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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Approval of Solicitation Process for 2022 All Source Request for Proposals	Docket No. 21-035-52

INITIAL COMMENTS OF THE UTAH ASSOCIATION OF ENERGY USERS

The Utah Association of Energy Users ("UAE") hereby submits its initial comments on the 2022 All Source Request for Proposals ("2022 RFP") proposed by Rocky Mountain Power, a division of PacifiCorp ("Company"), in this docket. UAE has reviewed the 2022 RFP and has attended technical conferences and other discussions regarding the 2022 RFP, and submits the following comments.

RELEVANT STANDARD

The RFP, and the Commission's evaluation of the RFP, is governed by the Energy Resource Procurement Act ("Act")[1] and the Commission regulations implementing the Act ("Rules").[2] The Act and the Rules impose numerous requirements on the solicitation and procurement of significant energy resources by public utilities in this State. UAE, along with

[1] Utah Code §§ 54-17-101, et seq.
[2] Utah Administrative Code §§ R746-420, et seq.

others, actively participated in negotiating and supporting adoption of the Act in 2005. UAE's goal, then and now, is to make electric utility resource solicitations and procurements fair and competitive so that the most cost-effective resources can be identified and procured for the benefit of Utah ratepayers.

Part 2 of the Act includes requirements for a solicitation process. The intent of Part 2 and the Rules implementing it is to ensure a robust array of bids from all available resource types and from varying owners and developers.[3] Only if a robust set of bids for market resources is received can bids be fairly compared and evaluated. The ultimate goal of the Act and the Rules is to ensure that the resources representing the lowest reasonable cost and risk to customers can be identified and procured, regardless of the nature or ownership of the resources.

Before a utility's proposed solicitation process can be approved by the Commission, the Act requires the Commission to first determine that the proposed solicitation process "will ***most likely*** result in the acquisition, production and delivery of electricity ***at the lowest reasonable cost*** to [the utility's] retail customers."[4] This same finding must also be made before the Commission can pre-approve procurement of any given resource.[5] These critical statutory requirements are designed to ensure that Utah ratepayers will not be burdened with anything other than the lowest-cost resources available.

In the following comments, UAE requests clarifications or modifications with respect to the 2022 RFP to ensure a robust bidding process to achieve the lowest reasonable cost resources.

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[3] *See* Rule 746-420-3(8)(i) (RFPs must be "designed to solicit a robust set of bids").
[4] Utah Code § 54-17-201(2)(c)(ii)(A) (emphasis added). Other relevant factors, such as risk and reliability, are also to be considered, *id*., but ensuring the lowest reasonable cost for customers is central to the Commission's public interest determination under the Act.
[5] *See* Utah Code § 54-17-302(3)(c)(i).

COMMENTS ON THE RFP

The Company's 2021 IRP preferred portfolio includes the addition of incremental generation resources to reach commercial operation by December 31, 2026, including 1,345 megawatts ("MW") of new proxy wind and solar generation resources and 600 MW of collocated energy storage resources. The IRP also includes 274 MW of new proxy demand-side resources. The 2022 RFP proposes to accept and evaluate bids of all resource types, though the Company encourages those who intend to submit bids for demand-side resources to bid into a separate, targeted demand-side resource RFP to be issued later in 2022.

A. Comments Related to Collocated Energy Storage Systems

The 2022 RFP seeks bids for projects containing energy storage systems collocated with new generation resources and imposes several requirements on such bids. For example, the Company is "requiring full dispatch control of the collocated or standalone battery (charge and discharge)."[6] The Company further requires that all storage bids must be:

> i) AC-coupled, ii) sized so that the storage power capacity rating is nominally greater than 50% of the nameplate capacity of the collocated generating resource, iii) four-hour duration or longer, and iv) bid as an augmented system capable of maintaining the original storage power capacity and duration rating for the contract term, or otherwise able to maintain original capability, as bid.[7]

UAE offers comments on each of these requirements below:

Full Dispatch Control

UAE supports the requirement that the Company have full dispatch control of the collocated energy storage systems, both for charging and discharging. This will allow the

[6] 2022 RFP at 5.
[7] *Id.*

Company to charge and discharge the storage systems at times and frequencies that will maximize benefits of the systems to all customers. Regulatory oversight of the Company's operations of the collocated energy storage system should ensure efficient use of the resource. By contrast, a project with a collocated energy storage system that is owned by a third party and for which the Company does not have full dispatch control will likely be charged and discharged at times and frequencies that are most likely to benefit the owner of the project, rather than the Company's ratepayers.

UAE supports this requirement.

