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November 27, 2013

Attention: Filing Center  
Public Utility Commission of Oregon  
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Re: *In the Matter of NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL  
Investigation into Schedule H, Large Volume Non-Residential High Pressure Gas Service  
Rider*  
OPUC Docket UG 266

Enclosed for filing today are an original and five copies of STAFF TESTIMONY in the  
above-captioned docket.

Sincerely,

Stephanie S. Andrus  
Senior Assistant Attorney General  
Business Activities Section

Enclosures  
SSA:jrs/#4812522  
(Electronic copy only)  
c: UG 266 Service list

CASE: UG 266  
WITNESS: ERIK COLVILLE

**PUBLIC UTILITY COMMISSION  
OF  
OREGON**

**STAFF EXHIBIT 100**

**Direct Testimony**

**November 27, 2013**

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS**  
2 **ADDRESS.**

3 A. My name is Erik Colville. I am employed as a Senior Utility Analyst for the  
4 Public Utility Commission of Oregon. My business address is 3930 Fairview  
5 Industrial Drive, SE, Salem, Oregon 97302.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK**  
7 **EXPERIENCE.**

8 A. My Witness Qualification Statement is found in Exhibit Staff/101.

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. I discuss my analysis of Northwest Natural Gas Company's (NWN) proposed  
11 high pressure gas service (HPGS) tariff (Schedule H) and my recommendation  
12 to allow the tariff to go into effect.

13 **Q. WHAT IS HPGS?**

14 A. HPGS takes low-pressure gas from the natural gas pipeline, compresses the  
15 gas to high pressure and low volume, and transfers it as compressed natural  
16 gas (CNG) to a storage tank until needed. The stored CNG may then be  
17 dispensed into natural gas vehicles (NGV) for use as fuel. The HPGS that  
18 NWN proposes will allow customers to fuel large fleets or provide NGV fueling  
19 services to the public.

20 **Q. WHY DOES NWN WANT TO PROVIDE HPGS?**

21 A. NWN reports that the primary motivation to offer HPGS as a utility service is to  
22 respond to requests from customers. NWN testifies that over the past several  
23 years, NWN has received an increasing number of calls from customers

1 interested in converting their vehicle fleets to CNG and unable to find  
2 businesses willing to provide them with local NGV fueling service. See  
3 NWN/200 Summers/8-9.

4 **Q. HOW WILL NWN PROVIDE THE SERVICE?**

5 A. NWN proposes to design, install, and maintain NWN-owned compression,  
6 storage and dispenser equipment on HPGS customers' premises. The  
7 equipment will take low-pressure gas from the natural gas pipeline, compress  
8 the gas to high pressure and low volume, transfer to a storage tank until  
9 needed, and dispense the CNG into NGVs. See NWN/200 Summers/3.

10  
11 The customer will operate the HPGS equipment, and may use the equipment  
12 to offer retail CNG to the public. NWN will own and maintain the HPGS  
13 equipment during a 10-year contract, and will continue to own the equipment at  
14 the end of the contract. See NWN/200 Summers/11.

15 **Q. WHO ARE THE POTENTIAL CUSTOMERS OF NWN HPGS?**

16 A. NWN will target non-residential customers with fleets of 40 or more vehicles  
17 that return to the same place each night. NWN reports that a fleet of 40  
18 vehicles or more is generally needed to make the investment in HPGS  
19 equipment economical for the customer. However, a customer with a smaller  
20 fleet could improve the economics by offering CNG for sale to the public or by  
21 aggregating service with another smaller fleet owner to jointly finance and  
22 utilize a single NGV fueling facility. See NWN/200 Summers/11.

23 **Q. WHAT CHARGES ARE INCLUDED FOR HPGS UNDER SCHEDULE H?**

1 A. Based on NWN's filing the terms of service and pricing for HPGS will vary for  
2 each installation and will be laid out in the customer's HPGS Service  
3 Agreement. NWN will bill the customer a monthly facility charge designed to  
4 recover all equipment, permitting and siting costs. NWN will derive the monthly  
5 facility charge by multiplying the actual project costs by an annual cost  
6 recovery factor, divided by 12. The cost recovery factor is designed to recover  
7 in each year the depreciation on the HPGS equipment plus NWN's financing  
8 costs, at its authorized return, for the investment made on behalf of the  
9 customer. In addition, the HPGS customer's monthly bill will include a charge  
10 for scheduled maintenance, and when applicable, charges for any other  
11 service such as unscheduled maintenance or back-up gas service that NWN  
12 may provide.

