent of the (undiscounted) \$59.41 average⁸⁵ total of cash inflows or average total valuation.
14 Compare the approximate 90 percent in Dr. Hadaway’s “alternative approach” with the terminal
15 value as a percent of total valuation averages supplied for Staff’s peer utilities in Exhibit
16 Staff/2201, which range from a low of 22.9 percent to a high of 24.3 percent. Mr. Storm’s
17 methodology places much less reliance on the terminal valuation in estimating ROE.

18 Dr. Hadaway’s use of a four-year investment horizon appears contradictory to his
19 statement that “[t]hese findings support the notion that long-term growth expectations are more
20 closely predicted by broader measures of economic activity than by near-term analysts’
21 estimates.”⁸⁶ In Exhibit NWN/3202; Hadaway/5, the average growth rate resulting from Value
22 Line analysts’ EPS estimates, which determines Dr. Hadaway’s selling price in 2016, is 6.7

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⁸³ NW Natural’s Prehearing Brief at at 5; emphasis added. *See also* Exhibit NWN/3200
25 Hadaway/5 line 7 through Hadaway/7 line 7 and Exhibit NWN/3202; Hadaway/5.

⁸⁴ Exhibit NWN/3200; Hadaway/6 lines 3 – 5.

26 ⁸⁵ This is the sum of the cash flow averages of \$1.72 + \$1.77 + \$1.81 + \$54.11.

⁸⁶ Exhibit NWN/500; Hadaway/35 lines 7 through 10.

1 percent,⁸⁷ or well above any long-term growth rate used by either Mr. Storm or by Dr. Hadaway
2 in any of the latter's other DCF models. Such a high average rate of EPS growth, over a
3 relatively short four-year period, suggests the analysts may be forecasting a "bounce" off
4 near-recession low EPS values associated with a long-anticipated increase in the rate of growth
5 in economic activity (economic "recovery").

6 Dr. Hadaway's use of a four-year investment horizon "to more accurately capture current
7 market conditions" also appears to contradict his statement in direct testimony that "...the
8 current economic turmoil makes it even more important to consider longer-term economic data
9 in the growth rate estimate."⁸⁸ Obviously analysts' four-year EPS estimates do not represent
10 "longer-term economic data."

11 Finally, shortening the timeframe of Mr. Storm's multistage DCF Model 2 from a
12 horizon of 40 years to one of *four years* certainly seems at odds with Dr. Hadaway's use of a
13 150-year time horizon in his multistage DCF model.⁸⁹ The theoretical grounds on which the
14 Company objects to Mr. Storm's use of either a 40- or 50-year investment horizon in his
15 multistage DCF models are unstated. A cynic might observe that, all else being equal, the way in
16 which to maximize the estimated ROE from Mr. Storm's Model 2 with respect to an EPS growth
17 rate is to use that rate or combination of rates and related time horizon that results in the highest
18 average EPS growth rate. The Commission should give no weight to the 10.2 (average) and 10.6
19 (median) estimated ROE results of Dr. Hadaway's "alternate approach" or to the related
20 assertions in the Company's Prehearing Brief.

21 The Company's prehearing brief claims Staff's 9.4 percent recommended ROE is
22 unreasonable, in part because it is 52 basis points lower than the 9.92 percent average gas utility
23 ROE awarded in 2011.⁹⁰ Staff notes that NW Natural's current 10.2 percent ROE, awarded in

24 _____

25 ⁸⁷ This is $(\$52.24 / \$40.35) ^{0.25-1}$, or 0.067, or 6.7 percent.

26 ⁸⁸ Exhibit NWN/500; Hadaway/36 lines 20-21.

⁸⁹ See; e.g., the header label in column 23 of Exhibits NWN/504; Hadaway/4, NWN/2106;
Hadaway/4, and NWN/3202; Hadaway/4.

⁹⁰ At page 10.

1 2003,⁹¹ is *83 basis points lower* than the 11.03 percent average gas utility ROE awarded in
2 2002.⁹² Staff elsewhere in testimony demonstrates that NW Natural has, on the whole, enjoyed
3 financial success since the last general rate case.⁹³

4 Dr. Hadaway claims that current near-term forecasts for both real GDP and inflation are
5 severely depressed and that “the longer-term forecasts of professional economists are also
6 depressed.”⁹⁴ If by this Dr. Hadaway is saying the “longer-term forecasts of professional
7 economists are also depressed” and that these longer-term forecasts are too low—which is and
8 has been Staff’s interpretation of Dr. Hadaway’s testimony on this point—the reason they must
9 be *too low* is that they include a *too low* forecast of long-term future inflation, as discussed
10 above, Staff strongly disagrees. The forecasts in the replicated Table 4 (above) indicate that the
11 numerous economists (over 50!) represented in the Blue Chip Consensus forecast as well as the
12 economists at the CBO, EIA, OMB, and SSA must all (or “on average” in the case of Blue Chip)
13 be producing “depressed forecasts” of long-term growth in nominal GDP (in a narrow range of
14 4.3 percent to 4.67 percent), long-term growth in real GDP (in a narrow range of 2.15 percent to
15 2.56 percent), and inflation as measured by annual rates of change in the GDP Implicit Price
16 Deflator (in a reasonably narrow range of 1.8 percent to 2.4 percent). Presumably the narrow

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19 ⁹¹ See Exhibit Staff/1300; Storm/64 line 11 through Storm/65 line 8.

20 ⁹² Exhibit Staff/1305; Storm/2.

21 ⁹³ See; e.g., Exhibit Staff/200; Johnson/4.

22 ⁹⁴ Exhibit NWN/500; Hadaway/37. In prior proceedings before this Commission, Dr.
23 Hadaway has stated this as “[t]he longer-term forecasts of professional economists are also
24 depressed” (Docket No. UE 246 Exhibit PAC/200 Hadaway/28 lines 13-14; March; 2012);
25 “[t]o the extent that even the longer-term outlooks of professional economists are also
26 depressed, their forecasts may be understated” (Docket No. UE 217 Exhibit PPL/200
Hadaway/34 lines 19-20; 2010); and “[t]o the extent that even the longer-term outlooks of
professional economists are also depressed, their forecasts will be low” (Docket No. UE 210
Exhibit PPL/200 Hadaway/32 lines 21-22; April 2009). The “professional economists” to
whom Dr. Hadaway presumably refers, as reflected by the sample of “professional
economists” employed by (or surveyed by in the case of Blue Chip Consensus)
organizations cited in Staff’s testimony, have produced “depressed forecasts” for no less
than three and one-half years at this point according to Dr. Hadaway.

1 ranges indicated are suggestive to Dr. Hadaway of approximately equal depression in these
2 forecasts across the economists in different organizations.

3 Dr. Hadaway's 2.62 percent long-term growth rate for real GDP is six basis points
4 (0.06 percent) above the highest of the "agency plus Blue Chip" forecasts, EIA's 2.56 percent,
5 while his 3.0 percent inflation rate, as measured by the GDP Price Deflator, is 60 to 120 basis
6 points (0.6 percent to 1.2 percent) above the highest (SSA's 2.4 percent) and lowest (EIA's 1.8
7 percent) forecasts, respectively; i.e., Dr. Hadaway's estimate of long-term inflation is from 25 to
8 67 percent higher than the forecasts of these "professional economists."

