

05/17/18 15:05

State Of WASH.
UTIL. AND TRANSP.
COMMISSION



Puget Sound Energy
P.O. Box 97034
Bellevue, WA 98009-9734
PSE.com

May 17, 2018

Filed Via Web Portal

Mr. Mark L. Johnson, Executive Director and Secretary
Washington Utilities and Transportation Commission
P.O. Box 47250
Olympia, Washington 98504-7250

Re: Docket UE-161024: Comments of Puget Sound Energy in Response to Notice of Opportunity to File Written Comments on draft rules for distribution system planning, WAC-480-100-238, WAC 480-90-238, and WAC 480-107

Dear Mr. Johnson:

Puget Sound Energy (“PSE”) appreciates the opportunity to respond to both the informal draft rules and questions for consideration proposed by the Commission staff in its Notice of Opportunity to File Written Comments on draft rules and questions (“Notice”) for including electric delivery system planning as part of the integrated resource plan (“IRP”). Given the significant changes to the WAC proposed in these draft rules, PSE recommends the Commission schedule another workshop on this topic for parties to provide further context around their ideas and concerns regarding the feasibility and timing for implementing these rules and to find areas of consensus for rule language.

From PSE’s perspective, the purpose of the various rules and processes being discussed here is to find an appropriate balance within electric delivery system planning of promoting transparency, engaging stakeholders, and responding to evolving technology without hindering the utility’s ability to meet its core public service obligations of customer reliability and safety at the lowest reasonable cost. PSE’s customers must be the ultimate focus and beneficiaries of these processes. While PSE supports the state’s broader energy policy goals, WAC rules should be written clearly so that a utility may continue to act in the interest of its customers. Finally, PSE supports many of the concepts included in the draft rules but encourages further rule language or Commission guidance in an order that allows for a transition period to implementing the rules and for utilities to focus on the opportunities that bring the greatest value.

Comments of PSE on Planning Draft Rules

In the following section, PSE will describe its proposed changes to the planning draft rules but will also attach a redline version of its proposed edits as Attachment A. PSE's recommendations for these rules are intended to be actionable and collaborative, and are based on participation in UTC workshops, its own IRP experiences, and conversations with UTC staff and stakeholders. There are four primary themes regarding PSE's comments on these draft rules and questions: 1) the rules need to align with the intent of the broader IRP rules which is to determine the *energy supply resources* to meet the system demand and not be overly broad to create process for low value results, 2) these rules need to align with other rules and policies specifically PURPA and Energy Storage Policy so that process, timing, and results do not conflict, 3) advisory group engagement must provide for a successful outcome which requires intentional process definition, membership requirements, and closure when solutions move to implementation, and 4) these rules should not create confusion with other regulations, defined terms or planning process requirements under FERC, WECC, NERC, Columbia Grid or others.

1. Planning Draft Rule 480-100-238(1) – Purpose

Generally, PSE recommends being clear in the purpose of how electric delivery system planning and plans support the purpose of the integrated resource plan which is to meet system needs with the lowest reasonable cost mix of energy supply. PSE believes that without that clarity the rules will be misinterpreted to apply to investments such as repairing failed infrastructure or result in significant burden to evaluate projects where alternative solutions clearly are not effective. If correlation to the IRP cannot be made clear in these rules, PSE recommends a separate rulemaking outside of this IRP rulemaking. PSE's proposed changes to the draft rules focus on three purposes: 1) understand how local distributed energy resources and conservation solutions can benefit evaluation of energy supply resources; 2) create transparency in the planning process to gain confidence that all types of solutions are being considered; and 3) support utility efforts to integrate distributed energy resource onto the electric grid.

Relative to specific draft rule language, PSE has serious concerns with certain language in Planning Draft Rule 480-100-238(1) that characterizes part of a cross-functional planning approach that is to identify and develop "related infrastructure to meet the state's energy needs." PSE recommends striking "the state's" and replacing with "customer's." The phrase should read "related infrastructure to meet customer's energy needs." This change would make clear that these planning documents and exercises are being undertaken for the benefit of utility customers under the UTC's jurisdiction. The state's energy needs may benefit from these planning exercises, but they may also conflict. The rule language should be explicit that customer benefits are the sole driver behind these planning exercises.

