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July 22, 2022

VIA ELECTRONIC FILING

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Washington Utilities and Transportation Commission
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RE: Advice 22-03—Demand Response Programs

In accordance with RCW 80.28.050 and WAC Chapter 480-80, PacifiCorp d/b/a Pacific Power & Light Company (PacifiCorp or the Company) submits the following tariff sheet applicable to PacifiCorp's electric service in the state of Washington. PacifiCorp respectfully requests an effective date of August 26, 2022.

Original Sheet No. 106-1

Schedule 106

Demand Response Programs

Purpose

PacifiCorp requests authorization to make demand response offerings available to Washington customers. With this filing, the Company proposes the following:

- Introduce a new broadly enabling Schedule 106 for Demand Response Programs.
- Introduce an irrigation demand response program using the provisions of Schedule 106.
- Position irrigation demand response program costs for recovery through a deferral account.

I. Demand Response is a Resource in the Clean Energy Implementation Plan

This filing is part of the continuing implementation of resources identified in the 2019 IRP and further outlined in the actions specified in the Clean Energy Implementation Plan (CEIP) as part of the Company's compliance with the Washington Clean Energy Transportation Act (CETA).

The Company's demand response request for proposals (RFP) issued on February 8, 2021, was a key component of identifying resource types and costs that were modeled and used to establish the demand response target. The Company emphasized in its RFP that bidders include programs in Oregon or Washington service areas and products that achieve at a minimum 3 megawatts (MW) in three years, scalable to 25 MW over five to 10 years. The Company received bids from 18 firms covering multiple programs for multiple sectors. RFP bids were scored based on cost, volume, and equity criteria and the top bid for each program category was selected for inclusion into the 2021 Integrated Resource Plan (IRP) model.

Each program category represents a discrete set of customer end uses, e.g., irrigation or residential water heating. Modeling in the IRP reflects the top bid because all bids within a program category rely on the same pool of customers. Costs were characterized via RFP bids and the Conservation Potential Assessment (CPA) and compared against supply side resources. The modeling identified a need for demand response not just in the short term, but throughout the planning horizon (2021–2040) of the Company’s 2021 IRP preferred portfolio. Demand response needs for Washington were further clarified in the Company’s CEIP¹ where 37.4 MW of demand response were targeted through 2025.

The proposed program development strategy for demand response is outlined in Chapter 3 of the CEIP² and this filing is designed to support and align with that strategy. The strategy reflects that the Company does not currently offer any demand response programs in Washington. Specifically, prior to filing demand response programs, PacifiCorp will share proposed program characteristics, budgets, implementation and evaluation strategies, and cost-effectiveness methodologies to facilitate feedback and guidance of stakeholders, in particular relying on the DSM Advisory Group (and consultation with the Equity Advisory Group). These meetings, in conjunction with email communications in which supporting information is shared, will be pivotal in helping the company develop programs and refine assumptions. Feedback will then be incorporated into a draft filing which will be shared with the DSM Advisory group to gather additional feedback. Programs, such as the irrigation program, will be filed independently to allow for flexibility and increase efficiency in the launch of programs.

II. Schedule 106 for Demand Response Programs

Since the proposed actions and resources cover multiple customer types and programs, the Company is proposing to enable a broad demand response tariff that will support multiple programs which are market driven. A regulatory framework that provides a fast and flexible change process while at the same time enabling transparent customer information will benefit all stakeholders. The proposed Schedule 106 outlines the basic program elements including customer eligibility, the possibility of a program administrator for program delivery, incentive levels that may change, and the change process. Specific details such as eligibility requirements, dispatch notifications, change process, and incentive levels for each program will be included on the program website section of the Company website.

Schedule 106 is intended to enable multiple demand response programs. Each new demand response program will be filed with the Commission and will include the information found on the website, a deferral request, cost effectiveness, the proposed evaluation and reporting schedule, and other details that may be required to support an approval request.

The Company expects to review each program delivered under Schedule 106 annually for performance and the need for any changes. The Company will generally consider changes to its programs annually, though a program that is performing well may not require annual changes.

