

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**LC 51**

In the Matter of

NORTHWEST NATURAL GAS  
COMPANY, d/b/a NW NATURAL  
2011 INTEGRATED RESOURCE PLAN

STAFF'S DRAFT RECOMMENDATIONS

On September 1, 2011, NW Natural (Company) filed its modified 2011 IRP. On November 14, 2011, Staff and the Citizens' Utility Board (CUB) filed their respective comments on NW Natural's 2011 IRP. On November 28, 2011, NW Natural filed its reply comments on Staff's and CUB's comments. Simultaneously, on November 28, 2011, Staff filed its summary comments, and CUB filed its reply comments, respectively.

**A. RECOMMENDATIONS:**

Based on the Company's modified 2011 IRP, the parties' comments, and the Company's response to the parties' comments, Staff recommends the following:

1. Staff recommends the Commission not acknowledge NW Natural's 2011 modified IRP.<sup>1</sup>
2. Staff recommends the Commission direct NW Natural to revise its IRP and provide additional analyses within six months of the non-acknowledgment order.<sup>2</sup>

**B. DISCUSSION:**

1. NWN's 2011 modified IRP does not provide sufficient analysis and evaluation to recommend acknowledgement of its preferred portfolio:  
The Company included an action plan in its modified 2011 IRP. In Staff's opinion, the action plan contains only one actionable item as defined by the Commission IRP guidelines.<sup>3</sup> This action item is Item No. 4.2 (specifically the first bullet). In this item, the Company is seeking Commission-acknowledgment to acquire resources consistent with the Preferred Portfolio. This is the only action item that is related with acquiring resources to meet projected demand. The remainder of the action plan items consists of activities that the Company is expected to perform in order to develop an IRP according to the Commission's IRP guidelines.

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<sup>1</sup> See p.2 of, Order No. 07-002: "Acknowledgment" generally means a Commission decision on acknowledgment, even if the Commission did not acknowledge the plan in full (*i.e.*, deem it reasonable, based on information available at the time)."

<sup>2</sup> See Guideline 3(d) in Order No. 07-002.

<sup>3</sup> See Guideline 4(n), Order No. 07-002.

NW Natural failed to perform Monte-Carlo simulation runs on the preferred portfolio in its modified IRP.<sup>4</sup> In response to Staff's request to perform these simulation runs as a condition to consider recommending acknowledgment of the proposed IRP, the Company responded that the procedural schedule did not allow enough time to accommodate this request. Staff believes the Company's decision not to perform these runs was not sufficiently justified. First, the Company performed these runs for the two candidate cases in the original IRP (one base case without Palomar pipeline, and the other included Palomar pipeline as an incremental supply-side resource). It is clear that the Company recognizes the necessity to perform such analysis for candidate portfolios. It carries the burden of deciding not to perform it in the modified IRP despite the significant changes to the Palomar/Blue Bridge pipeline, which triggered the IRP modification. This is reinforced by the Company's decision to withdraw its FERC Certificate Application for the original Palomar pipeline project.<sup>5</sup> This decision came as a result of the uncertainties about when this project will be needed, and whether and when it will have the necessary support, i.e. subscription from potential customers, in order to materialize and come to fruition. According to the Company, this was due to the persistent economic conditions and the potential customers indicating that this project is not needed as soon as was originally anticipated.<sup>6</sup>

Second, during the June 2011 Technical Group Meeting, Staff inquired whether Monte-Carlo simulations were run on the three candidate cases presented at that meeting. Third, Staff made that request again in its November 14, 2011 comments. Lastly, Staff notes that an adequate response time would have been accommodated by simply extending the procedural schedule upon a request by the Company.

Staff believes that as the Company seeks acknowledgment of acquiring resources consistent with the preferred portfolio, the Monte-Carlo simulation runs for the Preferred Portfolio should take the utmost priority. Staff opines that without this analysis, it is unable to evaluate the Company's risk analysis of the Preferred Portfolio. Notwithstanding the Company's action, Staff observed that there has been a noticeable change between the original plan and the modified plan with respect to the cost-differential between the base case and the preferred case.<sup>7</sup>

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<sup>5</sup> The Company indicated, in its certificate application withdrawal letter to the Federal Energy Regulatory Commission, that: "the most effective and efficient way to accommodate adjustments to the Project to meet the need of potential customers and partners, including an improved east side route, is to file a new certificate application with FERC for an updated project in the future."

