Statement for the Record

Lynn Dahlberg, Director of Marketing, Williams Northwest Pipeline LLC

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Coordination Efforts, Regional Issues and Remaining Challenges

My name is Lynn Dahlberg and I am here on behalf of Williams. I am director of marketing for Williams' Northwest Pipeline LLC. Northwest Pipeline is a primary artery for the transmission of natural gas to the Pacific Northwest and Intermountain Region.

Northwest Pipeline is a 3,900-mile bi-directional transmission system serving the states of Washington, Oregon, Idaho, Wyoming, Utah, Nevada, Colorado and New Mexico. Natural gas supplies from British Columbia, Alberta, and the Rocky Mountains and San Juan Basin can be delivered using this pipeline system.

I have worked in the natural gas industry for 24 years and have been part of the gas-electric harmonization discussions for the past few years. Thank you for the opportunity to participate in this forum today.

The Federal Energy Regulatory Commission (FERC) currently is examining the relationship between the natural gas and electric power industries, primarily due to concerns about electric reliability in the Eastern Interconnection. Policymakers, however, should keep in mind that most gas markets and even electric markets are functioning well right now. If there's one thing I can leave you with it's this: Don't fix what isn't broken. Don't force the Pacific Northwest to change its gas day to address an eastern electric reliability issue when such changes only serve to create problems in our region that we aren't facing today.

<u>Background</u>

The U.S. natural gas transmission pipeline network is the most robust and well developed natural gas transmission pipeline network in the world. This network has facilitated the development of a competitive natural gas commodity market in the U.S. and has made it possible for the U.S. economy to realize the benefits of the shale gas revolution.

In addition to traditional customers such as local distribution companies and industrials, interstate pipelines have been serving gas-fired generators reliably for decades. Interstate natural gas pipelines have demonstrated consistently the reliability of the natural gas system for customers that contract for firm pipeline transportation. Gas-fired generators, served with the appropriate mix of natural gas pipeline and storage services, can ramp up quickly to meet the demand for electricity.

Natural gas is being used increasingly as the power source for electricity generation. This trend is attributable to low natural gas prices, abundant supply, recent environmental regulations that have spurred coal-powered generation retirement, and use of natural gas to complement renewable energy resources. This has created the need to examine the interdependency of the natural gas and electric power industries, particularly in the organized wholesale electric markets in the Eastern Interconnection. Consequently, the FERC initiated a proceeding "to ensure that [electric power] outages and reliability problems are not the result of lack of coordination between the electricity and gas industries."

The FERC identified two items it could address on a national basis to improve gas-electric integration – encouraging communications between the two industries and reconciling the mismatch between the electric day, which starts at midnight in each time zone, and the uniform national gas day beginning at 9 am Central Clock Time (CCT).

The FERC addressed communication protocols in a final rule last November. The FERC recently proposed changes to the national gas day and scheduling timeline in order to address gas-electric integration issues that have arisen primarily in organized markets within the Eastern Interconnection. In particular, FERC has proposed to change the start of the natural gas operating day from 9 am to 4 am CCT. The FERC also has proposed to modify the natural gas scheduling timelines by moving the first day-ahead nomination opportunity to later in the day, and by adding two more nomination opportunities.

<u>FERC Must Take into Account All Pipeline Customers and Regional Differences</u>

When considering changes to the national gas day or the pipeline scheduling timeline, FERC must consider how such changes would impact all pipeline customers, not just power generators. It is important to remember that pipelines also serve gas utilities, industrials, gas marketers and producers. Northwest is working with all stakeholders, including FERC, the North American Energy Standards Board (NAESB), gas and electric industry stakeholders and our customers, to explore changes to the gas day and pipeline nomination schedule that meet the needs of the growing electric power market and our historic gas customers, such as Northwest Natural Gas,

Puget Sound Energy, PacifiCorp, Portland General Electric, Avista, Cascade, Intermountain Gas and Southwest Gas.[1]

In addition, FERC must consider regional differences before considering imposing a national solution. Northwest's experience with serving power generators is far different than that of our sister company, Transco, which transports gas along the East Coast. The two factors that most differentiate regions across the U.S. are: (1) whether the electric market in the region is an organized market or a bi-lateral market; and (2) the utilization level of the natural gas transportation system in the region.

