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DEPARTMENT OF COMMERCE  
Office of Consumer Services

MICHELE BECK  
Director

To: Utah Public Service Commission

From: Office of Consumer Services  
Michele Beck, Director  
Béla Vastag, Utility Analyst

Date: March 14, 2022

Re: **Application of Rocky Mountain Power for Approval of Solicitation Process for 2022 All Source Request for Proposals**  
Docket No. 21-035-52

### Background

On August 31, 2021, Rocky Mountain Power (“RMP”) filed a Notice of Solicitation Process with the Public Service Commission of Utah (“PSC”) to conduct PacifiCorp’s 2022 All Source Request for Proposals (“2022AS RFP”) for new resources that were identified as part of PacifiCorp’s 2021 Integrated Resource Plan (“IRP”) preferred portfolio action plan. In that notice, RMP included a motion to deviate from the 60-Day notice requirement of Rule R746-420-1(3)(a) by filing its RFP on October 20, 2021, only 50 days from the date of its notice. By filing early, PacifiCorp wanted to allow bidders additional time to be able to enter PacifiCorp Transmission’s annual cluster study by May 16, 2022. RMP opined that the additional time would help ensure potential bidders would receive interconnection studies and be able to interconnect with PacifiCorp’s system before the bidder’s proposed commercial operation date.

The PSC approved RMP’s request on October 4, 2021, but four days later on October 8, RMP notified the PSC of its decision to postpone the RFP because it “determined that sufficient options exist for bidders to participate in PacifiCorp Transmission’s annual cluster study before they have been selected as a resource through the 2022 All-Source RFP, and therefore the Company does not need to file its 2022 All-Source RFP on October 20 as planned.”<sup>1</sup> RMP also stated in its October 8 Revised Notice that the 2022AS RFP would be filed with the PSC on or around January 7, 2022.

On December 14, 2021, RMP notified the PSC that pursuant to Utah Statutes, it is required to hold a pre-issuance bidder’s conference at least fifteen (15) days ahead of filing its application requesting RFP approval. Therefore, RMP informed the PSC that

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<sup>1</sup> RMP’s October 8, 2021 Revised Notice of Solicitation Process, at pg. 2.

the 2022AS RFP would now be filed on January 26, 2022 (instead of January 7) and a pre-issuance bidders conference would be held on January 11, 2022.

RMP filed its application on January 26, 2022, and the PSC issued a Scheduling Order on February 15, 2022, setting deadlines of March 14 and April 1, 2022, for parties to file initial and reply comments, respectively, in this proceeding. The Order also set a deadline of March 22, 2022, for the Independent Evaluator (“IE”) to file its report on the draft RFP. In its application, RMP requested the PSC issue an order in this docket by April 22, 2022.

RMP’s application includes the testimony of Ms. Heather Eberhardt, Sr. Commercial Services Power Marketer from PacifiCorp’s Resource and Commercial Strategy Group. Ms. Eberhardt’s testimony describes the RFP process, the relationship of the 2021 IRP to the RFP process, how the RFP complies with Utah Admin. Code R746-420(1), (2), and (3), and includes PacifiCorp’s draft RFP document.

Ms. Eberhardt’s testimony states:<sup>2</sup>

“The 2022AS RFP is seeking resources consistent with its 2021 IRP preferred portfolio which identified 1,345 megawatts (“MW”) of new proxy wind and solar energy resources collocated with 600 MW of new proxy battery energy storage system (“BESS”) capacity by the end of 2026.”

PacifiCorp’s 2021 IRP preferred portfolio also included the 500 MW advanced nuclear Natrium™ demonstration project assumed to come online by the summer of 2028, and the potential for pumped storage hydro projects to be added around the same timeframe. To accommodate the possibility of these resources being added to the system, Ms. Eberhardt states:<sup>3</sup>

In addition, PacifiCorp will accept certain long-lead time resource types such as nuclear and pumped storage hydro in the 2022AS RFP, which require a longer development and construction schedule, so long as those types can achieve a December 31, 2028 in-service date.