9 Additionally, Dr. Hadaway's estimated long-term inflation rate of 3.0 percent is 87 basis
10 points (0.9 percent) higher than investors' collective expectation for inflation, as measured by the
11 GDP Price Deflator, over the 20 year period beginning May, 2022.^{95, 96} Not only are
12 "professional economists" producing Dr. Hadaway's "depressed forecasts," but investors in U.S.
13 Treasury securities are as well. Such forecasts, according to Dr. Hadaway, represent "inflation
14 rates that are not consistent with investors' long-term experience" and long-term nominal GDP
15 forecasts "entirely inconsistent with investors' long-term experience in U.S. capital markets,"⁹⁷
16 but in the former case they reflect investors' *expectations*. Dr. Hadaway would have us believe
17 investors are basing investment decisions by "looking over their shoulders" (using Dr.
18 Hadaway's weighted average history) regarding future inflation when it is abundantly clear (as
19 well as intuitive) that investors in U.S. Treasury securities are forward-looking.

20 Staff notes that Dr. Hadaway's long-term growth rate of 5.7 percent in the multistage
21 DCF model in his surrebuttal testimony takes full effect in 2017⁹⁸ and seemingly contradicts the
22 assertion in Exhibit NWN/200; Anderson/21, made in the context of discussing risks faced by
23 the Company, that "[m]ost economists are forecasting little to no growth until late this decade
24

25 ⁹⁵ Mr. Storm's multistage DCF models' stage 3 begins in 2023.

26 ⁹⁶ See Exhibit Staff/2200; Storm/21.

⁹⁷ Exhibit NWN/2100; Hadaway/12 line 23 through Hadaway/13 line 7.

⁹⁸ See Exhibit NWN/3202; Hadaway/4, columns 14 and 18 0 23, as well as Hadaway/6.

1 due to the financial nature of this crisis and associated recession.”⁹⁹ Mr. Storm’s testimony
2 includes discussions in multiple locations of both interest rates and inflation rates.¹⁰⁰

3 5. Dr. Hadaway’s “Confused Investors” and Risk and Return

4 While discussion of investors’ confusion (versus the views of Dr. Hadaway) with respect to
5 future rates of inflation appears above, there are other aspects involving investors’ “confusion” in
6 Dr. Hadaway’s testimony. Dr. Hadaway, on “[h]ow do capital market concerns affect the cost of
7 equity capital”:

8 “...[E]quity investors respond to changing assessments of risk and financial
9 prospects by changing the price they are willing to pay for a given security. When
10 the risk perceptions increase or financial prospects decline, investors refuse to pay
11 the previously existing market price for a company’s securities and market supply
12 and demand forces then establish a new lower price. The lower market price
typically translates into a higher cost of capital through a higher dividend yield
requirement, as well as the potential for increased capital gains if prospects
improve.”¹⁰¹

13 Setting aside discussion of a nuanced reworking of the last sentence of this excerpted
14 passage from Dr. Hadaway’s direct testimony and believing the statement applies to investors in
15 more than just equity securities, Staff agrees.¹⁰² This constitutes rational behavior by investors.
16 Furthermore, Staff believes such rational behavior results in asset prices that are in equilibrium.
17 The equilibrium price for an asset may change day-to-day and even minute-by-minute, but at all
18 times reflects investors’ collective appraisal of risk and reward.¹⁰³ Dr. Hadaway appears to share
19 Staff’s belief, having that “[e]ach day market rates of return and prices change to reflect new
20 investor expectations and requirements...[t]his competitive market adjustment process is quick
21 and continuous, so that market prices generally reflect investor expectation.”¹⁰⁴ In spite of this
22

23 ⁹⁹ Exhibit Staff/1300; Storm/73 lines 15 through 19.

24 ¹⁰⁰ See; e.g., Exhibit Staff/1300; Storm/75 – Storm/76; Staff/2200; Storm/20 – Storm/25; and
Staff/2200 Storm/32 – Storm/34.

25 ¹⁰¹ Exhibit NWN/500; Hadaway/17 lines 11 - 18.

26 ¹⁰² See Staff’s discussion of prices, cash flows, and discount rates in Docket No. UE 233,
Exhibit Staff/800 (Errata) Storm/27 line 12 through Storm/30 line 5.

27 ¹⁰³ See Exhibit Staff/2200; Storm/28, line 14 through Storm/29, line 8.

28 ¹⁰⁴ Exhibit NWN/500; Hadaway/19 lines 11 – 18.

1 statement by Dr. Hadaway, he simultaneously believes the prices of both his peer utilities and
2 Staff's peer utilities are "too high" as he believes the dividend yields are "too low."
3 Staff discusses Dr. Hadaway's reasoning on risk and return at Exhibit Staff/2200; Storm/25 line
4 14 through Storm/32 line 1,¹⁰⁵ including that Mr. Storm "...believe[s] current equity prices fully
5 reflect the risks perceived by investors and specifically by investors in the companies used by
6 either of us as peer utilities to NW Natural."¹⁰⁶

7 Dr. Hadaway links the "too low" ROE estimates in his DCF models' to two notions:
8 prices of peer utilities are too high due to low (and unsustainable) interest rates and investors'
9 collective risk aversion is "increased."¹⁰⁷ Mr. Storm points out that forecasts of an increase in
10 interest rates by sources cited by Dr. Hadaway in his rebuttal testimony, as compared with his
11 direct testimony, have been "pushed out" in time over the last year.¹⁰⁸ Staff asks that the
12 Commission take Official Notice of (1) the Federal Reserve's 2:00 p.m. EST "principles" press
13 release of January 25, 2012¹⁰⁹ and (2) the Federal Reserve's press release of August 1, 2012.¹¹⁰

14 The former includes a direct communication by the Federal Reserve that it "judges that
15 inflation at the rate of 2 percent...is most consistent over the longer-run with the Federal
16 Reserve's statutory mandate." The latter includes the statement by the policy-making arm of the
17 Federal Reserve (the Federal Open Market Committee, or FOMC) that the Committee "currently
18 anticipates that economic conditions—including low rates of resource utilization and a *subdued*
19 *outlook for inflation over the medium run*—are likely to warrant exceptionally low levels for the
20 federal funds rate at least through late 2014;"¹¹¹ that "inflation over the medium term will run *at*
21 *or below the rate that it judges most consistent with its dual mandate;*" that "longer-term

22 _____
23 ¹⁰⁵ See especially Exhibit Staff/2200; Storm/26 line 5 through Storm/27 line 15.

¹⁰⁶ Exhibit Staff/2200; Storm/29 lines 6 through 8.

¹⁰⁷ Exhibit NWN/2100 Hadaway/6, line 17 through Hadaway/7 line 2.

¹⁰⁸ See Exhibit Staff/2200; Storm/32 line 2 through Storm/34 line 16.

¹⁰⁹ Accessible as of September 10, 2012 at

¹¹⁰ <http://federalreserve.gov/newsevents/press/monetary/20120125c.htm>.

Accessible as of September 10, 2012 at

¹¹¹ <http://federalreserve.gov/newsevents/press/monetary/20120801a.htm> .

Emphasis added.

1 inflation expectations have remained stable;” and that the FOMC will “continue through the end
2 of the year its program to extend the average maturity of its holdings.”

3 Mr. Storm’s rebuttal testimony cites Federal Reserve Chairman Bernanke’s statement
4 that “[t]he central tendency of the [Federal Open Market] Committee's projections is that
5 inflation will be 1.2 to 1.7 percent this year, and at or below *the 2 percent level that the*
6 *Committee judges to be consistent with its statutory mandate* in 2013 and 2014.”¹¹² In other
7 words, inflation will be low (lower than 2.0 percent) this year, inflation over the medium- to
8 longer-term will be low, expectations of longer-term inflation are stable, short-term interest rates
9 will be low through at least a year past the end of the first 12 months of the proposed rate
10 effective period in the current proceeding, and the Federal Reserve will work to keep long-term
11 rates low through its maturity extension program through at least the end of 2012.

