

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1409

In the Matter of

PUBLIC UTILITY COMMISSION OF
OREGON

Investigation to consider adoption of new
federal standards contained in the Energy
Independence and Security Act of 2007

ORDER

**DISPOSITION: MODIFIED PORTION OF SMART GRID INVESTMENT
STANDARD ADOPTED; OTHER STANDARDS NOT
ADOPTED**

I. INTRODUCTION

On December 9, 2008, the Public Utility Commission of Oregon (Commission) opened this investigation to consider new federal standards related to integrated resource planning, electric and natural gas utility rate design modifications, smart grid investments, smart grid information, and incentives related to industrial waste energy recovery. On December 8, 2009, Commission Staff (Staff) presented two reports at the Commission's Public Meeting. The first report addressed the rate design and industrial energy waste recovery standards and is attached as Appendix A to this order and incorporated by reference. The second report addressed the smart grid investment and information standards and is attached as Appendix B and incorporated by reference. At its Public Meeting on July 28, 2009, the Commission received Staff's recommendations regarding the federal standard for integrated resource planning. Staff's report is based on joint comments. A copy of that report is attached as Appendix C to this order and incorporated by reference.

II. BACKGROUND

The Energy Independence and Security Act of 2007 (EISA 2007) requires each state commission to consider adoption of four new federal electric utility standards added to PURPA¹ section 111(d). EISA 2007 also requires each state commission to

¹ The Public Utility Regulatory Policies Act of 1978.

consider two new federal natural gas standards that were added to PURPA section 303(b). A stand-alone standard that is not an amendment to PURPA – Additional Incentives for Recovery, Use, and Prevention of Industrial Waste Energy – also was added by the EISA 2007.

A state commission is not obligated to adopt any of the subject standards. This Commission may decline to implement any or all of these standards or adopt different or modified standards. The EISA 2007 only mandates that that the Commission consider whether to adopt the standards and prescribes certain procedural requirements for that consideration. Those procedural requirements are that the Commission’s determination comes after public notice and hearing and that the Commission’s determination be made: (a) in writing, (b) based on findings included in such determination and upon the evidence presented at the hearing, and (c) available to the public.

III. RATE DESIGN STANDARD

A. Electric Utilities

With respect to electric utilities, subparagraph A of the Rate Design Standard provides as follows:

(A) IN GENERAL – the rates to be charged by any electric utility shall –

- (i) align utility incentives with the delivery of cost-effective energy efficiency; and*
- (ii) promote energy efficiency investments.*

As noted by Staff, this statement is broad and subject to interpretation. Staff observes that Oregon does have the utility-surcharge-funded enterprise known as the Energy Trust of Oregon (Energy Trust). Energy Trust sponsors various programs, including direct payments for energy conservation investments made on behalf of utility customers. In light of Oregon’s accomplishments in this general area (and absent strong advocacy for more aggressive measures) Staff recommends that the Commission take no action with regard to this provision.

Subparagraph B of the standard directs the Commission to consider six policy options:

(B) In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider –

In its report, Staff discussed each option in turn.

The first option is: “*(i) removing the throughput incentive and other regulatory and management disincentives to energy efficiency.*” As noted by Staff, the Commission has supported decoupling mechanisms on several occasions. The Commission approved decoupling for one Oregon-regulated electric utility. If other utilities were to

request similar treatment, their requests would be given strong consideration. The Commission has noted that decoupling mechanisms tend to reduce the overall business risk of the utility.

The second option is: “*(ii) providing utility incentives for the successful management of energy efficiency programs.*” As noted by Staff, the Oregon-regulated electric utility that has been proactive in proposing peak period efficiency measures, has received approval for recovery of related costs, including deferred accounting treatment where applicable.

The third option is: “*(iii) including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives.*” Staff notes that Oregon’s general rate design approach is to set rates that reflect costs. This approach has the effect of emphasizing the appropriate economic incentives for energy conservation. Each of the three Oregon-regulated electric utilities has inverted rates for one or more of its customer classes. One of those utilities has seasonal rates.

The fourth option is: “*(iv) adopting rate designs that encourage energy efficiency for each customer class.*” Staff notes that Oregon’s general rate design approach of basing rate design on marginal cost considerations, rather than embedded cost or historic cost, has the effect of emphasizing the economic incentive for energy conservation.

The fifth option is *(v) allowing timely recovery of energy efficiency-related costs.* Staff cites the Commission’s actions taken with respect to options i, ii, and vi.

The sixth option is: “*(vi) offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives including the availability of low-cost loans, that make energy efficiency improvements more affordable.*” Staff notes that this function is performed primarily by Energy Trust, which is funded by ratepayers of two Oregon-regulated electric utilities and two Oregon-regulated natural gas utilities via a billing surcharge pass-through.

B. Natural Gas

With respect to gas utilities, subparagraph A of the Rate Design Standard provides as follows:

(A) IN GENERAL – the rates to be charged by any natural gas utility shall align utility incentives with the delivery of cost-effective energy efficiency.

As noted by Staff, this statement is broad and subject to interpretation. Staff again cites Energy Trust, which sponsors various programs, including direct payments for energy conservation investments made on behalf of utility customers. Some Oregon-regulated utilities pay incentives directly to customers to promote energy efficiency investments.

Again, given Oregon’s accomplishments in this general area, and absent strong advocacy for more aggressive measures, Staff recommends the Commission take no action with regard to this provision of the Rate Standard.

Subparagraph B of the standard directs the Commission to consider four policy options:

(B) In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider –

The first option is: “*(i) Separating fixed-cost recovery from the volume of transportation or sales service provided to the customer.*” Staff notes that the Commission approved decoupling for two of the three Oregon-regulated natural gas utilities. The Commission has been quite supportive of decoupling mechanisms.

The remaining three policy options are:

- (ii) providing utility incentives for the successful management of energy efficiency programs, such as allowing utilities to retain a portion of the cost-reducing benefits accruing from the programs;*
- (iii) promoting the impact of adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives, and*
- (iv) adopting rate designs that encourage energy efficiency for each customer class.*

Staff notes that none of these policy options has received “systematic” consideration by the Commission. Staff recommends that the Commission not adopt these policies, but states that it is not adversely disposed toward them, awaiting compelling advocacy by an affected utility or other stakeholder.

IV. WASTE ENERGY RECOVERY STANDARD

As noted by Staff, subparagraph (a)(1) of the enabling statute provides that the Commission shall take action with respect to this standard not later than 180 days after receiving an application from a federally registered waste energy producer to provide energy to a regulated utility. This standard can be evaluated more meaningfully if considered in the context of an actual application.

V. SMART GRID INVESTMENT STANDARD

A. Paragraph (A)

Paragraph (A) of the Smart Grid Investment Standard provides:

(A) IN GENERAL – Each State shall consider requiring that, prior to undertaking investments in non-advanced grid technologies, an

electric utility of the State demonstrate to the State that the electric utility considered an investment in a qualified smart grid system based on appropriate factors, including:

- i. total costs;*
- ii. cost-effectiveness;*
- iii. improved reliability;*
- iv. security;*
- v. system performance; and*
- vi. societal benefit.*

With respect to paragraph (A) of this Standard, Staff notes that the consideration of alternative investment options using appropriate evaluation factors is at the core of prudent decision making. According to Staff, the “substantive” requirement of this paragraph is very close to the standard used by this Commission to determine the prudence of a utility investment decision. The biggest difference between the paragraph (A) Standard and the Commission’s prudence standard is the timing of the utility’s showing to the Commission.