The RFP affords bidders the opportunity to structure bids in one of five ways:<sup>4</sup>

- 1) Benchmark transactions in which PacifiCorp develops, constructs, owns and operates the proposed project.
- 2) A build transfer agreement (“BTA”) for projects developed by third parties, and then ownership transferred to PacifiCorp.
- 3) A power purchase agreement (“PPA”) that allows bidders to provide up to 30-year and possibly longer bids of either non-renewable or renewable technologies, with the latter permitting collocation with battery energy storage systems (“BESS”).

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<sup>2</sup> Direct Testimony of Heather Eberhardt, at In. 33.

<sup>3</sup> *Id.* at In. 33.

<sup>4</sup> PacifiCorp’s 2022AS RFP, at pg. 4.

- 4) A tolling agreement, whereby PacifiCorp controls the output of a stand-alone BESS, pumped storage hydro or other storage resource. Control by PacifiCorp may be performed using Automatic Generation Control (“AGC”) communication equipment installed on the generating unit.
- 5) Professional services agreements for demand-side resources.

### **Utah Standards for PSC Approval of a Request For Proposals (RFP) Solicitation Process**

The Utah Energy Resource Procurement Act requires that when ruling on PacifiCorp's request for approval of a solicitation process, the PSC must determine whether the solicitation process:<sup>5</sup>

- (ii) is in the public interest taking into consideration:
  - (A) whether [issuance of the RFP] will most likely result in the acquisition, production, and delivery of electricity at the lowest reasonable cost to the retail [Utah] customers of [RMP];
  - (B) long-term and short-term impacts;
  - (C) risk;
  - (D) reliability;
  - (E) financial impacts on [PacifiCorp]; and
  - (F) other factors determined by the PSC to be relevant.

Considering the above statutory standards for evaluating a utility's RFP for resources, the OCS provides the comments below identifying needed improvements to the draft 2022AS RFP to ensure that the final RFP is in the public interest. These comments were prepared with the assistance of the consulting firm, J. Kennedy and Associates, Inc.

### **Summary of Office of Consumer Services Comments**

The OCS provides comments on the 2022AS RFP that address the following topics:

- Benchmark Bids
- Blinding Bids
- Plexos Modeling
- Code of Conduct
- Natrium Nuclear Plant
- Gas Resources

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<sup>5</sup> Utah Code Ann. § 54-17-201(2)(c)(ii)(A)-(F).

- Transmission
- Ranking of Bids

### Benchmark Bids

Pursuant to Utah Admin Code R746-420-3(4)(a), Ms. Eberhardt indicates that RMP will propose “Benchmark Options that are both Owned Benchmark Resources, where PacifiCorp owns and self-develops the resource, and Market Benchmark Resources, whereby PacifiCorp has a purchase option to acquire the resource upon selection to a final shortlist.”<sup>6</sup> PacifiCorp included a list of 31 Benchmark Options under consideration in Appendix O to the draft RFP. Thirty-one Benchmark Options is an exceptionally large number of benchmark resources, particularly compared to prior RFPs. No benchmark resources were included in the 2020 All Source RFP (“2020AS RFP”) (Docket No. 20-035-05), and only four benchmark resources amounting to 860 MW were included in the 2017R RFP (Docket No. 17-035-23), in which 1,270 MW of new wind resources were sought in total. In this instant RFP, the total amount of resources being sought is 1,945 MW, while PacifiCorp’s 31 benchmark options amount to 6,847 MW, as follows:

#### PacifiCorp Benchmark Bids

	MW Wind	MW Solar	MW Storage	MW Total	%
<b>Idaho</b>	1,730	600	-	<b>2,330</b>	<b>34%</b>
<b>Utah</b>	100	959	600	<b>1,659</b>	<b>24%</b>
<b>Oregon</b>	-	1,033	350	<b>1,383</b>	<b>20%</b>
<b>Wyoming</b>	120	625	400	<b>1,145</b>	<b>17%</b>
<b>Washington</b>	80	100	-	<b>180</b>	<b>3%</b>
<b>Montana</b>	150	-	-	<b>150</b>	<b>2%</b>
<b>TOTAL</b>	<b>2,180</b>	<b>3,317</b>	<b>1,350</b>	<b>6,847</b>	<b>100%</b>