12 Dr. Hadaway, in his direct testimony, wants us to believe that (“too high”) peer utility
13 prices he uses in his DCF models result in ROE estimates that are too low relative to levels of
14 investors’ risk aversion.¹¹³ His ROE estimates using DCF models in his rebuttal testimony, with
15 a maximum of 10.0 percent in his updated range, are lower than in his direct testimony, so the
16 Company decreases its requested ROE in rebuttal testimony from 10.3 percent: “[c]onsidering
17 these results, the Company adjusted its ROE recommendations to 10.2 percent, acknowledging
18 my updated analysis, but ultimately giving more weight to my original analysis.”¹¹⁴ This directly
19 implies Dr. Hadaway and the Company believe prices are too high (as the Company chose to
20 rely on the model results using the earlier and lower prices). Given Dr. Hadaway’s surrebuttal
21 results of a 9.7 percent average estimated ROE in his multistage DCF model¹¹⁵ and Staff’s
22 recommendation for the Commission’s consideration regarding the results of Dr. Hadaway’s
23

24 ¹¹² See Exhibit Staff/2200; Storm/21, line 18 through Storm/19 line 3. Emphasis supplied.

25 ¹¹³ See; e.g., Exhibit NWN/500; Hadaway/3, including that “...under present conditions I
26 believe an ROE above some of the quantitative results is appropriate;” and Exhibit
Staff/1300; Storm/80 line 6 through Storm/82 line 2.

¹¹⁴ See Exhibit NWN/2100; Hadaway/2 line 14 through Hadaway/3 line 19.

¹¹⁵ Exhibit NWN/3202; Hadaway/4.

1 constant growth single-stage DCF models,¹¹⁶ the 10.0 percent ROE requested in the Company’s
2 surrebuttal testimony¹¹⁷ represents an “outboard” upward adjustment of 30 basis points.

3 Regarding investors’ risk aversion, Mr. Storm’s rebuttal testimony includes a chart
4 showing the monthly closing price of the Chicago Board Option Exchange’s (CBOE) Volatility
5 Index (“VIX”) since 1990, a chart of the daily VIX closing price for 2012 through July 17th, and
6 notes that “[t]he June 2012 value of 17.08 was well under the historical average of 20.5.”¹¹⁸ Staff
7 asks that the Commission take Official Notice of the 2012 year-to-date daily closing price of the
8 VIX through September 7, 2012.¹¹⁹ Staff includes a chart illustrating these values, which average
9 18.4, as compared with the 20.5 average of the month-end closing prices for January 31, 1990
10 through June 30, 2012. The average 2012 closing price of the VIX has to date been below its
11 long-term average and has not closed above 20.5 since June 15, 2012: *investors appear to be less*
12 *risk averse* than at the time of the Company’s filing, not more risk averse as claimed by Dr.
13 Hadaway.

14 The Company’s requested 10.0 percent ROE is unreasonable and does not result in fair
15 and reasonable rates. While Dr. Hadaway did not provide his two risk premium models in
16 surrebuttal testimony, these models appeared in both is direct and rebuttal testimony, with
17 estimated ROE results in rebuttal testimony of 9.75 percent based upon “projected interest rates”
18 and approximately 9.4 percent based on “current” interest rates. In September, 2012, it is now
19 clear his “projected interest rates” are based on a very near-term future that is highly unlikely to
20 occur prior to conclusion of this proceeding. Additionally, Dr. Hadaway’s risk premium models
21 use an obvious form of “circular reasoning” in that the variable his models “explain” are

22

23

24 ¹¹⁶ “Staff recommends the Commission give little weight to the results of Dr. Hadaway’s
25 constant growth DCF model.” *See* Exhibit Staff/1300 ;Storm/73 lines 3-4.

¹¹⁷ *See*; e.g., Exhibit NWN/3200; Hadaway/3 lines 1 through 5.

¹¹⁸ *See* Exhibit Staff/2200; Storm/29 line 8 through Storm/32 line 1.

¹¹⁹ This can be accessed in spreadsheet format at
<http://www.cboe.com/micro/vix/historical.aspx>

1 historical ROEs authorized primarily in other jurisdictions. The Commission should give very
2 little, if any, weight to the results of Dr. Hadaway’s risk premium models.

3 The estimated ROE of only one of Dr. Hadaway’s DCF models in surrebuttal
4 testimony¹²⁰ support the Company’s requested 10.0 percent ROE, a model of the simplistic
5 single-stage constant growth form which the Commission has previously discussed. The results
6 of this DCF model are predicated on a 5.7 percent growth rate for U.S. Gross Domestic Product
7 and for the dividends of Dr. Hadaway’s peer utilities to NW Natural, which growth rate Staff
8 discusses extensively in testimony. Staff demonstrates that such a high rate of long-term growth
9 is a view of the future that may be uniquely held by Dr. Hadaway, and therefore represents a
10 high long-term growth rate that is “highly uncertain,”¹²¹ Dr. Hadaway’s own testimony appears
11 to argue against the use of a single-stage constant growth DCF model. Additionally, other
12 Company testimony contraindicates the use of such a high growth rate over the near- to medium-
13 term (“little to no growth until late this decade”¹²²). The Commission should give little to no
14 weight to the results of Dr. Hadaway’s constant growth DCF models.

15 Dr. Hadaway’s surrebuttal testimony multistage DCF model results in an estimated ROE
16 of 9.7 percent. This DCF model also uses the 5.7 percent long-term growth rate (beginning in
17 year 5, or 2017,¹²³ and well within “...until late this decade”) Staff discusses extensively.
18 Considering only the 9.7 percent result of Dr. Hadaway’s sole multistage DCF model, the
19 Company’s requested ROE of 10.0 percent represents an upward “outboard” adjustment of
20 30 basis points. Dr. Hadaway and the Company are asking the Commission to disregard the
21 market’s valuation of the companies used as peer utilities to NW Natural (“[i]f the Commission
22

23 _____
24 ¹²⁰ Dr. Hadaway does not use the results of his “alternative P/E” DCF model presented in
25 surrebuttal testimony in support of the Company’s requested 10.0 percent ROE, indicating
26 at Exhibit NWN/3200 Hadaway/3 lines 6 through 7 that his “DCF models currently indicate
an ROE range of 9.4 percent to 10.1 percent.”

¹²¹ See Exhibit NWN/500 Hadaway/26 lines 15-17.

¹²² Exhibit NWN/200 Anderson/21 lines 4 through 6.

¹²³ See; e.g., Exhibit NWN/3202 Hadaway/4 (column 23) and Hadaway/6.

1 concludes that currently utility dividends are artificially depressed by government policy”¹²⁴) and
2 instead place some other, lower valuation on these companies due to the market’s imperfect
3 (according to Dr. Hadaway) understanding of risk and return. Staff documents that investors’
4 collective forward-looking risk aversion, as measured by the VIX, has in 2012 been not only
5 much lower than during the financial crisis of four years ago, but has also been for much of 2012
6 to date below the average of the past twenty-plus years. Staff recommends the Commission
7 exercise considerable caution if contemplating such an approach to establishing the ROE for NW
8 Natural.

9 As for NW Natural-specific risks, from which prudent investors diversify, the Company
10 has provided considerable testimony. While much less has been made by Staff of the risk
11 reduction mechanisms and activities contributing to a lower risk for the Company with respect to
12 establishing the Company’s ROE, Staff notes that many of the issues in this proceeding have
13 involved precisely such risk mitigation paid for by ratepayers; e.g., pensions, decoupling,
14 WARM, SIP, environmental remediation, losses associated with unwinding a financial hedge,
15 etc. Staff has provided a calculator for the Commission’s consideration of a dollar value to the
16 Company associated with decoupling should the Commission wish to consider specifically this
17 risk reduction mechanism.¹²⁵ NW Natural’s requested 10.0 percent ROE is unreasonable and
18 Staff provides convincing testimony on why it is unreasonable and the degree to which it is
19 unreasonable.