AC-Coupled vs. DC-Coupled

UAE does not oppose the Company's proposal to accept bids only from AC-coupled resources in this RFP, but requests that the Company re-assess this requirement for future RFPs.

UAE attended the Company's presentation to stakeholders on January 28, 2022 regarding its proposal to require that all energy storage systems be AC-coupled with the collocated generation resource, as opposed to DC-coupled. The presentation provides a high-level discussion of the distinction between AC-coupled and DC-coupled systems and explains the perceived advantages and disadvantages of each. [8]

The Company acknowledged that there are advantages to a DC-coupled system, including the ability to save costs by sharing inverters and other components with the PV system and the ability to capture excess PV energy.[9] The Company explained that these advantages are outweighed by disadvantages of the DC-coupled system and explained its preference for the advantages of the AC-coupled system.[10] With one exception, it appears that most of the

[8] *See* Exhibit 1 (January 28, 2022 presentation re: AC-coupling) at 6. Exhibit 1 is an updated version of the presentation that the Company circulated to stakeholders on February 8, 2022.
[9] *See id.*
[10] *See id*. at 6 & 15-16.

disadvantages of the DC-coupled system, and the relative advantages of the AC-coupled system noted by the Company are not really a result of the distinction between AC-coupled and DC-coupled systems themselves, but rather are a result of the way that developers tend to configure DC-coupled systems. The Company explained that developers of DC-coupled systems often will distribute the energy storage resources throughout the solar array in a "de-centralized" configuration. This configuration results in reduced costs because the developer can share inverters and other components in the integrated system but creates other challenges such as complications in adding future grid-charging capability that are not present in a centralized system.

UAE notes that many of the Company's concerns about the DC-coupled systems are not really the DC-coupling itself but the "de-centralized" project plans proposed in many (but not all) DC-coupled projects. If the location of energy storage resources is the true concern, UAE would prefer that the bid requirement simply limit the bids to "centralized" rather than "de-centralized" energy storage configurations, as this limitation more accurately address the Company's concerns.

UAE does not oppose the AC-coupling limitation in this RFP, however, because it appears that CAISO has not yet approved any revenue-grade meters for DC-coupled systems and that, as a result, a DC-coupled project may not be able to participate in the energy imbalance market. That limitation is significant. UAE understands that CAISO is considering approval of such meters for DC-coupled systems but has not approved any at this stage. UAE requests that the Company re-visit this proposed limitation for future RFPs once CAISO has approved meters for DC-coupled systems.

Power capacity rating of collocated energy storage resources

UAE requests additional information regarding the proposed requirement that bids that include collocated energy storage resources so long as the power capacity rating is at least 50% of the nameplate capacity of the collocated generating resource. The Company states in the RFP that "[a]ll collocated bids with energy storage installed capacity equal to or greater than 50% of the underlying generating resource will be accepted."[11] The RFP also states that the Company has a "preference for BESS that has a power capacity rating that is 100% of the nameplate capacity of a collocated renewable generating resource."[12] UAE requests that the Company more fully explain the preference, and how this preference will be reflected in its scoring or selection of submitted bids.

Specifically, UAE requests that the Company explain why it prefers energy storage systems with a power capacity rating that is 100% of the nameplate capacity of the collocated generating resource. Why is it preferable to have fewer energy storage resources on the system with greater storage capacity than to have more storage systems with lower storage capacity but more spread out over the system? Is there any advantage to having storage resources dispersed throughout the system rather than concentrated in a few locations?

In addition, UAE requests that the Company explain how its preference for energy storage systems with a power capacity rating that is 100% of the nameplate capacity of the collocated generating resource will be reflected in scoring or selection of bids. Does the Company's preference simply indicate that, if the scores of two projects with collocated energy storage systems

[11] 2022 RFP at 6 n.12.
[12] *Id*. at 6.

are equal, the Company would select the project with a power capacity rating that is 100% of the nameplate capacity of the collocated generating resource over one that is 50% of nameplate? Or, on the other hand, does the preference reflect a difference in scoring? Under what circumstances would the Company select a project with an energy storage system with a power capacity rating that is 50% of the nameplate capacity of the collocated generating resource over one with 100%, and vice versa?

UAE notes that the IRP preferred portfolio was selected based on the assumption that energy storage resources would have a power capacity rating of 50% of the collocated generation resources.[13] UAE does not object to the Company selecting resources with energy resources that are greater or lower than 50% of the collocated resource, but requests that the Company provide some detail regarding its preference as discussed herein.