Staff notes that under traditional ratemaking, the utility should make its prudence showing at the time of a general rate case. In a rate case the Commission would apply the “reasonable person” standard. The reasonableness of the decision would be based on information known (or that should have been known) at the time the utility made its investment decision.

As noted by Staff, paragraph (A) provides for an additional showing of prudence by a utility: “prior to undertaking investments in non-advanced grid technologies.” While compliance with that provision would keep the Commission and interested parties up-to-date on utility grid investment plans, Staff cautions that the provision is not clear with respect to what action, if any, the Commission should take in response to a utility’s showing.

To secure the benefits of the information to be provided to the Commission and interested parties of utility decision making regarding grid investments, Staff proposes that the Commission adopt a modified version of paragraph (A) and (A)(i):

Prior to making an investment in non-advanced grid technology, each electric utility shall file a report with the Commission demonstrating that it considered investing in smart grid technologies. The report shall demonstrate that the utility based its investment decision on appropriate factors, including cost-effectiveness, reliability, and system performance. The utility shall present the findings of the report to the Commission, for informational purposes only, at a regular public meeting.

For purposes of this standard, investment in non-advanced grid technology means investment in traditional grid technology. This includes, but is not limited to, investment in standard electro-

mechanical meters, automated meter reading (systems without two-way communication to each meter), non-digital communications systems, and non-automated transmission and distribution equipment. Investment in non-advanced grid technology does not include investment in basic poles, wires and transformer, replacement of individual meters, or replacement of malfunctioning equipment.

The Commission would have discretion to decide how to proceed with the utility report.

B. Paragraph (B)

Paragraph (B) of the Smart Grid Investment Standard provides:

(B) RATE RECOVERY – Each State shall consider authorizing each electric utility of the State to recover from ratepayers any capital, operating expenditure, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system.

With respect to Paragraph (B), Staff notes that this standard requires the Commission to consider allowing electric utilities to recover the costs on investments in qualified smart grid systems. Staff likens this standard to the Commission’s practice of allowing the utilities to recover their prudent investment costs. Staff does not see a need for this portion of the Standard and recommends that it not be adopted by this Commission.

C. Paragraph (C)

Paragraph (C) of the Smart Grid Investment Standard provides:

(C) OBSOLETE EQUIPMENT – Each State shall consider authorizing any electric utility or other part of the State to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid system, based on the remaining depreciable life of the obsolete equipment.

With respect to paragraph (C), Staff notes that this standard requires the Commission to consider allowing electric utilities to recover the remaining book value costs of any equipment rendered obsolete by the deployment of qualified smart grid systems. Again, Staff likes the standard to the Commission’s current practice, and recommends that the Commission not adopt this portion of the Standard.

VI. SMART GRID INFORMATION STANDARD

The Smart Grid Information Standard states:

(A) STANDARD – All electricity purchases shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).

(B) INFORMATION – Information provided under this section, to the extent practicable, shall include:

i. PRICES – Purchasers and other interested persons shall be provided with information based on:

I. time-based electricity prices in the wholesale electricity market; and

II. Time-based electricity retail prices or rates that are available to the purchasers

ii. USAGE – Purchasers shall be provided with the number of electricity units, expressed in kwh, purchased by them.

iii. INTERVALS AND PROJECTIONS – Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly prices and use information, where available, and shall include a day-ahead projection of such price information to the extent practicable.

iv. SOURCES – Purchases and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

(C) ACCESS – Purchasers shall be able to access their own information at any time through the Internet and on other means of communication elected by that utility for Smart Grid applications. Other interested persons shall be able to access information not specified to any purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.

With respect to the Information Standard, Staff states that the widespread provision of hourly price and usage information is impracticable. Hourly usage information is largely unavailable, for all but the largest of electricity purchasers. Hourly wholesale power price information is collected from market participants, but the information is proprietary to the firms that collect it, and not available to the general public. Day-ahead hourly wholesale price projections are not available.

Staff notes that Oregon's largest electric utilities already disclose power source information on an annual basis. That information is disclosed to more fully inform customers of their portfolio options.

Given the impracticability of providing hourly power price and usage information, and because Oregon's largest utilities already disclose their power source mix annually, Staff recommends the Commission take no action on this Standard. Staff does support the continuing discussion of time-based electricity pricing in Oregon.

VII. INTEGRATED RESOURCE PLANNING

The Integrated Resource Planning Standard (IRP Standard) provides:

Each electric utility shall:

- (A) integrate energy efficiency resources into utility, State, and regional plans; and*
- (B) adopt policies establishing cost-effective energy efficiency as a priority resource.*

Each natural gas utility shall:

- (A) integrate energy efficiency resources into the plans and planning processes of the natural gas utility; and*
- (B) adopt policies establishing cost-effective energy efficiency as a priority resource in the plans and planning processes of the natural gas utility.*

While the standards differ slightly for the electric and natural gas utilities, the parties agreed they are essentially synonymous.

As shown in its report, Staff listed a number of Commission actions that are each consistent with the proposed federal standard. Because those actions "leave no doubt" that the Commission practices "more than adequately address" the concerns of the Standard, Staff recommends that the Commission not adopt the IRP Standard.

VIII. DISCUSSION

In this decision, the Commission has considered the new federal standards pertaining to electric and natural gas utility rate design and smart grid investment and

information standards, as embodied in the Energy Independence and Security Act of 2007. We find that most of the objectives of the EISA 2007 are currently being met in Oregon through the established regulatory processes, as discussed above. Having met the procedural standards for consideration of the EISA 2007, the Commission chooses not to adopt these federal standards, except as modified as proposed by Staff with respect to a portion of the federal Smart Grid Investment Standard.

The Commission further holds in abeyance its consideration of the Waste Energy Recovery Standard, pending the filing of an application by a federally registered provider of waste energy.

IX. ORDER

IT IS ORDERED that:

1. The new federal standards pertaining to electric and natural gas utility rate design, as embodied in the Energy Independence and Security Act of 2007, are NOT ADOPTED.
2. The Public Utility Commission of Oregon's consideration of the Waste Energy Recovery Standard embodied in the Energy Independence and Security Act of 2007 is held in abeyance pending any application by a federally registered producer of waste energy.
3. The following standard for Smart Grid Investment is adopted:


“Prior to making an investment in non-advanced grid technology, each electric utility shall file a report with the Commission demonstrating that it considered investing in smart grid technologies. The report shall demonstrate that the utility based its investment decision on appropriate factors, including cost-effectiveness, reliability, and system performance. The utility shall present the findings of the report to the Commission, for informational purposes only, at a regular public meeting.

For purposes of this standard, investment in non-advanced grid technology means investment in traditional grid technology. This includes, but is not limited to, investment in standard electro-mechanical meters, automated meter reading (systems without two-way communication to each meter), non-digital communications systems, and non-automated transmission and distribution equipment. Investment in non-advanced grid technology does not include investment in basic poles, wires

and transformer, replacement of individual meters, or replacement of malfunctioning equipment.”