OCS does not necessarily object to PacifiCorp submitting 31 benchmark bids, given that there is no statute or commission rule that limits the number of bids a utility may submit as benchmark bids, and given that there will be a more robust set of resources to select from, which will typically result in lower costs to customers. However, the fact that PacifiCorp is submitting so many benchmark bids in this RFP compared to prior ones does warrant the need for an increased level of attention from the IE and other parties.

OCS also has a concern about the information that PacifiCorp supplied regarding the benchmark options. Appendix O to the RFP discloses information about the Benchmark Options, including the resource capacity, technology type, and location of each proposed resource, but PacifiCorp’s disclosure does not fully comply with Utah Admin Code R746-420-3(4)(b), which states:

<sup>6</sup> Direct Testimony of Heather Eberhardt, at In. 160.

If an Owned Benchmark Option is used, a description of the facility, fuel type, technology, efficiency, location, projected life, transmission requirements and operating and dispatch characteristics of the Owned Benchmark Option. If a Market Benchmark Option is used, the Soliciting Utility must disclose that a market option will be utilized and any inputs that will be utilized in the evaluation;

For the Owned Benchmark Options, PacifiCorp did not include it its disclosure list the efficiency of the resources, the transmission requirements needed to add the resources to the identified locations, and the operating and dispatch characteristics of the resources. In the case of the Market Benchmark Options, PacifiCorp did not identify the “inputs that will be utilized in the evaluation”, which in general, should be the same information identified for the Owned Benchmark Options, although there may be some information used in the evaluation that may be specific to Market Benchmark Options that should also be disclosed. OCS recommends that PacifiCorp be required to supply this information in accordance with the Utah Admin Code R746-420-3(4)(b) requirements, and at that time, completely describe the projects.

### **Blinding Bids**

While Utah Admin. Code R746-420-3(10)(a) requires the Independent Evaluator to “blind” all bids so that the evaluation team is unaware of the identity of the bids, PacifiCorp has requested a waiver of this requirement. PacifiCorp notes this waiver has been granted in past RFPs, that blinding bids provides limited value because the proposed location of bids is disclosed when the bid is submitted, which will effectively identify the bidder, and that blinding bids unnecessarily imposes additional burdens on the IE. In general, OCS agrees, however, in light of PacifiCorp’s plans to bid in 31 benchmark resources, OCS questions whether the sheer number of benchmark bids should warrant the additional step of blinding bids for a heightened level of oversight of the RFP. OCS will continue to consider and may file additional comments about this issue in reply comments.

### **Plexos Modeling**

In this RFP, PacifiCorp will utilize its newest IRP modeling tool, PLEXOS, rather than the PaR and System Optimizer models that it used in the 2020AS RFP. In the 2020AS RFP, in the Role of the Independent Evaluation section, Appendix M, at paragraph 3, PacifiCorp discussed the access to information that the IE would have as follows:<sup>7</sup>

“Access all important models in order to analyze, operate and validate all important models, modeling techniques, assumptions and inputs utilized by PacifiCorp in the solicitation process, including the evaluation of market bids.”

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<sup>7</sup> Rocky Mountain Power 2020 All Source RFP Application, April 9, 2020, <https://pscdocs.utah.gov/electric/20docs/2003505/313050ApplAprvSIctnPrct4-9-2020.pdf>

In the same Appendix M of the 2022AS RFP, at paragraph 3, PacifiCorp states:

“Because the PLEXOS portfolio optimization tool is a proprietary model, PacifiCorp is not able to provide the IE with full access; however, PacifiCorp will provide the IE with the Bid Preparation excel file prior to input into PLEXOS, and all other inputs and assumptions in order for the IE to analyze, and validate all important modeling assumptions and inputs utilized by PacifiCorp to perform its portfolio selection, price scoring and ranking of market and benchmark bids. PacifiCorp will similarly provide the IE with any additional assumptions and inputs used in the sensitivity analyses.”

