

ITEM NO. 2

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: December 6, 2011

REGULAR CONSENT _____ EFFECTIVE DATE _____

DATE: November 29, 2011

TO: Public Utility Commission

FROM: Juliet Johnson 

THROUGH: Bryan Conway, Maury Galbraith and Lori Koho  

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: Request to open a docket to investigate fuel switching and cross fuel energy efficiency issues.

STAFF RECOMMENDATION:

Staff asks the Commission to open a docket for the investigation of cross fuel energy efficiency issues and fuel switching as related to energy efficiency.

DISCUSSION:

Northwest Natural Gas (NW Natural) has raised questions about fuel switching as related to energy efficiency incentives. These concerns have been discussed individually with Staff, the Energy Trust of Oregon (ETO), and other parties as well as discussed publicly in forums such as Conservation Advisory Council (CAC) meetings and Utility Roundtable meetings between the utilities and the ETO Board. Specific questions have been raised regarding incentives design (for space and water heating equipment), communication to customers, and larger policy issues of cost effectiveness from the customer and whole utility system perspective.

A specific example is that ETO offers an incentive for high efficiency heat pumps to both electric and natural gas customers. The ETO no longer offers incentives for high efficiency gas furnaces because of its determination that the market has been transformed and customers no longer need incentives to purchase high efficiency models. NW Natural contends that the absence of a furnace incentive and the ability of gas customers to receive incentives for high efficiency heat pumps is leading to fuel switching. The ETO maintains that its heat pump incentives come into play only after a

ratepayer has chosen to install a heat pump and so the incentives only motivate installation of a higher efficiency model.

The current ETO policy states:

- Energy Trust should not advocate fuel-switching, but may provide fuel-neutral technical information on efficiency options. That is, Energy Trust may undertake technical studies to identify efficiency opportunities and make recommendations for making an application more efficient for an energy source specified by the energy user. If the energy user expresses interest in converting to another energy source, Energy Trust may perform analysis showing the economics of alternative systems, including the savings and incentives for installing high-efficiency options for the energy source. This type of assistance should help customers consider the merits of their options.
- However, the Energy Trust should not provide financial incentives for converting or replacing electric or gas equipment to another fuel.
- Energy Trust should work with gas and electricity suppliers who wish to provide efficiency information and/or incentives for conversion, where the customer deems that appropriate.
- Energy Trust should revisit the Policy periodically to assess whether the Energy Trust is missing compelling opportunities.

The ETO and the Oregon Public Utility Commission have a grant agreement “to control the manner in which the Energy Trust will receive and expend funds for the Statutory Purposes in conformity with the requirement and intent of the Statute [ORS 757.612].”¹ In the grant agreement, the term “Conservation” has the meaning given it under OAR 860-027-0310(1), which includes fuel switching as a conservation measure.

Oregon Administrative Rule (OAR) 860-027-0310(1)(a) defines “Conservation” as any reduction in electric power or natural gas consumption as the result of increases in efficiency of energy use, production, or distribution. The same rule specifies that conservation also includes cost-effective fuel switching.

In OAR 860-027-0310(1)(b) “Fuel switching” is defined as any substitution of one type of energy or fuel for another. In OAR 860-027-0310(1)(c) “Cost-effective” is defined as having the meaning given in OAR 860-030-0010, which refers to a definition in

¹ Recital D, Page 1. Grant Agreement between ETO and OPUC dated December 1, 2005.

ORS 469.631(4) that says *“Cost-effective” means that an energy conservation measure that provides or saves a specific amount of energy during its life cycle results in the lowest present value of delivered energy costs of any available alternative...*”

OAR 860-027-0310(2)(a)(A) says that a utility should not have an incentive to pursue conservation past the point at which it is no longer cost-effective and that an energy utility should not be expected to pursue a course of action that involves an identifiable and sustained loss of profits.

Due to implementation challenges, the ETO has not addressed cross-fuel efficiency issues but has rather looked at fuel sources and incentive design independently. Commission Staff has historically been supportive of this approach.

NW Natural hired an economist to perform a study of the energy savings, costs and overall economics of replacing an existing gas furnace in a single family home with either a high efficiency natural gas furnace or a high efficiency electric heat pump. A white paper was generated from the study. A copy of this study was provided to the ETO, Portland General Electric (PGE), PacifiCorp and Cascade Natural Gas. Given the set of assumptions used in the NW Natural study, the conclusions suggest that from a customer and Total Resource Cost (TRC) test perspective, it is not cost effective to switch from natural gas to even a high efficiency heat pump.

The Northwest Power and Conservation Council (NWPPCC) is close to finishing a study on the direct use of natural gas compared to electricity. The results of that analysis are expected in the next month or two and may be a resource in this docket.

Commission Staff have met with the ETO, PGE and PacifiCorp to discuss NW Natural's white paper and the larger issues of cross fuel energy efficiency and fuel switching. All parties agreed that direction is needed from the Commission and that opening an investigatory docket would be a good way to proceed.

The purpose of the proposed investigatory docket is to convene parties to analyze issues and alternatives and provide a recommendation to the Commission to direct the ETO how to handle cross fuel energy efficiency issues, particularly those associated with residential space heating equipment choices.

PROPOSED COMMISSION MOTION:

Open a docket to investigate fuel switching and cross fuel energy efficiency issues.