- 4. The remaining portions of the Smart Grid Investment Standard and Information Standard of the Energy Independence and Security Act of 2007 are NOT ADOPTED.
- 5. The Integrated Resources Planning Standard is NOT ADOPTED.

Made, entered, and effective DEC 18 2009.



Lee Beyer
Chairman



John Savage
Commissioner



Ray Baum
Commissioner



ITEM NO. 1

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: December 8, 2009**

REGULAR X CONSENT _____ EFFECTIVE DATE _____ N/A _____

DATE: December 1, 2009

TO: Public Utility Commission

FROM: George Compton and Kenneth Zimmerman

THROUGH: Lee Sparling, Ed Busch, Marc Hellman, Maury Galbraith, and Steve Storm

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF:
(Docket No. UM 1409) Recommendation regarding the formal adoption of new federal standards contained in the Energy Independence and Security Act of 2007 and pertaining to "Rate Design Modifications to Promote Energy Efficiency Investments" and to the Recovery of Industrial Waste Energy.

STAFF RECOMMENDATION:

Staff recommends that the Commission *not* adopt new federal standards pertaining to electric and natural gas utility rate design as embodied in the Energy Independence and Security Act of 2007 (EISA 2007).¹ We recommend that the report written in compliance with the act state that most of the specific EISA 2007 objectives, particularly those applicable to electric utilities, are currently being met through the established regulatory process in Oregon.² We further recommend that the Commission hold in abeyance the non-PURPA waste energy recovery standard.

DISCUSSION:

The Public Utility Commission (Commission or PUC), at the December 9, 2008, public meeting, adopted Staff's recommendation to open an investigation to consider new federal standards related to integrated resource planning; electric and natural gas utility

¹ The rate design standard is in Title V, Subtitle D—Energy Efficiency of Public Institutions, Section 532 Utility Energy Efficiency Programs. The recovery of industrial waste energy standard is in Title IV, Subtitle D—Industrial Energy Efficiency, Section 374 Additional Incentives for Recovery, Use, and Prevention of Industrial Waste Energy.

² If required by law, the report will be filed with the federal government.

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rate design modifications; smart grid investments; smart grid information; and incentives related to industrial waste energy recovery. This Staff Report addresses only the two EISA 2007 standards related to rate design³ and the standard related to waste energy recovery.⁴ This Staff Report has been reviewed by the affected utilities and other stakeholders for the sake of additions and clarifications.

The Energy Independence and Security Act of 2007 (EISA 2007) requires each state commission to consider adoption of four new federal electric utility standards added to PURPA⁵ Section 111(d). The four electric utility standards are replicated in Attachment A. EISA 2007 also requires each state commission to consider two new federal natural gas utility standards that were added to PURPA Section 303(b). The natural gas utility standards comprise Attachment B.

A stand-alone "standard" that is not an amendment to PURPA was also added by EISA 2007. This standard—"SEC. 374. Additional Incentives for Recovery, Use, and Prevention of Industrial Waste Energy"—is replicated in Attachment C. As stated in clause (a)(1) of the standard, the Commission is provided 180 days to implement or reject the standard after receiving an application from a federally registered waste energy producer to provide energy to a regulated utility. This standard can be evaluated more meaningfully if considered in the context of an actual application.

The Commission is not obligated to adopt any of the subject standards. The Commission may decline to implement any or all of these standards or adopt different or modified standards from those included in the Act. EISA 2007 only mandates that the Commission consider whether to adopt the standards and prescribes certain procedural requirements for that consideration. Those procedural requirements are that the Commission's determination on whether to adopt a standard comes after public notice and hearing and that the Commission's determination is to be made "(A) in writing, (B) based upon findings included in such determination and upon the evidence presented at the hearing, and (C) available to the public."⁶

³ One standard for electric utility rate design and one standard pertaining to natural gas utility rate design.

⁴ Staff's recommendations regarding adoption of the EISA 2007 standards pertaining to Smart Grid Investments and Information are presented today in a separate public meeting Staff Report. Staff's recommendation regarding adoption of the EISA 2007 standards relating to Integrated Resource Planning was presented at the July 28, 2009 public meeting.

⁵ The Public Utilities Regulatory Policies Act of 1978.

⁶ See PURPA Section 111(b)(1).

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In choosing whether to adopt these standards, the Commission should consider whether implementing the standards is necessary to further the purposes underlying the initial PURPA standards, which are: (1) conservation of energy supplied by electric utilities; (2) optimal efficiency of electric utility facilities and resources; and (3) equitable rates for electric consumers.

Under EISA 2007, the Commission had until December 19, 2008, to commence consideration of these standards. The Commission now has until December 19, 2009, to issue its determination, although the law is unclear as to the timing with respect to several of the standards. Some standards appear to not have any specific time limitations. It is generally understood that, if a determination with respect to a specific standard is not made by December 2009, the Commission would have to determine whether to adopt the standard in the first rate case proceeding within three years after EISA 2007's enactment,⁷ or by December 19, 2010. Staff recommends the Commission declare as final its formal determination of non-adoption regarding the PURPA's EISA 2007 standards applicable to electric and natural gas utility rate design—thereby obviating any requirement of the Commission to revisit these standards in the future.

Review of the elements of the Rate Design Standard

The discussion below addresses Oregon's status with regard to specific and quoted clauses (shown in *italics*) that are embedded in the subject standards.

[Electricity] Rate Design Modifications to Promote Energy Efficiency Investments⁸

(A) IN GENERAL. – the rates allowed to be charged by any electric utility shall—

- i. align utility incentives with the delivery of cost-effective energy efficiency; and*
- ii. promote energy efficiency investments.*

Apart from specific policy options such as those discussed below, Staff does not comprehend all that might be entailed by "*IN GENERAL...rates allowed to be charged by any electric utility shall...align utility incentives with the delivery of cost-effective energy efficiency.*" Regarding the "*promot[ion of] energy efficiency*

⁷ Presumably, the intended reference is to the first rate case in which the specific standard had relevancy.

⁸ See Item 2 in Attachment A.

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investments," Oregon can point to the utility-surcharge-funded enterprise known as the Energy Trust of Oregon.⁹ This organization sponsors various programs, including direct payments for energy conservation investments made on behalf of utility customers. Given Oregon's accomplishments in this general area, and absent strong advocacy for more aggressive measures, Staff recommends the Commission take no action with regard to this subparagraph of the federal standard beyond summarizing those accomplishments in its written report.

(B) POLICY OPTIONS. — In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—

Given this Commission's preference for tailoring energy efficiency policy options to address the specific circumstances faced by each utility, Staff recommends the Commission take no action on the following elements of the federal standard beyond summarizing their status in Oregon in its written report.