PSE also recommends clarifying language in this section such as adding the word "potential" after "(2) conservation" and eliminate the words "efficiency resources." The phrase should read "(2) conservation potential;". This change will make clear that the purpose of the IRP is to identify conservation potential, while the utility develops and implements efficiency programs.

Finally, PSE recommends striking the phrase “integrating renewable and distributed energy resources, including addressing any overgeneration event” and replacing with “integrate alternatives to traditional utility infrastructure that address an identified system energy need.” The current language is very specific to three types of needs, i.e. distributed energy resource integration, renewable integration, and overgeneration. The reality of distribution planning is that there are hundreds of needs across the system and the right solution must be used for each. PSE’s proposed language would better reflect the realities that distribution system planning is tied to solving a need and should now consider alternatives beyond traditional solutions.

2. Planning Draft Rule 480-100-238(2) - Definitions

PSE supports some definitions included in planning draft rule 480-100-238(2) and recommends clarification on others. PSE supports the definition of “advisory group” under this section, in particular the language permitting a utility to form a separate electric delivery system planning advisory group composed of parties that have “demonstrated subject matter expertise in distribution system planning or distributed energy resources.” Keeping this language in the final rule is important because it will facilitate an electric delivery system planning process that can respond with more agility to a rapidly evolving grid. PSE recommends the role of the advisory group to be clearly defined and end with preliminary conclusion of types of solutions to be considered for identified need. Project details determining the location, routing, and permitting of solutions and working with jurisdictional and local communities can present other considerations that must be factored in during implementation. PSE does not believe the advisory group can represent these stakeholders effectively and the utility must be empowered to make the final solution decision that is best for all the customers. The advisory group responsibility must be further defined to prevent stakeholders from engaging for inappropriate reasons and to create an environment that can effectively slow or skew the planning process, creating risk or delay in delivering the benefits for customers of specific projects. PSE recommends an advisory group process that is different than PSE IRP Advisory Group (“IRPAG”) and supports a different name for the advisory group to make clear that the function and responsibility of this advisory group is different than the IRPAG.

PSE recommends removing the standalone definition of “Demand response” and incorporate the term demand response into the definition of “distributed energy resource.” For planning purposes, demand response is one of several types of distributed energy resources that can manage the level or timing of consumption. PSE also recommends removing the phrase “provide ancillary and other grid services” from the definition of “distributed energy resource” because this language moves beyond a clear tie to the energy supply resource needs. Solutions can solve multiple problems such as ancillary and grid services, but in isolation is not a need that should be applicable to this process. For planning purposes, any distribution energy supply resource solutions should be considered in the IRP relative to their aggregate impact on energy supply resources.

PSE recommends removing the term electric vehicles from the definition of “distributed energy resources” as it is not implemented for the purposes of providing an energy supply resource. It should be considered in general planning and load forecasting and not conflict with the intention

of the Commission's policy statement on Electric Vehicle Supply Equipment (UE-160799). From a planning perspective, PSE contends that the term distributed energy resources captures the value of electric vehicles, which could be timed charging in the near term or potentially utilized in some other way to meet a need.

Regarding the definition of "distribution system," PSE recommends changing the name to "delivery system" and striking the granular list of distribution or delivery system components and instead recommends the definition include only substations, power lines, and control systems. PSE is concerned more granular language in this definition implies this planning process include what are low value opportunities for a distribution energy resource such as replacing a pole or switch due to age or failure. Instead, this planning process should focus on high value opportunities that drive impact to energy supply resources.

In addition, PSE is also concerned the terms "transmission" and "distribution" in the definition of "distribution system" creates confusion and potential jurisdictional conflicts between the UTC and FERC or NERC. PSE recommends the draft rules be explicit that this rule and resulting process must not put a utility at risk of not meeting NERC compliance or FERC process adherence. Additionally, those known and future unknown FERC or NERC requirements should take precedence over the purpose of this planning rule. For example, transmission planning is typically subject to FERC Order 1000 and other rules governed by PSE's Open Access Transmission Tariff Attachment K that define how transmission information can be published, as well as processes for studying transmission impacts. Another example is NERC's brightline threshold for defining transmission is typically 100 kV and above. These different processes and definitions will confuse stakeholders when plans are included (or not included) in the process to comply with this rule. PSE appreciates the clarity in the draft rule language that system infrastructure interconnected to another utility or subject to regional evaluation processes should be excluded from this planning rule.

