State of Utah

Department of Commerce
Division of Public Utilities

CHRIS PARKER
Executive Director

ARTIE POWELL
Director, Division of Public Utilities

GARY HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Recommendation

To: Public Service Commission of Utah

From: Utah Division of Public Utilities
Artie Powell, Director
Doug Wheelwright, Utility Technical Consultant Supervisor
David Williams, Utility Analyst

Date: May 21, 2020

Re: **Docket No. 20-035-05,** Application of Rocky Mountain Power for Approval of Solicitation Process for 2020 All Source Request for Proposals.

Recommendation (Approval With Conditions)

The Utah Division of Public Utilities (Division) finds that PacifiCorp's Application of Rocky Mountain Power for Approval of Solicitation Process for 2020 All Source Request for Proposals (Application) generally meets the relevant statutory and administrative requirements, and recommends that the Public Service Commission of Utah (Commission) approve the Application, subject to conditions listed below.

Issue

PacifiCorp, doing business as Rocky Mountain Power (the Company), filed the Application on April 9, 2020 with the Commission, seeking approval of the solicitation process for its 2020 All Source Request for Proposals (2020AS RFP). In Utah the solicitation process is generally governed by Utah Code Ann. § 54-17-201 through 203 and Utah Admin. Code R746-420.

Background

The RFP stems from the Company's 2019 Integrated Resource Plan (IRP). The IRP's preferred portfolio included Action Item 2b, which stated that "PacifiCorp will issue an all-source request for proposals … to procure resources that can achieve commercial operations by the end of December 2023."[1] Subsequent to the filing of the IRP, the federal government extended the Production Tax Credit (PTC) deadline, so that wind projects are able to qualify for PTC if they achieve service before the end of 2024. The Company therefore has in the RFP a required resource in-service date of December 31, 2024.

In accordance with Utah Code Ann. § 54-17-203, in March 2020 the Commission appointed an independent evaluator (IE) for the 2020AS RFP. On April 9, 2020, the Company filed the Application. Direct Testimony from Bruce Griswold of the Company accompanied the Application, and attached as an exhibit to the testimony was the Draft 2020AS RFP and Associated Appendices (Draft 2020AS RFP). The IE will submit a separate set of comments focusing on more technical aspects of the Draft 2020AS RFP.

The IRP selected a preferred portfolio with specific resources, but the RFP selection process is not bound by the IRP's selection—the Division's understanding is that the RFP process will use the IRP modeling methodology to evaluate portfolios based on the actual bids received (rather than the cost and other assumptions made in the IRP), and so the selected RFP resources may vary considerably from the IRP's preferred portfolio. For example, although the IRP preferred portfolio includes "nearly 3,000 MW of new solar resources and more than 3,500 MW of new wind resources,"[2] the RFP could select nearly all wind (if actual wind bids are lower cost than the IRP assumed costs), or nearly all solar (if solar costs are lower than expected), or even no new resources at all (if all project bids cost more than expected). In the last case (where all bids

[1] 2019 Integrated Resource Plan Volume I, p. 24. Available at: https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2019_IRP_Volume_I.pdf

[2] *Id.* at 145. These resource amounts are over the preferred portfolio time period; the RFP resource amounts are lower.

come in higher cost than expected), the Division's understanding is that the models could instruct the Company to seek other resources altogether, such as front-office transactions.

The balance and makeup of selected RFP resources depends on the models' results; the models will be run as they were in the IRP, but with bid information used in place of IRP proxy information. This point is made in the Application and supporting testimony, but not in the RFP itself. The Division recommends that the RFP make it clearer that the IRP results do not dictate where the winning RFP bids will ultimately be located, or what the types of the winning bids will be.

Discussion

Interconnection Issues

The Company prepared the 2020AS RFP in parallel with PacifiCorp Transmission's proposed interconnection queue reform process. PacifiCorp Transmission has an ongoing interconnection queue reform docket application with the Federal Energy Regulatory Commission.[3] The Company describes the interplay between the 2020AS RFP and the queue reform docket as follows:

> The [FERC] filing proposes to replace the existing "serial queue" interconnection study process with a "first-ready, first-served, cluster" interconnection study approach. However, in anticipation of queue reform being approved by FERC and in effect by the release of this RFP to market in July 2020, PacifiCorp's 2020AS RFP process for bid evaluation, scoring, modeling, and selection reflects PacifiCorp Transmission's proposed queue reform process as described in its application at FERC. Eligibility requirements or evaluation criteria in the 2020AS RFP will be revised as necessary to align with the final version of the interconnection queue reform approved by FERC before the 2020AS RFP is finalized and issued to the market. In the event that PacifiCorp Transmission's queue reform application is not approved by the time the 2020AS RFP is finalized and issued to the market, PacifiCorp will revise the 2020AS RFP to ensure it is consistent with the current interconnection queue process as described in PacifiCorp Transmission's OATT.[4]

[3] See FERC Docket No. ER20-924.

