

Agenda Date: January 29, 2009
Item Number: A1

Docket: UE-082241
Company: Puget Sound Energy

Staff: Deborah Reynolds, Regulatory Analyst

Recommendation

Take no action, thereby allowing Puget Sound Energy's (PSE or company) proposed electric to natural gas conversion incentive tariff revisions filed in Docket UE-082241 to become effective January 30, 2009, by operation of law.

Background

In June of 2008, the Commission held a workshop¹ focused on the direct end-use of natural gas as a substitute for the use of electricity. The Commission invited discussion on possible economic savings of gas delivery versus electricity service for certain applications as well as the possible reduction of green house gas emissions. The workshop considered fuel switching from the perspective of both jurisdictional and nonjurisdictional electric utilities, gas utilities, individual customers, and the region as a whole.

The benefits of fuel switching are explained in a 1994 study by the Northwest Power and Conservation Council.

[I]t is more energy efficient to burn natural gas directly for space or water heating than it is to generate electricity with it. The energy content of the electricity generated in a combined-cycle combustion turbine, for example, is only 45 percent of the energy content of the gas burned to generate it. In contrast, direct use of natural gas to fire a home furnace would make use of 80 percent of the original energy content of the gas as heat for the home. To be a valid energy comparison, however, other considerations have to be introduced, such as the efficiency with which electricity is converted to useful heat in the home and the duct and flue losses associated with different types of heating systems. Such considerations make the comparison less clear, but the direct use of natural gas is more energy efficient for many conventional heating systems.²

PSE discussed the addition of a fuel switching incentive to its energy efficiency program both at the workshop and at its Conservation Resource Advisory Group meetings. The addition of fuel switching is part of the company's ramp-up of conservation efforts previously filed with the

¹ See Docket UG-080750.

² Direct Use of Natural Gas: Analysis and Policy Options. Northwest Power & Conservation Council. Issue Paper 94-41. August 11, 1994. *For additional discussion, see* the April 2008 American Gas Foundation study on Direct Use of Natural Gas at <http://www.gasfoundation.org/ResearchStudies/AGFDirectUseStudy.pdf>.

Commission.³ The company will fund the fuel switching program through its conservation service tariff rider.⁴

Discussion

On December 19, 2008, PSE filed tariff sheets to create an incentive for customers to convert existing electric residential service to natural gas. The company later requested the tariff sheets become effective January 30, 2009. PSE electric customers are eligible for the incentive whether they are switching to PSE natural gas service or Cascade Natural Gas Corporation service.

The company's proposed 2009 budget for the program is about \$3.7 million and is expected to conserve approximately 1.7 average megawatts. The fuel switching incentive is expected to represent about one eighth of the existing residential program in both dollars spent and megawatts saved.

PSE will offer one-time cash payments to existing one to four unit residential electric customers in order to encourage investments in conversions to highly efficient natural gas space heating or domestic water heating equipment or both. The Company will provide incentives for replacing existing electric forced-air or baseboard space heating equipment or tank style water heating equipment with high efficiency natural gas space heating equipment or high efficiency natural gas domestic water heating equipment or a combination of such equipment. Limiting the incentives to high efficiency equipment reduces the potential for lost opportunities, such as the installation of standard efficiency equipment.

Conclusion

Staff reviewed the proposed tariff revisions filed by PSE in Docket UE-082241 and found them to be reasonable. Therefore, Staff recommends the Commission take no action thereby allowing PSE's proposed electric to natural gas conversion incentive tariff revisions in Docket UE-082241 to become effective January 30, 2009, by operation of law.

³ See UE-072235 and UG-072236.

⁴ See Docket UE-080389 and UG-080390 for the most recent revisions to the tariff. See also Twelfth Supplemental Order, UE-011570 and UG-011571(Consolidated), Exhibit F to Settlement Attachment.