13 **Q. WHAT ARE THE PRIMARY ISSUES IN NWN'S FILING?**

14 A. The primary issues emerging from NWN's HPGS filing are issues related to  
15 competition and cost-subsidization. Some stakeholders assert that allowing  
16 NWN to provide HPGS as a regulated service is unfair competition and will  
17 harm growth of a competitive NGV fueling infrastructure market. Other  
18 stakeholders are concerned that non-HPGS customers will subsidize the  
19 HPGS.

20 **Q. PLEASE DESCRIBE YOUR ANALYSIS.**

21 A. I analyzed the following:

- 22 1. Is there a need for NGV fueling market development?
- 23 2. Is utility participation in the NGV fueling market unfair competition?

- 1        3.     Does the proposal facilitate NGV fueling market development?
- 2        4.     Will the Schedule H charges cover the costs of HPGS or will HPGS costs
- 3                be subsidized?
- 4        5.     Is NWN's proposal structured to leave room for competition by
- 5                unregulated entities?
- 6        6.     Does the Commission have authority to require NWN to exit the market
- 7                once it is developed?
- 8        7.     Is there a net benefit to ratepayers?

9

10        Before addressing the questions above, I reviewed the Commission's  
11        conclusions in its Investigation of Matters Related to Electric Vehicle Charging.  
12        (Order No. 12-013; Docket No. UM 1461) In Docket No. 1461, the Commission  
13        addressed whether regulated utility ownership and operation of publicly  
14        available electric vehicle service equipment in any form—even without  
15        regulated rate recovery—would permit the full development of a competitive  
16        marketplace for electric vehicle charging services. See Order No. 12-013 at 5.  
17        I consider the electric vehicle service equipment (EVSE) issues addressed in  
18        Docket No. 1461 analogous to the HPGS issues stemming from NWN's filing in  
19        this docket in that the regulatory principles discussed in that docket related to a  
20        nascent market are applicable here.

21        **Q. DID THE COMMISSION CONCLUDE THAT PARTICIPATION BY**  
22        **REGULATED UTILITIES IN THE EVSE MARKET WOULD IMPEDE**  
23        **COMPETITION?**

1 A. No. The Commission found that it is paramount to allow all market players,  
2 including the regulated utilities, to have flexibility to respond to emerging  
3 market demands. Also, the Commission did not find that allowing regulated  
4 utilities to participate in an emerging market will necessarily impede the  
5 vibrancy of the whole market. See Order No. 12-013 at 6.

6 **Q. IS THERE A NEED FOR NGV FUELING MARKET DEVELOPMENT?**

7 A. Yes, there appears to be. Governor Kitzhaber's 10-year Energy Plan Action  
8 calls for accelerated fleet turnover to alternative fuels. Goal 3 of the plan  
9 states:

10 Oregon should develop a comprehensive alternative fuel program that  
11 allows utility-ownership of refueling infrastructure and provides  
12 incentives, where appropriate, for vehicle conversions. See Kitzhaber,  
13 *10-Year Energy Action Plan* at 36.

14 Based on this Energy Action Plan, there is a need to develop the NGV fueling  
15 market. Comments presented to the Commission at the public meeting  
16 regarding the lack of availability of NGV fueling infrastructure support this  
17 conclusion. Furthermore, stakeholders filing comments prior the Commission's  
18 public meeting regarding NWN's proposed HPGS uniformly support the  
19 development of NGV fueling infrastructure in Oregon. See comments filed in  
20 Advice No. 13-10, and October 23, 2013 Staff Report at 6.

21 **Q. DOES PARTICIPATION BY A REGULATED UTILITY IMPEDE NGV**  
22 **FUELING MARKET COMPETITION?**

1 A. Governor Kitzhaber's 10-Year Energy Plan Action Item 3 for accelerated fleet  
2 turnover to alternative fuels specifically calls for utility participation in  
3 development of markets such as electric vehicle charging or NGV fueling, at  
4 least at the outset. Accordingly, the 10-Year Energy Plan supports the  
5 conclusion that regulated utilities' participation in the NGV fueling market is a  
6 desirable strategy necessary to help accelerate the early deployment of  
7 alternative fuel vehicle infrastructure. Further, the conclusions reached by the  
8 Commission in the EVSE docket regarding inclusion of all market players are  
9 applicable to the emerging NGV fueling market. See Order No. 12-013 at 6.