20 6. The Commission should disallow some portion of NW Natural’s financial hedge loss.

21 In order to determine whether or not NW Natural’s involvement in a financial hedge was
22 prudent, we must ask what a reasonably prudent financial expert would have done at the time the
23 transaction was entered into. A reasonably prudent financial expert would have taken certain
24 steps that NW Natural did not to inform the financial hedging decision.

25 ¹²⁴ Exhibit NWN/3200 Hadaway/10 lines 15 through 17.

26 ¹²⁵ See Exhibit Staff/2200 Storm/4 line 9 through Storm/5 line 5, specifically including footnote
1.

1 A reasonably prudent financial expert should know that an investment bank’s sale of
2 products does not constitute advice or recommendations. The bank is not entering into a
3 fiduciary relationship with the utility. All amounts, terms and conditions are for indicative
4 purposes only. The bank need not validate displayed materials and the materials provided by the
5 bank to the utility are not binding. Indeed, the banks do not discuss various counterparty risk
6 exposures that could make a deal less attractive. While a bank may state that performance will
7 be improved by increased exposure to variable rates, such professionals know that this
8 performance may be accompanied by increased risk exposure to high-impact low-frequency
9 events disproportionately borne by parties unable to diversify or to offset the hedge positions.
10 The banks even provide written warnings regarding these points.¹²⁶

11 Reasonably prudent financial experts do not rely on the sales materials provided by a
12 bank’s sales force as the sole basis for entering into, terminating, or modifying any transaction
13 contract. The written warnings and disclaimers provided by investment banks serve to remind
14 reasonably prudent financial experts that they should not presume that it is prudent in any
15 instance, when entering into contracts governing millions of dollars, to accept the sales
16 presentations of bank sales representatives as a substitute for rigorous independent analysis of
17 the nature discussed in Staff rebuttal testimony.¹²⁷

18 Moreover, reasonably prudent financial experts in regulated utility transactions know that
19 “lucking” upon a good decision may excuse slight imperfections in a jurisdictional utility’s
20 analytical framework and process, but an unsupported bad decision excuses nothing in a
21 prudence review. Reasonably prudent financial experts expect that their analysis will be
22 provided in the next rate case. Requirements stated in Commission orders, such as Order No.
23 07-012, provide a written reminder that prudence review is reserved for the rate case.¹²⁸

24 Reasonably prudent financial experts never presume, prior to entering into a complex financial

25

¹²⁶ See Staff Cross Exhibit 1.

26 ¹²⁷ See Staff/2300; Muldoon/11 at lines 8-19.

¹²⁸ See Order No. 07-032 in Docket No. 4235, conditions shown in Appendix A pages 1-2.

1 contract placing millions of dollars at risk, that they do not need to do analysis of the sort
2 recommended by Staff because “it wouldn’t make any difference.”¹²⁹

3 In October of 2007, there was no global financial crisis. There was no unavoidable doom
4 looming for all parties. Fully functioning markets allowed for a range of alternatives to financial
5 hedging such as a delayed start in private placement at little or no incremental cost or risk.
6 Reasonably prudent financial experts would document and retain the quotes from alternatives
7 considered, in part to show that their utility remained focused on the need to assure lowest risk
8 and all-in cost¹³⁰ for the next bond issuance, and particularly so should they use a newly
9 authorized hedging tool. Reasonably prudent financial experts also recognize that utility plans
10 for bond issues are generally within a window of time of approximately six months. In October
11 of 2007, time allows for reasonably prudent financial experts to seek least cost with minimal risk
12 exposure solutions, because the next issuance is under no short-term time pressure.

13 In October of 2007, a reasonably prudent financial expert would communicate to the
14 banks bidding on the hedging transactions that no one expects outcomes outside of two standard
15 deviations from the most likely outcome that reduced future correlation is extremely unlikely and
16 the utility is therefore unwilling to pay much to cap losses. This is particularly the case because
17 the utility is willing to accept a hedging transaction with a floor protecting the bank or
18 counterparty from paying the utility an outsized gain. A reasonably prudent financial expert
19 knows that investment banks are willing to discuss and bid on the collared hedge because the
20 utility does not need the investment bank to arrange a “plain vanilla” swap or equivalent forward
21 position. Being financial professionals, all parties recognize that the ability to customize the
22 hedge contract to meet the client’s needs is a primary reason that the client chooses an
23 investment bank over cheaper sources of plain vanilla swaps or futures.

24

25

¹²⁹ See NWN/2000; Feltz/13 at lines 4-5.

26 ¹³⁰ This term is defined on page 32 of the Commission’s Standard Data Requests and accessed
via a Quick Link on the lower right side of the OPUC home page.

1 7. NW Natural’s actions did not mirror those of a reasonably prudent financial expert.

2 The NW Natural financial hedging policies in place at the time the hedge was entered
3 into were not proscriptive and afforded broad flexibility when the Company executed the
4 financial hedge, when the hedge was terminated, and when NWN assigned the hedge loss to a
5 bond series to be amortized over its life. That flexibility precludes reliance on this policy to
6 substitute for performing due diligence and robust analysis prior to entering into the hedging
7 transaction. Criteria such as not putting 30 percent of NW Natural total outstanding debt at
8 risk¹³¹ should be given little or no weight by a reasonably prudent financial expert in evaluating
9 prospective decisions regarding financial hedging in conjunction with bond issuances of between
10 \$25 million and \$75 million, not constrained in the least by the financial hedging policy.¹³²

11 NW Natural has not articulated that it kept forefront the goal of the lowest all-in cost of
12 money for the next bond issuance at the least risk. For example, a slightly lower coupon rate and
13 a very high issuance cost may not equate to the alternative with the lowest all-in cost of money.
14 Similarly, a simple lower cost, lower risk alternative may be preferable to a higher cost and
15 higher risk alternative. NW Natural did not appear to evaluate any no-hedge alternatives to
16 assist in quantifying the value of different ways to achieve bond issuance goals.

17 NW Natural did not do its own analysis nor demonstrate that it kept investment banks at
18 arm’s length and kept mindful that “past performance is no guarantee of future results” when
19 viewing bank sales presentations. NW Natural should have been mindful of its fiduciary
20 obligations, the differences between its needs and those of investment banks, and the ever
21 present need to exercise due diligence. The fiduciary responsibilities are informed by what NW
22 Natural is and what it is not. For example, NW Natural is not an investment bank with a
23 portfolio of existing or potential financial hedges and the general ability to offset one hedge with
24 others.

25
26 ¹³¹ See Tr. at 166, line 177.

¹³² *Id.* at lines 21-22.

1 NW Natural had just one financial hedge and no portfolio of offsetting financial hedges
2 so NWN needed to do its own cost and risk analysis of alternatives, including cost and risk
3 analysis associated with non-hedging alternatives. On a forward-looking basis and prior to
4 entering into the hedge, NW Natural's decision should have been informed by this robust
5 analysis. Additionally, NW Natural should have completed documentation of its analysis for
6 presentation now, at this next rate case.

7 The financial hedging policy (not dealing with natural gas) has not been informed by the
8 Company's experience. A review of this policy performed by NW Natural management, with
9 implementation and ensuing recommendations, could better align the policy to NW Natural's
10 utility function and fiduciary responsibilities. Modifying the Company's levers of control in this
11 manner is likely beneficial to investors as well as ratepayers. The revised policy should guide
12 analysis, negotiation of hedging contracts, internal review of acceptable benefit-cost-risk
13 profiles, documentation methodology and presentation of hedge risk and cost management
14 activities. Without communicating a need for and expectation of improvement in these areas, the
15 Commission may see similar imperfections in future proceedings.