- i. removing the throughput incentive and other regulatory and management disincentives to energy efficiency;*

The Commission has noted its general support for decoupling mechanisms on several occasions.¹⁰ The Commission approved sales-versus-fixed cost decoupling for one of the three Oregon-regulated electric utilities.¹¹ If other Oregon-regulated electric utilities requested similar decoupling mechanisms, the Commission would certainly give strong consideration as to the merits of the specific design of the mechanism and the circumstances facing the utility and its customers. The Commission has noted that decoupling mechanisms generally tend to reduce the overall business risk of the utility.^{12,13}

- ii. providing utility incentives for the successful management of energy efficiency programs;*

⁹ Legislation enabling creation of the Energy Trust of Oregon was passed in 1999. See Oregon Revised Statute 757.612.

¹⁰ See, for example, Order No. 92-1673 at 13 in Docket UM 409 and Order No. 02-634 at 7 in Docket UG 143.

¹¹ See Order Nos. 09-020 and 09-176 in Docket UE 197.

¹² See Order No. 09-020 at 28.

¹³ Decoupling avoids the need for deferred accounting in conjunction with a general rate case to recover utility losses attributable to conservation-induced sales reductions.

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The Oregon-regulated electric utility that has been proactive in proposing and adopting, at least on a pilot study basis, peak period efficiency measures (i.e., critical peak pricing¹⁴ and large load reduction¹⁵) has received approval for recovery of related costs, including deferred accounting treatment where applicable.¹⁶

- iii. including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;*

Oregon has adopted the general rate design approach of having rates that reflect costs.¹⁷ This approach has the effect of emphasizing the appropriate economic incentives for energy conservation. Inverted-block rate designs, which also promote energy efficiency, are used by all three Oregon-regulated electric utilities for one or more customer classes.¹⁸ One of the electric utilities currently has seasonal rates in effect.¹⁹

- iv. adopting rate design that encourage energy efficiency for each customer class;*

Oregon's general rate design approach of basing rate design on marginal cost considerations,²⁰ as opposed to embedded or historic cost accounts, has the effect of emphasizing the economic incentive for energy conservation.²¹

- v. allowing timely recovery of energy efficiency-related costs; and*

Refer to the responses under *i.*, *ii.*, and *vi.*

- vi. offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with*

¹⁴ See Advice No. 09-05.

¹⁵ See Order No. 09-254 in Docket UE 205.

¹⁶ See Order No. 09-395 in Docket UM 1427.

¹⁷ See Order No. 85-010, page 23.

¹⁸ See Order No. 80-728, referenced in Order No. 85-010, page 26.

¹⁹ See Advice No. 09-08 and Order No. 09-338.

²⁰ See Order No. 85-010, pages 23 – 24.

²¹ See Order No. 85-010.

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making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.

This function is performed primarily by the Energy Trust of Oregon, which is funded by ratepayers of two Oregon-regulated electric utilities and two Oregon-regulated natural gas utilities via a billing surcharge pass-through.

[Natural Gas] Rate Design Modifications to Promote Energy Efficiency Investments²²

(A) IN GENERAL. – the rates allowed to be charged by a natural gas utility shall align utility incentives with the delivery of cost-effective energy efficiency.

Apart from specific policy options such as those discussed below, Staff does not comprehend all that might be entailed by "*IN GENERAL...rates allowed to be charged by a natural gas utility shall...align utility incentives with the delivery of cost-effective energy efficiency.*" Having said that, Oregon can point to the utility-surcharge-funded enterprise known as the Energy Trust of Oregon. This organization sponsors various programs, including direct payments for energy conservation investments made on behalf of utility customers. In addition, some Oregon-regulated utilities pay incentives directly to customers to "promote energy efficiency investments." Attachment D contains an example of a utility energy efficiency incentive program. Given Oregon's accomplishments in this general area, and absent strong advocacy for more aggressive measures, Staff recommends the Commission take no action with regard to this subparagraph of the federal standard beyond summarizing these accomplishments in its written report.

(B) POLICY OPTIONS. — In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—

- i. Separating fixed-cost recovery from the volume of transportation or sales service provided to the customer;*

²² See Item 2 in Attachment B.

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The Commission approved sales-versus-fixed cost decoupling for two of the three Oregon-regulated natural gas utilities.²³ As noted above, the Commission has been quite supportive of decoupling mechanisms. Again, Staff recommends the Commission take no action on this element of the federal standard beyond summarizing its status in Oregon in its written report.

None of the remaining three guideline elements (below) has received systematic consideration by the Commission. Staff recommends the Commission not adopt these three elements of the federal standard, but include in its written report that the Commission is not averse to them, but rather awaits compelling advocacy by an affected utility or other stakeholder.

- ii. providing utility incentives for the successful management of energy efficiency programs, such as allowing utilities to retain a portion of the cost-reducing benefits accruing from the programs;*
- iii. promoting the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives; and*
- iv. adopting rate designs that encourage energy efficiency for each customer class.*

PROPOSED COMMISSION MOTION:

Federal standards pertaining to Oregon-regulated electric and natural gas utility rate design, as contained in the Energy Independence and Security Act of 2007, not be adopted and that the written report shall communicate the fact that most of the specific EISA objectives, particularly as they apply to electric utilities, are being met through the current regulatory process in Oregon.

²³ See Order No. 02-634 at 7 in Docket UG 143 and Order No. 06-191 in Docket UG 167.

Attachment A

Electric Utilities

1. Integrated Resource Planning

Each electric utility shall

- (A) integrate energy efficiency resources into utility, State, and regional plans; and*
- (B) adopt policies establishing cost-effective energy efficiency as a priority resource.*

2. Rate Design Modifications to Promote Energy Efficiency Investments

(A) IN GENERAL. – the rates allowed to be charged by any electric utility shall—

- i. align utility incentives with the delivery of cost-effective energy efficiency; and*
- ii. promote energy efficiency investments.*

(B) POLICY OPTIONS. – In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—

- i. removing the throughput incentive and other regulatory and management disincentives to energy efficiency;*
- ii. providing utility incentives for the successful management of energy efficiency programs;*
- iii. including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;*
- iv. adopting rate designs that encourage energy efficiency for each customer class;*
- v. allowing timely recovery of energy efficiency-related costs; and*
- vi. offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.*

3. Consideration of Smart Grid Investments [truncated version]

(A) IN GENERAL. – Each State shall consider requiring that, prior to undertaking investments in nonadvanced grid technologies, an electric utility of the State demonstrate to the State that the electric utility

considered an investment in a qualified smart grid system based on appropriate factors, including—

- i. total costs;
- ii. cost-effectiveness;
- iii. improved reliability;
- iv. security;
- v. system performance; and
- vi. societal benefit.

4. Smart Grid Information [truncated version]

(A) **STANDARD.** — All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).

(B) **INFORMATION.** — Information provided under this section, to the extent practicable, shall include:

(i) **PRICES.** — Purchasers and other interested persons shall be provided information on—

(I) time-based electricity prices in the wholesale electricity market; and

(II) time-based electricity retail prices or rates that are available to the purchasers.

(ii) **USAGE.** — Purchasers shall be provided with the number of electricity units, expressed in kWh, purchased by them.

(iii) **INTERVALS AND PROJECTIONS.** — Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly price and use information, where available, and shall include a day-ahead projection of such price information to the extent available.