Regarding the definition of "distribution system plan" PSE recommends striking the word distribution and replace with the word "delivery" to incorporate more than just the distribution system and eliminate conflict with the terms "distribution and "transmission". PSE also recommends striking the phrase "improve or maintain reliability of the distribution system" because it is not a primary need in the context of addressing energy supply resources.

Regarding the definition of "Integrated resource plan," PSE opposes the Commission removing the phrase "to the utility and its ratepayers" because it creates a fog over whom the IRP is intended to benefit. At most, the Commission could change the word "ratepayer" to "customer" in this phrase. The final rule should maintain this phrase to ensure there is absolute clarity that the intent of the IRP is to find solutions and meet needs at the lowest reasonable costs "to the utility and its customers."

Regarding the definition of "Major distribution capital investment," PSE recommends revising the language to focus on "major energy delivery need" because the term "capital investment" assumes some level of planning to understanding solution costs or "capital investment" before that process has been initiated. PSE also recommends removing the term "scope" within the

definition of major distribution capital investment” because it’s a subjective term open to broad interpretation by stakeholders and those impacted by the solutions.

3. Planning Draft Rule 480-100-238(3) – Distribution System Plans

PSE recommends changing the name of this subsection from “distribution system plans” to “delivery system plans” as previously discussed. Additionally, it is unclear whether the concept of long-term planning and distributed energy resource integration included in this section of the draft rules are clear enough for the intent. The language of the long term planning section appears to be primarily about improving the planning process tools and data while the distributed resource integration section is primarily about enabling the integration of distributed energy resources through grid modernization. As already discussed, PSE proposes language changes that focus on needs and solutions identification as opposed to “investments” that imply a sense of certainty to stakeholders and customers. PSE cautions that solutions that may be published in the short term plan need to be vetted further through implementation, and that solutions may change from the published plan in response to conditions on the ground.

PSE recommends language changes to section 480-100-238(3)(a)(i) to simplify and better align with the focus of addressing delivery of energy needs (i.e. capacity needs) at the delivery system planning level and alternative solutions. PSE also recommends striking references to the circuits on the reliability report because it creates misalignment and an unnecessary distraction. PSE recommends removing the reference to considering “major facilities that are near the end of their expected useful life” as that phrase is vague and could imply that this planning process include low value opportunities for distributed energy resources such as replacing a pole or switch due to reliability based on age.

PSE recommends changes to section 480-100-238(3)(a)(ii) by removing the phrase “all commercially available” due to its vagueness and replacing with “technically viable options that have been proven to meet the needs identified” as a technology can be marketed but be known not to be mature enough to be reliable or available to meet the need in time.

PSE recommends minor changes to section 480-100-238(3)(a)(iii) that better reflect the fact that solutions as an outcome of this process may change once implementation begins, and discussing location specific solutions may not be possible due to other regulations such as FERC Order 1000 and OATT process.

PSE recommends changes to section 480-100-238(3)(a)(iv) to make clear that solutions in the delivery system plan relate to the broader focus on energy supply resources in the integrated resource plan. It is very important that distributed energy resource solutions remain focused on aggregate energy impacts.

PSE recommends changing the title of section 480-100-238(3)(b) from “Long term planning and system improvement” to simply “Planning Process Improvement Plan”. PSE also recommends removing undefined terms in this section such as “operations”, “optimal”, and “equal footing” for clarity.

PSE recommends simplifying and clarifying language changes to sections 480-100-238(3)(b)(i) and 480-100-238(3)(b)(ii).

PSE recommends removing section 480-100-238(b)(iv) as part of these IRP rules. PSE appreciates that proposals relative to increasing tools and data must be defensible through a rate case proceeding, but it is unclear what the Commission's actions would be in this rule relative to approving business cases and plans. The inclusion of business cases in a planning exercise will only be valuable if the Commission plans to approve, reject, or modify the business case as part of its evaluation of the plan. PSE does not support this direction, and believes a rate proceeding is the proper venue for evaluating business cases. However, PSE does support the Commission's general acknowledgement that more tools and data will require more investment and support.