16 8. Discussion of Certain Facets of NW Natural's Prehearing Brief.

17 NW Natural fails to note support for Staff's position.¹³³

18 NW Natural argues that no analysis if performed could have informed the Company
19 regarding risk.¹³⁴ Perfunctory after-the-fact analysis cannot now reach back in time to better
20 inform the Company's decision. NWN relied on sales materials from the investment banks and
21 did not perform its own analysis. We cannot conclude from the facts that analysis would not
22 have informed NW Natural's decision.

23

24

25 ¹³³ NW Natural Prehearing Brief at 12, lines 7-8 contrasts distinctly with CUB's Prehearing
26 Brief at 44, where it explicitly recommends that the Commission adopt Staff's position as to
hedging.

¹³⁴ See *Id.* at lines 9-13.

1 NW Natural argues it would have had to predict the financial crisis to restrict outcomes in
2 the hedge contract to two standard deviations of most likely outcomes, or in effect to those
3 outcomes on which the Company predicates the hedge was a good benefit-cost decision (again in
4 the absence of its own analysis.)¹³⁵ Note that there is expansion of scope in each subsequent
5 round of this proceeding. For example, in NW Natural Reply Testimony, Mr. Feltz implies that,
6 before NW Natural could take reasonable precautions to avoid assuming excessive incremental
7 risk with the hedge, the Company “would have to been able to predict the financial crisis”. By
8 the time we get to the prehearing briefs, the Company indicates it would have had to predict the
9 outcomes of the financial crisis. This approach tries to ever expand the scope away from review
10 of non-hedge alternatives and review of the actual, bilateral, self-contained hedging contract.

11 NW Natural addresses the goals of the hedge which were to control the coupon rate of an
12 upcoming bond issue and in general to mitigate debt market volatility and risk.¹³⁶ Here it is
13 important to note that sensitivity analysis could have informed the Company that possible
14 outcomes included the actual outcome. Presumably, the actual outcome, if known, would not
15 have been acceptable to the Company at the time it entered into the hedge contract. Yet the
16 Company took no action to manage risk in its hedge contract and apparently did not (or created
17 no record of) considering alternatives. There are not quotes for alternatives considered and no
18 quotes regarding hedge contract modification, only after the fact obfuscations rather than
19 documentation of facts.

20 NW Natural enlarges the earlier misstatement that the Company would have had to
21 predict the financial crisis¹³⁷ in October of 2008 to now state that NWN would have had to
22 predict the outcome of that financial crisis.¹³⁸ The relevant hedge execution time frame was the
23 year 2007, a year with robust markets and no financial crisis. Lack of robust analysis leading to
24

25 ¹³⁵ See *Id.* at 12, lines 18-19.

26 ¹³⁶ See *Id.* at 13, lines 7-14.

¹³⁷ NWN/200; Feltz/9, line 14.

¹³⁸ See NW Natural Prehearing Brief at 14, line 19.

1 inadequate ratepayer protections in 2007 is not somehow excused by a financial crisis occurring
2 in later years.

3 NW Natural does not identify and avoid or manage incremental risk represented by the
4 hedge contract in unmodified form. To do so requires only that NW Natural use decision tree or
5 other analysis to assess outcomes that are or are not addressed within NW Natural's benefit –
6 cost understandings. If risks are outside the Company's benefit cost framework there is no
7 reason NW Natural, or its ratepayers should take on those risks. Such risks should be eliminated
8 with an alternative choice or with a modification to the hedge contract to restrict outcomes to
9 outcomes considered.

10 NW Natural tries to create an umbrella of prudence over both a process riddled with
11 imperfections and a failed outcome.¹³⁹ In 2007, investment banks warned potential customers
12 that their sales presentations were illustrative and that the bank materials were not in any way a
13 replacement for prudent financial, legal, and accounting analysis performed by a sophisticated
14 counterparty or by that counterparty's own third party experts.¹⁴⁰ Could the Company have
15 determined that the actual outcome was a possible result? Could the Company have determined
16 that the actual result was unacceptable? Could the Company have modified the hedge contract to
17 limit losses or preclude the actual result? Could the Company have considered alternatives to the
18 hedge in 2007? Can we say precisely which mitigation the Company would have selected in
19 2007, had NW Natural performed its own robust analysis prior to executing the hedge in a time
20 of functional markets?

21 NWN's presumption that all outlying financial hedge risk is the burden of the ratepayer is
22 not supported. The argument that myriad explicit bank warnings were somehow boilerplate and
23 bear no real meaning is strongly countered by the actual payment of \$10,096,000 by NW Natural
24 to UBS. These warnings were real. The analysis was not done by the Company prior to hedge

25 ¹³⁹ *See Id.* at 19-20.

26 ¹⁴⁰ *See* NWN/2700; White/5, lines 19-22 and NWN/2701 for an example of a situation in which
NWN utilized an external third party to assist in decision tree and scenario analysis.

1 execution despite these warnings. The Company states that it was not cost effective to modify
2 the hedge contract, but we see no quotes in this to this effect. The Company states that
3 alternatives that are currently cost effective were not cost effective in 2007, but we see no
4 evidence of NW Natural's investigation into the viability and cost of alternatives.¹⁴¹

5 The Company mischaracterizes each of the above elements in its prehearing brief. In total,
6 the Company does not demonstrate that its actions were prudent. If the Commission disallows
7 part of the hedge loss, lower issuance costs may reduce the cost of long-term debt, which in turn
8 would reduce revenue requirement.¹⁴²

9 **IV. ENVIRONMENTAL COST RECOVERY**

10 NW Natural asserts that no party objects to the implementation of a mechanism for
11 recovery of environmental remediation expenses.¹⁴³ As confirmed at the hearing, however, Staff
12 only supports a Site Remediation Recovery Mechanism (SRRM) if it includes Staff's
13 recommend conditions. Staff does not support the mechanism as proposed by NW Natural.¹⁴⁴
14 As described in Staff's prehearing brief, although Staff proposed certain important conditions to
15 the proposed SRRM, it was generous in its overall support for a mechanism that would
16 substantially lower NW Natural's risk.¹⁴⁵

17 Staff viewed its support of the SRRM, with conditions, as generous because of its
18 understanding of traditional ratemaking in context of the favorable programs NW Natural
19 already has in place. The Company has mitigated its risk to shareholders through programs such
20 as decoupling, WARM, SIP, and a PGA. Guaranteed recovery of prudently incurred
21 environmental remediation expenses would further reduce the risk to NW Natural shareholders.

22

23 ¹⁴¹ See NWN/2000; Feltz/5 ("The Company plans to issue in the private debt market, which
24 will allow for a delayed take-down of the debt proceeds later this year at very little
additional costs for the delay.")

25 ¹⁴² See Staff/2301; Muldoon/1, line 9 column (j) for issuance costs assigned to the 5.370
percent series.

26 ¹⁴³ NW Natural Prehearing Brief at 21, lines 16-17.

¹⁴⁴ See Transcript (Tr.) at 46, lines 13-19.

¹⁴⁵ Staff Prehearing Brief at 10-11.