(iv) **SOURCES.** — Purchasers and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

Attachment B

Natural Gas Utilities

1. Integrated Resource Planning

Each natural gas utility shall

- (A) integrate energy efficiency resources into the plans and planning processes of the natural gas utility; and*
- (B) adopt policies that establish energy efficiency as a priority resource in the plans and planning processes of the natural gas utility.*

2. Rate Design Modifications to Promote Energy Efficiency Investments

- (A) IN GENERAL. – the rates allowed to be charged by a natural gas utility shall align utility incentives with the delivery of cost-effective energy efficiency.*
- (B) POLICY OPTIONS. – In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—*
 - i. Separating fixed-cost revenue recovery from the volume of transportation or sales service provided to the customer;*
 - ii. providing to utilities incentives for the successful management of energy efficiency programs, such as allowing utilities to retain a portion of the cost-reducing benefits accruing from the programs;*
 - iii. promoting the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives; and*
 - iv. adopting rate designs that encourage energy efficiency for each customer class.*

42 USC 6344. "SEC. 374. ADDITIONAL INCENTIVES FOR RECOVERY, USE, AND PREVENTION OF INDUSTRIAL WASTE ENERGY.

Deadline. Notification. "(a) CONSIDERATION OF STANDARD.—
"(1) IN GENERAL.—Not later than 180 days after the receipt by a State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority), or nonregulated electric utility, of a request from a project sponsor or owner or operator, the State regulatory authority or nonregulated electric utility shall—

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"(A) provide public notice and conduct a hearing respecting the standard established by subsection (b); and

"(B) on the basis of the hearing, consider and make a determination whether or not it is appropriate to implement the standard to carry out the purposes of this part.

"(2) RELATIONSHIP TO STATE LAW.—For purposes of any determination under paragraph (1) and any review of the determination in any court, the purposes of this section supplement otherwise applicable State law.

"(3) NONADOPTION OF STANDARD.—Nothing in this part prohibits any State regulatory authority or nonregulated electric utility from making any determination that it is not appropriate to adopt any standard described in paragraph (1), pursuant to authority under otherwise applicable State law.

"(b) STANDARD FOR SALES OF EXCESS POWER.—For purposes of this section, the standard referred to in subsection (a) shall provide that an owner or operator of a waste energy recovery project identified on the Registry that generates net excess power shall be eligible to benefit from at least 1 of the options described in subsection (c) for disposal of the net excess power in accordance with the rate conditions and limitations described in subsection (d).

"(c) OPTIONS.—The options referred to in subsection (b) are as follows:

"(1) SALE OF NET EXCESS POWER TO UTILITY.—The electric utility shall purchase the net excess power from the owner or operator of the eligible waste energy recovery project during the operation of the project under a contract entered into for that purpose.

"(2) TRANSPORT BY UTILITY FOR DIRECT SALE TO THIRD PARTY.—The electric utility shall transmit the net excess power on behalf of the project owner or operator to up to 3 separate locations on the system of the utility for direct sale by the owner or operator to third parties at those locations.

"(3) TRANSPORT OVER PRIVATE TRANSMISSION LINES.—The State and the electric utility shall permit, and shall waive or modify such laws as would otherwise prohibit, the construction and operation of private electric wires constructed, owned, and operated by the project owner or operator, to transport the power to up to 3 purchasers within a 3-mile radius of the project, allowing the wires to use or cross public rights-of-way, without subjecting the project to regulation as a public utility, and according the wires the same treatment for safety, zoning, land use, and other legal privileges as apply or would apply to the wires of the utility, except that—

"(A) there shall be no grant of any power of eminent domain to take or cross private property for the wires; and

"(B) the wires shall be physically segregated and not interconnected with any portion of the system of the utility, except on the customer side of the revenue meter of the utility and in a manner that precludes any possible export of the electricity onto the utility system, or disruption of the system.

"(4) AGREED ON ALTERNATIVES.—The utility and the owner or operator of the project may reach agreement on any alternate arrangement and payments or rates associated with the

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arrangement that is mutually satisfactory and in accord with State law.

"(d) RATE CONDITIONS AND CRITERIA.—

"(1) DEFINITIONS.—In this subsection:

"(A) PER UNIT DISTRIBUTION COSTS.—The term 'per unit distribution costs' means (in kilowatt hours) the quotient obtained by dividing—

"(i) the depreciated book-value distribution system costs of a utility; by

"(ii) the volume of utility electricity sales or transmission during the previous year at the distribution level.

"(B) PER UNIT DISTRIBUTION MARGIN.—The term 'per unit distribution margin' means—

"(i) in the case of a State-regulated electric utility, a per-unit gross pretax profit equal to the product obtained by multiplying—

"(I) the State-approved percentage rate of return for the utility for distribution system assets; by

"(II) the per unit distribution costs; and

"(ii) in the case of a nonregulated utility, a per unit contribution to net revenues determined multiplying—

"(I) the percentage (but not less than 10 percent) obtained by dividing—

"(aa) the amount of any net revenue payment or contribution to the owners or subscribers of the nonregulated utility during the prior year; by

"(bb) the gross revenues of the utility during the prior year to obtain a percentage; by

"(II) the per unit distribution costs.

"(C) PER UNIT TRANSMISSION COSTS.—The term 'per unit transmission costs' means the total cost of those transmission services purchased or provided by a utility on a per-kilowatt-hour basis as included in the retail rate of the utility.

"(2) OPTIONS.—The options described in paragraphs (1) and (2) in subsection (c) shall be offered under purchase and transport rate conditions that reflect the rate components defined under paragraph (1) as applicable under the circumstances described in paragraph (3).

"(3) APPLICABLE RATES.—

"(A) RATES APPLICABLE TO SALE OF NET EXCESS POWER.—

"(i) IN GENERAL.—Sales made by a project owner or operator of a facility under the option described in subsection (c)(1) shall be paid for on a per kilowatt hour basis that shall equal the full undiscounted retail rate paid to the utility for power purchased by the facility minus per unit distribution costs, that applies to the type of utility purchasing the power.

"(ii) VOLTAGES EXCEEDING 25 KILOVOLTS.—If the net excess power is made available for purchase at voltages that must be transformed to or from voltages

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exceeding 25 kilovolts to be available for resale by the utility, the purchase price shall further be reduced by per unit transmission costs.

“(B) RATES APPLICABLE TO TRANSPORT BY UTILITY FOR DIRECT SALE TO THIRD PARTIES.—

“(i) IN GENERAL.—Transportation by utilities of power on behalf of the owner or operator of a project under the option described in subsection (c)(2) shall incur a transportation rate that shall equal the per unit distribution costs and per unit distribution margin, that applies to the type of utility transporting the power.

“(ii) VOLTAGES EXCEEDING 25 KILOVOLTS.—If the net excess power is made available for transportation at voltages that must be transformed to or from voltages exceeding 25 kilovolts to be transported to the designated third-party purchasers, the transport rate shall further be increased by per unit transmission costs.

“(iii) STATES WITH COMPETITIVE RETAIL MARKETS FOR ELECTRICITY.—In a State with a competitive retail market for electricity, the applicable transportation rate for similar transportation shall be applied in lieu of any rate calculated under this paragraph.