<sup>6</sup> See Palomar's withdrawal letter to FERC dated March 23, 2011.

<sup>7</sup> See Tables 5.8 and 5.10 in Chapter 5 of the Company's modified plan.

	Base Case	Preferred Case (w/ Palomar)	Difference (absolute) on a PVRR basis
Original IRP	1321 – No Palomar	1319 – Palomar East	\$5 Million
Modified IRP	1411 – No Palomar	1392 – Palomar 100	\$20 Million
Modified IRP	1411 – No Palomar	1391 – Palomar 50	\$40 Million

It is obvious that the cost difference in the modified IRP is more significant than originally estimated. This emphasizes the need to perform a thorough analysis based on updated and reliable information.

Additionally, the Company did not provide an adequate Benefit-Cost analysis of the revised Palomar/Blue Bridge project. The Company withdrew its FERC certificate application for the original Palomar project in part because of the need to perform this and related analyses of the project based on changed conditions.

For the reasons stated above, Staff recommends the Commission not acknowledge the Company's modified 2011 IRP as filed. Further, Staff recommends the Commission direct NW Natural to perform a Benefit-Cost analysis of the revised Palomar/Blue Bridge project based on reliable estimates, in future IRPs in order to support acknowledgment of a portfolio that proposes to acquire a specific incremental resource.<sup>8</sup>

Until such time, there is not enough information to justify acknowledgment of the Company's preferred portfolio. Not acknowledging the Company's preferred portfolio, would not harm the Company or its core customers (ratepayers) since the Company will have the opportunity to represent its case in the next IRP in two years. Staff notes that the Company's second candidate case (1411-2011 Mod Base Case) presents another less costly case on a Present Value Revenue Requirement (PVRR) basis while providing high level of reliability according to the Company's presentation.<sup>9</sup> Based on the information filed by NWN, there was no evidence to suggest that additional incremental resources will be needed in the near term, i.e. until the Company files its next IRP in two years. Additionally, the Company should include a Benefit-Cost analysis of any incremental resource it proposes to acquire, to specifically answer the question of what are the benefits and risks (trade offs) of having a specific incremental resource, vs. not having it.<sup>10</sup>

<sup>8</sup> See Order No. 10-457 consistent with the Commission's directive to Portland General Electric's in Docket No. LC-48.

<sup>9</sup> See Table 5.8 in NW Natural's modified rate case and its November 28, 2011 response to Staff's comment regarding Monte-Carlo simulations.

<sup>10</sup> See NW Natural's comments of July 17, 2008 in response to Northwest Pipeline questions in LC 45.

The Company's presentation is more focused on describing the methodology of forecasting demand and constructing a portfolio than on demonstrating why its decision and selection of a specific resource(s) is reasonable to acknowledge. Staff also notes that NW Natural's IRP contains two candidate cases that initially ranked very close on a PVRR cost basis and reliability basis.<sup>11</sup> However, they are very distinct in terms of adding a capital intensive supply-side resource, i.e. Palomar/Blue Bridge pipeline project. Hence, the need for an adequate analysis is required.

3. The Company failed to recognize that modeling the straight fixed-variable (SFV) rate structure may have a potential impact on demand-side resources. While rate design has not typically been analyzed in an IRP venue, it is Staff's opinion that a potential switch from the current rate design, which includes a Weather Adjusted Rate Mechanism (WARM) and a Decoupling Mechanism, to a SFV design, may have a significant impact on demand-side resources. Therefore, Staff concurs with CUB's recommendation to model SFV as part of NWN's IRP, allowing parties to analyze the effects of such a change on demand-side resources as well as how a SFV design versus the current design may influence customers' participation in energy efficiency programs.
4. Provide additional analyses in the next IRP: In its November 28, 2011 reply comments, the Company noted: "In many instances, Staff's comments and questions lack the context necessary to enable NW Natural to determine what concern, if any, Staff has that can be addressed at this stage."