¹ Available online https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/ceip/PAC-CEIP-12-30-21_with_Appx.pdf. See pp 22-23 for demand response target and calculations.

² Ibid, p. 83

Conversely, the Company may propose changes more frequently than annually if there is compelling market data. To initiate a change using this process, the Company will follow the process outlined in Attachment D, presenting information to the DSM Advisory Group (and consult with the Equity Advisory Group), and seek comments prior to making changes. The Company will respond to stakeholder's comments, including reasoning, and any proposed resolution to issues raised and provide back to the stakeholders. The Company will clearly post the notice of change(s) to the program website with at least 45 days advance notice. The change process anticipated for programs administered under this Schedule is similar to the process utilized by the Company for energy efficiency program design and many of its incentive or requirement changes. The Company will not use the proposed change process to make changes to Schedule 106, remove or add pilots/programs to Schedule 106, as those substantive changes will require filing for approval.

III. Irrigation Program

PacifiCorp proposes to establish a demand response program for its Washington irrigation customers under proposed Schedule 106, as described in the following sections A through H.

A. The Evolution of PacifiCorp's Oregon Irrigation Program and the Proposed Washington Program

PacifiCorp's 2015 IRP selected capacity resources from irrigation load management in Oregon beginning in 2022. The Company requested authorization in 2016 to implement a pilot irrigation load control program for irrigation customers in the Klamath Basin area to investigate whether the existing Idaho and Utah program design would be effective in Oregon. Much of the Klamath Basin irrigation load is subject to water restrictions and/or scheduling challenges not encountered in Utah and Idaho, where the Company also delivers irrigation load control programs, and the Company wanted to test for grower acceptance, barriers to participation, and cost to deliver within the Klamath Basin area prior to 2022.

The Company proposed running the pilot program for five years to allow sufficient time for growers and water districts to work through these scheduling and coordination issues and to investigate changes to pumping operations to facilitate participation. The proposed pilot duration was intended to provide the Company and its irrigation customers the time needed to evaluate the program to identify any necessary modifications before the 2022 resource need from the 2015 IRP.

Consistent with the 2016 filing, the Company filed annual reports for each program year by March 31 of the following year. The 2018 (year three) report filed on March 29, 2019 included the review per the staff memo, the highlights of which are summarized below:

- Expanded to include irrigation customers beyond the Klamath Basin, but target areas with potential to defer traditional investments in sub-station upgrades. Stopped short of expanding to all customers as an intentional tactic to help manage delivery costs and provide for a sustainable delivery model for the Company and its third-party delivery partner.

- Expanded the last daily dispatch hour (from 8:00 p.m. to 10:00 p.m.); days were expanded to all days (including weekends and holidays) and weeks (August 15 to September 1) during which events can be called.
- Added an option for a higher incentive for a shorter event notice period.
- Permitted customers with large loads, demonstrated technical challenges to the installation of load control equipment and alternate in-place methods to implement control to participate in events by manually controlling loads and utilize Advanced Metering Infrastructure data to assess availability and performance.
- Extended the pilot end date to 2023. Maintained the pilot status to permit the continued focus on innovation.

Following the 2021 program season, the Company filed to expand the pilot to all Oregon irrigation customers.³ The requested expansion was based in part on the selection of the irrigation resource within the 2021 IRP and participating customer feedback.

The Company has incorporated learnings from delivering the Oregon program into its program design and implementation in Washington. The first five years of the Washington irrigation selections from the 2021 IRP are provided in Table 1.

Table 1 - Washington Irrigation selections in the 2021 IRP

	2022	2023	2024	2025	2026
Incremental MW (gen)	3.2	6.3	3.3	0.4	0.4
Cumulative MW (gen)	3.2	9.5	12.8	13.2	13.6

B. Irrigation Program Period, Size and Grid Services Provided

The Company is proposing an ongoing irrigation demand response program without an end date to align with ongoing capacity needs in 2021 IRP period. The day-ahead and hour-ahead notice options provide capacity and energy grid services to the Company and are included in the impacts included in Table 2. The initial design could also provide regulating reserves if customers elect to participate with a 22.5-minute notification. Customer acceptance of this shorter notice is unknown at this point and, as a result, no impacts are included in Table 2. Cost effectiveness results and evaluations findings will inform future changes which would be managed through the change process enabled in Schedule 106.