It appears that in the current RFP, the IE will receive access to bid assumptions and all other inputs and assumptions, however, it appears the IE will not have the same access to “all important models” as it had in the last RFP.

PacifiCorp asserts that this access cannot be provided because PLEXOS is a proprietary model. This is curious because all three models are in fact proprietary models, so it is not clear what is different about PLEXOS. This is the first time that PLEXOS will be used in an RFP proceeding, and PacifiCorp only began using PLEXOS for IRP work in the 2021 IRP proceeding, which makes the need for access to PLEXOS all that more important.

Furthermore, PacifiCorp intends to use new logic in this RFP process, such as representing each bid “in PLEXOS in both the original bid form and size as well as a micro-resource as a fractional less than 100 kilowatt(kW) resource.”<sup>8</sup> PacifiCorp provided little to no information about this modeling technique in the RFP document, though it did briefly discuss the technique during the February 17, 2022, technical conference.

At a minimum, PacifiCorp should explain all its modeling techniques, such as the use of micro-resources, in more detail in its RFP documents, however, because of its obligations pursuant to Utah Code Section 54-17-203(3)(b)(v) regarding the Energy Resource Procurement Act, the IE will need to have additional access to PacifiCorp’s RFP models. The Code states that the IE shall:

Render an opinion as to whether:

(A) the solicitation process is:

(I) fair; and

(II) in compliance with this part; and

(B) any modeling used by the affected electrical utility to evaluate bids is sufficient;

As discussed above, PacifiCorp should at least be required to provide more details regarding its modeling techniques in the RFP documents, but given the IE’s

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<sup>8</sup> OCS Data Request Response 1.19.

responsibilities, PacifiCorp should also ensure that the IE receives access “to all important models” that PacifiCorp uses in the RFP, including the PLEXOS model.

### **Code of Conduct**

In the 2017R RFP, PacifiCorp seems to have described a more rigorous code of conduct process than it planned to follow in either the 2020AS RFP or in this 2022AS RFP. PacifiCorp witness Rick Link testified in the 2017R RFP proceeding that PacifiCorp employees involved in the RFP, “will abide by a code of conduct included in the 2017R RFP, and would be required to attend a code of conduct training prior to release of the RFP to market.”<sup>9</sup> In addition to the training for employees that was mentioned, Appendix N was included in the 2017R RFP entitled, “Code of Conduct Governing PacifiCorp’s Intra-Company Relationships for RFP Process.”<sup>10</sup> A similar Appendix was not included in the 2020AS RFP nor in this 2022AS RFP.

It is possible that some of the information that had previously been included in the Code of Conduct section of the 2017R RFP (Appendix N) has been absorbed into other sections of the most recent RFP. OCS recommends that PacifiCorp require employees who will be participating in the 2022AS RFP to participate in a code of conduct training prior to release of the current RFP to market, and that PacifiCorp ensure that the RFP document discusses the code of conduct information to the same extent that it was addressed in the 2017R RFP.

### **Natrium Nuclear Plant**

PacifiCorp’s 2022AS RFP contemplates the possibility of receiving a nuclear bid, which will likely be for the Natrium Nuclear project. In the 2021 IRP proceeding, OCS discussed its concerns at length in its comments that were filed on March 4, 2022, regarding the 500 MW Natrium nuclear plant, which PacifiCorp included in its 2021 IRP preferred portfolio action plan (Docket No. 21-035-09). For example, OCS is concerned that PacifiCorp has not considered all of the risks of the nuclear project, and therefore OCS believes the nuclear project appears to be receiving special treatment by PacifiCorp. PacifiCorp may decide to acquire the Natrium nuclear unit based on the costs that are bid in to this RFP, however, those costs could ultimately turn out to be significantly understated when the project is actually completed. OCS notes that pursuant to Utah Code Section 54-17-303(2)(a), the Commission has the authority to disallow unreasonable costs based on changed circumstances after a significant energy resource has been approved. OCS recommends that if a resource such as the Natrium nuclear plant is bid into the 2022AS RFP, the PSC should require PacifiCorp to conduct sensitivity analyses with at least a 100% higher capital cost assumption, and at least 3 years of delay in the installation date to reflect the actual cost overruns and delays experienced by recent nuclear plant construction in the U.S.