Staff provides the following context to clarify its concerns:

- i. The downturn in the economy and the ongoing low gas prices are major factors with regard to the Gas Requirements Forecast. The components include customer growth, projected load growth, and customer usage. NWN describes this in Chapter 2 of its plan with a strictly methodological point of view. However, there was not a sufficient discussion to justify the reasonableness of projecting the addition of 14,000 customers on an annual basis.<sup>12</sup> Staff expects the Company to provide a breakout of the projected customer growth by zone, region, territory, etc. This data is critical in determining and selecting the appropriate resources on a least-cost and least-risk basis. Staff recommends that the Company provide a chart showing a range of 5-10 cases from low to high, including the base and preferred case with a narrative describing why the Company selected its preferred case. Also, the Company should provide tipping point analysis of the cases shown in the chart, indicating at what point significantly different resources will be needed to meet the Gas Requirements Forecast.

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<sup>11</sup> Reliability was provided based on meeting annual demand and not meeting peak demand. Staff believes both are necessary. Additionally, the Company should explain what metrics it developed to assess reliability.

<sup>12</sup> See Figure 2.2 of NW Natural's proposed plan for an illustration.

- ii. The Company also explains at length the methodology of its selected design-year weather pattern (85% probability of a colder than normal winter). The Company then augments the weather pattern by the coldest (peak) event in the last 20 years. The result of using the current design-year (through Sendout®) is selecting resources that meet the characteristics of this weather pattern. Should it be reasonable from a planning perspective, to pre-determine that this weather pattern is the only pattern to be considered in development of the plan? For example, the current design weather pattern indicates a significantly colder than normal November and a part of December as well.<sup>13</sup> Are there other weather patterns that should be considered?<sup>14,15</sup>
- iii. The Company should perform a cost differential analysis based on serving load without the peak day and the shouldering two days.
- iv. The Company should rank the portfolio resources based on risk metrics in addition to PVRR basis and include sufficient interpretation of the results.<sup>16</sup>
- iv. If the Company is planning upgrades to the Mist Storage, the Company should conduct a storage study to explain why these upgrades are needed e.g. to meet base load, swing, peak or a combination, improve reliability, or other benefits.
- v. The Company should explain how much of its Mist storage capacity and deliverability is used for core customers, in relationship to the projected demand growth.
- vi. The Company's plan should discuss in detail the use of current and future resources (supply-side and demand-side) in meeting the base load, heating load, which includes swing demand and peak demand as part of demonstrating the least-cost, least-risk resource planning.

This concludes Staff's draft recommendations on NW Natural's Modified 2011 Integrated Resource Plan.

Dated at Salem, Oregon, this 8th day of December, 2011.

  
**Moshrek Sobhy**  
Sr. Utility and Energy Analyst  
Natural Gas Rates & Planning

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<sup>13</sup> See figure 2.16 in the modified plan filed on September 1, 2011.

<sup>14</sup> See Chapter 3 of NW Natural's plan: "The characteristics of the load increase are a critical component of the resource selection process".

<sup>15</sup> It should be noted that the WUTC requested NW Natural to perform additional analyses with respect to the design-weather in the previous IRP.

<sup>16</sup> Table 5.10 shows a ranking based on cost only. See Guideline 4(j).

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2011 Integrated Resource Plan. )

DRAFT ORDER

DISPOSITION: PLAN NOT ACKNOWLEDGED

**Introduction**

Northwest Natural Gas Company, dba NW Natural (NW Natural or the Company, seeks acknowledgment of its 2011 Integrated Resource Plan (IRP or the Plan). This IRP filing is in accordance with the requirement that Oregon regulated energy utilities engage in integrated resource planning (*See* Order Nos. 89-507, 07-002, and 07-047). NW Natural filed the original IRP on January 12, 2011, and then replaced the original filing with a modified IRP on September 1, 2011. NW Natural followed the procedural requirements according to the IRP guidelines. However, we find that the plan does not satisfy the substantive requirements and, accordingly, we decline to acknowledge it as discussed below.