³ Advice 22-004 filed March 28, 2022. Approved May 5, 2022.

Table 2 - Irrigation program impacts and participation estimates⁴

	2022*	2023	2024	2025	2026
Incremental MW ⁵ (gen)	6.0	5.7	0.4	0.4	0.4
Cumulative MW (gen)	6.0	11.7	12.1	12.5	12.9
Participants (inc. sites)	150	150	25	25	25

*Note: Participation in 2022 will vary depending on when the program is approved. Customers can enroll the approved program anytime during the year, including after the end of the 2022 season. At this point in the year, any 2022 participants and enrolled MW should be considered as available for 2023 season (and additive to the 2023 impacts in Table 2).

C. Delivery of the Program

PacifiCorp has selected Connected Energy to deliver the program. This is the same company who started delivering the Oregon pilot program in 2018 and was the successful bidder in the 2021 Demand Response RFP (described above) to deliver these services for PacifiCorp's customers in Oregon and Washington.

Connected Energy is responsible for the installation, operation and maintenance of the irrigation load control devices, dispatch of the devices as directed by the Company, customer participation, customer service, and issuance of customer incentives. The Connected Energy equipment also provides participating customers with near real-time access to energy usage data available through a dynamic web portal.

The irrigation program is part of an overall equity approach by PacifiCorp, and highlighted in the CEIP, to make demand response programs available to all customers classes. The program will be focused on enrolling pumps with the highest connected loads during the available dispatch hours in the dispatch period with incentives differentiated only by the dispatch notification option. Connected Energy is a small business with veteran and non-white full time staff members that will utilize local electrical contractors for equipment installations.

The irrigation program will operate as a complement to the non-residential time of use pilot⁶ or the time of use pilot offer within Schedule 40.⁷ To ensure the three offers are positioned to deliver useful information about grower acceptance of the incentive offers and their ability to shift usage in response to these offers, customer participation by meter will be limited to the irrigation demand response program, the Schedule 29 time of use pilot, or the time of use pilot offer in Schedule 40. A meter may not enroll in more than one offer. This requirement will be included in Attachment B.

⁴ Represent expected impacts and costs but ramping may occur more quickly than presented. If additional eligible MWs and participants are enrolled, the resultant totals may exceed totals presented.

⁵ MW volumes represent maximum capacity available during a given year.

⁶ Schedule 29 filed in UE-210532 effective February 1, 2022.

⁷ Schedule 40 filed in UE-210402 effective May 1, 2022

D. Irrigation Program Costs

Estimated costs for the irrigation demand response program are provided in the Table 3 and include vendor costs, customer incentives, customer outreach/advertising, evaluation, measurement and verification (EM&V), and utility staffing costs directly attributable to managing the program. These costs include the impact of all customers participating with hour ahead notice and delivering the capacity impacts provided in Table 2.

Table 3 - Irrigation Program Costs

	2022	2023	2024	2025	2026
Total Program Costs ⁸	\$ 655,419	\$ 914,958	\$ 667,137	\$ 687,462	\$ 708,208

E. Cost Effectiveness

The Company proposes to use of the 2016 California Demand Response Protocol for estimating cost-effectiveness of programs. A Total Resource Cost perspective will be provided prospectively when seeking Commission approval for a new demand response program and retrospectively as part of the annual reporting. The cost effectiveness prospective provided will be similar to information on energy efficiency programs in Washington.

Cost effectiveness for the irrigation demand response program is provided as Confidential Attachment A. Cost effectiveness scenarios include the entire program being operated with an hour-ahead notice and the entire program being operated with day-ahead notice, both of which provide capacity and energy grid services. A third scenario estimates potential incentives for a 22.5 minute or less dispatch providing regulation reserve benefits. These scenarios are provided to illustrate the high and low value of these grid services and to reflect some uncertainty around which options customers might initially select. The day ahead, hour ahead, and reserve program scenarios are cost effective from the utility cost and total resource cost perspectives when ten years of benefits and costs are compared. First year, 2022 benefits are slightly less than first year costs which include start-up expenses. The subsequent nine years for each scenario are cost effective under both cost tests. A summary of cost-effectiveness results over a ten-year horizon are summarized below in Table 4.