10 **Q. DOES NWN'S PROPOSAL LEAVE ROOM FOR COMPETITION BY**  
11 **UNREGULATED UTILITIES?**

12 A. Yes. The HPGS tariff is structured to amortize the capital costs over a ten-year  
13 period rather than over the life of the equipment (customarily twenty or more  
14 years). This short amortization period, which is less than the economic life of  
15 the HPGS equipment, raises the rates charged by NWN to a level over  
16 incremental costs. Market competitors can choose to amortize the capital costs  
17 over longer periods of time, potentially reducing their monthly facility charges.

18  
19 Further, according to NWN, its proposal addresses a demonstrated need for  
20 gas compression infrastructure among its customers to provide their own NGV  
21 fueling services. NWN is not proposing to operate NGV fueling stations. Thus,  
22 competitors can offer customers other competing services including bundling of  
23 NGV fueling equipment with operation of NGV fueling stations. Also, in

1 response to comments from the Natural Gas Vehicle Fuel Providers, NWN  
2 revised its filing to eliminate the exclusivity clause in the HPGS Feasibility  
3 Agreement. Lastly, because of the high initial investment required for HPGS  
4 equipment, I am convinced that customers seeking HPGS are motivated and  
5 sophisticated enough to study the market before signing a long-term contract  
6 with a single service provider.

7 **Q. DOES NWN'S PROPOSAL AID IN NGV FUELING MARKET**  
8 **DEVELOPMENT?**

9 A. Again, Goal 3 of Governor Kitzhaber's 10-Year Energy Plan Action Item for  
10 Accelerated Fleet Turnover to Alternative Fuels assumes that participation by a  
11 regulated utility in the NGV fueling market will accelerate the transition to  
12 alternative fuels. Further, the interplay between the installation of HPGS  
13 equipment and NGVs argues that increasing the number of NGV fueling  
14 stations in Oregon will facilitate acquisition of NGVs in the state. This is  
15 because entities interested in converting their fleets to CNG may be hesitant to  
16 do so if there are few fueling stations. As the number of NGVs in the state  
17 increases, the opportunity for competitive service could rise. In other words,  
18 regulated utility participation in providing HPGS could actually kick start a  
19 competitive market in Oregon.

20 **Q. WILL NWN HAVE UNFAIR COMPETITIVE ADVANTAGES BECAUSE OF**  
21 **ITS ACCESS TO EXISTING CUSTOMERS' INFORMATION AND ITS**  
22 **ABILITY TO USE REVENUES FROM OTHER RATEPAYERS TO**  
23 **SUBSIDIZE HPGS?**

1 A. NWN states that it plans to target non-residential customers with a fleet of at  
2 least 40 return-to-base vehicles. Information regarding fleet size is not  
3 exclusively found in NWN customer databases. Further, NWN states that it will  
4 not identify potential customers by reviewing its customers' historical data, but  
5 will use publicly-available information listing fleets in Oregon via software called  
6 "FleetSeek." NWN states this information is equally available to any competitor  
7 wishing to target fleets for conversion to CNG. See NWN/200 Summers/21-22.

8  
9 With respect to the potential for subsidization, NWN has responded to  
10 concerns by Staff, the Citizens' Utility Board of Oregon (CUB), and Northwest  
11 Industrial Gas Users (NWIGU) regarding potential subsidies for the HPGS. As  
12 discussed below, I do not think it is likely that NWN will be able to use  
13 ratepayer revenues to subsidize HPGS. However, if this occurs, the  
14 Commission will be able to remedy it.

15 **Q. DOES THE COMMISSION HAVE AUTHORITY TO REQUIRE NWN TO**  
16 **EXIT THE MARKET ONCE IT IS DEVELOPED?**

17 A. Yes. NWN's provision of HPGS will be regulated as any other service. The  
18 Commission has discretion to observe, modify, and end NWN's participation in  
19 the NGV fueling market, as provided in ORS 756.568.

