Final Report of Merrimack Energy Group, Inc.

To

Utah Public Service Commission

PacifiCorp Renewable Request for Proposals

(2017R RFP)

Docket No 17-035-23 and Docket No 17-035-40

Public Version

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I. Introduction

On January 16, 2018, in Docket No. 17-035-40, Rocky Mountain Power ("Rocky Mountain Power" or "Company"), a division of PacifiCorp[1] submitted "Application of Rocky Mountain Power for Approval of Solicitation Process for Wind Resources" ("Application") to the Public Service Commission of Utah ("Commission") for approval of a Significant Energy Resource Decision and Voluntary Request for Approval of Resource decision resulting from the PacifiCorp Renewable Request for Proposals ("2017R RFP"). In its application, the Company requested that the Public Service Commission of Utah ("Commission") approve its significant energy resource decision to construct and acquire new wind resources ("Wind Projects") and voluntary energy resource decision for the construction of the Aeolus-Bridger/Anticline line and network upgrades ("Transmission Projects") collectively, the ("Combined Projects"). The Company also provided supplemental testimony describing the results of the Company's 2017R Request for Proposals. In support of the Combined Projects, the Company concluded that the Combined Projects are the least-cost, least-risk path available to serve the Company's customers by meeting both near-term and long-term needs for additional resources. Based on the results of the 2017R RFP, the Company sought seeking approval of the significant energy resource decision to construct or procure four new Wyoming wind projects with a total capacity of 1,170 MW, including two of the benchmark facilities (TB Flats I and II, combined as a single project, and McFadden Ridge II), and two new facilities (NextEra Cedar Springs combined BTA/PPA proposal and Invenergy Uinta). The Company stated in its application that the results of the 2017R RFP and the extensive modeling that supports it confirms that the Combined Projects identified above are the least-cost, least-path available to serve the Company's customers by meeting both near-term and long-term needs for additional resources.

On February 16, 2018, Rocky Mountain Power submitted its Second Supplemental Direct Testimony on the results of the 2017 Request for Proposals ("RFP"), and its Motion to Deviate from R746-1-601(d)(i) and (ii) and from R746-1-203(1)(c). The second supplemental filing updates the 2017R RFP final shortlist to reflect the results of the interconnection restudy process and updated system impact studies ("SIS"). The updated 2017R RFP shortlist now consists of 1,311 MW, replacing the McFadden Ridge II benchmark resource, totaling 109 MW, with another company benchmark resource, Ekola Flats, totaling 250 MW. PacifiCorp also concluded that the revised portfolio provides increased benefits to customers due to the lower cost of the Ekola Flats project relative to the McFadden Ridge II project and the higher capacity associated with the Ekola Flats project.

Merrimack Energy Group, Inc. ("Merrimack Energy") was retained by the Public Service Commission of Utah to serve as the Independent Evaluator ("IE") for PacifiCorp's ("the Company") All Source Request for Proposals (RFP).[2] Utah Code Section 54-17-101 (known as the "Energy Resource Procurement Act") requires the Commission to appoint

[1] Throughout this report Rocky Mountain Power, the Company and PacifiCorp are used interchangeably.
[2] Merrimack Energy was originally retained to serve as Independent Evaluator for the Company's Request for Proposals for Flexible Resources ("RFP"), now referred to as the All Source RFP

an Independent Evaluator to monitor any solicitation conducted by an affected electrical utility under this chapter. Section 54-17-203 identifies the roles and requirements of the IE and specifies that the IE actively monitor the solicitation process for fairness and compliance with Commission rules. However, the IE may not make the decision as to which bid should be awarded under the solicitation.

Merrimack Energy's involvement as Independent Evaluator, therefore, began at the very initiation of the RFP development process and continued through final evaluation, selection, and is anticipated to continue through negotiations of the preferred proposal(s). The roles and functions of the Independent Evaluator in Utah are defined in the Energy Resource Procurement Act and in Rule R746-420-6. As defined, the overall objective of the Independent Evaluator is to ensure the solicitation process could reasonably be expected to be undertaken in a fair, consistent and unbiased manner.

The Scope of Work prepared by the Commission for the Independent Evaluator with regard to the final report identifies specific areas or issues that are required to be addressed in the final report:

1. An analysis of all aspects of the solicitation process and the IE's involvement, observations, conclusions and recommendations. The report will include an analysis of PacifiCorp's reasons and basis for:
    a. Evaluating and ranking bids and the benchmark options;
    b. Selecting a winning bid or benchmark option;
    c. Decisions regarding rejection of proposals or benchmark options are to be fully identified and detailed in the final report; and
    d. If the IE disagrees with PacifiCorp's ranking and conclusions, explain the basis and rationale for this disagreement.