PSE supports the inclusion of the advisory group relative to gaining alignment with the planning process and future planning process improvements as included in section 480-100-238(b)(v). With agreement on tools, assumptions, methodologies, and scenarios, the outcomes will be better supported by the stakeholders and UTC which provides a clear line where meaningful engagement with an advisory group begins and ends. As changes occur to these considerations and agreements then the advisory group can be reconvened effectively. PSE would support open meetings to gather feedback on outcomes in a different way than utilizing the advisory group as there will be disagreement on the outcomes for reasons driven by unanticipated agendas. It will be important to not undermine the advisory group and planning process that has been agreed upon as the best planning process to deliver the best solutions. The Commission should recognize that even with these rules, increased transparency, and advisory inputs, there will be opposition that cannot be satisfied.

PSE recommends language changes to section 480-100-238(3)(c)(i) that will be more aligned with evaluating and enabling infrastructure to meet needs. Planning should remain focused on evaluation of alternatives for that specific need.

PSE recommends removing section 480-100-238(3)(c)(ii) as a discussion of tariff and rate design should remain separate to minimize unanticipated bias in the planning process.

PSE recommends clarifying language changes to sections 480-100-238(3)(c)(iii) and 480-100-238(3)(c)(iv) so that utilities and stakeholders can have clearer expectations around these elements of enabling distributed energy resource integration.

PSE recommends adding an additional section (i.e. 480-100-238(3)(c)(iv) in Attachment A) to bring visibility to the system and operating upgrades needed to allow a utility to more effectively meet the timing of customer owned distributed energy resources. An aging system means that it becomes exponentially more difficult to respond to infrastructure needs after customers have added distributed energy resources. PSE suggests a proactive approach looks at the aging system needs now to prepare for future distributed energy resource integration.

Questions

1. **Should the Commission propose parallel natural gas distribution planning rule language similar to the draft rules in WAC 480-100-238 for electric utilities, with the exception of subsection (3)(c) “Distributed energy resource integration”?**
 - a. **How should distribution system planning rule requirements for WAC 480-90-238 be similar to that of the electric utilities?**
 - b. **How should the requirements be different?**

PSE Response

PSE is not opposed to a proposed parallel natural gas distribution planning rule, however a better approach might be to wait until more distributed alternatives are available on the gas side. Currently, the needs of natural gas customers and its delivery system as well of the types and maturity of distributed energy resource options are significantly different than that of an electric system. At this time, it is likely that the result of the planning effort may not support any distributed energy resource type solutions. PSE cautions that creating a rule for the sake of process is costly for ratepayers. That said, PSE’s planning process is similar for gas and electric and believes the transparency through the electric rules will be beneficial and most meaningful for now. PSE would suggest more discussion relative to a natural gas planning rule is the best approach for now.

2. **In the draft rule, electric utilities would be required to form a separate advisory group to assist the utility as it develops its distribution system plan, in addition to the usual IRP advisory group. Regarding the distribution system advisory group:**
 - a. **Should the distribution system advisory group be required, or should it be optional?**
 - b. **What should be the extent and scope of the distribution system advisory group?**
 - c. **Should the advisory group review the modeling methods, inputs, economic assumptions, cost estimates, and other factors that affect the selection of best options, or just review the results of transmission and distribution analysis?**
 - d. **Is the draft description of the distribution planning advisory group’s membership appropriate?**
 - e. **Is a distribution advisory group necessary for the natural gas utilities? If yes, what should be the extent and scope of the advisory group?**

PSE Response

PSE sees value in what has been included in the draft language. However, a utility should have the option to establish an advisory group if and when it is appropriate based on their own uniqueness as one size does not fit all. PSE will endeavor to establish an advisory group but as stated above believes it is very important to define what the group advises on and membership makeup,

participation protocol, and requirements such as information protection in order for the group to progress in an effective manner. Unending input forums and conflicting agendas cannot be tolerated if a utility is to make timely decisions necessary to maintain the delivery system. PSE believes that for the advisory group to be most effective, its responsibility should not extend into implementation of specific solution types and locations, and should be unbiased by distributed energy resource vendors. Finally, Commission staff should play a significant committed role in these utility advisory groups to clarify expectations and drive efficiency in future prudence reviews.