20 **Q. WILL SCHEDULE H COVER THE COSTS OF THE SERVICE OR IS IT A**  
21 **SUBSIDIZED RATE?**

22 A. The Schedule H rates would be subsidized if they do not fully recover the  
23 incremental costs associated with the services offered under the schedule. As

1 originally designed, Schedule H would not capture the costs of initial customer  
2 contacts and costs associated with determining the feasibility of HPGS for  
3 customers and thus, would be spread to all ratepayers. NWN testifies that  
4 Schedule H is now designed to fully recover all the costs and all cost risk for  
5 the service, including the initial contacts with potential HPGS customers and  
6 feasibility study costs. See NWN/200 Summers/15.

7 **Q. WHAT COSTS ARE INCURRED OR MAY BE INCURRED IN**  
8 **CONNECTION WITH HPGS?**

9 A. Schedule H delineates four phases that cover the initial HPGS customer  
10 contact regarding HPGS to actual service. The phases are (1) Customer  
11 Service; (2) Feasibility Study; (3) Site Design and Permit Evaluation, and (4)  
12 HPGS Service. See NWN/200 Summers/12. During the Customer Service  
13 Phase, a customer interested in HPGS will call NWN and speak with a  
14 representative for a very high level assessment of the customer's needs. See  
15 NWN/200 Summers/12. If by the end of the Customer Service phase it appears  
16 that the customer is a potential match for HPGS, the customer may sign a  
17 Feasibility Agreement to continue with a Feasibility Study. If the Feasibility  
18 Agreement is signed, NWN will conduct site visits and collect information from  
19 the customer to assess the customer's site, fuel needs, facilities and other  
20 factors. The final Feasibility Study will provide the customer with a preliminary  
21 estimate for the cost of HPGS for the customer. See NWN/200 Summers/12-  
22 13.

23

1 If the customer decides to proceed with HPGS after the final Feasibility Study,  
2 the process enters the third phase and the customer will sign the Site Design  
3 and Permit Evaluation Agreement. During the third phase, NWN will refine its  
4 cost estimate and perform the design and permitting work for HPGS equipment  
5 installation. The final site design will include a final cost estimate for the  
6 customer. See NWN/200 Summer/13.

7  
8 Finally, when the design work is complete, the fourth phase begins and the  
9 customer will enter into the High Pressure Gas Service Agreement. The High  
10 Pressure Gas Service Agreement governs the terms of service for the ten-year  
11 contract period, including the terms and conditions for the procurement and  
12 construction of the equipment, terms for scheduled and unscheduled  
13 maintenance, and the Administrative Services Charge. Once this agreement is  
14 signed, NWN will proceed with construction of the compressor, storage tanks,  
15 dispenser, and any other customized equipment on the HPGS customer's  
16 property. See NWN/200 Summers/13.

17 **Q. HOW DOES NWN PROPOSE TO RECOVER ALL INCREMENTAL COSTS**  
18 **ASSOCIATED WITH THE FOUR PHASES?**

19 A. NWN has estimated the annual incremental costs associated with the  
20 Customer Service and Feasibility Study phases and proposes to recover these  
21 costs from HPGS customers through the Administrative Services Charge  
22 included in the Scheduled Maintenance Charge in Schedule H. See NWN/200  
23 Summers/16. NWN proposes to set the Administrative Services Charge at

1       \$10,087 per customer per year. However, NWN will track costs to determine  
2       whether this charge will require revision. NWN will collect costs of the third and  
3       fourth phases from the customers incurring the charges, even if the customer  
4       ultimately does not contract for HPGS. See NWN/200 Summers/17-18.

5       **Q. WILL NWN BE ABLE TO ENSURE THAT NON-HPGS CUSTOMERS DO**  
6       **NOT SUBSIDIZE HPGS CUSTOMERS?**

7       A. As discussed above, NWN will recover the actual costs associated with the  
8       third and fourth phases of services under Schedule H. NWN will recover other  
9       costs of providing HPGS based on estimates of these costs for the first year  
10      the tariff is in effect.

11  
12      If actual incremental costs were to exceed NWN's estimates, non-HPGS  
13      ratepayers will subsidize the cost of service for HPGS customers. NWN  
14      proposes to avoid subsidizing in the first year by including an amount in rates  
15      for each customer that exceeds NWN's estimate of actual costs. In addition,  
16      NWN commits to tracking the costs incurred for the first year of the tariff during  
17      the first and second phases and to meet with stakeholders to discuss the costs,  
18      and to propose changes to the tariff in order to adjust the Administrative  
19      Services Charge as necessary. See NWN/200 Summers/19.