2. At a minimum, the final report should also include an analysis of whether, or the extent to which:
    a. the energy resources selected are in the public interest and is the lowest reasonable cost to PacifiCorp's retail customers taking into consideration long-term and short-term impacts, risk, reliability, and the financial impact on PacifiCorp;
    b. the solicitation process was fair;
    c. the benchmark option was considered and evaluated in the same way as all other bids;
    d. screening factors and weights were applied consistently and comparably to all bid responses and the benchmark option;
    e. credit requirements, liquidated damage provisions, warranties, and other similar requirements affect the bid evaluations and the outcome of the solicitation process;
    f. all reasonable available data and information necessary in order for a potential bidder to submit a bid was provided to potential bidders;

g. all data, information, and models relevant to the solicitation process were made available or given access to the IE to permit full and timely testing and verification of assumptions, models, input, output, and results;
h. confidentiality claims and concerns between the IE and PacifiCorp were resolved in a manner that preserved confidentiality as necessary, yet permitted dissemination and consideration of all information reasonably necessary for an open bidding process to be conducted fairly and thoroughly validated;
i. evaluations were performed consistent with evaluation criteria and methods approved; and
j. negotiations between PacifiCorp and bidders proceeded in a timely fashion and were conducted in good faith.

3. The final report shall also offer, where necessary, feedback on the solicitation and solicitation process including:
    a. content of the solicitation;
    b. evaluation and ranking of bid responses;
    c. creation of a short list of bidders for more detailed analysis and negotiations;
    d. post-bid discussions and negotiations with, and evaluation of, short list bidders; and
    e. negotiation of proposed contracts with successful bidders.

The IE shall also provide recommendations with respect to changes or improvements for a future solicitation process.

In addition to the Final IE report, the IE was required to submit a Shortlist Report. The Shortlist Report was provided to the Commission, DPU and Company on February 15, 2018. The Scope of Work for the Final IE Report states that "to the degree there may be duplication between the reports required in Tasks B8 (IE Shortlist Report) and C1 (IE Final Report), the B8 Report may be simply referenced in the final report." While the majority of the body of the B8 Shortlist Report is also included in this report, Merrimack Energy is including references to supporting Appendices included in the Final Shortlist report rather than replicate the Appendices in the Final IE Report. It is important to note that all Appendices included in the IE Shortlist Report are Confidential Documents.

Merrimack Energy has been actively involved in PacifiCorp's 2017R RFP from the beginning and has been involved in the RFP development process and monitoring the solicitation process through participation in all major team meetings, conference calls and conversations regarding the decisions about the RFP and solicitation process. Our involvement has included all stages of the solicitation process, including (1) development of the RFP; (2) receipt and evaluation/selection of proposals; and (3) monitoring contract negotiations.[3] The objective of this involvement has been to ensure the process is fair and

[3] The IE is required to monitor the contract negotiation process. However, unlike previous PacifiCorp solicitations, the IE Final Report is due prior to the completion of the contract negotiation process due to the timeframe established for this solicitation.

unbiased and provides the best deal for consumers and to raise any concerns along the way, if necessary, to ensure the process stays on track to meet these objectives. [4]

For purposes of undertaking this assessment of the competitive solicitation or RFP process, the following issues will be addressed in this report:

1. An overview of the competitive bidding requirements in Utah which serve to guide the implementation of the bidding process;

2. A list and description of the Scope of Work of the Independent Evaluator as well as the actual activities undertaken by the IE relative to the tasks included in the Utah statutes;

3. A list of the criteria relied upon by the IE to assess the performance of PacifiCorp during the solicitation process;

4. Background to the regulatory decisions and processes leading up to request for approval of the selected resource.

5. A brief description of the contents of the RFP document, including the objectives of the RFP, requirements of the bidders, the proposed evaluation process, Code of Conduct and other information. This information is included for reference purposes with regard to the discussion of PacifiCorp's performance;

6. A brief description of the activities undertaken by the IE at each stage of the solicitation process;

7. Description and assessment of the entire competitive solicitation process including preparation for receipt of bids, bid evaluation and selection process for establishing the initial and final shortlist of preferred proposals and the initial negotiation process to address conditions associated with each short-listed proposal;

8. Description of the comments of shortlisted bidders regarding contract provisions, and the contract negotiation process;[5]

9. Assessment of PacifiCorp's performance in managing and implementing the process relative to the requirements outlined in the Utah Procurement

[4] It is important to note that the Company was ultimately responsible for all final decisions. The IE provided observations or input to the Company, Commission and Division as required.

[5] Unlike previous PacifiCorp RFP processes on which Merrimack Energy has served as IE, the schedule for this solicitation calls for the contract negotiation process to be on-going at the time the IE is required to submit its Final Report. Therefore, this Final Report will not provide a complete assessment of the contract negotiation process or assessment of the final contract as we have included in prior IE Final Reports.

Rules, key criteria for a fair and equitable solicitation process, and lessons learned from the process;

10. Conclusions and recommendations for improving the competitive bidding process.

II. Competitive Bidding Requirements in Utah

Utah Code Section 54-17-101, known as the Energy Resource Procurement Act (2005) requires that an affected electric utility seeking to acquire or construct a significant energy resource[6] shall conduct a solicitation process that is approved by the Commission. The Commission shall determine whether the solicitation process complies with this chapter and whether it is in the public interest taking into consideration 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 electric utility located in the state.