[4] Direct Testimony of Bruce W. Griswold, Docket No. 20-035-05—Application of Rocky Mountain Power for Approval of Solicitation Process for 2020 All Source Request for Proposals, p. 8, lines 162-75.

The Company stated: "Should that proposal not be accepted, or is substantially revised, the Company will modify its interconnection documentation requirements accordingly and seek Commission approval for any modifications per Utah Admin. Code R746-420-1(4)(c)."[5]

FERC recently issued an order approving most of PacifiCorp Transmission's proposed interconnection reforms.[6] The Division recommends that the Company in its reply comments in the current docket explain the nature and extent of any revisions to the RFP required as a result of the FERC order.

Projects Eligible to Bid on the RFP

The 2020AS RFP is deemed to be an "all-source" RFP, but there are limitations on what projects are eligible to bid. The Application states that "[t]he 2020AS RFP is … an all-source RFP including renewable and non-renewable resources as well as energy storage…"[7] The Company later states that it will reject bids for the following:

> Failure to provide documentation that an interconnection request with PacifiCorp Transmission was received and pending on or before January 31, 2020, consistent with PacifiCorp Transmission's interconnection queue reform transition process.[8]

A third requirement relating to eligible sources is that the Company is looking for new resources only (not refurbishment of existing resources).[9] Therefore only bids that are already in the interconnection queue (or that already have an executed interconnection agreement) are eligible.

Looking at PacifiCorp Transmission's current interconnection queue, the Division found the

[5] Application, p. 6, ¶ 9.

[6] Order on Tariff Revisions, issued May 12, 2020. Docket Nos. ER20-924-000 and ER20-924-001, 171 FERC ¶ 61,112 (FERC Order).

[7] Application, p. 5, ¶5.

[8] 2020AS RFP, Section I (Minimum Eligibility Requirements for Bidders), p. 16, item 30. In the recently issued FERC Order, FERC approved the January 31, 2020 cut-off. See FERC Order, p. 43, ¶ 148.

[9] See also the Company's answer to question 97 in PacifiCorp 2020 All Source RFP - Questions and Answers (2020AS RFP Q&A): "this RFP is for new greenfield resources only." Available at: https://www.pacificorp.com/suppliers/rfps/all-source-rfp.html in the "Documents" section. As discussed in a later section, the Company may consider changes to this requirement.

following numbers/types of proposed large generation projects in the queue with a request date of January 31, 2020 or earlier:[10]

- Battery only: 11 projects
- Pumped storage: 2 projects
- Nuclear: 1 project
- Solar: 79 projects
- Solar plus battery storage: 29 projects
- Wind: 43 projects
- Wind plus battery storage: 1 project

The Division has seen no indication that the nuclear project is progressing or plans to bid into the RFP.

In addition to projects in the interconnection queue by the appropriate date, projects with executed interconnection agreements may also submit bids. Looking at the projects with executed agreements, and again limiting the projects to LGI applications, most of the projects are wind or solar projects:

- Wind: 25 projects
- Solar: 41 projects
- Pumped storage: 1 project
- Natural gas: 3 projects
- Waste heat: 1 project

Of the natural gas projects, one is suspended, one is a smaller project (20 MW), and one is a larger project, with an interconnection agreement signed in 2014 and no apparent progress or intent to bid.

The Company also states on p. 2 of the RFP that "PacifiCorp will not accept bids in the 2020AS RFP from existing operating facilities." Therefore, conversions of existing plants would not be

[10] Spreadsheet downloaded from PacifiCorp Transmission's OATI website, at http://www.oasis.oati.com/ppw/

The list is found under the "Generation Interconnection and TSR Queues" folder. As a proxy for what types of projects are likely to submit a proposal, only large projects (LGI) were counted. The RFP states that: "Projects submitted into the 2020AS RFP must have a minimum net power production capacity greater than 20 MW(AC) with the exception of qualifying facilities…" (2020AS RFP p. 2). Therefore, most of the non-LGI projects in the interconnection queue will be ineligible to bid.

eligible, nor are other types of repowering. In response to a question in the 2020AS Q&A, the Company did indicate that it would consider accepting bids from existing sources: "PacifiCorp has allowed existing projects to bid in previous RFPs and would consider a similar approach in the 2020AS RFP if parties support it…" with some conditions.[11] Since apparently there is at least some interest from an existing site, the Division recommends that existing sites be allowed to bid, subject to conditions approved by the IE.

