

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

LC 45

In the Matter of	)	
	)	
NORTHWEST NATURAL GAS	)	ORDER
COMPANY, dba NW NATURAL	)	
	)	
2008 Integrated Resource Plan.		

DISPOSITION: PLAN ACKNOWLEDGED

**Introduction**

Northwest Natural Gas Company, dba NW Natural (NW Natural or the Company, seeks acknowledgment of its 2008 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. We conclude the plan satisfies our procedural and substantive requirements and, accordingly, acknowledge it.

**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. 07-002.

The Commission “acknowledges” resource plans that satisfy the procedural and substantive requirements and that seem reasonable at the time acknowledgment is given.

**Overview of NW Natural’s 2008 IRP**

NW Natural’s 2008 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; consideration of planning risks and uncertainties; analysis and selection of resource options for meeting future needs; and identification of actions to be accomplished over the next several years to carry out NW Natural's resource strategy and to complete additional planning activities. 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 estimated 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 used economic and population growth projections from the Oregon Office of Economic Analysis to forecast system and regional center projections of customer growth. NW Natural developed its "Base Case" demand forecast using its projected customer growth and projected prices. The Company also developed five demand sensitivities to place reasonable bounds on the range of demand forecast outcomes. In addition to the six deterministic demand forecasts, NW Natural incorporated Monte Carlo simulations (stochastic analysis) in its evaluation of customer demand. 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 1.6 percent over the 20-year planning horizon. Peak-day core market demand for the Base Case is projected to grow at an annual rate of 1.5 percent over the 20-year period.

Demand-Side Resources: NW Natural contracted with Stellar Processes to develop a comprehensive assessment of cost-effective, achievable demand-side resource potential in its Oregon and Washington service territories for the Company's 2008 IRP. The Base Case study identified cumulative achievable savings of approximately 75 million therms related to residential and commercial energy efficiency programs in Oregon by the year 2028. The projection for firm Oregon industrial efficiency potential is 570,000 therms by 2028. NW Natural contracts with the Energy Trust of Oregon (ETO) to deliver its energy efficiency programs in Oregon. Stellar Processes worked with ETO to estimate attainable program ramp-up rates. The consultant developed a 20-year demand-side-management (DSM) deployment scenario with year-by-year achievable savings and annual costs. Based on this joint analysis, both NW Natural and ETO have established goals of acquiring 2.3 million therms in Oregon in 2008 and 2.5 million therms in 2009. They also determined that the current public purpose charge is set appropriately to achieve the savings goals during the next two years, given the current level of surplus funds available from prior collections.

Supply-Side Resources: Supply-side options available to gas utilities include flowing gas supplies through interstate pipelines, storage, infrastructure

additions to the Company's distribution system, and recallable supply arrangements. NW Natural's flowing gas supplies originate in the Canadian provinces of British Columbia (BC) and Alberta and in the U.S. Rocky Mountain area. The Company's supplies include annual contracts, firm winter-peaking contracts, and spot gas. 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 releases excess pipeline and storage capacity into the secondary market when the capacity is not fully utilized. NW Natural's storage resources include the Mist underground storage facility and the Newport and Portland, Oregon Liquefied Natural Gas (LNG) facilities. The Company also contracts for underground storage at Jackson Prairie and LNG storage at Plymouth, Washington. NW Natural has four recallable agreements with three 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. The IRP evaluated a variety of resource alternatives to meet additional capacity needs over the planning horizon, including: incremental interstate pipeline capacity; recall of existing Mist underground storage capacity to core market service from the interstate storage market; distribution system additions; satellite LNG storage; transportation capacity through the as yet unconstructed Palomar pipeline that could allow substantial NWPL capacity to be released; and the potential acquisition of imported LNG from two large-scale facilities.

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 2008-2009. The Plan estimates peak day unserved demand in all areas (except Newport) totaling about 28 thousand dekatherms per day (MDth/day) in the initial year, rising to more than 500 MDth/day by the end of the planning horizon. Forecasted annual unserved demand grows from 28 MDth in the first year to about 7,000 MDth by 2027-2028. NW Natural used its SENDOUT<sup>®</sup> optimization model to evaluate supply-side and demand-side resource options for meeting identified load deficits. The Company developed a Base Case Scenario and evaluated nine alternate scenarios and 14 sensitivity cases before selecting its Preferred Portfolio. All achievable DSM programs were selected by the model and included in the Preferred Portfolio. The optimal supply resources selected include recall of Mist capacity beginning in 2008; satellite LNG in Eugene and build-out of the Willamette Valley Feeder in 2010; capacity on Palomar East pipeline (and turn-back of NWPL capacity) and construction of the Brownsville to Eugene project in 2011; and enhancement of Newport's LNG in 2012.