20      **Q. HOW WILL NWN RECOVER COSTS ASSOCIATED WITH FEASIBILITY**  
21      **STUDIES OR OTHER ACTIVITIES ASSOCIATED WITH POTENTIAL**  
22      **CUSTOMERS THAT ULTIMATELY DO NOT CONTRACT FOR HPGS?**

1 A. The Administrative Services Charge is based on estimates of all the costs  
2 incurred to provide the service, including costs for market research or pricing  
3 review and also, costs incurred for entities that ultimately do not contract for  
4 HPGS. In the event the customer decides against going forward, that customer  
5 will receive a bill for the costs incurred, payable within 30 days. See NWN/200  
6 Summers/17. As discussed above NWN commits to tracking the costs incurred  
7 for the first year of the tariff during the first and second phases and to propose  
8 changes to the tariff in order to adjust the Administrative Services Charge as  
9 necessary. See NWN/200 Summers/19. Accordingly, customers taking HPGS  
10 will bear the costs associated with contacts with potential customers that  
11 ultimately do not contract for the service.

12 **Q. IS THIS THE COST RECOVERY MECHANISM THAT STAFF PROPOSED**  
13 **PRIOR TO THE COMMISSION'S OCTOBER 28, 2013 PUBLIC MEETING?**

14 A. It is similar. Staff recommended that the Commission require NWN to track all  
15 costs related to the provision of HPGS for one year and to submit a tariff rider  
16 increasing cost recovery from HPGS customers if it turned out that non-HPGS  
17 customers were subsidizing HPGS. NWN's proposal is designed to avoid the  
18 need for a rider after the first year of service but also contemplates that a rate  
19 increase may be put into effect after the first year if Schedule H does not  
20 capture all the costs of HPGS.

21 **Q. IS NWN'S COST RECOVERY PROPOSAL SATISFACTORY?**

22 A. Yes. I agree it is preferable to recover costs from HPGS customers close to the  
23 time the costs are incurred and NWN's proposal will do so. In addition, NWN's

1 proposal to track costs to guard against rate subsidization is consistent with  
2 recommendations by CUB and NWIGU made in comments prior to the  
3 Commission's October 28, 2013, public meeting. Both CUB and NWIGU  
4 recommended that the Commission require that NWN track costs associated  
5 with providing HPGS to ensure that the costs are recovered by HPGS  
6 customers and not subsidized by non-HPGS customers. See CUB  
7 September 30, 2013 Comments at 4 and NWIGU September 27, 2013  
8 Comments at 2.

9 **Q. DOES NWN PROPOSE REVISIONS TO SCHEDULE H THAT ADDRESS**  
10 **THE COST AND LIABILITY RISK ISSUES IDENTIFIED BY STAFF IN**  
11 **STAFF'S OCTOBER 23, 2013 STAFF REPORT?**

12 A. NWN revised Schedule H prior to the October 28, 2013, Public Meeting to  
13 address one of Staff's concerns. As noted in Staff's October 23, 2013, Staff  
14 Report, the other risks identified by Staff were sufficiently minimized by the  
15 provisions already included in Schedule H.

16  
17 Staff identified the following cost and liability risks for ratepayers that are not  
18 expressly covered under Schedule H; 1) costs associated with site work if the  
19 customer defaults on the Service Agreement; 2) liability from site and  
20 equipment sizing, and 3) liability from vehicle fueling activities. See  
21 October 23, 2013 Staff Report at 9. Staff concluded that the credit review  
22 process will minimize risk that HPGS customers will default on their Service  
23 Agreements and therefore minimize risk of NWN costs associated with

1 abandoned sites. In addition, the Site Design and Permit Evaluation process  
2 should ensure NWN receives accurate information regarding needed  
3 equipment, and the extensive applicable code regulations should help ensure  
4 the equipment is appropriately installed and sized. Id. at 9-10.