Table 4 - Irrigation Program Cost-Effectiveness Results

Program Dispatch Scenario	TRC
Hour-ahead	1.2
Day-ahead	1.3
22.5 minute or less	1.0

⁸ Additional detailed cost breakouts can be found in Confidential Attachment A.

F. Cost Recovery

PacifiCorp proposes to recover the approved irrigation demand response program costs through Schedule 191 but is not proposing a change to Schedule 191 as part of this filing. Once the irrigation demand response program is approved, the Company will file a petition to defer the costs incurred through this program for later recovery through Schedule 191. Using a deferral account will provide an additional tool for PacifiCorp to manage the timing of cost recovery and mitigate, to the extent possible, customer bill impacts.

G. Annual Reporting

PacifiCorp will provide an annual report for the irrigation program following one full year of program operation. Annual reporting will at a minimum provide summary of program activities, costs, and accomplishments, future changes under consideration, feedback received, and other items that are requested by the Company's Washington DSM Advisory Group. Annual reporting for demand response programs for the prior year will be included as an attachment to the clean energy progress and compliance reports due July 1 of each year. Drafts of the demand response report will be provided to the DSM Advisory Group at least 30 days ahead of the July filing.

H. Stakeholder Involvement – Planning, Procurement, and Program Design

Stakeholder engagement was an integral part of pursuing demand response acquisitions with a demand response RFP. Key activities tied to the demand response are provided in summary form and are in addition to irrigation load activities described later.

On January 21, 2020, PacifiCorp held a CPA workshop meeting in the 2021 IRP public input process. Highlights included review prior IRP/CPA comments, proposed CPA methodologies for demand response, interactions between demand response and pricing/rates options.

On February 18, 2020, PacifiCorp held a technical workshop in the 2021 IRP public input process. Highlights included further defining the grid services a demand response resource can provide and IRP credits for demand response.

On April 14, 2020, PacifiCorp held a stakeholder meeting interested in demand response. Highlights included background information on existing demand response programs, review of demand response in 2019 IRP, review of demand response potential in the conservation potential assessment, discuss pilot concepts and gather input on how to structure or focus a demand response RFP

On April 16, 2020, at its regular IRP public input meeting, PacifiCorp shared information on the demand response stakeholder meeting with the broader IRP audience.

On June 18 & 19, 2020, PacifiCorp held an IRP public input meeting, which included 2019 IRP Action Item 4 acknowledgement with demand response conditions and draft RFP schedule shared with broader IRP audience.

On August 28, 2020, PacifiCorp held an IRP CPA Technical Workshop. Highlights included an assessment of demand response resources, assessment methodology, transition to grid services view of demand response, development of demand response costs, draft potential results (short and long duration, winter and summer) and a demand response RFP update

On October 22, 2020, PacifiCorp held an IRP public input meeting. Highlights included demand response ramp rates, battery storage assumptions, types of demand response costs used in the levelized calculation, demand response cost bundles

On October 14, 2020, Johnson Consulting Group was hired to: Research demand response technical vendor requirements, summarize demand response RFPs that have been issued by other energy organizations, assist in developing a simple Request for Qualifications (RFQ) template to identify potential vendors, assist in the distribution of the RFQ to ensure it is widely circulated to encourage a robust response rate, Conduct in-depth interviews with up to 15 potential demand response vendors to identify market barriers, opportunities, and critical elements that should be addressed in a forthcoming demand response RFP, summarize key elements and essential components that should be considered in developing a demand response RFP and a demand response RFQ.