Multi-Year Action Plan: NW Natural's Multi-Year Action Plan describes the near-term actions the Company will take to implement its optimal resource strategy and to support and improve IRP planning. On the supply side, NW Natural plans to commit to 100,000 Dth/day of capacity on Palomar East; recall 10,000 Dth/day of Mist capacity in 2008 and an additional 30,000 Dth/day of capacity in 2009; refine cost estimates, conduct more detailed system modeling, and investigate siting/permitting constraints on satellite LNG facilities and distribution system investments, including the Willamette Valley Feeder and the Newport LNG enhancement; monitor potential LNG import terminal developments and new or expanded interstate pipeline projects, principally related to moving Rocky Mountain and LNG-sourced supplies to markets in the West; and investigate biogas as a potential future resource option. On the demand-side, the Company will work with ETO in efforts to achieve savings projections of 2.3 million therms in 2008 and 2.5 million therms in 2009 and to continue to evaluate achievable DSM potential and required public purpose funding levels. NW Natural will also work with interested parties to determine a potential energy efficiency funding mechanism for its Oregon firm industrial customers in order to pursue cost-effective energy savings for industrial sales customers. In the demand forecasting area, the Company plans to determine appropriate statistical probabilities in developing design year and peak day demand levels through stochastic analysis; review the demand forecast to ensure that the Company performs well under warmer days; investigate data collection requirements to analyze demand forecast error regionally; and monitor the spread of hybrid heating systems and their implications on demand forecasting.

### **Comments of the Parties**

NW Natural solicited initial comments from interested parties and the public through its five Technical Advisory Committee meetings and one public meeting prior to distributing a draft IRP for external review on February 7, 2008. The Commission Staff (Staff) provided comments on NW Natural's draft Plan on March 6, 2008. On April 15, 2008, the Commission received the final 2008 IRP. The Commission solicited parties' comments on the Plan on July 3, 2008. On July 7, 2008, NWPL submitted comments in the form of data requests to the Company on the Plan's Preferred Portfolio and commitment to contracting with Palomar East (and turn-back of NWPL capacity). NW Natural provided responses to NWPL's data requests on July 17. After additional data requests were submitted by NWPL and Staff and responded to by the company, NWPL filed comments on September 4, 2008, stating that it does not object to acknowledgement of NW Natural's Plan. NW Natural's reply, dated September 9, 2008, provided additional support for its commitment to the Palomar East pipeline. The Company filed clarifying revisions to its final IRP on October 24, 2008. Staff distributed its draft recommendation and a draft proposed order on the Plan to the Company and interested parties on November 17, 2008. NW Natural filed

reply comments to Staff's draft recommendation/proposed order in a letter dated November 20, 2008. No other comments on the Plan or on Staff's recommendation were received.

Staff Comments: Based on its review of NW Natural's 2008 IRP and participation in the planning process, Staff determined that the Plan meets the Commission's Guidelines in Orders No. 07-002 and 07-047. Procedural requirements were met as described above. Substantive IRP requirements were addressed throughout the Plan and summarized in an Appendix to the Plan. Staff agreed that NW Natural's IRP meets the Commission's substantive IRP requirements. Staff also concluded the demand-side and supply-side resources identified to fill the deficiencies expected in NW Natural's service territory beginning in 2008/2009 (Mist Recall and DSM savings) are appropriate. Staff's recommendation includes comments related to enhancing the SENDOUT<sup>®</sup> modeling in the Company's future IRPs and emphasizing the need for NW Natural to update the Commission in its IRP Update and future IRPs on its activities and decisions related to the development of the Palomar pipeline. Staff recommended the Commission acknowledge the 2008 IRP and action plan.

NW Natural Reply Comments: By letter dated November 20, 2008, NW Natural agreed to continue to work with Staff in future IRP processes to address Staff's comments and concerns related to SENDOUT<sup>®</sup> modeling and to "continue to update the Commission on Palomar [pipeline] and include consideration of the Palomar pipeline in our next annual update, or until such time as we have certainty about the future of the proposed pipeline and are required to commit to taking contractual firm capacity on the pipeline."

### **Commission Disposition**

NW Natural is a public utility subject to the jurisdiction of this Commission. Staff recommends that NW Natural's 2008 IRP be acknowledged. After review of NW Natural's IRP and consideration of Staff's comments, we agree with and adopt Staff's recommendation. NW Natural's 2008 IRP reasonably adheres to the principles of integrated resource planning set forth in Order Nos. 89-507, 07-002, and 07-047. Consequently, we acknowledge NW Natural's 2008 IRP.

### **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:

The establishment of Least-Cost planning in Oregon is not intended to alter the basic roles of the Commission and the utility in the regulatory process. The Commission does not intend to usurp the role of utility decision-maker. Utility management will retain full responsibility for making decisions and for accepting the consequences of the decisions. Thus, the utilities will retain their

autonomy while having the benefit of the information and opinion contributed by the public and the Commission.

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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 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.

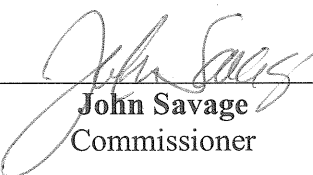
This order does not constitute a determination on the rate-making treatment of any resource acquisitions or other expenditures undertaken pursuant to NW Natural's 2008 IRP. As a legal matter, the Commission must reserve judgment on all rate-making issues. Notwithstanding these legal requirements, we consider the integrated resource planning process to complement the rate-making process. In rate-making proceedings in which the reasonableness of resource acquisitions is considered, the Commission will give considerable weight to utility actions which are consistent with acknowledged IRPs. Utilities will also be expected to explain actions that they take that are inconsistent with Commission-acknowledged plans.

**ORDER**

IT IS ORDERED that the 2008 Integrated Resource Plan filed by Northwest Natural Gas Company, dba NW Natural, on April 15, 2008, is acknowledged.

Made, entered, and effective JAN 12 2009.

  
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**Lee Beyer**  
Chairman

  
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**John Savage**  
Commissioner

  
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**Ray Baum**  
Commissioner