5  
6 With respect to the third issue, liability associated with customers providing  
7 fueling services, NWN modified the Gas Service Agreement to specify that  
8 NWN is not liable for damage to or damage caused by HPGS customer-owned  
9 non-standard equipment. Id. at 10. Also, liability associated with a HPGS  
10 customer's provision of fueling services is limited by Article 12 of the Gas  
11 Service Agreement, which covers liability and indemnification. Id.

12 **Q. WILL NWN'S PROVISION OF HPGS RESULT IN A NET BENEFIT TO**  
13 **CUSTOMERS?**

14 A. Yes. As discussed above, NWN proposes to recover from HPGS customers all  
15 the costs to provide, and associated with providing, HPGS. However, Schedule  
16 H will provide benefits to all ratepayers through the sharing of fixed costs.  
17 Customers taking service under Schedule H will increase the volumes of  
18 natural gas sold by NWN. As a result NWN's fixed costs will be spread to these  
19 additional volumes, reducing existing customers' unit costs, thereby creating a  
20 net benefit to existing customers.

21 **Q. DO YOU HAVE A REPORTING RECOMMENDATION FOR**  
22 **CONSIDERATION BY THE COMMISSION?**

1 A. Yes. In order for the Commission and the parties in this case to continue to  
2 assess the market as it develops and address any issues that may arise, I  
3 recommend the Commission require NWN to provide a report every three  
4 years on certain gas operations and on market shares relating to HPGS.  
5 This information will enable the Commission to ensure that NWN gains  
6 no unfair competitive advantage in the provision of this service and to  
7 enable the Commission to monitor developments in this market.

8  
9 I recommend the report be filed in a perpetual Commission docket  
10 allowing for stakeholder intervention. The first report should be filed  
11 January 1, 2017, and every three years after that, unless the  
12 Commission orders otherwise.

13  
14 I further recommend the report include data, for the previous three year period,  
15 regarding: the identity and number of potential HPGS customer contacts made;  
16 the identity of and how many potential HPGS customers advance through each  
17 of the (1) Customer Service; (2) Feasibility Study; (3) Site Design and Permit  
18 Evaluation, and (4) HPGS Service phases; total HPGS costs identified by  
19 major cost category; HPGS revenues; and an accounting of the costs incurred  
20 for the first and second phases to support potential changes in the  
21 Administrative Services Charge.

1     **Q. WHAT IS YOUR RECOMMENDATION REGARDING NWN'S PROPOSED**  
2           **HPGS TARIFF (SCHEDULE H)?**

3     A. I recommend approval of NWN's request for Advice No. 13-10, the proposed  
4           HPGS tariff (Schedule H).

5     **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

6     A. Yes.

CASE: UG 266  
WITNESS: ERIK COLVILLE

**PUBLIC UTILITY COMMISSION  
OF  
OREGON**

**STAFF EXHIBIT 101**

**Witness Qualifications Statement**

**November 27, 2013**

## WITNESS QUALIFICATION STATEMENT

NAME: Erik E. Colville, P.E.

EMPLOYER: Public Utility Commission of Oregon

TITLE: Senior Utility Analyst/Electric Rates and Planning

ADDRESS: 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2115.

EDUCATION: Bachelor of Science in Agricultural Engineering  
Washington State University, Pullman, WA, 1979

Master of Business Administration  
City University, Seattle, WA, 1989

Licensed Professional Engineer since 1984, and licensed as such  
in Oregon since 1997

EXPERIENCE: I have been employed by the Public Utility Commission of Oregon  
since June of 2010. I am a Senior Utility Analyst in electric rates and  
planning for the Electric and Natural Gas Division of the Utility  
Program. Current responsibilities include lead analyst for integrated  
resource planning, resource acquisition, the renewable portfolio  
standard, and environmental related matters.

I have approximately 32 years of professional engineering  
experience, including approximately 23 years:

- Relating to air, water and soil environmental issues; and
- Evaluating, planning, permitting, designing, and supporting  
construction of energy facilities

## CERTIFICATE OF SERVICE

I hereby certify that on November 27, 2013, I served the foregoing STAFF TESTIMONY upon the persons named on the service list below who have waived such service by mail, by serving a full, true and correct copy thereof at their e-mail address as follows:

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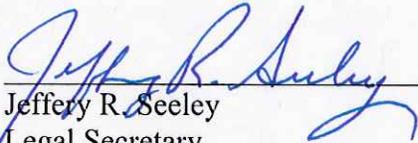
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