**Requirements for Integrated Resource Planning**

The Public Utility Commission of Oregon (Commission) requires regulated energy utilities to prepare integrated resource plans within two years of acknowledgment of the last plan. Utilities must involve the Commission and the public in their planning process and prior to resource decision-making. Substantively, the Commission requires that energy utilities: (1) evaluate resources on a consistent and comparable basis; (2) consider risk and uncertainty; (3) make the primary goal of the process selecting a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers; and (4) create a plan that is consistent with the long-run public interest as expressed in Oregon and federal energy policies. *See* Order No. 07-047.

The Commission “acknowledges” resource plans that satisfy the procedural and substantive requirements and that seem reasonable at the time of issuing an acknowledgment order.

## Overview of NW Natural's 2011 IRP

NW Natural's 2011 IRP describes the components of the Company's planning process. The Plan includes forecasts of future customer demand and identification of resource needs over the 20-year planning period; assessments of demand-side and supply-side resource options and distribution system enhancements; construction of a set of portfolio resources to test various operating characteristics and resource types; and identification of actions to be accomplished over the next several years to carry out NW Natural's resource strategy. A summary of the Plan is provided below:

Demand Forecast: NW Natural's demand forecasts are based on projected economic and population trends for its service territory, anticipated gas prices, and usage patterns of its core market customers over 20 years. These factors were used to develop the demand forecasts using a variety of econometric and computer-based modeling tools. The Company process to develop the demand forecast comprises of the following steps:

1. Customer forecast: 20 year estimate of customer counts by region and category
2. Customer usage behavior: data collection and analysis of recent usage trends by region and category
3. Load model: non-linear, statistical model fit with the independent variables heating degree day (HDD) and delivered natural gas rate (\$ per unit)
4. Natural gas price forecast: monthly price forecast by basin with resulting delivered rate estimate
5. Weather pattern and peak day development: Design weather pattern colder than 85% of winters in the past 20 years
6. Demand forecast: the load model is implemented in SENDOUT® to integrate demand with supply side and demand side resource planning options
7. Demand scenarios: development of other potential but less likely demand outcomes
8. Forecast accuracy analysis: measure forecast performance by "backcasting" – using the load forecast model factors to predict historic use and compare the results to actual use

NW Natural relies on internal business information along with information from outside sources such as the Oregon Office of Economic Analysis (OEA) and the Northwest Power and Conservation Council to project customer numbers across the 20-year planning horizon. The growth forecast methodology involves blending near and long term economic outlooks that consider factors such as unemployment rate, housing starts, and economic leading indicators. In addition to the base case growth forecast, the Company forecasted a high-growth case, low-growth case, and an extremely low-growth case using a variety of economic and technological assumptions.

The natural gas price forecast impacts the load forecast, the least cost planning model, and avoided cost calculations.<sup>1</sup> The price forecast is also an input into the resource planning model (Sendout®) and, therefore, it influences the model's selection of

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<sup>1</sup> The Company's price forecast is derived from a proprietary forecast developed by a third party organization IHS CERA, Inc.

future resources. Similar to the customer growth forecast, NW Natural developed base case, low case and high case for the price forecast based on a variety of outlooks of the natural gas market and future carbon dioxide regulation.

Starting with historical customer usage data in each of the company’s classes, i.e. residential, commercial, and industrial, the Company then combines this data with the customer growth forecast to develop a load forecast under the design-year weather. Customer usage is divided in two components: (i) the base load, non-weather sensitive usage; (ii) the heat load, weather-sensitive usage. The heat load includes the peak load, which occurs during extreme cold events and usually last for a short period. Another category considered in the load forecast is: “Swing Demand”. This term reflects a load that the Company plans for and is required to meet.<sup>2</sup>

In addition to the “Base Case” demand scenario, the Company developed several demand scenarios using three main components: Customer growth forecast, customer usage, and price forecast based on the design-year weather. The additional scenarios reflect possible future demand forecasts by blending the low and high forecasts in the three major categories. The following table summarizes the construction of the Company’s demand scenarios:

<b>Case</b>	<b>Customer Forecast</b>	<b>Customer Usage Forecast</b>	<b>Gas Price Forecast</b>	<b>Weather</b>
<b>Base Case</b>	Base Case	Base Case	Base Case	Design
<b>Gas Breakthrough</b>	High	High	High	Design
<b>Gas Dereg.</b>	High	Base Case	Low	Design
<b>Electric Breakthrough</b>	Low II	Base Case	High	Design
<b>Low Customer Growth</b>	Low	Base Case	Base Case	Design
<b>High Customer Growth</b>	High	Base Case	Base Case	Design
<b>Low Gas Price</b>	Base Case	Base Case	Low	Design
<b>High Gas Price</b>	Base Case	Base Case	High	Design

NW Natural chose the Base Case demand forecast as the most likely for its planning activities. For the Base Case, NW Natural projects the average core market demand will grow at an annual average rate of 0.61 percent over the 20-year planning horizon (net of estimated energy efficiency and energy conservation savings). Peak-day core market demand for the Base Case is projected to grow at an annual rate of 0.74 percent over the 20-year period. The base case projects an average customer growth of 1.84 percent annually.

Demand-Side Resources: NW Natural worked with the Energy Trust of Oregon (Energy Trust) to forecast the 20-year demand side management (DSM) potential for NW Natural’s service territory. The ETO administers the Company’s DSM programs except

<sup>2</sup> From a gas supply stand-point, Swing Demand is acquired on an as-needed-basis, i.e. the Company has the flexibility to purchase all of its’ swing load, portion of it or none of it depending on if and when the demand arises.

for the low-income energy efficiency program, which is administrated directly by the NW Natural. The DSM savings forecast was evaluated in Sendout® as a resource in a consistent and comparable manner with supply-side resources. The Company determined the technical potential (technical) savings based on the cost-effectiveness of the measures. Then, the potential savings were screened based on the Benefit to Cost ratio to determine the achievable savings. The achievable savings forecast is 98 million therms.

For the Base Case, the Company updated its avoided costs calculation to determine the effect of the substantial change in the gas price forecast since the last IRP on the cost effectiveness of DSM measures. Using the average price at four delivery points, and by comparing two price forecasts (2008 vs. 2010), the avoided costs decreased by 10% on Net Present Value basis over the 20-year planning period. The effect on the measures' cost effectiveness is a decrease of 2.5 million therms in DSM savings or 2.6 percent reduction in the original DSM savings forecast.

The Company presented a deployment scenario of the achievable savings based on the ETO's experience with prior DSM deployment and expectations of the developing market. The residential and commercial DSM program is funded by the Public Purpose Charge. The industrial DSM program is funded by a separate surcharge applicable only to the industrial customers. Demand response can be administered through various means including real time pricing, time-of-use rates, critical-peak pricing, demand buyback, interruptible rates and direct load control.

Supply-Side Resources: Supply-side options available to gas utilities include the gas supply, the interstate pipeline capacity, and storage, in addition to the distribution pipeline system that delivers gas to the end user. NW Natural's gas supply originates from several supply points e.g. British Columbia (BC), Alberta, and the Rocky Mountain Area in addition to a smaller percentage produced at Mist well field, which is owned by and located within NW Natural's service territory. The Company has a diversified gas supply portfolio that consists of different types of contracts, e.g. fixed price (physical and financial hedging), spot market purchases, and the Encana Gas Reserves. About 75 percent of the Company's gas supply is purchased using hedging instruments both financial and physical. The remaining 25 percent is purchased from the spot market.

NW Natural contracts with Northwest Pipeline Corporation (NWPL) for interstate pipeline transportation into the Company's service areas in Oregon and Washington. The Company has also negotiated transportation contracts in conjunction with commitments for firm Alberta and BC supplies to be delivered via Gas Transmission Northwest (GTN), TransCanada's BC System, TransCanada's Alberta System, Westcoast Energy Inc., and the Southern Crossing Pipeline. NW Natural's storage resources include the Mist underground storage facility, and the Newport and Portland, Oregon Liquefied Natural Gas (LNG) facilities, in addition to leased underground storage at Jackson Prairie and LNG storage at Plymouth, Washington. NW Natural has four recallable agreements with third parties that allow the Company to use their gas deliveries to the Company's service territory for a limited number of days during the heating season (November through March.)

