

November 2, 2016

VIA ELECTRONIC FILING

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

RE: Docket UE-161024—Pacific Power & Light Company’s Comments

In response to the Notice of Opportunity to File Written Comments issued by the Washington Utilities and Transportation Commission (Commission) on September 6, 2016, Pacific Power & Light Company (Pacific Power or Company), a division of PacifiCorp, submits the following written comments.

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?**

Pacific Power appreciates the opportunity to provide comments on the scope of this rulemaking. Staff has identified a broad range of important issues for review, including the process for request for proposals, avoided costs, conservation measures, and energy storage. Pacific Power understands that addressing these issues is a significant undertaking. At this time, the Company believes that the scope of this rulemaking is sufficiently broad and has not identified any other issues or topics that should be addressed. Due to this broad scope, to the extent possible, Pacific Power recommends that Staff attempt to keep this rulemaking as narrowly tailored as possible to address the issues identified.

The Company urges Staff to use a streamlined process to address the numerous and wide-ranging issues identified in this rulemaking. Pacific Power recommends that the Commission use the December 7 workshop to focus the scope of the rulemaking on the key issues identified by Staff. After that workshop, Pacific Power looks forward to the opportunity to comment on updated draft rules, and to work with Staff and stakeholders to identify limited changes to the rules.

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?**

Considering the broad and diverse topics that need to be addressed in this proceeding, Pacific Power recommends keeping the energy storage proceeding separate from this rulemaking. The Company participated in the Commission's August 25, 2015 recessed open meeting on energy storage and provided comments in that proceeding. The Company will continue to engage with the Commission and staff in that process.

C. Request 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?**

Pacific Power believes changes to the RFP rules would be beneficial. As Staff noted, Pacific Power has requested and received waivers of certain RFP requirements within WAC 480-107 following its recent IRPs. In prior waiver requests, Pacific Power has explained that it has procurement processes that are tailored to efficiently and effectively acquire each resource identified in its three-year timeframe. In addition, requiring issuance of an all source RFP with every two-year IRP cycle would be extremely burdensome on both the utilities and the bidders, and would fail to provide commensurate value or benefits.

Pacific Power recommends that the Commission revise the rules to allow flexibility in the post-IRP procurement processes. Pacific Power recommends revisions to the rules that would allow utilities to describe the type of resource procurement effort it will use to procure resources in the IRP preferred portfolio. The procurement process could be identified in the IRP action plan and become part of the IRP acknowledgement process. Alternatively, the Commission could establish certain parameters apart from filing an IRP that might trigger a requirement to issue an RFP. For instance, neighboring states have established resource size and term parameters that trigger the need to issue an RFP. If this approach is pursued, it is important that revisions to the guidelines allow utilities to request a waiver of RFP requirements, as allowed under the current rules, to ensure there is flexibility for utilities to take advantage of favorable market conditions or time-sensitive resource acquisition opportunities.

- 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?**

As noted above, Pacific Power has procurement processes in place to efficiently and effectively acquire any resources as outlined in its IRP and on a timely basis. Pacific Power believes its

processes are the most efficient mechanism, from the perspective of the Company and bidders, for resource procurement activities. Defining the RFP requirement more broadly would enable the utilities to utilize the most efficient and cost-effective processes as necessary based on the resource need identified. The Company should be able to utilize procurement processes that are specifically designed, by type of resource, to achieve the maximum benefit for Pacific Power's customers.

- 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?**

The Company believes there is potential for compromise on this issue, which is best addressed during the planning process and before the procurement process. The Company does not believe that an RFP, issued in response to an IRP showing near-term capacity needs being met with market purchases, is the right step in the process to address market risk. The Company has a robust and transparent public input process that encourages input from stakeholders and commissions both before and after each IRP is filed. Pacific Power is actively engaged in its public input process for its 2017 IRP and is proactive in managing and addressing these concerns as part of its public input process. In fact, in order to address Staff's concerns from the 2015 IRP, the Company agreed to provide additional detail and evaluation of market risk in its 2017 IRP.

- 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?**

Pacific Power has competitive procurement processes in place to meet its conservation commitments associated with Washington I-937 (WAC 480-109) including the conservation commitment associated with the recently approved decoupling mechanism. These processes are designed to secure high quality, cost-effective delivery of the demand side management (DSM) programs, and where possible, to realize cost savings from procuring these services on a system-wide basis.