The advisory group should advise on the process and work toward agreement on assumptions relative to cost ranges, value methodology, modeling assumptions and scenarios, and alternative maturity and technical viability assumptions. Agreement on the basis of the planning process should result in agreement on the outcome without introducing bias relative to a “desired” result or locational influence. PSE does not believe that the group should agree on the outcomes of the planning process nor the short term plan for reasons already mentioned.

PSE stresses that other rules such as reliability reporting, PURPA interconnection processes, and regional process create a challenge to ensure no conflict with those expectations making this transparency, timing of plans and adherence to published plans unlikely at times.

PSE believes the one advisory group could suffice at this time for any planning process discussion relative to the natural gas side of the business.

3. **The draft rule uses a new term, “major distribution capital investment,” which is not tightly defined by a dollar value or otherwise. This definition is intended to provide separation of routine traditional maintenance of poles and other components from more significant capital expenditures that often have the potential for more than one solution. In those cases, a major distribution capital investment would call for analysis of all potential distributed energy resource options that satisfy the identified distribution need.**
 - a. **Would it be useful to include a dollar limit in the definition of “Major distribution capital investment”? For instance, the rule could state a cutoff using an estimated capital cost of over \$1 million. Are there other, better, criteria that the Commission should consider?**
 - b. **Is there a need to define a major distribution capital investment for natural gas utilities? If yes, should the criteria be the same as for electric utilities? How should it be different?**

PSE Response

PSE does not support a dollar threshold at this time or the language of “capital investment”. The lens of dollar investment assumes solution knowledge already exists and investment cost will vary widely based on type of solution, location, and other requirements that come during implementation making it hard to use as an input criteria for this process. A utility should have the flexibility of developing transparent criteria as their process evolves through implementation

of this rule making with a focus of high value opportunities and not low value or low probability distributed energy resource solutions. PSE believes the advisory group will participate in this evolution of criteria. PSE would not support a threshold of \$1M because in today's environment that is a small need and the Commission should consider the cost this process will add to customer rates. Before setting a threshold, the cost of these processes should be measured and considered seriously in determining applicability.

PSE does not support a definition of major distribution capital investment for natural gas utilities for the reasons given already.

- 4. Distributed energy resources include a broad suite of evolving technologies. Electric utilities are learning through experience and experimentation how to efficiently integrate and value these resources. In recognition of this changing landscape, the Commission wants to encourage significant and creative progress in the prudent adoption and implementation of distributed resources without being too prescriptive in rule. Given that context:**
 - a. Is there a recommended structure for organizing the distribution system plan that allows future flexibility as well as engendering significant near-term progress?**
 - b. Is there specific language that would optimize the combined goals of flexibility and timely implementation?**
 - c. How should pilot and demonstration projects be encouraged in rule?**
 - d. What criteria should the utility use to evaluate when there is a need for a pilot or demonstration project as opposed to programs ready for full-scale implementation?**

PSE Response

PSE does not have a recommended structure in mind, but suggests that the Commission issue guidance in its IRP rulemaking order for utilities to produce a roadmap that guides implementation of these rules. This guidance would be useful and provide each utility the necessary time and flexibility to implement the rules and offer the opportunity to highlight near-term actions as desired. Each utility will be at a different place and could implement different pieces faster or slower. Full implementation is likely five or more years out, but the roadmap will allow the Commission to see the milestones to implementation. PSE envisions a process that starts with the established IRP (2019 IRP) process that develops and refines value methodologies for distributed energy resources and will create greater granularity of conservation potential and impact on load. These will be inputs to the first delivery system planning process and the development of the first short term plan targeted in 2020.

The short term plan will provide aggregate distributed energy resource impact back to the next IRP cycle. The detail and processes will continuously improve from that first integrated cycle. In the meantime, PSE will standup an advisory group which will provide input on the roadmap

and begin foundational education on modeling and assumptions. For a view of near term progress, PSE can include detail regarding its ongoing and future pilot programs, transparency of ongoing customer-owned interconnection work that is being leveraged to support the processes being considered in this rule, and its work reviewing 3-4 areas as committed in the 2017 IRP.

PSE strongly believes the devil will be in the detail in implementing these rules and urges the Commission to staff and support strong engagement with utilities in these early process days so that progress is effective and expectations become apparent.