In addition to the current resources, the IRP identified incremental resources that it used in constructing its portfolio cases in order to meet demand.

DEMAND SIDE MANAGEMENT	SUPPLY	PIPELINE	STORAGE
<b>Future Additional Resources</b>			
ETO program deployment	US Rockies (Opal)	Incremental CD on TransCanada NOVA/BC/GTN system (TCPL & GTN) <sup>3</sup>	NWN Mist Recall
	Alberta Canada (AECO)	Incremental CD on Williams' Grants Pass Lateral	NWN Satellite Storage projects in the Willamette Valley
	British Columbia Canada (Sumas)	CD on Palomar Gas Transmission's Palomar/Blue Bridge Pipeline	
	Recall Agreements	Williams' NWPL Opal to Stanfield (generic from Rockies)	
	US Rockies/Alberta Canada at Malin (OR) via Ruby Pipeline	GTN backhaul Malin to Madras	
	Oregon LNG - imported LNG	March Point CD	
	Jordon Cove – imported LNG	NWN Newport LNG Compressor Project	
		NWN Mid & South Willamette Valley Feeder	

**Integration Strategies:** NW Natural's IRP analysis concludes that the Company's existing resource portfolio is not sufficient to serve forecasted firm loads under design day peak conditions beginning in 2009-2010. The Plan indicates unserved demand in all areas (except Newport/Lincoln City) totaling about 28 thousand dekatherms per day (MDth/day) in the initial year. NW Natural used its Sendout® optimization model to evaluate supply-side and demand-side resource options for meeting identified load deficits. The Company's modified IRP included 17 deterministic cases based on a variety of forecasts for customer growth, customer usage, gas price, and DSM with and without Palomar/Blue Bridge. The Company then selected three candidate portfolios, a base case without Palomar, a Palomar case with 100 MDT reserved capacity (Palomar-100) and another Palomar case with 50 MDT reserved capacity (Palomar-50). The Company then concludes that the Preferred Portfolio is the Palomar-100 case. The Company justifies its selection based on assumed but non-quantified reliability and risk management benefits. The following table displays a comparison of the final three candidate portfolios on a NPVR basis and the incremental resources that will meet demand:

Run	Name	Cost \$(000)	Palomar/Blue	Mist Recall	Newport LNG	Satellite	Grants Pass
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<sup>3</sup> CD refers to Contract Demand for firm interstate pipeline capacity.

#		NPV	Bridge		Compressor Project	Storage	Lateral Expansion
1	1411-2011 IRP Mod Base Case	6,772,580	N/A	X	X	X	-
11	1392-2011 IRP Mod PAL 100	6,792,363	Palomar 100 MDTH	X	X	-	X
10	1391-2011 IRP Mod PAL BB 50	6,813,487	Palomar 50 MDTH Blue Bridge 50 MDTH	X	X	-	X

Multi-Year Action Plan: NW Natural's modified Plan included an Action Plan describing the activities, which are required by the IRP guidelines. Only Item No. 4.2 of the Action Plan is an actual action by the Company that is subject to consideration for acknowledgment: "Acquire Resources consistent with the Preferred Portfolio." The Palomar/Blue Bridge is a significant component in the Preferred Portfolio. Subsequently, the Company's action plan calls for acknowledging the acquisition of this resource.

### Comments of the Parties

NW Natural solicited initial comments from interested parties and the public through four meetings of Technical Advisory Committee (TWG) during the original IRP phase and one additional TWG meeting during the modified phase. In addition, Staff and CUB issued data requests throughout the IRP development process. Staff and CUB provided their respective comments on November 14, 2011 and then on November 28, 2011. The Company provided reply comments on November 28, 2011. Staff distributed its draft recommendation and a draft proposed order on the Plan to the Company and interested parties on December 8, 2011.