1 In spite of the risk-reducing aspect of all of these mechanisms, NW Natural also desires
2 an ROE higher than supported by the high range of multi-stage DCF models. In spite of the fact
3 that NW Natural has generally earned more than its authorized ROE since its last rate case, it not
4 only wants the SRRM, but it also wants the risk-reducing SRRM to operate without any earnings
5 review or earnings test. In spite of the fact that NW Natural would get dollar-for-dollar recovery
6 of prudent expenses without the typical regulatory lag, NW Natural does not want to share one
7 cent of the costs of environmental recovery with shareholders. In spite of the fact that NW
8 would get dollar-for-dollar recovery for prudently incurred environmental remediation costs, it
9 wants to earn its authorized rate of return on a large balance that is certain of recovery.

10 Without a SRRM, NW Natural could request prudently incurred environmental costs
11 through a general rate case or through deferred accounting applications. As discussed in Staff
12 Prehearing Brief, the law requires the currently deferred amount be subject to an earnings review
13 (\$64.5 million as of September 30, 2011).¹⁴⁶ After an earnings and prudence review, the
14 appropriate amounts would be amortized leaving only future amounts subject to dispute in this
15 proceeding. For future environmental remediation costs that may be incurred over a long period
16 of time, NW Natural gives a conservative estimate of \$58 million.¹⁴⁷

17 Under traditional ratemaking, if NW Natural incurred substantial environmental
18 remediation costs that it could not absorb, it would file a general rate case or file a deferred
19 application. Under either of those regulatory processes, the overall earnings of NW Natural
20 would be considered. While supporting an automatic adjustment clause with conditions, Staff
21 thought it was abundantly reasonable to condition the mechanism on a review of overall earnings
22 because they would always be considered in other regulatory processes. Apparently, NW
23 Natural finds this unfair and punitive because it does not allow them to consistently over-earn its
24 authorized ROE.¹⁴⁸ Although Staff thought it was generous in its support of an SRRM, if Staff's

25 _____
26 ¹⁴⁶ Staff Prehearing Brief at 11-12.

¹⁴⁷ *Id.* at 9, lines 20-21.

¹⁴⁸ *Id.* at 14, lines 6-11.

1 conditions on the SRRM seem unfair to NW Natural, Staff would prefer to see traditional
2 regulatory treatment for future environmental remediation costs as it would offer ratepayers the
3 benefits of regulatory lag and a review of overall earnings.

4 At the hearing, NW Natural seemed to try to establish that the Commission had
5 sometimes allowed other utilities to collect decommissioning or remediation costs without
6 sharing. Staff will of course respond to any such arguments that NW Natural may make in its
7 post-hearing brief. Staff suspects that such arguments ignore the regulatory context of the
8 current proposal.

9 For example, in Docket No. UM 1047, Order No. 02-224, the Commission allowed full
10 recovery of PacifiCorp's share of the unrecovered costs associated with the closure of Trail
11 Mountain Mine. However, in the same Order the Commission granted several conditions,
12 among them was condition (d), which provided "[t]here will be no return allowed on the
13 unrecovered costs of Trail Mountain Mine. On March 31, 2008, Portland General Electric
14 Company filed an application for deferral of costs associated with the remediation for Portland
15 Harbor and Harbor Oil Superfund Sites. Its application for a deferred account was granted in
16 Commission Order No. 09-052, but the docket was closed in January of 2010 because there were
17 few costs being incurred and it was decided that PGE would reapply for a deferred account when
18 the costs began to increase. In both of these cases, the Commission was not dealing with a
19 request to adopt an automatic adjustment clause and include costs regardless of overall earnings.

20 As discussed in the Introduction, ratemaking is holistic and should be done in context
21 with overall rates and regulatory treatment. In relation to NW Natural's proposed SRRM, it is
22 necessary to consider that NW Natural is not asking for environmental cost recovery through a
23 general rate case or a deferral. Rather, NW Natural is requesting a special risk-reducing
24 automatic adjustment clause without any conditions on regulatory lag or earnings. Aside from
25 the legal requirement that the currently deferred balances be subject to an earnings review, Staff
26 does not argue that the Commission is legally prohibited from establishing an automatic

1 adjustments clause with no sharing, allowing interest at the authorized rate of return, and
2 allowing recovery without an earnings review on future amounts. Instead, Staff argues that it is
3 bad regulatory policy to do so in the context of granting NW Natural a risk-reducing automatic
4 adjustment clause for one category of expenses.

5 NW Natural also asserts that it should be allowed to earn interest on the SRRM at the
6 authorized rate of return and then at the Modified Blended Treasury Rate (MBTR) for the
7 amounts approved for that year's amortization.¹⁴⁹ Staff agrees that this is the manner in which
8 the Commission treats deferred accounts. But again, Staff's proposal is based upon the totality
9 of circumstances - the holistic nature of ratemaking - and the type of recovery mechanism being
10 proposed. Deferred accounts may never be amortized for various reasons and before they are
11 amortized an earnings review is legally required. NW Natural ignores the fact that it is
12 requesting an automatic adjustment clause, not a deferred account.

13 As mentioned earlier in this section, NW Natural could request recovery of future
14 environmental remediation costs – and Staff prefers this approach if the SRRM is not
15 appropriately conditioned – through deferred accounting. In that case, the parties would know
16 the actual costs and would be able to review the overall earnings of the Company during the
17 period in which the costs were incurred. Under that approach, Staff would readily agree that the
18 deferred account balance should accrue interest at the authorized rate of return.

19 In summary, Staff reviewed NW Natural's proposed SRRM in the context of traditional
20 regulatory treatment and the programs NW Natural already has in place. In that context, Staff
21 proposed reasonable and necessary conditions. Finally, Staff noted that NW Natural's proposal
22 to move \$64.5 million dollars from a deferred account to an automatic adjustment clause could
23 not be lawfully completed without an earnings review of the deferred amounts.

24

25

26

¹⁴⁹ NWN Prehearing Brief at 29, lines 10-13.

1 **V. OUT OF PERIOD PENSION EXPENSES**

2 In a briefing request issued August 28, 2012, the Commission asked NW Natural to
3 address the following issue (and invited other parties to address the issue):

- 4 1. NW Natural seeks a change in the current ratemaking methodology for
5 recovery of pension costs. As part of this request, it seeks recovery of past
6 cash contributions that it was required to make to comply with federal law.
7 NW Natural has pointed to a number of gas utilities that have been allowed to
8 implement ratemaking methodologies other than pure FAS 87 recovery,
9 methodologies that presumably allow utilities to recover large cash
10 contributions such as those at issue here.
- 11 2. Have these gas utilities been limited to recovery of cash contributions that
12 have been deferred through a deferral mechanism or included in a test year?
13 Please point to any state Commission orders or legal decisions that allow a gas
14 utility to recover cash contributions such as those at issue in this docket that
15 (1) have not been the subject of a deferral order, or, if in a rate case, that (2)
16 are outside the applicable test year.

17 Staff is interested in reading the Company's response to this question and will comment on
18 that response in its post-hearing reply brief. Staff cautions that the answer to this question may be
19 misleading and confuse the issue, however. Every state has a distinct regulatory framework and
20 pension cost recovery is potentially a small portion of a whole in how this issue is handled in other
21 jurisdictions. For example, resolution of pension expenses could come through settlement of
22 issues, be related to complicated sharing mechanisms, or pension expenses could be considered in
23 context of a utility that is chronically under-earning. Finally, the briefing question seems to inquire
24 about the legality of whether or not including past pension contributions in future rates is allowed
25 and not necessarily asking whether including past pension contributions in future rates at a time
26 when a Company is over-earning is good regulatory policy. With these caveats, Staff will attempt
to add to the answer it gave at the hearing and state what it currently knows about pension cost
treatment in other states cited by NW Natural.