Organized vs. Bi-Lateral Electric Power Markets

In organized wholesale electric power markets, merchant generators are dispatched on the lowest-cost basis and, accordingly, may have no incentive to contract for firm pipeline transportation, which is often more expensive than interruptible transportation.[2] Organized wholesale electric markets exist in the East, Midwest and in California.

In bi-lateral electric markets (wherein buyers of electricity and sellers of electricity enter into bi-lateral contracts), reliability is clearly delineated between the buyer and seller. The seller agrees to deliver a product to the buyer at a certain location. Bi-Lateral markets exist in the western U.S., excluding California.

The Pacific Northwest has a bi-lateral electric market. Northwest serves 24 gas-fired power generators with a potential load of approximately 1 billion cubic feet per day, and all but one merchant plant holds firm pipeline transportation. The power plants are owned by integrated electric utilities that can recover the costs of holding firm transportation service through rates approved by the state public service commission.

Utilization Level of Natural Gas Transportation Varies by Region

In New England and the Northeast, pipelines often run full during peak demand periods, such as the winter heating season, and have little or no capacity available for interruptible transportation shippers. In contrast, Northwest currently has adequate pipeline capacity to meet the needs of its electric generation customers. The Pacific Northwest does not face the large scale coal plant retirements, as the Midwest does, for example, since it can rely heavily on existing hydroelectric power. In California, there is far more interstate natural gas pipeline infrastructure bringing gas into the state than actually is needed.

[1] Northwest also is working with the Pacific Northwest Utilities Conference Committee (PNUCC), the Northwest Gas Association, the Western Energy Interstate Board (WIEB), the Interstate Natural Gas Pipeline Association of America (INGAA) and other stakeholders to address issues related to integrating the natural gas and electric industries and maintaining a high level of pipeline reliability.

[2] While firm transportation is a higher priority service, interruptible transportation is served on a best-efforts basis.

As the demand for natural gas increases, and as natural gas pipelines become more fully utilized by firm customers, there will be less or little pipeline capacity available to serve customers utilizing interruptible service. This is particularly true during peak winter or summer periods when firm transportation customers use all of their transportation capacity.

Should a region choose to rely on natural gas and gas-fired generation, pipelines stand ready to build the necessary infrastructure to serve increased demand. To do so, pipelines must receive firm contracts to support the long-term investment in these assets. It appears that there is an incentive for gas-fired generators in bi-lateral markets to hold firm pipeline capacity since there is a mechanism for the electric utility to recover the costs of holding firm transportation. By contrast, it appears there is a disincentive for generators in organized wholesale electric markets to hold firm transportation. One could argue that this disincentive is frustrating the ability for regions like New England to build necessary pipeline infrastructure. While not a problem in the Pacific Northwest, should a region within a wholesale electric market wish to rely on natural gas-fired generation to support electric reliability, the region must find a way to ensure that the electric power industry subscribes for the firm transportation contracts necessary to ensure timely pipeline expansions.

<u>FERC Should Not Impose Changes to the National Gas Day to Address Concerns in One Region to the Detriment of Another</u>

After numerous industry-wide discussions wherein participants have highlighted these regional differences, FERC issued a proposed rulemaking in March 2014 that proposed to change the scheduling timeline and the start of the gas day. Specifically, FERC has proposed to change the start of the natural gas operating day from 9 am CCT to 4 am CCT. The FERC also has proposed to modify the natural gas scheduling timelines by moving the first day-ahead nomination opportunity to later in the day and by additional nomination opportunities.

The FERC proposed a 4 a.m. CCT gas day so that the gas day does not begin during the middle of the morning electric peak-demand period. Some organized wholesale electric markets in the Eastern Interconnection are concerned that some generators currently are reaching their contractual limits on the pipeline or running out of natural gas before the end of the preceding 9 a.m. CCT gas day, just as the Independent System Operator (ISO) or Regional Transmission Organization (RTO) needs the generator to perform. These generators, according to some ISOs, are running out of gas during illiquid periods in the gas commodity market when it is difficult to purchase gas. Some believe moving the gas day to 4 a.m. CCT would mitigate this concern, because a generator that had run out of gas could "de-rate" (remove itself from operation) during an off-peak electric demand period. In reality, this is just shifting the problem to an off-peak electric period, and not addressing the electric reliability concern associated with ISOs relying on generators that had run out of gas.

