

Service Date: September 6, 2016



STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
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September 6, 2016

NOTICE OF WORKSHOP
(Set for 1 p.m. on Wednesday, December 7, 2016)

AND

NOTICE OF OPPORTUNITY TO FILE WRITTEN COMMENTS
(By 5 p.m. on Wednesday, November 2, 2016)

RE: Rulemaking for Integrated Resource Planning, WAC 480-100-238, WAC 480-90-238, and WAC 480-107
Docket UE-161024

TO ALL INTERESTED PERSONS:

On September 1, 2016, the Washington Utilities and Transportation Commission (Commission) filed with the Office of the Code Reviser a Preproposal Statement of Inquiry (CR-101) to examine whether the Commission's rules related to the integrated resource plan (IRP) process require an update to keep up with recent trends in the energy industry. The Commission adopted its existing IRP rules on January 4, 2006, by General Order R-526 in Dockets UE-030311 and UG-030312, promulgated as chapter 480-100-238 and 480-90-238 WAC, respectively. Since adoption of these rules, the Legislature has enacted and amended a similar statute at RCW 19.280.

Additionally, the Commission will consider whether a revision is necessary for its rule in WAC 480-107, which outlines utility bidding process responsibilities that are closely tied to the IRP rules. The Commission adopted this rule on April 28, 2006, by General Order R-530 in docket UE-030423.

While electric utility IRPs will be the primary focus of this inquiry, the Commission anticipates that there will be broad topics related to the IRP process that may affect natural gas utilities, and therefore encourages their participation in this proceeding.

The CR-101, as filed with the Code Reviser, is available for inspection on the Commission's website at <http://www.utc.wa.gov/161024>. If you are unable to access the Commission's web page and would like a copy of the CR-101 mailed to you, please contact the Records Center at (360) 664-1234.

ISSUE DISCUSSION

Shortly after the Commission adopted its IRP rules in 2006, the Legislature passed a law that required all electric utilities in the state to engage in integrated resource planning. Through subsequent amendments to the law, the Legislature clarified that its intent for the plans was to provide the information necessary to “assist in identifying and developing: (1) New energy generation; (2) conservation and efficiency resources; (3) methods, commercially available technologies, and facilities for integrating renewable resources, including addressing any overgeneration event; and (4) related infrastructure to meet the state's energy needs.”¹

The Commission's rule defines an IRP as “a plan describing the mix of energy supply resources and conservation that will meet current and future needs at the lowest reasonable cost to the utility and its ratepayers.”² The rule specifically directs utilities to consider a range of demand forecasts and resource options, including conservation, conventional resources, commercially available unconventional resources, load management, and transmission and distribution resources.

Rapid technological advancements in the electric utility industry have altered the resource landscape and complicated the IRP modeling process. Resources that were still unconventional when the Commission adopted its rule in 2006, such as wind and solar, have become commonplace on today's electric grid. Meanwhile, other technologies and options like energy storage, smart grid and the Energy Imbalance Market have offered new means of integrating renewable resources and managing the electric grid. These resources, however, bring modeling challenges that strain traditional IRP models.

In reviewing its rules, the Commission has identified two potential types of changes that may be needed: changes related to the Commission's experience in administering the IRP rule (process changes), and changes related to accommodating new types of resources

¹ RCW 19.280.010

² WAC 480-100-238(2)(a).

(technology changes). Generally, the commission anticipates that its inquiry will be loosely divided into the following topical areas:

- Energy storage;
- Requests for proposals;
- Avoided costs;
- Transmission and distribution planning;
- Flexible resource modeling; and
- General procedural improvements.

QUESTIONS FOR CONSIDERATION

To facilitate this inquiry, the Commission requests stakeholder feedback in these areas as described below.

A. General:

1. The Commission has identified a broad scope of issues to evaluate in its inquiry. Are there other issues or topics that should be addressed? What type of schedule would best lend itself to a proceeding of this scope?

B. Energy storage

1. The Commission has already engaged in an investigation regarding energy storage technologies and their treatment in IRP documents (Docket UE-151069). The Commission is considering merging that investigation with this proceeding, then issuing a straw proposal and soliciting one more round of comments before issuing a policy statement on the topic. Do the parties have any concerns with this approach? Is there any information relative to modeling energy storage that has not been presented in the existing docket?