On October 22, 2020, PacifiCorp held an IRP Public input meeting. Highlights included demand response ramp rates, battery storage assumptions, types of demand response costs used in the levelized calculation, demand response cost bundles

On November 2, 2020, PacifiCorp posted the RFQ for bidders to the following website: <https://www.pacificorp.com/suppliers/rfps/demand-response-rfp-2021.html>. RFQ responses were due on or before November 23, 2020, and were intended to build the bidders list for the RFP and help to expand our outreach to a range of suppliers. The RFQ also asked respondents to provide some brief descriptions of potential programs and also asked for Oregon pilot ideas, response to stakeholder interests. The RFQ was also posted to Peak Load Management Alliance, Association of Energy Service Professionals, International Energy Program Evaluation Conference, Energy Central, and ESource in order to reach a broad audience.

On February 8, 2021, PacifiCorp released the RFP to 26 bidders registered in the Company's on-line procurement system.

On February 9, 2021, PacifiCorp filed the RFP with the Washington Utilities and Transportation Commission under Docket UE - 210088.

On March 15, 2021, the Company received RFP responses from 18 different organizations.

On April 23, 2021, PacifiCorp held an IRP public input meeting. Highlights included updates on All Source 2020 and the demand response RFPs.

On June 25, 2021, PacifiCorp held an IRP public input meeting. Highlights included update on demand response selected by the System Optimizer model selections from the 2021 demand response RFP.

On August 27, 2021, PacifiCorp held an IRP public input meeting highlighting the 2021 preferred portfolio action plan with demand side management actions.

On October 19, 2021, PacifiCorp held a technical workshop on proposed CEIP utility actions to meet CETA requirements, specifically highlighting demand response actions, including irrigation load control, that the Company intended to undertake as part of the CEIP.

On October 20, 2021, PacifiCorp met the Equity Advisory Group (EAG) on proposed CEIP utility actions, specifically highlighting demand response actions, including irrigation load control, that the Company intended to undertake as part of the CEIP.

On November 10, 2021, PacifiCorp held a technical workshop on the draft CEIP and discussed prospective capacity volumes and costs associated with demand response actions identified in the CEIP.

On November 15, 2021, PacifiCorp met with the demand response advisory council staff lead from the Northwest Power and Conservation Council and discussed the California Demand Response Protocol utilized by PacifiCorp for evaluating their programs. Discussion focused on similarities between the council' approach and the protocol and how costs and benefits were included in the total resource cost test calculations.

On November 17, 2021, PacifiCorp met with the EAG providing further detail on draft demand response actions included in the CEIP.

On February 4, 2022, Company representatives and Connected Energy met with a representative from Farmer Conservation to discuss organizational roles and plans, demand response program design and opportunities for coordinated outreach were discussed for both Oregon and Washington.

On April 13, 2022, the Company presented the draft program requirements, participation parameters for discussion and requested specific feedback from the EAG regarding program marketing and partnership strategies.

On April 28, 2022, the Company presented draft program requirements, participation parameters, marketing and outreach, cost-effectiveness, implementation strategies, and potential mechanisms for cost recovery with the Washington DSM advisory group.

On June 27, 2022, the Company provide a draft of this filing, including attachments, to the Washington DSM advisory group for review and comment. The Company did not receive any comments from the group.

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On June 28, 2022, the Company provided an overview of the irrigation demand response program to the Washington DSM advisory group.

On July 22, 2022, the Company added two definitions, added information about co-participation in demand response and time of use offers and updated eligible rate schedules in Attachment B. In addition, minor changes were made to all documents to improve clarity in the filing provided to the Commission.

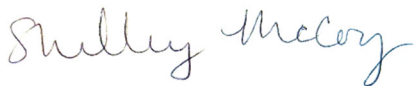
It is respectfully requested that all formal data requests regarding this matter be addressed to:

By email (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 2000
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Please direct any informal questions about this filing to Ariel Son, Regulatory Affairs Manager, at (503) 813-5410.

Sincerely,



Shelley McCoy
Director, Regulation

Enclosures

22-03-PAC-Attachment-A-7-22-2022 (C).zip
22-03-PAC-Attachment-A-7-22-2022 (R) .pdf
22-03-PAC-Attachment-B-7-22-2022.pdf
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