“(4) LIMITATIONS.—

“(A) IN GENERAL.—Any rate established for sale or transportation under this section shall—

“(i) be modified over time with changes in the underlying costs or rates of the electric utility; and

“(ii) reflect the same time-sensitivity and billing periods as are established in the retail sales or transportation rates offered by the utility.

“(B) LIMITATION.—No utility shall be required to purchase or transport a quantity of net excess power under this section that exceeds the available capacity of the wires, meter, or other equipment of the electric utility serving the site unless the owner or operator of the project agrees to pay necessary and reasonable upgrade costs.

“(e) PROCEDURAL REQUIREMENTS FOR CONSIDERATION AND DETERMINATION.—

“(1) PUBLIC NOTICE AND HEARING.—

“(A) IN GENERAL.—The consideration referred to in subsection (a) shall be made after public notice and hearing.

“(B) ADMINISTRATION.—The determination referred to in subsection (a) shall be—

“(i) in writing;

“(ii) based on findings included in the determination and on the evidence presented at the hearing; and

“(iii) available to the public.

“(2) INTERVENTION BY ADMINISTRATOR.—The Administrator may intervene as a matter of right in a proceeding conducted under this section—

“(A) to calculate—

“(i) the energy and emissions likely to be saved by electing to adopt 1 or more of the options; and

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"(ii) the costs and benefits to ratepayers and the utility; and

"(B) to advocate for the waste-energy recovery opportunity.

"(3) PROCEDURES.—

"(A) IN GENERAL.—Except as otherwise provided in paragraphs (1) and (2), the procedures for the consideration and determination referred to in subsection (a) shall be the procedures established by the State regulatory authority or the nonregulated electric utility.

"(B) MULTIPLE PROJECTS.—If there is more than 1 project seeking consideration simultaneously in connection with the same utility, the proceeding may encompass all such projects, if full attention is paid to individual circumstances and merits and an individual judgment is reached with respect to each project.

"(f) IMPLEMENTATION.—

"(1) IN GENERAL.—The State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) or nonregulated electric utility may, to the extent consistent with otherwise applicable State law—

"(A) implement the standard determined under this section; or

"(B) decline to implement any such standard.

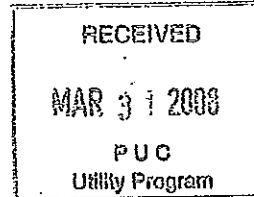
"(2) NONIMPLEMENTATION OF STANDARD.—

"(A) IN GENERAL.—If a State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) or nonregulated electric utility declines to implement any standard established by this section, the authority or nonregulated electric utility shall state in writing the reasons for declining to implement the standard.

"(B) AVAILABILITY TO PUBLIC.—The statement of reasons shall be available to the public.

"(C) ANNUAL REPORT.—The Administrator shall include in an annual report submitted to Congress a description of the lost opportunities for waste-heat recovery from the project described in subparagraph (A), specifically identifying the utility and stating the quantity of lost energy and emissions savings calculated.

"(D) NEW PETITION.—If a State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) or nonregulated electric utility declines to implement the standard established by this section, the project sponsor may submit a new petition under this section with respect to the project at any time after the date that is 2 years after the date on which the State regulatory authority or nonregulated utility declined to implement the standard.



P.U.C. OR. No. 5

Original Sheet 490

AVISTA CORPORATION
dba Avista Utilities

Attachment D

SCHEDULE 490
RESIDENTIAL ENERGY EFFICIENCY EQUIPMENT PROGRAM – OREGON

PURPOSE:

To acquire natural gas resources through a more efficient use of energy by providing partial funding for the installation of energy efficiency measures.

AVAILABLE:

To all qualifying residential customers, within the Company's Oregon service territory. This program is available to Owners of these facilities, as well as Tenants who have obtained appropriate Owner consent.

PRESCRIPTIVE EFFICIENCY MEASURES:

Avista Utilities shall provide the specified incentive for the natural gas efficiency measures identified within this section. Upon completion of the installation of measures, the Company will reimburse to Customers, or Contractors, the following amounts:

Measures (See Specific Qualifications in the Measure Definitions)	Measure Life	Incentive
New high-efficiency forced air gas furnace (AFUE RATING OF AT LEAST 90%)	25 Years	\$200
Gas Boiler Systems & Combination Space/Water Heating Systems (CA-AFUE RATING OF AT LEAST 90%)	25 Years	\$200
New high efficiency direct vent natural gas space heater (AFUE RATING OF AT LEAST 80%)	15 Years	\$150
New high-efficiency gas water heater (40 GALLON, EF RATING OF AT LEAST 0.62)	12 Years	\$50
New high-efficiency gas water heater (50 GALLON, EF RATING OF AT LEAST 0.60)	12 Years	\$50
New high-efficiency gas water heater (Other sizes may qualify if EF RATING exceeds the Federal energy factor ratings by at least six points.)	12 Years	\$50
New high-efficiency tankless water heater (AFUE RATING OF AT LEAST 80%)	20 Years	\$200
Chimney damper (Wood burning fireplace only, installed by licensed contractor)	15 Years	\$100
New programmable thermostat (Must have change/check reminder)	15 Years	\$50

Advice No. 08-02-G
Issued March 31, 2008.

Effective For Service On & After
April 1, 2008

Issued by Avista Utilities
By Kelly O. Norwood, VP, State & Federal Regulation

ITEM NO. 2

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT

PUBLIC MEETING DATE: December 8, 2009

REGULAR X CONSENT _____ EFFECTIVE DATE _____ N/A _____

DATE: December 2, 2009

TO: Public Utility Commission

FROM: Maury Galbraith

THROUGH: Lee Sparling and Ed Busch

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. UM 1409) Staff recommendation relating to the smart grid standards in the U.S. Energy Independence and Security Act of 2007.

STAFF RECOMMENDATION:

Staff recommends the Commission adopt a modified version of the U.S. Energy Independence and Security Act of 2007 (EISA 2007) smart grid investment standard and take no action on the EISA 2007 smart grid information standard.

DISCUSSION:

At the December 9, 2008, public meeting, the Public Utility Commission of Oregon (Commission or OPUC) adopted Staff's recommendation to open an investigation to commence consideration of new federal standards related to integrated resource planning, rate design policies, smart grid investments, and incentives for industrial waste energy. As Staff indicated in its public meeting memo, the Commission is not obligated to adopt the federal standards. The Commission may decline to implement the standard or adopt a different or modified standard from the one included in the EISA 2007.

The EISA 2007 only mandates that the Commission consider whether to adopt the standards and prescribes certain procedural requirements for that consideration. Those procedural requirements are that the Commission's determination on whether to adopt the standards comes after public notice and a hearing and that the Commission's determination is to be made, "(A) in writing, (B) based upon findings included in such determination and upon the evidence presented at the hearing, and (C) available to the public." (PURPA section 111(b)(1)). The requirement that the determination come after

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public notice and a “hearing” does not mean that the Commission has to hold a contested-case hearing on this matter. Instead, the investigation can be conducted by allowing interested persons opportunity to provide written comments followed by an opportunity for oral presentations to the Commission.

This Staff report contains Staff’s recommendation on the smart grid standards of the EISA 2007. The recommendations are based, in part, on two workshops held at the OPUC on September 9, 2009. The EISA 2007 contains two smart grid standards—an investment standard and an information standard.¹ This report addresses each standard separately.