C. Requests for proposals

1. WAC 480-107-015 requires any utility that files an IRP identifying a generation capacity shortfall within the next three years to issue a request for proposals (RFP) within 135 days of filing its IRP. In recent IRP cycles, utilities have frequently requested waivers of this rule, generally citing the cost and complexity of the RFP process and stating that the IRP selected market purchases as the low-cost, preferred approach to meeting short-term capacity needs. Given the frequent requests for waivers of this rule, should the Commission change it? What type of changes would parties recommend to make the rule more broadly applicable and reduce the need for waiver requests?
2. Utilities state that the RFP process is time-consuming and complex, and does not lend itself to a biennial cycle. Are there alternative means of meeting the rule's requirement? Would narrowly crafted solicitations that are tailored to the specific resource needs identified in the IRP be an effective way of reducing

administrative burden and costs, while still encouraging bidders to provide the utility with a range of resource options?

3. In considering the waiver requests to this rule, Commission staff and utilities have been at odds whether the IRP actually identified a resource shortfall in the following three years. Staff has generally held that if the IRP model relies on market purchases for capacity needs, then the utility is short on capacity; utilities have generally held that if the model selected market purchases, then the resource need has been cost-effectively met. Is there a potential compromise on this issue? Could improved modeling of market risk in the IRP increase confidence in the model's determination? How might market risk be modeled?
4. Conservation is currently included in WAC 480-107-015. Should the commission require utilities to issue RFPs for conservation measures and programs on a regular basis? If so, should RFPs be issued in conjunction with the IRP cycle or the biennial conservation planning cycle described in WAC 480-109-120?

D. Avoided costs

1. Avoided costs are used by utilities in multiple applications. They are used for determining rates for qualifying facilities in compliance with the Public Utility Regulatory Policy Act (PURPA), they are used for identifying cost-effective conservation measures, and they are used in determining the incremental cost of resources used for complying with the state's renewable portfolio standard. Despite their ubiquitous use, however, avoided costs can be difficult, if not impossible, to identify in current utility planning. Would it be feasible and beneficial for the utilities to transparently report their avoided costs in the IRP document? What obstacles exist that would complicate such a report? Would it be possible to create a generic avoided cost calculator that could be used to generate avoided costs for various applications? Should the included elements of avoided costs be different for different applications? Is the avoided cost methodology different for natural gas distribution utilities?

E. Transmission and distribution modeling

1. The IRP rule requires utilities to conduct "an assessment of transmission system capability and reliability" and "a comparative evaluation of energy supply resources (including transmission and distribution) ..." How are utilities currently meeting these requirements in their IRPs? Has modeling software advanced in a way that might allow for a more detailed analysis of transmission and distribution systems?
2. To what degree are utilities currently planning for distribution system impacts such as electric vehicles, changes in end uses, and distributed generation? Are there opportunities for utilities to improve their modeling related to these issues without overly burdening the planning process?

3. The Commission's rule requiring smart grid reports, 480-100-505, is scheduled to sunset this year absent an order from the Commission requiring utilities to consider filing the reports. What has the experience of utilities been in filing these reports? Would there be value in extending this requirement? Is there a way to address the Commission's desire for information on this topic through the IRP?
4. The natural gas IRP rule requires plans to include "an assessment of pipeline transmission capability and reliability and opportunities for additional pipeline transmission resources," but is silent on distribution system modeling. To what degree are gas utilities currently engaged in modeling their distribution system? Would it be beneficial for utilities to further engage in distribution system modeling? If so, is there commercially available software that is capable of meeting these modeling needs?
5. In recent years, other states have required or considered requiring utilities to engage in full-scale distribution system planning. What are the costs and obstacles associated with such a requirement? What are the benefits? Is detailed distribution planning feasible now, and if not, what is needed for it to become so?