Augmented System Capable of Maintaining Original Power Storage Capacity

UAE requests additional information regarding the Company's proposal that all bids for projects that include energy storage systems collocated with generating resources be bid as an augmented system "capable of maintaining the original storage power capacity and duration rating for the contract term, or otherwise able to maintain original capability, as bid."[14]

Augmentation is intended to address degradation of the energy storage resources. The Company discusses degradation of energy storage resources in Appendix L and Appendix N of the 2021 IRP. Appendix L is the 2020 Renewable Resources Assessment performed by Burns &

[13] *See* 2021 IRP, Tables 7.1-7.3 (Supply-Side Research Table and Costs for Supply-Side Resource Options, identifying energy storage resources with power storage capacity at 50% of nameplate capacity of collocated generation resource); *Id*. at 191 (describing resource options of wind and solar resources paired with energy storage as the generating resource "paired with a 4-hour battery with 50% of the power capacity of the [generating] resource.").
[14] 2022 RFP at 5.

McDonnell. Appendix N is the Energy Storage Potential Evaluation. The discussion in these appendices acknowledges that there are various methods to address degradation. Appendix N notes that battery modules "can be gradually replaced over time to maintain a more consistent storage capacity, or they can be replaced all at once when cycle limits are reached, at the expense of a reduced storage capacity in the interim."[15] Appendix L discusses another option to address degradation. The 2020 Renewable Resources assessment acknowledges augmentation strategies that "account for the addition of future capacity to maintain guaranteed performance," as discussed in Appendix N, but also note that "[s]ystems can be 'overbuilt' by including additional capacity in the initial installation."[16]

UAE requests that the Company state whether it will accept bids that address degradation through "overbuilding" the capacity, rather than augmentation strategies. If so, UAE requests that the Company explain how it intends to model and score the two separate approaches on an apples-to-apples basis. UAE also requests that the Company explain how methods to address degradation of energy storage systems will be modeled and scored in PPA bids vs. utility-owned or BTA bids. In a PPA bid, UAE expects that augmentation solutions would be built into the $/MWh bid.[17] UAE requests that the Company explain how augmentation solutions will be modeled in utility-owned and BTA bids so that the bids can be fairly compared to PPA bids.

B. Comments Related to Proposed Commercial Operation Date of December 31, 2026

The Company proposes to require that bids demonstrate that the project's commercial operation date ("COD") will be achieved by December 31, 2026 and to reject bids that cannot meet

[15] 2021 IRP, Appendix N at 239.
[16] 2021 IRP, Appendix L at 9-7.
[17] *See* 2021 IRP, Appendix N at 239 ("[T]he replacement cost of storage equipment can be expressed per MWh of discharge, and accounted for as part of resource dispatch.").

this requirement. UAE is aware that parties in other states have requested that the Company extend the commercial operation date for bids beyond December 31, 2026. In an open meeting held on March 10, 2022, the Washington Utilities and Transportation Commission ("WUTC") approved the Company's 2022 RFP on the condition that the Company extend the COD deadline to December 31, 2027.[18]

If RMP or other parties in this docket propose to extend the COD deadline in the bid requirements to December 31, 2027, UAE would not oppose such an extension. Extending the COD to December 31, 2027 will allow additional projects to bid into the 2022 RFP. Many of the projects that sought interconnection service through PacifiCorp Transmission's 2021 Cluster Study have been informed that they will have lengthy network upgrade construction schedules (of 60 months or more) that will not allow a December 31, 2026 COD. Any project that seeks interconnection service through the 2022 Cluster Study—the first available window after the 2021 IRP that identified the needs the 2022 RFP seeks to address—will almost certainly not be able to meet a 2026 COD.

The 2021 IRP identifies an increase in system short position toward the end of the 2020s, but there is very little difference in that system short position in 2026 and 2027. Tables 6.11-6.13 in the 2021 IRP detail the expected loads in PACE and PACW as compared to the system capacity to meet those loads in both the summer and winter if no additional resources are added.[19] Tables 6.11-6.13 identify the system's current capacity to meet expected load demands at system peak in the summer and the winter. The following tables summarize the system positions at summer and

[18] *See* Exhibit 2 (WUTC Order 02 Approving Proposed Request for Proposals Subject to Conditions) at 4 (approving 2022 RFP on condition that Company "[r]evise the RFP to extend the required commercial operation date from December 21, 2026.").
[19] 2021 IRP, Tables 6.11-6.13 (pp. 154-157).

winter peak in both PACE and PACW in 2026, 2027, and 2028. System short positions are shown below in parentheses (XX).