Pilot and demonstration projects should be encouraged. In many cases, pilots are not driven by lowest reasonable cost tests but instead to facilitate an understanding for future applicability, enablement and scalability that can be successful. Some pilots will prove values as expected while some may demonstrate that certain applications are not scalable until new foundations are set. The Commission's support of pilot projects is extremely important.

The criteria for each pilot may be unique, but some preliminary themes would be testing value assumptions, reliability, technical functionality, customer engagement tests and dependability, revenue or cost recovery mechanism support, ability to incorporate into routine planning process, constructability, jurisdictional and community perceptions and considerations. These considerations demonstrate that utilities should have the flexibility and leeway to decide when pilots are needed, how to implement, and how to decide full scale implementation. Evolution of process may eventually enlighten the Commission on standardized criteria.

5. **Recognizing that utilities are at various stages of modernizing their distribution systems, should the rule identify specific assumed fundamental requirements for enabling a modernized grid, such as:**
 - a. **a two-way distribution communication system,**
 - b. **a distribution management system (DMS) that provides centralized and automated monitoring and control of the utility's distribution system,**
 - c. **a distributed energy resources management system (DERMS) that aggregates, monitors and controls distributed energy resources as dispatchable resources, or,**
 - d. **Other physical infrastructure and software needed to manage and control a modernized grid?**
 - e. **Are the fundamental requirements the same for electric and natural gas utilities? If no, what fundamental requirements should be used for natural gas utilities?**

PSE Response

The foundational requirements mentioned naturally surface in the section relative to distributed energy resources integration and PSE believes there is value in creating a transparent plan to demonstrate what needs to occur before achieving perceived values or expectations. PSE has suggested section 480-100-238(3)(c)(v) as a result.

- 6. When utilities submit biennial energy conservation reports to the Commission, they are required to provide an independent third-party evaluation of their conservation program achievements (See WAC 480-109-120(4)(b)(v)). Should a similar periodic independent review and evaluation of distribution plan results be required? If not, please explain why this should not apply.**

PSE Response

PSE does not believe an independent third party evaluation is necessary or valuable. Advisory group support of the assumptions and planning processes should be adequate. A quality control process may be worth considering if that is the intent of this question.

- 7. Should the distribution plan conclude with an action plan? If so, what should be the time horizon for the action plan?**

PSE Response

There may be benefit to an action plan regarding the planning process improvements plan. However, PSE does not see value in an action plan relative to the short term plan or enabling distributed energy resource integration, but sees value in updating progress on those plans from cycle to cycle. PSE cautions on the expectation that any of the plans produced by this rule are static. Plans will be pursued but may change as more information is considered through the implementation.

- 8. For the organization of WAC 480-100-238, would it provide greater clarity to reorganize the rule into smaller sections, maintain the same organization and numbering structure, or add a new rule section?**

PSE Response

No, the rule is sufficiently organized. PSE has provided edits in effort to provide greater clarity and make clear that the goals of these rules are to provide meaningful input to the IRP. As suggested, PSE sees value in a section that allows a utility to establish a roadmap towards implementation, as success will take thoughtful discussions over time and space. At a minimum, the Commission should not expect utilities to produce meaningful plans in parallel with the 2019 IRP cycle, but should look to 2020. In addition, these rules should be forward-looking and not be retroactive to projects for which the planning process is concluded as this would increase costs, jeopardize success in timely meeting a known need, create rework, potentially sunk costs, and possible waste should solution alternatives not change. Through the planning process development, planning process conclusion will become evident. Finally, PSE expects to establish

criteria for reviewing plan outcomes based on certain assumption changes through the implementation process such as load growth.

Please contact Nate Hill at (425) 457-5524 or nate.hill@pse.com for additional information or questions regarding this filing. If you have any other questions, please contact me at (425) 456-2142.

Sincerely,

/s/ Jon Piliaris

Jon Piliaris
Director, Regulatory Affairs
Puget Sound Energy
PO Box 97034, PSE-08N
Bellevue, WA 98009-9734
425-456-2142
Jon.Piliaris@pse.com

cc: Lisa Gafken, Public Counsel
Sheree Strom Carson, Perkins Coie