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<sup>9</sup> Rick Link Direct Testimony, PacifiCorp 2017R RFP, Docket No. 17-035-23, June 16, 2017, at In. 214

<sup>10</sup> PacifiCorp 2017R RFP Bid Documents, Appendix N, Docket No. 17-035-23, June 16, 2017.

## Gas Resources

In its response to data request OCS 1.19, RMP stated that the “Proxy” resources it intends to model will not include gas-fired combustion turbine (“CT”) or combined cycle (“CC”) resources. Proxy resources are the potential resources that can satisfy PacifiCorp’s need for capacity and fill out PacifiCorp’s long-term expansion plan beyond the 2026 – 2028 period that is being addressed by this RFP. OCS reiterates the concern stated in its March 4, 2022 comments submitted in the PacifiCorp 2021 IRP proceeding that it is not persuaded that the system should exclude gas-fired resources prematurely. This is especially the case when considering that reliability needs are becoming more of a concern in the West, and no utility in this country has enough experience to provide confidence that batteries storage systems and other untested advanced resources can solve all significant reliability issues in the future. PacifiCorp needs to be particularly concerned about this given its plans to retire its entire fleet of coal units in the not too distant future. Battery storage systems and advance resources such as the Natrium nuclear plant may not turn out to be the solution that PacifiCorp is hoping for, and there is no reason not to at least include CT units as potential proxy resources in its expansion plans in the future. CT units can be relatively low cost resource additions, and produce far less CO<sub>2</sub> emissions compared to CC units. To be clear, OCS is unconvinced that CC units should not also be considered proxy resources, however, at a minimum, OCS recommends that the PSC require PacifiCorp run a scenario or sensitivity that includes CT resources as potential proxy resources in the 2022AS RFP evaluation.

## Transmission

A Certification for Public Convenience and Necessity (“CPCN”) proceeding (Docket No. 21-035-54) is currently underway in which PacifiCorp is seeking approval to begin construction of the Gateway South transmission project. While parties in that docket appear to agree that PacifiCorp should be granted its CPCN to construct the Gateway South project, the Utah Division of Public Utilities (“DPU”) and the Utah Association of Energy Users (“UAE”) are unconvinced that there could be no other cost-effective transmission alternatives that could provide the same level of reliability as the Gateway South project. The DPU and UAE both recommended that the Commission state in its order that issuance of a CPCN does not constitute pre-approval or assurance of any future cost recovery.<sup>11</sup>

Furthermore, the DPU discusses in its testimony that the Northern Tier Transmission Group (“NTTG”) alternative<sup>12</sup> to Gateway South should be further evaluated, but without the assumption that retail customers must be responsible for paying the cost of a 230

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<sup>11</sup> Docket No. 21-035-54, January 25, 2022, Direct Testimony of David Williams, DPU, at lines. 360-366. Direct Testimony of Justin Bieber, UAE, at lines 417-426.

<sup>12</sup> In March 2019, as part of the NTTG 2018-19 transmission planning process, a coalition of parties including the OCS and the Utah Association of Energy Users, Deseret Power, Utah Municipal Power Agency and the Utah Municipal Power Systems (the "Joint Parties") submitted an Economic Study Request to evaluate two 345 kV transmission lines running along existing corridors as a lower cost alternative to both Gateway West and Gateway South. The study showed that the Joint Parties' alternative transmission proposal provided for a reliable transmission system and cost savings of \$1.9 billion versus the cost of the combined Gateway West and Gateway South projects.



kV line addition that PacifiCorp believes it would have to construct to satisfy a single point-to-point transmission service request.<sup>13</sup> In PacifiCorp's view, the inclusion of the 230 kV line in its economic analysis of alternatives, paid for by retail customers, makes the cost of the NTTG alternative equivalent to the cost of the Gateway South project, and therefore PacifiCorp prefers the Gateway South project.