The typical process involves issuing an RFP, where competitive proposals are solicited from two or more qualified suppliers. Technical performance, pricing, and other factors are evaluated utilizing predetermined evaluation criteria designed to determine best value. The formal competitive solicitation process is documented and controlled in accordance with established procurement procedures. Program delivery services are typically procured and contracted for on a three-year term with an option to extend for an additional two-year period. The additional two-year extension allows the parties to extend the contract if there are no issues with the services

being rendered without impacting the cost to the program by perpetually stopping and starting with a new contractor.

Because the Company relies on Commission-approved tariffs and processes in place to procure conservation resources in a holistic manner, conducting an additional RFP process for these resources would unnecessarily create additional administrative burden and cost for customers. This would be the same whether it was tied to the IRP cycle or the biennial conservation planning cycle. The Company does not believe that tying its procurement processes to a rigid biennial schedule will provide any additional value. Pacific Power therefore recommends the Commission allow flexibility in the timing of conservation procurement processes to ensure costs for programs can be as competitive as possible.

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?**

Pacific Power appreciates the Commission's efforts to provide greater transparency into the utility's avoided costs. However, the Company does not agree that including the avoided cost in the IRP would add value, in part because the Company already files its avoided cost prices with the Commission in a separate proceeding, typically on an annual basis. Additionally, the Company has concerns with requiring utilities to report their avoided costs in the IRP document, particularly due to the mismatched timing and process between these two proceedings.

The Company's avoided cost prices applicable to qualifying facilities (QFs) have been made available to the Commission and parties in the Company's avoided cost filings. In past filings, the Company included documentation supporting its estimated avoided costs, including references to information published in its IRP. Pacific Power believes the current process provides adequate transparency into the Company's avoided cost prices.

The Company is concerned about the mismatched timing and process between its avoided cost filing and the biennial IRP. As noted above, the Company has filed its avoided cost annually. It would be problematic to expect the Company to file its avoided costs annually but also require the Company to report its avoided costs in the biennial IRP. It is unclear whether the Company would be required to include its most recently filed avoided cost prices in the IRP, or whether filing an IRP would necessitate an additional update to the published avoided cost prices.

As a multistate utility, Pacific Power plans and operates its entire six-state service territory as a single system. Each state has adopted unique methods and timelines for calculating avoided costs. Because the Company's IRP is a planning document for the Company's six-state service territory, it would be problematic to require the Company to include its Washington-specific avoided costs in that document. The Company files its avoided cost prices with other state commissions, and not only do these avoided cost prices vary state-by-state, but the timing of filing and approval of these prices may vary significantly. For these reasons, the Company does not believe that the six-state IRP document is the proper vehicle to report its state-specific avoided cost prices.

Calculation of a utility's avoided cost prices is specific to the characteristics of each utility; therefore, the Company does not believe that it would be appropriate to create a generic avoided cost calculator. Each utility should have the flexibility to calculate its avoided cost prices based on the unique characteristics of its system.

At this time, avoided costs are not used in determining Pacific Power's incremental cost of resources used for complying with the state's renewable portfolio standard.

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?**

IRP modeling has not advanced in a way that it would make sense to evaluate transmission and distribution as energy supply resources in the IRP long-term planning process. The biennial nature of an IRP is also problematic given evolving reliability requirements of the North American Energy Reliability Corporation that may require investment outside of IRP cycles or to meet compliance requirements associated with the Open Access Transmission Tariff to serve wholesale transmission load. Pacific Power includes major transmission investment in its sensitivity cases in the IRP and updates new technologies in its supply-side resources table. In the 2017 IRP, Pacific Power also plans to run a portfolio specific to evaluating energy storage and flexible resources. It is important for utilities to maintain flexibility in their long-term resource planning to update and study evolving resources and technologies.

- 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?**

Electric vehicle penetration is considered in Pacific Power's load forecast data for its IRP process and private generation is studied by a third-party and used to reduce the load forecast for IRP purposes. Utility scale distributed generation such as energy storage technologies are included as available supply-side resources for the IRP portfolio optimization process to select. Pacific Power believes it is modeling these new and developing technologies appropriately.

- 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?**

While the requirement to file biennial smart grid reports under WAC 480-100-505 sunsets in 2016, Pacific Power currently provides a concise report of smart grid activities as part of its IRP. It is unclear whether the Commission finds value in the separate biennial smart grid report, but the Company would not be opposed to extending the biennial filing requirement.

