TAMY LINVER

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August 12, 2013

Steven King, Secretary and Executive Director Washington Utilities & Transportation Commission 1300 S. Evergreen Park Drive, S.W. P.O. Box 47250 Olympia, Washington 98504-7250

RE:	UG	, NW	Natural's	2014	IRP	Work	Plan
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Northwest Natural Gas, dba NW Natural ("NW Natural" or the "Company"), herein files its 2014 Integrated Resource Plan ("IRP") Work Plan in compliance with Washington Administrative Code ("WAC") 480-90-238.

If you have any questions regarding this plan, please contact Jennifer Gross at 1-503-226-4211, extension 3590.

Sincerely,

/s/ Tamy Linver

Tamy Linver

enclosures

Work Plan for NW Natural's 2014 WASHINGTON

Integrated Resource Plan

Issued August 12, 2014

Methodology

The purpose of the Integrated Resource Plan (IRP) is to develop strategies for purchasing gas and improving efficiencies of gas usage to meet current and future needs consistent with a lowest reasonable cost approach. To do this, NW Natural will develop and integrate demand forecasts, weather patterns, natural gas price forecasts, and demand side and supply side resources into Gas Supply and Planning Optimization software. The resulting model will act as a guide to steer the Company toward the least cost resource planning portfolio.

Technical Working Group Meetings

The table below provides the schedule for Technical Working Group meetings.

Technical Working Group (TWG) Meetings					
1 st Meeting	August 22, 2013 - 9 a.m. – 3 p.m.				
Discuss load forecast					
2 nd Meeting	October 2, 2013 - 9 a.m. – 3 p.m.				
Discuss changes to modeling approach					
3 rd Meeting	December 10, 2014 - 9 a.m. – 3 p.m.				
Discuss Demand Side Management,					
Scenario development, Reliability					
planning, and Analysis of model runs					
4 th Meeting	January 23, 2014 - 9 a.m. – 3 p.m.				
Discuss modeling results					
File Final 2014 Washington IRP	May 16, 2014				

Content of 2014 Integrated Resource Plan

1. Executive Summary

- Overview of Company and Resource Plan
- Principal Conclusions from this Plan
- 2014 IRP Multi-Year Action Plan

Content of 2014 Integrated Resource Plan (Continued)

2. Gas Requirements Forecast

- Overview
- Customer Forecast
- Load Forecast Model
- Gas Price Forecast
- Weather
- Emerging Markets
- Results
 - o Base Case
 - Demand Scenarios
- Forecast Accuracy and Peak Day Analysis
- Key Findings

3. Supply-Side Resources

- Overview
- Current Resources
- LNG Refurbishment Project
- Supply-Side Dispatching
- Future Resource Alternatives
- Gas Supply Portfolio Acquisition Strategy
- Emergency Planning
- Key Findings

4. <u>Demand-Side Resources in Washington</u>

- Energy Efficiency Overview
- Methodology Energy Efficiency
- Other Demand-Side Management Sensitivities
 - o Lower Avoided Costs
 - Higher Gas Cost
- Program Funding and Delivery
 - o Energy Efficiency Programs
 - o Low Income Programs
- Load Management and Demand Response
- Energy Policy
- Key Findings

5. Linear Programming and the Company's Resource Choices

- Overview
- Resource Planning Model Integration
- Resource Planning Model Results

Content of 2014 Integrated Resource Plan (Continued)

- Reliability Modeling and Model Results
- Monte Carlo Simulation
- Key Findings

6. Avoided Cost Determination

- Overview
- Environmental Externalities
- Methodology
- Results
- Avoided Costs-Modified
- Key Findings

7. <u>Distribution Planning</u>

- Background
- Scope
- Overview and Nomenclature
- Existing Distribution System
- Distribution System Planning Methodology
- Significant HP Transmission/Distribution System Planning Projects
- Key Findings

8. Public Participation

- Technical Working Group
 - o Issues lists from TWG meetings
- Public Participation

Planning Schedule

The attached Gantt chart provides the work schedule for the Company's planning process.

Anticipated 2014 IRP Work Plan