Staff Comments: Staff filed comments on November 14, 2011, and summary comments on November 28, 2011. In its comments, Staff requested additional information to support acknowledgment of the Company's Action Plan. First, Staff requested that the Company perform Monte-Carlo simulations on the candidate portfolios to justify acknowledgement of the the acquisition of Palomar/Blue Bridge, as a component of the Preferred Portfolio. Second, Staff advised the Company that there was not adequate analysis of the Palomar/Blue Bridge pipeline as a resource. Staff comments specifically denoted the lack of Benefit-Cost analysis, as well as the lacking analysis of the risk and uncertainties associated with the Preferred Portfolio. Further, Staff requested that the Company provide the cost estimates with adequate explanation of how these estimates were calculated for the Palomar/Blue Bridge pipeline.<sup>4</sup>

In addition, Staff made several comments regarding the Company's compliance with the substantive requirements of the Commission's IRP Guidelines. The details of these issues are included in Staff's comments, however, we summarize here that they are related to the development of the Company's "Base Case" demand forecast, e.g.

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<sup>4</sup> These requests were made during the June 2011 TWG meeting, in meetings following the February 2011 joint Public Meeting in Portland, and finally in Staff comments.

customer growth projections, price forecasts, customer usage, unserved demand and design-year weather.

CUB Comments: In its November 14, 2011 comments, CUB requested that the Company include in its IRP analysis the potential impact of the Straight Fixed-Variable (SFV) rate design on customers' behavior and participation in the Company's energy efficiency and conservation programs (Efficiency Programs). CUB also requested that the Company model the potential effect of the LNG exporting terminal in Kitimat B.C. (Kitimat) on future natural gas prices.

NW Natural Reply Comments: The Company responded that Staff's request with respect to the Monte Carlo simulations would cause a significant departure from the procedural schedule of this proceeding. In response to the Staff's comments on the remainder of the plan components, the Company replied that Staff's comments lacked a context that enabled the Company to determine, what concern, if any, Staff has that can be addressed at this stage. The Company also stated that many of Staff requests seem to be a result of low engagement level in the IRP process to date.

In responding to CUB's comments, the Company replied that the SFV rate design should not be part of the IRP analysis. The Company's position is that the appropriate place to address the SFV is in a general rate proceeding. The Company also disagreed to perform additional analysis on the potential impact of Kitimat on the price forecast.

Staff's recommendations: Based on its review, Staff recommends not acknowledging NW Natural's modified 2011 IRP. Staff concludes in its recommendations that the modified 2011 IRP's Preferred Portfolio lacked adequate analysis and critical information to evaluate the cost, benefits and risks of acquiring Palomar/Blue Bridge. Additionally, Staff points to the deficiencies in the Company's modified IRP as a result of failing to adequately address Staff's and CUB's concerns.

## **Commission Disposition**

NW Natural is a public utility subject to the jurisdiction of this Commission. Staff recommends that NW Natural's 2011 IRP not be acknowledged. After review of NW Natural's IRP and consideration of Staff's comments, we agree with and adopt Staff's recommendation. First, we find that there is no basis to acknowledge the Company's acquisition of Palomar/Blue Bridge pipeline as an incremental resource in its Preferred Portfolio without the performing the Monte-Carlo simulations. Indeed the Company states in its Plan: "The Monte Carlo module provides risk planning analysis around hundreds of weather and price simulations. This allows portfolios to be evaluated from a probabilistic standpoint."<sup>5</sup> The Company confirmed this statement by performing these runs in the original Plan's candidate portfolios.

According to the Company the single most important factor to modify the Plan is the fact that the original Palomar's pipeline is no longer considered. A modified Palomar/Blue Bridge

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<sup>5</sup> See page 5.1, Chapter 5 of the Company's September 2011 Plan.

project is being considered by the Company but no FERC certificate application has been filed yet. No reliable estimates of the project's costs were provided. It is very clear, that the Plan lacks the essential information and analyses to support acknowledgement at this stage. The principles of integrated resource planning are set forth in Order Nos. 89-507, 07-002, and 07-047. There are serious deficiencies in the Company's Plan that result in non-compliance with several of major requirements, for example:

Guideline 1: Substantive requirement

(a) *All resources must be evaluated on a consistent and comparable basis:*

- *Consistent assumptions and methods should be used for evaluation of all resources.*

The Company did not apply consistent assumptions and methods to evaluate the Palomar/Blue Bridge pipeline.