F. Flexible resource modeling

1. Current IRP models balance load and resources on an hourly basis over a 20-year period, generating more than 175,000 data points for the model to solve. Many of the new resource alternatives that utilities consider, however, operate on a sub-hourly basis and therefore generate benefits that cannot be captured in the IRP's hourly modeling. These benefits promise to increase over time as the penetration of variable generation increases and the need for flexibility from fast-moving resources grows. Prime examples of this type of resource are energy storage, reciprocating engines and the Energy Imbalance Market. How are utilities accounting for sub-hourly resources in current IRP models?
2. Are there readily available means of using sub-hourly IRP models? For example, if the model ran in 15-minute increments over 20 years, it would generate more than 700,000 data points – four times as many as current models. But if it ran in 15-minute increments for just 10 years, it would only double the number of data points, to about 350,000. Would it be possible to adapt current IRP models to operate in that way? Are there commercially available alternatives for sub-hourly modeling? Do utilities or other parties have experience in operating those models?

G. Procedural improvements

1. Should the commission clarify its treatment of confidential information in IRP and RFP dockets? If so, how?
2. Should the commission outline more specific requirements for public involvement, like identification of meeting time and location on the workplan, and the identification of the date a draft will be available for public review?

3. How can the commission increase the transparency of IRP models? Is there a way to allow commission staff and other stakeholders to independently access company modeling software and test assumptions, without violating proprietary agreements or confidentiality, as is done with power cost models?
4. Are there any improvements that could be made in the IRP reporting or review process? Staff will ensure rule language is simplified and written in terminology that promotes clarity and understanding for all stakeholders. Rules that are written in Plain Talk are easier to understand and implement consistently.

WRITTEN COMMENTS

Written comments on the CR-101 inquiry and the questions listed above must be filed with the Commission no later than **5:00 p.m., November 2, 2016**. The Commission requests that comments be provided in electronic format to enhance public access, for ease of providing comments, to reduce the need for paper copies, and to facilitate quotations from the comments. Comments may be submitted via the Commission's Web portal at www.utc.wa.gov/e-filing or by electronic mail to the Commission's Records Center at records@utc.wa.gov. Please include:

- The docket number of this proceeding (UE-161024).
- The commenting party's name.
- The title and date of the comment or comments.

An alternative method for submitting comments may be by mailing or delivering an electronic copy to the Commission's Records Center on a 3 ½ inch, IBM-formatted, high-density disk, in .pdf Adobe Acrobat format or in Word 97 or later format, a flash drive, or CD. Include all of the information requested above. The Commission will post on its web site all comments that are provided in electronic format. The web site is located at the following URL address: <http://www.utc.wa.gov/161024>.

If you are unable to file your comments electronically, the Commission will accept a paper document. Questions may be addressed to Jeremy Twitchell, at (360) 664-1138 or at jtwitche@utc.wa.gov, or Kathi Scanlan, at (360) 664-1267 or kscanlon@utc.wa.gov.

STAKEHOLDER WORKSHOP

In addition to filing written comments, interested persons are invited to attend a stakeholder workshop on **December 7, 2016, beginning at 1 p.m., in Room 206, Richard Hemstad Building, 1300 S. Evergreen Park Drive S.W., Olympia, Washington.**

The Commission's teleconference bridge line will be available for the workshop. The Commission prefers and recommends that interested persons participate in person and

share ideas in a workshop setting. However, if this imposes a hardship, interested persons may participate at the workshop via the Commission's teleconference bridge at **(360) 664-3846**. The conference bridge, however, is limited to 22 access lines.

Stakeholders will have further opportunity for comment. Information about the schedule and other aspects of the rulemaking, including comments, will be posted on the Commission's website as it becomes available. If you wish to receive further information on this rulemaking you may:

- 1) Call the Commission's Records Center at (360) 664-1234.
- 2) E-mail the Commission at records@utc.wa.gov.
- 3) Mail written comments to the address below.

When contacting the Commission, please refer to Docket UE-161024 to ensure that you are placed on the appropriate service list(s). The Commission's mailing address is:

Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, Washington 98504-7250

NOTICE

If you do not want to comment now, but do want to receive future information about this rulemaking, please notify the Executive Director and Secretary in one of the ways described above and ask to be included on the mailing list for Docket UE-161024. If you do not do this, you might not receive further information about this rulemaking.

STEVEN V. KING
Executive Director and Secretary