The FERC instructed NAESB to see if it could reach consensus among the gas and electric industries on the start of the gas flow day and a scheduling timeline. NAESB made significant progress developing a revised scheduling timeline with broad support from much of the gas industry. NAESB now is working on consensus standards on the timeline. Interstate pipelines support this revised timeline. NAESB did not reach consensus on a gas day. While Northwest and its customers are open to considering changes to the start of the gas day, they do not support starting the national gas day at 4 a.m. CCT.

First, the gas industry generally is supportive of retaining the current gas day. It has worked well for decades to deliver gas reliably. While the industry is sympathetic to the mismatch between the gas and electric days, the customers of Northwest Pipeline have some very real concerns about moving the gas day to 4 a.m. CCT.

Four a.m. CCT is 2 a.m. Pacific Clock Time. Since some natural gas transportation facilities in the West are not fully automated, pipeline customers assert that there could be new safety and operational concerns if they must go out in the "middle of the night" to make manual adjustments to operations to support gas flow beginning at 4 am CCT.

Second, pipelines will face reliability concerns if producers, gatherers and processors of natural gas (that are not regulated by FERC and thus not required to abide by a new gas day) do not make the necessary gas flow adjustments to inject gas upstream at the beginning of the gas day to support nominations and withdraw gas accordingly downstream. On the days when you most need everything to work – for example, on a cold winter day when local distribution companies need gas for heating needs and generators need gas for electricity demand – there is a greater chance for something to limit the operations necessary for reliability.

Some customers believe the proposed gas day time change is an East Coast solution that actually could lead to greater reliability concerns in the West. As there is only one non-firm electric-generator on the system, the customers of Northwest Pipeline believe there are only downsides to these changes. They want to know why they should bear the costs – both in terms of dollars and potential safety and operational issues – of changes that would only benefit other parts of the country.

While there has not been consensus on the start of the gas day, both the gas and electric industries have come to consensus on other proposed changes. Interstate pipelines and representatives from ISOs have met collaboratively numerous times to discuss what information is available publicly that may be useful to industry operations. We also have reached out to establish contacts within the various ISOs so that both the pipeline and the ISO know who to call on high-demand days. The FERC issued a final order last November that permits voluntary sharing of certain non-public information between natural gas pipelines and parties that operate

electric transmission facilities in order to promote reliability. Both the gas and electric industry participants have learned a great deal through this process.

It also is important to highlight that while these shorter-term changes – to modify the gas and days and scheduling or to increase communications between ISOs and pipeline operators – may result in some incremental improvements in gas-electric market efficiency, they do not negate or mitigate the need to address the longer-term, and core issue, of electric reliability. Gas day/scheduling issues and communications alone will not create additional pipeline capacity or provide generators lacking firm transportation service with the ability to transport gas during peak conditions.

Conclusion

Preparing for the increased use of natural gas for power generation is an important issue for our country. The two industries and the FERC have done an excellent job in addressing how to improve communications and information sharing. But the jury still out on whether proposed changes to the gas day or scheduling timeline will improve reliability and benefit the entire country.

Should the FERC wish to make meaningful change to address gas-electric integration, it should consider how its proposal would impact all types of pipeline customers, not just power generators, and take into account regional diversity across the country.

The FERC should not change a well-functioning national gas day for the benefit of one region, yet to the detriment of another region. While customers in the Northwest are open to considering changes that will improve electric reliability in all regions, they are very concerned that changing the start of the gas day to 4 am CCT could hurt their longstanding reliability and impose significant costs with little or no benefit.

In addition, the FERC should ensure that the electric industry makes changes to its generation dispatch schedules to correspond to any changes to the gas scheduling timeline. Otherwise, any changes are for naught.

Finally, the FERC should ensure that should a region wish to rely on natural gas-fired generation to support electric reliability, the region must find a way to ensure that the electric power industry subscribes for the firm transportation contracts necessary to ensure timely pipeline expansions. Changing the gas day and pipeline scheduling alone, without these changes to organized wholesale electric power markets, will not address electric reliability in wholesale electric power markets.