Staff was unable to confirm any of the treatment of pension expenses mentioned other
than references to the California Commission treatment of Pacific Gas and Electric (PG&E), the
Hawaii Commission's treatment of HELCO and the Wisconsin Commission's treatment of

1 Wisconsin Gas. Staff was able to verify the information on Cross Exhibit NWN/4325 as being
2 correct.

3 The Hawaii reference comes directly from the Hawaii Commission's order. Other than
4 PG&E, the other companies mentioned in NWN/2008 Feltz/3 did not respond to Staff's request
5 for verification.

6 As far as Staff can determine from its research, PG&E had established a balancing
7 account for cash contributions. On a forward looking basis, the California Commission allowed
8 the PG&E recovery of three years of contributions in rates but it is Staff's understanding that the
9 amounts were not "prior period" contributions, but were estimates for 2011-2013. The amount
10 in rates in 2013, \$215.7 million, remains in rates until the next general rate case.

11 The Hawaii Commission set a level of NPPC to recover in rates and tracks the NPPC
12 against the Company's cash contributions. The tracked balance going forward becomes the "test
13 period" amount and any under recovered cash contribution or over-recovered cash contribution,
14 above or below the actuarial calculated NPPC in rates becomes the "test period" amount that is
15 then amortized over a five year period. This seems like a modified deferral.

16 The Wisconsin order allowed the utility to earn a kicker on their authorized weighted
17 average cost of capital (WACC). The Wisconsin Commission seems to be allowing the
18 Wisconsin Gas Company a return on the working capital used to fund the utility's pension
19 contributions. Complicating matters is the fact the Wisconsin's Commission allows the utility to
20 recover 50 percent of the construction work in progress (CWIP) in their net invested rate base
21 (NIRB). Effectively, the Wisconsin Commission adjusts the weighted cost of capital by the ratio
22 of net invested rate base (NIRB) by total capital. Anytime the cash contributions are greater than
23 the NPPC, it creates a higher working capital requirement, which in turn increases the WACC
24 that gets applied to rate base.

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1 1. The Commission should not allow recovery of out-of-period cash contributions.

2 Staff recommends removal of both the return on and the return of past pension
3 contributions made prior to the test period. First, NW Natural proposed collect a return on past
4 pension contributions and amortize \$36,549, 793 over an eight year period, or approximately
5 \$4,568,724 per year. Second, NW Natural proposed to collect a return of past pension
6 contributions, which has a revenue requirement impact of approximately \$3,114,000.¹⁵⁰

7 The This Commission has long maintained that “[t]he objective of any regulatory method
8 of setting rates is to provide sufficient revenue to give a utility an opportunity to earn an adequate
9 rate of return during a future period.”¹⁵¹ As Staff outlined in its prehearing brief, its fundamental
10 issue with NW Natural’s proposal on pensions is that it proposes to include a return on and of past
11 cash contributions into future rates while ignoring every other expense during those same periods
12 of time when NW Natural was earning near or over its authorized return on equity. It is
13 inappropriate to choose a single expense category, while ignoring all other categories, and include
14 that single increase in future rates when the Company was financially stable or over-earning during
15 the period the expenses were incurred.¹⁵² This is a typical example of cherry-picking one category
16 and ignoring the end result and holistic nature of ratemaking.

17 The Commission should decline to consider NW Natural’s pension expenses inside a
18 vacuum and should, instead, consider why future ratepayers should pay for expenses that the
19 Company paid while earning its authorized return on equity. It is unnecessary to determine
20 whether or not the Commission may lawfully include these past amounts in future rates because
21 the Commission should decline to utilize single issue ratemaking as a matter of regulatory policy.

22 Finally, at the hearing NW Natural asked about an Idaho Power request to recover cash
23 contributions for pensions and a PGE application for deferred accounting to recover carrying costs
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¹⁵⁰ See Staff/900; Cimmiyotti/6.

26 ¹⁵¹ Docket No. UF 2938, Order No. 73-217 at 3.

¹⁵² Staff Prehearing Brief at 18, lines 12-24.

1 on prepaid pension assets.¹⁵³ Staff notes that PGE’s application was filed shortly before the
2 hearing and no action has yet to be taken on that application. In relation to Idaho Power’s request
3 in 2009, Staff notes that Idaho Power’s request was settled pursuant to a Stipulation and that
4 “Idaho Power would continue to account for pension expense on an accrual basis, a practice
5 consistent with Statement of Financial Accounting Standards (SFAS) 87.”¹⁵⁴

6 Therefore, all Oregon regulated utilities do currently follow FAS 87. Furthermore, PGE’s
7 recently filed application for deferred accounting substantiates Staff’s position that a change in the
8 Commission’s long-established policy on using FAS 87 for pension costs would lead to other
9 utilities also asking for similar relief. Staff notes that NW Natural has also filed a deferred
10 application, which is being held in abeyance pending this rate case, but could be used to review the
11 methodology for future pension costs. In any event, Staff does not believe that out-of-period
12 pension costs at a time when NW Natural was over-earning should be amortized in future rates.

13 In summary, the fundamental issue related to pension expense is that the Commission
14 should not go all the way back to 2004 and include those out-of-period single issue costs in future
15 rates without a consideration of earnings at the time the contributions were made.

16 **VI. OUT OF PERIOD STATE TAXES**

17 NW Natural did not propose to change its deferred taxes based upon changes to its deferred
18 tax expense, but instead created a \$4.48 million regulatory asset in 2009, which it now wants to
19 amortize over a five year future period. These facts demonstrate that this issue is not establishing
20 the appropriate deferred tax expense going forward. Rather, it is an attempt to collect in a future
21 test year a regulatory asset created in 2009, without any Commission approval or a request for
22 deferred accounting. This rate case is to set future rates, not reconcile previous rates.

23 NW Natural’s arguments convolute the issue, but this is not an issue about “amortization of
24 the deferred tax balances.”¹⁵⁵ Rather, this is an issue of a request to amortize a regulatory asset (a

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26 ¹⁵³ See Tr. at 142, line 20 through 143, line 1.
¹⁵⁴ Commission Order No. 10-064 at 4.
¹⁵⁵ NW Natural Prehearing Brief at 53, line 16 through 54, line 4.

1 book expense versus money changing hands) of \$4.48 million dollars that NW Natural decided to
2 create, but did not request a deferral, which would require an earnings review. Similar to the out-
3 of-period pension contributions, this is single-issue ratemaking because the expense, which is
4 reflected only on the books rather than paid to a taxing authority, occurred between rate cases. As
5 a matter of policy, Staff does not believe a utility should be able to cherry pick an expense that
6 went up between rate cases, ignore earnings, and ask for future recovery of a past expense.

7 Finally, at the time the regulatory asset was created SB 408 and its automatic tax
8 adjustment clause was in effect. The resolution of that proceeding established the taxes for NW
9 Natural for that period of time. The Company should not be allowed to move \$4.48 million from
10 that past period where the tax amounts were established to future rates.

11 **VII. THE TWO PREMATURELY CONSTRUCTED MID-WILLAMETTE VALLEY**
12 **FEEDER PROJECTS (MWVF).**

13 There is no bare steel replacement on the two segments contested in this proceeding:

14 Q: Is the Company currently replacing bare steel on the portions in dispute, the
15 Perrydale to Monmouth and the Monmouth reinforcement?

16 A: On those two segments there is not any bare steel.¹⁵⁶

17 When Staff asked for financial analysis of the need for constructing the projects now in
18 spite of the fact that the Modified IRP did not select the project until at least 2019, NW Natural
19 responded “[a] financial analysis of the investment was not conducted by the Company for these
20 projects. The decision to invest in these projects is based upon system reliability, replacement of
21 bare steel and system reinforcement.”¹⁵⁷ In context of the contested segments, NW Natural did
22 not rely on the results of the Modified IRP or any financial analysis. Instead, it built the
23 segments based upon its purely qualitative judgment on system reliability and reinforcement.