Therefore, the Division expects most of the bids to be some combination of wind, solar, and battery, with a possible pumped storage or waste heat project. The Division believes that given the number of wind, solar, and/or battery projects available to bid, the RFP has a good chance of receiving a robust number of competitive bids. However, the bid eligibility limitations mean that there will be few (or no) non-renewable bids.

Demand Response

The Application does not state that it will accept demand response resource bids. The Commission has in the past indicated that to the extent feasible, demand-side resources should be evaluated on a consistent and comparable basis.[12] In correspondence with the IE, the Company indicated that it expects to issue a separate RFP for demand response and energy efficiency. The Division will not request that demand response bids be allowed to bid into the RFP at this late date, but does recommend that: (1) The Company address whether in general it believes demand response projects are appropriate for all-source RFPs, and why demand response was not included in this RFP, and (2) The Company confirm that it is planning on issuing a separate RFP for demand response and energy efficiency, with a general timeline (if known).

[11] 2020AS Q&A, question 115, available at: https://www.pacificorp.com/suppliers/rfps/all-source-rfp.html in the "Documents" section.

[12] See, e.g., Report and Order on Standards and Guidelines, June 18, 1992, Docket No. 90-2035-01, pp. 14-15.

Load Forecasts and COVID

PacifiCorp's projected capacity need is shown in Table 1.3 of the IRP.[13] The RFP seeks "up to 1,823 MWs of new proxy solar resources co-located with 595 MWs of new BESS [battery energy storage system] capacity and 1,920 MWs of new proxy wind resources."[14] In its Data Request 1.19 in the current docket, the Utah Office of Consumer Services (OCS) asked:[15]

> At each stage in the RFP process that the Company uses IRP models to evaluate bids, please explain if updated forecasts will be used (e.g. power price forecasts, gas price forecasts, load forecast, etc.). What is the expected vintage of each of these forecasts for each stage of IRP modeling in the RFP evaluation?

The Company responded:

> For the initial request for proposals (RFP) screening, major assumptions will be updated in the Integrated Resource Plan (IRP) models. The loads will be updated to the latest load forecast. The electric and natural gas prices will also be updated to the June 2020 price forecast.

The Division understands this to mean that expected loads, and therefore expected capacity positions, will be updated by the latest load forecasts throughout the RFP process. The Division requests clarity on how often these assumptions will be updated—for example, will the load forecast and June 2020 price forecasts be updated in the IRP models before the RFP is issued to market? If so, Table 1.3 of the IRP could change significantly. Utility demand for the next six months and beyond may be affected by the Coronavirus pandemic (COVID), which in March of 2020 resulted in curtailment of commercial activity in many states. Utilities are bracing for a possible drop in short-term demand based on COVID-related decreases in projected employment and other factors. The United States Energy Information Administration (EIA) recently stated:

> EIA expects retail sales of electricity in the commercial sector will fall by 6.5% in 2020 because many businesses have closed and many people are working from home. Similarly, EIA expects industrial retail sales of electricity will fall by 6.5% in 2020 as

[13] 2019 Integrated Resource Plan, Volume I, October 18, 2019, p. 16. Available at: https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2019_IRP_Volume_I.pdf

[14] Direct Testimony of Bruce W. Griswold, p. 7 (brackets added).

[15] Docket No. 20-035-05, OCS 1st Set Data Request, May 1, 2020, Request 1.19.

> many factories cut back production. Forecast U.S. sales of electricity to the residential sector fall by 1.3% in 2020 because of lower electricity demand as a result of milder winter and summer weather, which is offset slightly by increased household electricity consumption as much of the population spends relatively more time at home.[16]

If the Company's load forecasts going forward significantly change Table 1.3 of the IRP and the expected capacity shortfall, the Division seeks clarification regarding whether the Company would reduce the maximum capacity sought in the RFP. The Division recommends more information regarding when and how new load forecasts will be used during the RFP process, and to what extent the RFP maximum capacity sought might be impacted by the load forecasts and price forecasts.

Statutory Requirements

The Company's solicitation process is generally governed by Utah Code Ann. § 54-17-201 through 203 and Utah Admin. Code R746-420. Utah Code Ann. § 54-17-201(2)(c) provides that the Commission "shall determine whether the solicitation process… is in the public interest taking into consideration" the following factors:

> (A) whether it will most likely result in the acquisition, production, and delivery of electricity at the lowest reasonable cost to the retail customers of an affected electrical utility located in this state;
> (B) long-term and short-term impacts;
> (C) risk;
> (D) reliability;
> (E) financial impacts on the affected electrical utility; and
> (F) other factors determined by the commission to be relevant.[17]

The Company's general method of satisfying these factors is to use modeling similar to that used in the IRP to evaluate the short-term and long-term cost, risk, and reliability impacts of the bids submitted to the RFP:

> [T]he IRP modelling tools will be used to guide prudent resource acquisition paths that maintain system reliability at a reasonable cost. Moreover, the analysis of bids using the

[16] See Short-Term Energy Outlook, Forecast Highlights, May 12, 2020, available at: https://www.eia.gov/outlooks/steo/report/

[17] Utah Admin. Code R746-420-3(1)(b)((ii) repeats these factors.

