June 24, 2011

NOTICE OF OPPORTUNITY TO FILE WRITTEN COMMENTS (Due by Friday, July 15, 2011) And NOTICE OF WORK SESSION

(To be held Monday, July 25, 2011, beginning at 9:30 a.m.)

RE: Study of the Potential for Distributed Energy in Washington State, Docket UE-110667

TO ALL INTERESTED PERSONS:

At the request of Washington State House of Representatives Technology, Energy and Communications Committee (TEC Committee), the Washington Utilities and Transportation Commission (Commission) is conducting a study relating to development of distributed energy in areas served by investor owned electric utilities. Specifically, the TEC Committee has asked the Commission to provide to the Legislature background information and detailed discussion of options to encourage the development of cost-effective distributed energy in areas served by investor-owned utilities, as well as the opportunities and challenges facing investor-owned utilities and their ratepayers in developing distributed energy in this state.

The Commission proposes to address in the study the opportunities and challenges for developing distributed energy by reviewing:

- The current state and federal statutory authority governing distributed energy;
- Issues that apply to all forms of distributed energy, regardless of technology, including interconnection standards, system sizing restrictions, storage, and financial incentives, such as tax incentives, net metering and feed-in tariffs;
- Evaluations of the technical and economic potential for distributed energy, and the challenges and issues in Washington using specific technologies, including, but not limited to solar, hydrokinetic, wind, biomass, and biogas.
- Policy options and recommendations for developing distributed energy in areas served by investor-owned utilities.

The Commission is currently in the process of gathering information and reviewing existing literature concerning distributed energy. The Commission also seeks the perspective of investor-owned utilities, persons involved in developing distributed energy in the state, and others to better inform our efforts in this study. The Commission has identified a number of issues and questions, listed below, on which we seek comments from interested persons. The Commission provides an opportunity for interested persons to provide comments on these topics and questions by **Friday**, **July 15, 2011**.

The Commission also invites interested persons to a work session scheduled for **Monday**, **July 25**, **2011**, to discuss these topics and comments on the topics. The Commission has focused on those issues that it deems central to the main focus of this inquiry. However, should any person wish to comment on issues not included on this list but that he or she deems relevant, he or she may do so.

Issues and Questions

A. General – Cross-Cutting Issues:

- 1. What is the scope of current and anticipated distributed energy in the service territories of Washington's investor-owned utilities, including technology type, size and capacity; distribution across service territory; application of feed-in tariffs or netmetering; and any other relevant information? For each technology, what is its total technical resource potential (in contrast to the present, economically viable potential)? Is it concentrated within the state?
- 2. What is, or what is anticipated to be, the overall cost of integrating distributed energy resources to investor-owned utilities?
- 3. Describe the incentives paid by or through investor owned utilities. How much is paid annually for each technology?
- 4. Are there changes in state statutes or rules that would encourage technology-neutral development of distributed energy generally, such as changes to financial incentives? For example,
 - Would current interconnection standards need to be changed to accommodate more distributed energy or to accommodate different distributed energy technologies? Why?
- 5. What storage options exist that could be used to help integrate distributed energy into the electric grid?

6. Do distributed energy technologies impact investor-owned utility rates currently? If so, please describe how and whether rate impacts affect certain customer classes more than others. How might future rates be impacted?

- 7. Do distributed energy technologies meet winter peaking needs for investor-owned utilities? Can distributed energy technologies serve baseload capacity? Which distributed energy technologies serve primarily as an hour-ahead or day-ahead energy supply? How can each of the distributed energy technologies and fuel sources contribute to meeting utility peak load needs?
- 8. If rates or incentives are established at the state level, would it violate or conflict with the federal law provisions in PURPA and the Federal Power Act? For example, if the Commission interprets PURPA to establish a feed-in tariff at the state level, is the Commission obligated by federal law to establish a rate that does not exceed avoided cost?
- 9. Certain statutes and Commission rules require the UTC to review resource acquisition pursuant to least-cost planning. Would pursuing distributed energy conflict with those rules due to the nascent state of technology development and current cost to implement? How far, if at all, should the state depart from least-cost planning principles and rules?
- 10. If the Commission were to change the avoided cost methodology for certain types of renewable resources, what criteria should we take into account as we do this? Should there be a total cap on the amount of resources to be acquired in this manner, and, if so, state-wide or by utility? Should there be a carve-out for certain technologies that are in a more nascent stage of development now, or should commercially available and emerging technologies be treated equally?
- 11. Other policy incentives, both at the state and federal level, already exist for certain types of renewable resources, such as federal grants and state or federal tax benefits. How should these incentives be considered in to the calculation of avoided cost?
- 12. For both capacity and energy, how does the current cost of building distributed energy technology compare with other available resources?
- 13. What marginal costs are associated with the interconnection requirements for the connection of distributed energy systems? Are those costs material, and how should the costs be recovered (socialized or born by customer-owners of distributed resources)?
- 14. Should the current statutory restrictions on the size of distributed energy resources be changed? If so, please explain the reasons for the suggested change.
- 15. Can each distributed energy resource be used to support emergency management practices in addition to electricity generation?