(b) *Risk and uncertainty must be considered.*

- *Utilities should identify in their plans any additional sources of risk and uncertainty.*

The Company did not identify the risks and uncertainties associated with the acquisition and development of the Palomar/Blue Bridge pipeline.

Guideline 4: Plan Components

(e) *Identification and estimated costs of all supply-side and demand-side resource options, taking into account anticipated advances in technology;*

The Company failed to provide a reliable and reasonable estimate of the costs of the Palomar/Blue Bridge project.

(f) *Analysis of measures the utility intends to take to provide reliable service, including cost-risk tradeoffs;*

The Company did not include cost-risk tradeoffs for the Palomar/Blue Bridge project.

(i) *Evaluation of the performance of the candidate portfolios over the range of identified risks and uncertainties;*

The Company did not evaluate the performance of the Preferred Portfolio over the range of identified risks and uncertainties associated with the Palomar/Blue Bridge project.

*(j) Results of testing and rank ordering of the portfolios by cost and risk metric, and interpretation of those results;*

Notwithstanding the previous findings, the Company did not identify which risk metric, if any, it used in order to compare the performance of these portfolios.

*(n) An action plan with resource activities the utility intends to undertake over the next two to four years to acquire the identified resources, regardless of whether the activity was acknowledged in a previous IRP, with the key attributes of each resource specified as in portfolio testing.*

Notwithstanding the previous findings, the Plan did not mention what specific and concrete activities it intends to take to acquire the Palomar/Blue Bridge resource. It appears that it relied on previously acknowledged IRP, which this guideline indicates is not sufficient.

We reject the Company's argument that performance of the analysis will cause significant departure from the procedural schedule. In instances where additional time is needed by any party, the Company is well familiar with the process to request an extension of time. We reiterate that utilities carry the burden of providing sufficient information and analyses to receive acknowledgment. On page 12 of our Order No. 07-002, we stated: "This guideline incorporates what we minimally expect from an IRP. We urge the utilities to provide more, rather than less, information."<sup>6</sup>

Moreover, we find that adequate explanation of Staff's concerns about developing the "Base Case" demand forecast is necessary to evaluate the Company's Plan. The Preferred Portfolio is based on the "Base Case" demand forecast, and the incremental resources are selected according to this basis. Hence, the acquisition of Palomar/Blue Bridge.

Finally, we don't find any urgency to hasten the acknowledgment of the Preferred Portfolio at this time since the Company's second candidate portfolio, which does not include Palomar, is less costly and appears to provide relatively the same level of reliability as the Company concludes.

Therefore we conclude that the Company did not meet the burden of supporting acknowledgment of its Preferred Portfolio. We direct the Company to revise and resubmit its Plan within six months addressing all the issues raised by the Parties.

### **Effect of the IRP on Future Rate-making Actions**

In Order No. 89-507, the Commission established its role in reviewing and acknowledging a utility's least-cost plan:

Acknowledgment of a plan means only that the plan seems reasonable to the Commission at the time the acknowledgment is given. As is noted elsewhere in

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<sup>6</sup> The reference is made to Guideline 4 (Plan Components)

this order, favorable rate-making treatment is not guaranteed by acknowledgment of a plan.

*See* Order No. 89-507 at 6 and 11. The Commission affirmed these principles in Order Nos. 07-002 and 07-047.<sup>7</sup>

### **DRAFT ORDER**

It IS ORDERED that the 2011 Integrated Resource Plan filed by Northwest Natural Gas Company, dba NW Natural, on September 1, 2011, is not acknowledged.

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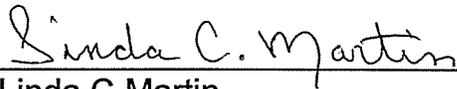
<sup>7</sup> *See* Order NO. 07-002: “Acknowledgment” generally means a Commission decision on acknowledgment, even if the Commission did not acknowledge the plan in full (*i.e.*, deem it reasonable, based on information available at the time).

**CERTIFICATE OF SERVICE**

**LC 51**

I certify that I have this day served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 8th day of December, 2011 at Salem, Oregon.



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Linda C Martin  
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Regulatory Operations  
550 Capitol St NE Ste 215  
Salem, Oregon 97301-2551  
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**LC 51  
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