Investment Standard

The first standard would require each electric utility to demonstrate that it considered smart grid alternatives prior to undertaking an investment in non-advanced grid technologies. The standard would also require the Commission to consider allowing each electric utility to recover the costs of the deployment of qualified smart grid systems, and to recover the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid systems. More specifically, the EISA 2007 smart grid investment standard states:

- (A) *IN GENERAL – Each State shall consider requiring that, prior to undertaking investments in nonadvanced grid technologies, an electric utility of the State demonstrate to the State that the electric utility considered an investment in a qualified smart grid system based on appropriate factors, including:*
- i. *total costs;*
 - ii. *cost-effectiveness;*
 - iii. *improved reliability;*
 - iv. *security;*
 - v. *system performance; and*
 - vi. *societal benefit.*
- (B) *RATE RECOVERY – Each State shall consider authorizing each electric utility of the State to recover from ratepayers any capital, operating expenditure, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system.*

¹ The smart grid investment standard is paragraph (18), and the smart grid information standard is paragraph (19), of Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C 2621(d)).

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- (C) *OBSOLETE EQUIPMENT – Each State shall consider authorizing any electric utility or other party of the State to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid system, based on the remaining depreciable life of the obsolete equipment.*

Paragraph A of the EISA 2007 smart grid investment standard would require each electric company to demonstrate that it considered smart grid technologies, “prior to undertaking investments in nonadvanced grid technologies.” The consideration of alternative investment options using appropriate evaluation factors is at the core of prudent decision making. The substantive requirement of paragraph A is nearly equivalent to the standard this Commission uses to determine the prudence of a utility investment decision. The biggest difference between paragraph A of the EISA 2007 smart grid investment standard and the Commission prudence standard is the timing of the utility’s demonstration to the Commission.

Under traditional ratemaking, the utility would make its prudence demonstration at the time of a general rate proceeding. In the rate proceeding, the Commission would apply the reasonable person standard to judge the prudence of the utility’s investment decision. The objective reasonableness of the utility’s decision, however, would be based on information known, or knowable, at the time the utility made its investment decision.

Paragraph A of the EISA 2007 smart grid investment standard would simply provide an additional early demonstration of the utility’s decision making. Adoption of the standard would require the utility to make a demonstration that it considered smart grid technologies, “prior to undertaking investments in nonadvanced grid technologies.”

The early demonstration required by the EISA smart grid investment standard would keep the Commission and interested parties up-to-date on utility grid investment decisions. However, it is unclear what action, if any, the Commission should take in response to an early demonstration of the utilities’ investment decision. Individual Commissioners could indicate skepticism or optimism regarding the reasonableness of the utility’s pending decision; however, it is a generally accepted tenet of utility regulation in Oregon that the current Commission cannot bind the ratemaking decisions of future Commissions.

In order to secure the benefits of keeping the Commission and interested parties informed of utility decision making regarding grid investment, while at the same time

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recognizing the limitations of early Commission action, Staff recommends that the Commission adopt the following modified version of paragraph A:

- (A) *Prior to making an investment in non-advanced grid technology, each electric utility shall file a report with the Commission demonstrating that it considered investing in smart grid technologies. The report shall demonstrate that the utility based its investment decision on appropriate factors, including cost-effectiveness, reliability, and system performance. The utility shall present the findings of the report to the Commission, for informational purposes only, at a regular public meeting.*
- i. For purposes of this standard, investment in non-advanced grid technology means investment in traditional grid technology. This includes, but is not limited to, investment in standard electromechanical meters, automated meter reading (systems without two-way communication to each meter), non-digital communication systems, and non-automated transmission and distribution equipment. Investment in non-advanced grid technology does not include investment in basic poles, wires, and transformers, replacement of individual meters, or replacement of malfunctioning equipment.*

Paragraph B of the EISA 2007 smart grid investment standard would require the Commission to consider allowing electric utilities to recover the costs of investment in qualified smart grid systems. This part of the standard is comparable to, and subsumed under, the Commission's historic practice of allowing each electric utility to recover the costs of its prudent investments. Established precedent informs the Commission's consideration of whether to authorize an electric utility to recover investment costs from ratepayers. Commission consideration of whether to allow a utility to recover the costs of investment in smart grid technology can be easily addressed by the Commission's prudence standard. Staff does not see a need for a separate standard for the consideration of smart grid investment, and recommends that the Commission not adopt paragraph B of the smart grid investment standard.

Paragraph C of the EISA 2007 smart grid investment standard would require the Commission to consider allowing electric utilities to recover the remaining book-value costs of any equipment rendered obsolete by the deployment of qualified smart grid systems, based on the remaining depreciable life of the obsolete equipment. This part of the standard is also subsumed under the Commission's current practice. For example, in separate proceedings, the Commission recently authorized Portland General Electric and Idaho Power Company to accelerate the depreciation of the cost of

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equipment rendered obsolete by advanced metering infrastructure.² The proposed standard is comparable to recent Commission practice, and Staff recommends that the Commission not adopt paragraph C of the smart grid investment standard.

Information Standard

The second EISA 2007 smart grid standard would require each electric utility to provide electricity purchasers actual hourly price and usage information, and day-ahead projections of this information, on a daily basis. The standard would also require the utility to provide the sources of its power generation, and the associated greenhouse gas emissions, by type of generation, on an annual basis. More specifically, the smart grid information standard states:

- (A) *STANDARD – All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).*
- (B) *INFORMATION – Information provided under this section, to the extent practicable, shall include:*
 - i. *PRICES – Purchasers and other interested persons shall be provided with information on:*
 - I. *time-based electricity prices in the wholesale electricity market; and*
 - II. *time-based electricity retail prices or rates that are available to the purchasers.*
 - ii. *USAGE – Purchasers shall be provided with the number of electricity units, expressed in kwh, purchased by them.*
 - iii. *INTERVALS AND PROJECTIONS – Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly prices and use information, where available, and shall include a day-ahead projection of such price information to the extent practicable.*
 - iv. *SOURCES – Purchasers and other interested persons shall be provided annually with written information on the sources of the*

² Portland General Electric received authorization for accelerated depreciation of existing meters in Order No. 08-245 and Idaho Power Company received authorization in Order No. 08-614.

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power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

- (C) *ACCESS – Purchasers shall be able to access their own information at any time through the Internet and on other means of communication elected by that utility for Smart Grid applications. Other interested persons shall be able to access information not specified to any purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.*

At this time, Staff views widespread provision of hourly price and usage information to be impracticable. Hourly usage information is largely unavailable for all but the largest electricity purchasers. Hourly wholesale power price information is collected from participants in the Pacific Northwest bi-lateral markets, but the information is proprietary to the firms that collect it and not available to the general public. Finally, day-ahead projections of hourly wholesale power prices are simply unavailable.

On the other hand, Oregon's largest electric utilities already disclose their power source information to electricity purchasers on an annual basis. This information is disclosed pursuant to OAR 860-038-0300 in order to more fully inform the choice of direct access and portfolio options available to retail electricity consumers.