- 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?**

N/A to Pacific Power

- 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?**

Pacific Power currently performs distribution system planning, which is a process used to periodically examine a selected portion of the primary distribution system. The study is used to identify distribution system deficiencies and evaluate potential solutions to address the deficiency. The challenges that would be associated with changing the current methodology would depend on what the expected outputs and frequency of study that would be considered “full scale distribution system planning”. The process currently reviews solutions that are considered “traditional” and “alternative.” An example of the template to evaluate “alternative” solutions was included in the biennial smart grid report.

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?**

Pacific Power addresses highly individual and developing areas of study, such as energy imbalance market (EIM) and battery storage, as inputs in its IRP modeling process. For example, energy storage and other flexible resource technologies are considered in Pacific Power's IRP as part of supply-side resources available for portfolio selection over the 20 year study period. In addition, Pacific Power is running a specific scenario in its 2017 IRP to evaluate a portfolio that includes a selection of flexible resources. The EIM is a real-time fifteen minute dispatch market that does not affect the selection of resources for long-term resource planning purposes. The benefits however, of the EIM are captured as a benefit or offset to reserve requirements included in the IRP model. This value is considered as part of Pacific Power's Flexible Capacity Reserve Requirements Study for its 2017 IRP. While modeling tools may exist for purposes of sub-hourly analysis, they are typically limited and not functional for a long-term planning study. For long-term planning purposes, hourly granularity models continue to offer the optimal balance between complexity, detail, study length and performance.

- 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?**

Pacific Power is required to conduct long-term resource planning through its IRP over a 20-year study period. Pacific Power is not aware of any sub-hourly modeling tool that would enable resource optimization and the level of cost / risk assessment available under current hourly modeling tools. The practicality of performing sub-hourly optimizations relies not only on application design, but also on the sophistication of what is being modeled, hardware and the availability of sub-hourly inputs.

In addition to limited modeling tools, sufficient input data must also be available in sub-hourly granularity. This implies the eventual need for sub-hourly forecasting of inputs such as market pricing, load and wind forecasts, etc. As sufficient sub-hourly data is not available, it again becomes beneficial to consider sub-hourly benefits in separate assessments used to inform the IRP, as done by Pacific Power described above.

G. Procedural Improvements

- 1. Should the commission clarify its treatment of confidential information in IRP and RFP dockets? If so, how?**

Pacific Power would be willing to work with the Commission and other parties on these issues as necessary. Pacific Power would be interested to learn if other parties would like additional clarification of confidential treatment.

- 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?**

Pacific Power has a robust and transparent public process that encourages input from stakeholders and commissions both before and after each IRP is filed with the Commission. The Company therefore does not believe it is necessary for the Commission to outline more specific requirements for public involvement.

As a multistate utility, Pacific Power is uniquely situated because it does not undertake planning and procurement decisions on a state-by-state basis, but instead plans and operates its entire six-state service territory as a single system. As part of the process of managing its six-state system, Pacific Power files its IRP on a biennial basis with each of its state utility commissions.

Pacific Power's IRP is developed as part of a well-vetted public process where the Company solicits and addresses comments from Commission staff and stakeholders. Pacific Power's IRP public process includes numerous public input meetings and technical workshops spanning roughly a ten month period leading up to filing of the IRP and coordinated among its six states and diverse list of stakeholders. Through these meetings and workshops, along with direct feedback to the Company, participants have an opportunity to review and influence the Company's IRP model assumptions, studies, methodologies, and results. Commission staff and other Washington stakeholders have stated their satisfaction in the depth, flexibility, and quality of Pacific Power's IRP public process.

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?

Pacific Power uses a proprietary model for its resource planning. Unlike some of the other models that the Company uses in other regulatory proceedings, the Company is unable to unilaterally provide access to the modeling software under its contracts with the vendor. If the Commission wishes to allow stakeholders to independently access the modeling software, parties would need to seek separate agreements with the vendor. In addition, proper use of the modeling software would require a significant amount of training and understanding of the Company's unique system limits.

To circumvent some of these complex issues, Pacific Power has historically provided voluminous workpapers in the form of both confidential and non-confidential data disks to provide as much transparency as possible.

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.

Pacific Power appreciates Commission staff's efforts to simplify and clarify the IRP rules, and looks forward to participating in the workshop scheduled for December 7, 2016. Further, Pacific Power would like to take this opportunity to express appreciation for the Commission staff's active participation in the Company's IRP stakeholder process and public input meetings.

Washington Utilities and Transportation Commission

November 2, 2016

Page 9

Please direct inquiries to Ariel Son, Regulatory Projects Manager, at (503) 813-5410.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Bryce Dalley". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

R. Bryce Dalley
Vice President, Regulation