Summer Peak System Capacity Positions (MW)

Year	2026	2027	2028
PACE position	(974)	(1,005)	(1,577)
PACW position	(1,105)	(1,125)	(1,063)

Winter Peak System Capacity Positions (MW)

Year	2026	2027	2028
PACE position	(48)	10	(682)
PACW position	(1,301)	(1,356)	(1,302)

While this data shows that the system short positions increase slightly from 2026 to 2027, those increases are modest, particularly when compared to the increase in short position in PACE from 2027 to 2028. As such, the 2021 IRP appears to show that shifting the COD requirement for bids into the 2022 RFP from December 31, 2026 to December 31, 2027 should not create unreasonable additional reliability risk. If the Company contends that moving the COD bid requirement date to December 31, 2027 would create an unreasonable additional reliability risk, UAE requests that RMP identify the basis for that contention.

Moreover, the Company would not be prevented from selecting resources with CODs in 2026 or earlier if the COD bid requirement were extended to December 31, 2027. The Company explains in the RFP that the final shortlist of resources will be the result of a process of selecting an optimized portfolio of resources using the same modeling techniques as were used to develop

the 2021 IRP preferred portfolio.[20] This process should ensure that the final shortlist that is selected will yield the least-cost and least-risk total portfolio of system resources, whether the new resources selected in the final shortlist are added in 2027 or in earlier years. As a result, UAE does not object if the Company were to adjust the COD bid requirement to allow bids that can reach commercial operation by December 31, 2027.

C. Comments Related to Timing of RFP and Interconnection Cluster Studies

While extending the COD deadline for bids will allow more projects to bid into the 2022 RFP, it will not resolve the legitimate concerns raised by other commenters about the timing of this RFP relative to the 2022 Cluster Study process managed by PacifiCorp Transmission. Specifically, as noted by the Western Power Trading Forum ("WPTF") in public comments filed in this docket on January 24, 2022, the timing of the 2022 RFP deadlines will make it difficult for many (perhaps most) projects that seek interconnection service through the 2022 Cluster Study—the first such cluster study window after the release of the 2021 IRP—to demonstrate "readiness" sufficient to remain in the interconnection process.[21] In short, projects that seek interconnection service must demonstrate "readiness" to stay in the interconnection study process and the "readiness" requirements become more stringent as projects proceed through that process. Selection to the initial shortlist in the 2022 RFP would demonstrate "readiness" that would allow projects to obtain interconnection service, but the selection of the initial shortlist in the 2022 RFP does not occur until ***after*** projects in the 2022 Cluster Study are required to demonstrate "readiness" in time to stay in the interconnection process.[22] This means that the universe of

[20] *See* 2022 RFP at 36-37.
[21] *See* Jan. 24, 2022 Public Comments filed by WPTF at 7-8.
[22] *Id.*

projects that could be selected in the 2022 RFP must either already have an interconnection agreement or be able to demonstrate "readiness" through some means other than being selected in the 2022 RFP. Other forms of "readiness" are limited and may require a very large cash payment that many developers cannot or are not willing to make.

The Company initially indicated in a filing in this docket that the timing of the 2022 RFP was intended to allow projects to enter the 2022 Cluster Study and proceed through the interconnection process such that they could be selected in the initial short list, thus allowing them to demonstrate this form of "readiness." Specifically, in its Notice of Solicitation Process and Motion for Deviation from 60-Day Notice Rule ("Motion for Deviation"), filed in this docket on August 31, 2021, the Company sought to deviate from the statutory 60-day notice rule for solicitations, stating that "[s]uccessful bidders to the 2022 All Source RFP may need to enter PacifiCorp Transmission's 2022 Cluster Study to receive an interconnection study and ensure that their projects can interconnect with the Company's system before the bidder's proposed commercial operation deadline."[23] Subsequently, however, the Company revised its Notice and indicated its confidence 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."[24]

It is unclear why the Company changed its stance on the relative timing of the 2022 RFP and the 2022 Cluster Study. The options to demonstrate "readiness" are the same now as they

[23] Motion for Deviation at 2.
[24] Revised Notice of Solicitation Process (Oct. 8, 2021) at 2.

were when the Company sought to deviate from the statutory 60-day notice rule for solicitations to enable the procurement and interconnection processes to align. UAE strongly suggests that future RFPs be designed to ensure that projects seeking interconnection through the first available cluster study window after an IRP be allowed to obtain "readiness" through selection into the RFP's initial shortlist.

CONCLUSION

UAE appreciates the opportunity to comment on the RFP and believes that clarifications and the additional information requested above will ensure that bidders have all of the necessary information to ensure that the RFP process will provide a robust response.

DATED this 14th day of March 2022.

Respectfully submitted,

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Certificate of Service
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I hereby certify that a true and correct copy of the foregoing was served by email this 14th day of March 2022 on the following:

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