Given the impracticality of providing hourly power price and usage information, and the fact that Oregon's largest utilities already disclose their power source mix on an annual basis, Staff recommends the Commission not take action on this EISA standard. Staff does not intend, however, for this recommendation to close the discussion of time-based electricity pricing in Oregon. Dynamic pricing is likely to be one of the core benefits of future smart grid technologies.

In a separate Staff Report being presented to the Commission at the December 8, 2009 Regular Public Meeting, Staff will recommend that the Commission open a docket to develop Commission smart grid objectives and action items for the 2010 through 2014 time period. The need for the Commission to set a vision for future smart grid deployment in Oregon was a common theme heard during the Commission's September 9th smart grid workshops. The Commission can use funding awarded to the Oregon Electricity Regulators Assistance Project under the American Recovery and Reinvestment Act of 2009 to advance this new docket and further the Commission's smart grid objectives.

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PROPOSED COMMISSION MOTION:

Staff's modified version of the EISA 2007 smart grid investment standard be adopted and no action be taken on the EISA 2007 smart grid information standard.

ITEM NO. CA11

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: July 28, 2009

REGULAR CONSENT EFFECTIVE DATE _____ N/A

DATE: July 22, 2009

TO: Public Utility Commission

FROM: Maury Galbraith

THROUGH: Lee Sparling and Ed Busch

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. UM 1409) Staff recommendations relating to a federal standard on integrated resource planning.

STAFF RECOMMENDATION:

Staff recommends the Commission take no action on the federal standard on integrated resource planning (IRP).

DISCUSSION:

At the December 9, 2008, public meeting, the Public Utility Commission (Commission or PUC) adopted Staff's recommendation to open an investigation to commence consideration of new federal standards related to IRP pertaining to both electric and natural gas utilities, rate design policies, smart grid investment and incentives related to industrial waste energy. This Staff Report addresses only the IRP standard.

A prehearing conference was held on January 28, 2009, Staff's initial comments and recommendation were submitted to Parties¹ on March 10, 2009, and the Parties agreed to Joint Comments on July 20, 2009.

As Staff indicated in its public meeting memo dated November 21, 2008, the Commission is not obligated to adopt the federal standard. The Commission may decline to implement the standard or adopt a different or modified standard from the one included in the Energy Independence and Security Act of 2007 (EISA 2007). EISA

¹ The Parties include Staff, Avista Utilities, Cascade Natural Gas Corporation, Citizens' Utility Board, Idaho Power Company, Industrial Customers of Northwest Utilities, Northwest Industrial Gas Users, Northwest Natural Gas Company, PacifiCorp, and Portland General Electric.

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2007 only mandates that the Commission consider whether to adopt the standard² (see specific language, below) and prescribes certain procedural requirements for that consideration. Those procedural requirements are that the Commission's determination on whether to adopt a standard comes after public notice and a hearing and that the Commission's determination is to be made, "(A) in writing, (B) based upon findings included in such determination and upon the evidence presented at the hearing, and (C) available to the public." (Public Utility Regulatory Policy Act (PURPA) section 111(b)(1).) The requirement that the determination come after public notice and a "hearing" does not mean that the Commission has to hold a contested-case hearing on this matter. Instead, the investigation can be conducted by allowing interested persons opportunity to provide written comments followed by an opportunity for oral presentations to the Commission. The process followed by Staff and other Parties meets the procedural requirements.

IRP Standard

Each electric utility shall

- (A) *integrate energy efficiency resources into utility, State, and regional plans; and*
- (B) *adopt policies establishing cost-effective energy efficiency as a priority resource.*

Each natural gas utility shall

- (A) *integrate energy efficiency resources into the plans and planning processes of the natural gas utility; and*
- (B) *adopt policies establishing cost-effective energy efficiency as a priority resource in the plans and planning processes of the natural gas utility.*

While these standards differ slightly for the electric and natural gas utilities, the Parties agree they are essentially synonymous.

Staff submitted initial comments to interested stakeholders on March 10, 2009, with its assessment of what actions the Commission should take with regard to its determination. The Parties agreed that review of the proposed federal IRP standard was uncomplicated because Oregon had already implemented similar requirements. In their Joint Comments, the Parties agreed that:

² The IRP standard was added to PURPA section 111(d) for electric utilities and PURPA section 303(b) for natural gas utilities.

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- In Order No. 07-002, as corrected by Order No. 07-047, the Commission updated its guidelines for IRP, after numerous workshops and ample opportunity for comment. The issues were thoroughly vetted and thoughtfully reviewed by the Commission.
- In Guideline 1, the Commission states that it did not make a wholesale change in its previous IRP order, Order No. 89-507, in which the Commission required that “All resources must be evaluated on a consistent and comparable basis.” The Commission’s more recent order made the following modifications applicable to Docket UM 1409:
 - *All known resources* for meeting the utility’s load should be considered, including supply-side options which focus on the generation, purchase and transmission of power . . . and demand-side options which focus on conservation and demand response.
 - At a minimum, [electric] utilities should address the following sources of risk and uncertainty: . . . load requirements, hydroelectric generation, plant forced outages, fuel prices, electricity prices, and costs to comply with any regulation of greenhouse gas emissions.
- The Commission further clarified that it did not want “the utilities to limit their consideration [of known resources] to currently available resources, but rather to include all those that are expected to become available.”
- SB 1149, enacted in 1999, provided for a stable funding source for acquisition of cost-effective energy efficiency resources for Oregon customers of Portland General Electric (PGE) and PacifiCorp. SB 838, enacted in 2007, gave authority to the Commission to allow these two utilities to pursue additional cost-effective energy above the 3% collected by the public purpose charge. Clearly, Oregon’s legislators have provided guidance that cost-effective energy efficiency is a priority resource.
- The Commission has approved collection of public purpose charges on behalf of two natural gas utilities’ customers, with those funds distributed to the Energy Trust of Oregon (ETO), similar to the collections of PGE and PacifiCorp.
- Under ORS 757.262, the Commission may adopt policies designed to encourage the acquisition of cost-effective conservation resources and small-scale renewable-fuel electric generating resources.

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- Under ORS 757.455, the Commission has encouraged financing investments in cost-effective conservation. This statute allows the Commission to authorize (as appropriate) deferral and amortization of certain conservation program expenditures, and designation of all or part of these expenditures as bondable conservation investment.
- It is not necessary to implement the federal IRP standard to “further the purposes” of PURPA: conservation of energy supplied by electric utilities; optimal efficiency of electric utility facilities and resources; and equitable rates for electric consumers. Guideline 1 in Order No. 07-002 is intended in part to achieve these purposes by analyzing expected cost, risk and uncertainty associated with candidate resource plans comprised of a broad range of demand- and supply-side resources. The guidelines, in whole, and as further modified with the inclusion of the fossil fuel generation standard adopted by the Commission in 2007 (in Order No. 07-499), leave no doubt that the Commission’s IRP guidelines and subsequent Orders more than adequately address the federal IRP standard, and that no further action is necessary by this Commission.

PROPOSED COMMISSION MOTION:

Order No. 07-002, as corrected by Order No. 07-047, and subsequent orders acknowledging the utilities’ IRPs already address the federal standard on IRP and the proposed federal standard is not adopted.