16. Are there other technologies we should consider in addition to wind, solar, hydrokinetic, biomass, and biogas? If so, please identify the technology, the state of development and likelihood of adoption.

B. Technology-Specific Issues:

Distributed Solar

- 1. Not including the photovoltaic solar panels themselves, what is the cost of installation on a unit basis of solar panels in distributed energy applications? How does this compare to the per-unit cost of installation for utility scale applications?
- 2. Is the integration of the variable output of photovoltaic power production made easier or less expensive if it is distributed versus central plant photovoltaic production?
- 3. Are there lessons learned from Oregon's tariff subsidies for solar installations? Is there a calculated subsidy per kWh for the Oregon program?
- 4. Given the variety of tax and other financial incentives for solar manufacturers and consumers, are additional incentives needed?

Distributed Wind

- 5. Is the integration of the variable output of wind power production made easier or less expensive if it is distributed throughout the service area rather than centralized from a utility-scale wind farm?
- 6. What is the estimated contribution of distributed wind generation to meeting a utility's peak demand?
- 7. Does current distribution capacity constrain development of distributed wind generation?

Distributed Hydroelectric

- 8. What is the state of the technology for generating electricity from wave, tidal, and micro-hydro technologies (maturation, market penetration, retail price of installation)?
- 9. Do these technologies pose potential negative environmental impacts?
- 10. Are there potential impacts from current environmental regulations for hydroelectric generation that might adversely affect the development of future distributed hydroelectric generation (in other words, should micro-hydro be treated the same as utility-scale hydroelectric generation? Are there other impacts specific to micro-hydro that ought to be considered)?

Biogas

11. What is the generation capacity and energy production potential from biogas fuels located in Washington State?

- 12. How are fuel mixtures accounted for, and are there fuel mixes with fuel components that do not qualify under the state renewable portfolio standard (RCW 19.285)?
- 13. What is the range of project capacity sizes for biogas generation resources and how does that compare to the capacity sizes for projects that qualify for published PURPA rates?
- 14. What is the status of municipal green stream digester development, including the status of the eligibility of those projects or potential projects under RCW 19.285?

C. Financial Incentives:

- 1. If the cost of building a distributed energy resource is not yet competitive, and a subsidy is recommended, what form of subsidy is best?
- 2. What effect would the subsidy have on encouraging the building of the resource versus research and development?
- 3. Should subsidies, incentives or renewable energy credits be paid or created for power generated through distributed resources while market prices are negative?

The Commission appreciates your comments on these questions and issues. Commentors may choose to comment only on those questions for which they have expertise. If there are other topics or information you wish to share with the Commission concerning the benefits and challenges of distributed energy, please submit your additional comments.

STAKEHOLDER WORK SESSION

We encourage your attendance and participation in the stakeholder work session. The work session will be held on **Monday**, **July 25**, **2011**, **beginning at 9:30 a.m.**, in Room 206 of the Commission's headquarters, Richard Hemstad Building, 1300 S. Evergreen Park Drive S.W., Olympia, Washington.

WRITTEN COMMENTS

Written comments addressing the issues listed above must be filed with the Commission no later than 5:00 p.m., **Friday**, **July 15**, **2011**. The Commission requests that comments be provided in electronic format to enhance public access, for ease of providing responses, to reduce the need for paper copies, and to facilitate quotations from the comments. Comments may be submitted via the Commission's Web portal (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-110667
- The commenting party's name.
- The title and date of the comment or comments.

An alternative method for submitting comments is to mail/deliver 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. 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 http://www.utc.wa.gov/110667>.

If you are unable to file your comments electronically or to submit them on a disk, the Commission will always accept a paper document. Questions may be addressed to Elizabeth Osborne at (360) 664-1209 or e-mail at <<u>eosborne@utc.wa.gov</u>>.

Your participation is welcomed via written comments and through participation in the stakeholder work session. Information about the schedule and other aspects of this inquiry, including comments, will be posted on the Commission's web site as it becomes available. If you wish to receive further information on this inquiry you may:

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

When contacting the Commission, please refer to Docket UE-110667 to ensure that you are placed on the appropriate service list. 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 inquiry, please notify the Executive Director and Secretary in a manner described above and ask to be included on the mailing list for Docket UE-110667. <u>If you do not do this, you might not receive further information about this inquiry.</u>

Sincerely,

DAVID W. DANNER Executive Director and Secretary