OCS recognizes that the issue of whether retail customers would be required to pay the costs of the 230 kV line resulting from a point-to-point transmission service request requires a legal interpretation of issues such as PacifiCorp's Open Access Transmission Tariff and that some parties in the CPCN docket disagree with PacifiCorp's interpretation. However, OCS does agree with the DPU that other alternatives to the Gateway South project should be considered, recognizing that such a decision could have an impact on the resources selected in the 2022AS RFP. OCS recommends that the PSC require PacifiCorp conduct a sensitivity analysis using PLEXOS with the NTTG transmission option as an alternative transmission option, but without the assumption that retail customers would be required to pay for the 230 kV line addition.

In addition, it is unclear to OCS how the costs of this 230 kV line are treated in the economic analysis of cases that include the Gateway South line. OCS attended the March 8, 2022 Oregon PUC special public meeting on 2022AS RFP transmission issues.<sup>14</sup> Based on the discussion in that meeting, it appears that PacifiCorp may be reducing the cost of Gateway South by the cost of the 230 kV line in PLEXOS modeling. OCS recommends that the PSC require PacifiCorp to explain how the costs of the 230 kV line are treated in the RFP's economic analysis of bids and why PacifiCorp believes this treatment is appropriate for RFP modeling.

### **Ranking of bids**

PacifiCorp has described the Plexos modeling and price-scoring components of the bid ranking process, but OCS recommends PacifiCorp provide additional clarification. PacifiCorp's response to data request OCS 1.19(h) states:

“Any resource with a negative net cost (i.e. it pays for itself on energy basis alone) will get a 75/75 price score. PacifiCorp will assign 0 points to the bid with the highest positive net cost and force rank the remainder of the bids on a continuum from 0 points to 75 points.”

OCS recommends that PacifiCorp provide an example of how its bid scoring process will work in the RFP document. PacifiCorp should include a project that barely breaks-even, and another that would be considered to have a large negative net cost. The OCS also requests PacifiCorp provide additional information about how projects of various sizes and technologies are compared and how capacity contribution value will be treated.

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<sup>13</sup> Docket No. 21-035-54, January 25, 2022, Direct Testimony of David Williams, DPU, at In. 340.

<sup>14</sup> See Public Utility Commission of Oregon Docket Nos. LC 77 (2021 IRP) and UM 2193 (2022AS RFP)

## Recommendations

For the final version of the 2022AS RFP, the OCS recommends that the PSC require PacifiCorp to address the following issues:

1. Benchmark Bids – PacifiCorp should be required to comply with Utah Admin Code R746-420-3(4)(b) and supply all required information regarding benchmark bids.
2. Plexos Modeling – PacifiCorp should provide more details regarding its modeling techniques in its RFP documents, and it should ensure the IE receives access to “all important models” that PacifiCorp uses in the RFP, including the PLEXOS model.
3. Code of Conduct – Employees participating in the 2022AS RFP should be required to participate in a code of conduct training prior to release of the current RFP to the market, and PacifiCorp should ensure that the RFP document discusses the code of conduct information to the same extent that it was addressed in the 2017R RFP.
4. Natrium Nuclear Plant – If a resource such as the Natrium nuclear plant is bid into the 2022AS RFP, PacifiCorp should conduct a sensitivity analysis with at least a 100% higher capital cost assumption, and at least 3 years of delay in the installation date.
5. Gas Resources – A sensitivity or scenario should be required where selectable proxy resources include CT units in the PLEXOS studies.
6. Transmission – PacifiCorp should conduct a PLEXOS sensitivity analysis with the NTTG transmission option modeled as an alternative transmission option, but without the assumption that retail customers would be required to pay for the 230 kV line addition. In addition, PacifiCorp should be required to explain and justify how the costs of the 230 kV line are treated in the economic modeling of RFP bids.
7. Ranking of Bids – PacifiCorp should provide examples of how its bid scoring process will work in the RFP document.

cc:

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