> IRP tools will allow the Company to determine whether or not any of the bids received are expected to deliver customer benefits over the long and short-term.[18]

The bids will be evaluated in three main phases. These phases are described in Section 6 of the 2020AS RFP.[19] The three phases are briefly described below.

Phase I: Development of the initial shortlist. In this phase, the Company will evaluate the proposals for completeness and satisfaction of minimum requirements. The bids will be ranked by resource type within each topology location. The eleven topology locations are shown in Appendix H of the RFP, and are based on the transmission topology as described in the 2019 IRP.[20] For example, for the initial shortlist, all wind projects in the East Wyoming region will be ranked against other wind projects in that region, and all solar plus battery projects will be ranked against other solar plus battery projects in that region, up to 150% of the capacity level for each topology region (for each resource type). To take a particular topology region, Southern Oregon, the IRP selected 500 MW of solar for that region, and so the RFP shortlist will allow up to 750 MW of solar, and 750 MW of wind, etc. to make the initial shortlist for that region.[21] The bids wills be ranked by the Company's pricing model. The costs of each bid will be compared to system-value curves, which are developed using the Planning and Risk (PaR) model, similar to the model used in the IRP process.

Based on the cost analysis, bids will be evaluated for a price score, worth 75%, and a non-price score, worth 25%. The non-price score evaluates "maturity and readiness" of the projects, based on factors such as site control, permitting, and equipment acquisition. The Division has some comments about the proposed criteria used in the scoring. The IE has submitted questions on these topics, and as the reply from the Company has not been received, the Division will address scoring concerns in its reply comments.

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[18] Application, p. 9, ¶ 15

[19] 2020AS RFP, pp. 24-33.

[20] See the right-hand side of Appendix H to the RFP.

[21] See *Exhibit Accompanying Direct Testimony of Bruce W. Griswold*, Pre-Issuance Bidders Conference, March 25, 2020 Presentation, slide 7.

The initial shortlist will be determined by production cost modeling, similar to that used for the IRP. The Company will also perform a reliability analysis of all initial bid selections, similar to the reliability analysis performed in the IRP.

Phase II: Interconnection cluster study. This phase will see PacifiCorp Transmission perform a cluster study as described in its queue reform proposal. The Company will also verify capacity factors and storage performance, using a third-party consultant. The cluster study will produce interconnection costs. In some cases, bidders may update certain aspects of their pricing.

Phase III: Final shortlist. In this phase, the production cost models are re-run with interconnection costs from Phase II, and any updated pricing. The Company will use the System Optimizer (SO) model (the same model used in the 2019 IRP) to develop a resource portfolio for creation of a final shortlist.

The Division has some comments about particulars in the scoring and some other details, which it will address in its reply comments, but overall, the process used by the Company to select its final shortlist complies with the dictates of Utah Code Ann. sec. 54-17-201(2)(c). The models and overall portfolio selection process are similar to those used in the IRP. The risk, reliability, and cost impacts of the bids are evaluated by the IRP methodology. The procedural requirements of the statutes and rules are addressed in pages 5-11 of the Application, and the Division agrees that these have been generally satisfied.

The Company requests a waiver of the requirement in Utah Admin. Code R746-420-3(10)(a) that the IE blind all bids for the evaluation process, stating that the effort required would not produce much value, especially since detailed project location (e.g. location, type) in each bid would enable identification of bidders. The Division supports this waiver, especially since the Company is not submitting a self-bid in this RFP.

Conclusion

The Division recommends that the Commission approve the Application, with the following conditions:

- The Division finds the Application to generally comply with the relevant statutes and rules. Due to the compressed timeline in the case, the Division requests the option to make specific recommendations on Application process improvements in its reply comments.
- The Division recommends that the RFP make it clearer that the IRP results do not dictate where the winning RFP bids will ultimately be located, or what the types of the winning bids will be.
- The Division recommends that existing sites be allowed to bid, subject to conditions approved by the IE.
- The Division recommends more information regarding when and how new load forecasts will be used during the RFP process, and to what extent the RFP maximum capacity sought might be impacted by updated load forecasts and price forecasts.
- The Division supports the Company request to waive the requirement in Utah Admin. Code R746-420-3(10)(a) that the IE blind all bids for the evaluation process.

Cc: Michele Beck, Utah Office of Consumer Services