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26 ¹⁵⁶ Tr. at 222, lines 5-9.

¹⁵⁷ Staff/1107; Sobhy/2.

1 NW Natural describes the entire Willamette Valley Feeder Project (northern, mid, and
2 southern) as a “transmission line . . . designed to move high pressure gas south . . . from a
3 critical north-end connection.”¹⁵⁸ NW Natural states that “Staff’s primary objection to the
4 MWVF is that the Company developed the project before it was selected in the preferred
5 portfolio in the Integrated Resource Plan (IRP).”¹⁵⁹ Later, NW Natural states that “[t]he Staff’s
6 focus on the IRP in this case appears to be based upon a misunderstanding of the role that the
7 IRP plays in the Company’s distribution system planning.”¹⁶⁰ NW Natural goes on to state that
8 the “IRP Guidelines, which do not require the inclusion of distribution planning, and all of the
9 Company’s IRPs have been acknowledged by the Commission as meeting the Guidelines.”¹⁶¹
10 Finally, NW Natural asserts that “[t]he MWVF is needed for distribution reliability purposes,
11 which is not generally modeled in the IRP.”¹⁶²

12 The IRP guidelines do require consideration of segments such as the Willamette Valley
13 Feeder. In Order No. 89-507, the Commission adopted “least-cost planning” (IRP) as the
14 preferred approach to utility resource planning. In that same Order, the Commission identified
15 the key substantive elements of a least-cost plan. These elements are:

- 16 1. All resources must be evaluated on a consistent and comparable basis.
- 17 2. Uncertainty must be considered.
- 18 3. The primary goal is least cost to the utility and its ratepayers, consistent with the
19 long-run public interest.
- 20 4. The plan must be consistent with Oregon’s energy policy.

21 In Order No. 07-002, the Commission further clarified that a utility IRP should identify
22 resources that provide the best mix of cost and risk. That Order also established IRP guidelines.

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¹⁵⁸ NW Natural Prehearing Brief at 42.

25 ¹⁵⁹ *Id.* at 43, lines 16-17.

¹⁶⁰ *Id.* at 46, lines 6-7.

26 ¹⁶¹ *Id.* at 18-19.

¹⁶² *Id.* at 44, lines 8-9.

1 Beginning with IRP substantive element No. 1, it is clear that the Commission intended
2 that a utility IRP should consider all resources and consider them on a consistent and comparable
3 basis. Nothing in these Orders allows a utility to pick and choose among the resources that
4 should be evaluated pursuant to the IRP process. Neither do these Orders allow a utility to
5 ignore the results of the IRP process when it comes time to set rates. Yet, NW Natural has
6 proposed to do both when it requests that the Commission allow inclusion of the costs for these
7 two segments of the MWVF project.

8 The MWVF was not selected as part of the “preferred” portfolio in NW Natural’s
9 Modified 2010 IRP and it is this portfolio that the Commission acknowledged when it
10 acknowledged the Modified IRP. This is a fact that NW Natural has not even attempted to
11 refute. When deciding whether or not to include the costs of resources in rates, the IRP is the
12 threshold test. For the preferred portfolio, the preferred portfolio establishes that the resources
13 NW Natural wants to purchase or construct have been compared consistently with competing
14 resources in terms of cost and risk and ranks the resources compared in terms of risk and cost.

15 The failure of NW Natural to consider the resources in the IRP process is the primary
16 reason Staff presents for recommending that the timing of the projects is imprudent.
17 Secondly, Staff asked for financial analysis to support the decision that was not supported by
18 the IRP process, but was only given the qualitative answer that it was for reliability and
19 reinforcement. This is very important because the MWVF project, according to NW Natural, is a
20 critical transmission project carrying high-pressure gas south. This fact makes the cost of this
21 project much larger than simple distribution projects.

22 Once the IRP threshold has been successfully realized, the resources must then pass
23 individual prudence testing to establish that the cost for the resource proposed is both least cost
24 and least risk. For example, if there is bidding to construct a pipeline it must be determined that
25 the bidding was properly conducted and then whether or not the lowest cost qualified bidder was
26 selected. Next, comparative testing (usually referred to as cost/benefit analysis) is employed to

1 ascertain how a resource performs in terms of cost and risk compared to other resources under
2 the same parameters. For example, if the lowest cost/risk bidder for construction of a pipeline
3 has been selected how does this bidder's bid compare in terms of cost and risk with city gate
4 deliveries of gas, building storage nearer to service areas, leasing space on an existing pipeline,
5 etc.? This second level of analysis also compares, in turn the costs and risks of each resource
6 with the value (always quantitative) of the benefits provided by the resource. Even if a resource
7 is the lowest in cost and risk among those examined, the resource would not be
8 constructed/purchased if the level of benefits it provides is significantly (statistically determined)
9 less than the resource's cost/risk. Thus far, NW Natural has provided neither of these levels of
10 analysis and apparently considers both unnecessary.

11 Finally, Staff has substantial concerns about NW Natural's contention that the MWVF is
12 needed for distribution reliability purposes. At Staff's request, NW Natural in its 2010 Modified
13 IRP considered which resources would be selected if NW Pipeline's Grants Pass Lateral were to
14 be offline. The IRP model selected the MWVF in that instance. That analysis does not include
15 an examination of the probability that the Grants Pass Lateral would be out of service, during
16 which times of the year, and for what reasons - just out of service for modeling purposes. An
17 obvious question that must be answered is what level of spending on resources is justified by
18 each level of probability of a Grants Pass Lateral failure. NW Natural's analysis does not
19 include an assessment of what fixes (such as looping by NW Pipeline) could be made to the
20 Grants Pass Lateral to reduce the probability of it failing or the costs and risks of building a
21 pipeline south to connect with Gas Transmission Northwest's (GTN) system to bring gas to the
22 southern part of NW Natural's system. As a simple scenario the IRP's assessment of what
23 resources might be available to meet load in the southern part of NWN's system is reasonable.
24 Such a narrow and limited scenario should never be the basis for resource selection in the IRP
25 and certainly not for setting rates in a general rate review.

26

1 In summary, NW Natural has failed to demonstrate that the timing of these two segments
2 were prudent. The projects were not selected in the IRP process. NW Natural did not offer any
3 quantitative evidence that these projects were the least cost/least risk alternative. Staff
4 recommends that these projects not be included until such a time as the IRP process and
5 quantitative analysis supports their inclusion into rates.

6 **VIII. CONCLUSION**

7 For the foregoing reasons, Staff respectfully requests that:

- 8 • the Commission adopt Staff’s recommended ROE;
- 9 • the Commission disallow a portion of NW Natural’s hedge loss;
- 10 • the Commission condition NW Natural’s SRRM or, alternatively, not grant its
11 request to establish another risk-reducing mechanism with no benefits to
12 ratepayers;
- 13 • the Commission reject NW Natural’s request to place past pension expenses in
14 future rates;
- 15 • the Commission reject NW Natural’s request to place an out-of-period regulatory
16 asset or book expense, incurred between rate cases and at a time that SB 408’s
17 automatic adjustment clause set tax expense, in future rates;
- 18 • the Commission reject NW Natural’s request to place two segments of the
19 MWVF project into rates until such a time as the IRP process and quantitative
20 analysis is provided to support the prudence of the projects.

21 DATED this 12th day of September 2012.

22 Respectfully submitted,

23
24 s/ Jason W. Jones
25 Jason W. Jones, #00059
26 Assistant Attorney General
Of Attorneys for the Public Utility Commission
of Oregon Staff