Rule R746-420 outlines in detail the requirements of a solicitation process with regard to implementation of the Energy Resource Procurement Act. Among other issues, Rule R746-420 provides general provisions regarding the filing requirements for the soliciting utility in seeking approval of the solicitation, a description of the solicitation process and associated requirements, and the roles and responsibilities of an Independent Evaluator to oversee the solicitation process.

This Section of the Report will address three major issues. Sub-section A will provide a summary of the solicitation requirements in Utah as a means of setting the stage for a discussion of whether PacifiCorp effectively met the requirements of the Utah statutes. Sub-section B provides an overview of the required role of the Independent Evaluator in the process.

A. Solicitation Requirements in Utah

The specific requirements for the solicitation process are included in section R746-420-3 of the Rules. The key provisions and Disclosures by topic area in the rules are summarized below. In our assessment of PacifiCorp's solicitation process, adherence to these requirements will be a focus of our discussion. Chapter VIII includes that assessment based on 54-17-101 and R746-420.

(1) General Objectives and Requirements of the Solicitation Process

- The solicitation process must be fair, reasonable and in the public interest;
- Be designed to lead to acquisition of electricity at the lowest reasonable cost to retail customers in the state;

[6] A significant energy resource is defined as a resource that consists of a total of 100 MW or more of new generating capacity that has a dependable life of ten or more years.

- Consider long-term and short-term impacts, risk, reliability, financial impacts on the utility, and other relevant factors;
- Be designed to solicit a robust set of bids;
- Be sufficiently flexible to permit the evaluation and selection of those resources or combination of resources determined by the Commission to be in the public interest;
- Be timely in the sense of ensuring adequate time is allotted to undertake the analysis and secure the resources.

(2) Screening Criteria – Screening in a solicitation process

- Develop and utilize screening and evaluation criteria, ranking factors and evaluation methodologies that are reasonably designed to ensure that the Solicitation Process is fair, reasonable and in the public interest in consultation with the IE and Division. Initial screening criteria can include cost to ratepayers, timing of deliveries, point of delivery, dispatchability/flexibility, credit requirements, and transmission, interconnection and integration costs and benefits;
- Allocation of project development risks, including capital cost overruns, fuel price risk and environmental regulatory risk among project developers, utility and ratepayers;
- Environmental impacts;
- In developing the screening and evaluation criteria, the utility shall consider the assumptions in the utility's most recent Integrated Resource Plan ("IRP"), any recently filed IRP update, any Commission Order on the IRP or IRP update and in its Benchmark Option;
- The utility may consider non-conforming bids

(3) Screening Criteria – Request for Qualification and Request for Proposals

- The soliciting utility may utilize a Request for Qualifications (RFQ) process:
- The IE will provide each eligible bidder a bid number when the utility, in consultation with the IE has determined the bidder has met the criteria under the RFQ:
- Reasonable criteria for the RFQ could include such factors as credit requirements, non-performance risk, technical experience, and financial feasibility.

(4) Disclosures – Benchmark Option Included

- Identify whether the Benchmark is an owned option or a purchase option
- If the option is a utility-owned option, provide a detailed description of the facility, including a description of the facility, fuel type, technology, efficiency, location, project life,

transmission requirements and operating and dispatch characteristics;

- Assurance from the utility that the Benchmark Option will be validated by the IE and that no changes to any aspects of the Benchmark option will be permitted after the validation of the benchmark option by the IE and prior to receipt of bids under the RFP and that the Benchmark Option will not be subject to change unless updates to other bids are permitted.

(5) Disclosures – Evaluation Methodology

- The solicitation shall include a clear and complete description and explanation of the methodologies to be used in the evaluation and ranking of bids including a description of all evaluation procedures, factors and weights, credit requirements, proforma contracts, and solicitation schedule.

(6) Disclosures – Independent Evaluator

- The solicitation should describe the role of the IE consistent with Section 54-17-203 including an explanation of the role, contact information and directions for potential bidders to contact the IE with questions, comments, information and suggestions.

(7) General Requirements

- The solicitation must clearly describe the nature and relevant attributes of the requested resources
- Identify the amounts and types of resources requested, timing of deliveries, pricing options, acceptable delivery points, price and non-price factors and weights, credit and security requirements, transmission constraints, etc.;
- Utilize an evaluation methodology for resources of different types and lengths which is fair, reasonable and in the public interest and which is validated by the IE;
- Impose credit requirements and other bidding requirements that are non-discriminatory, fair, reasonable and in the public interest;
- Permit a range of commercially reasonable alternatives to satisfy credit and security requirements;
- Permit and encourage negotiation with short-listed bidders to balance increased value and risk;
- Provide reasonable protection for confidential information.

(8) Process Requirements for a Benchmark Option

- Evaluation team may not be members of the Bid team or communicate with the Bid team about the solicitation process;
- The names and titles of each member of the Bid team, non-blinded personnel, and Evaluation team shall be provided to the IE;

- The Evaluation team shall have no direct or indirect communication with any bidder other than through the IE until such time as a final short list is selected by the Soliciting Utility
- Each team member must agree to all restriction and conditions contained in the Commission rules;
- All relevant costs and characteristics of the Benchmark option must be audited and validated by the IE prior to receiving any of the bids;
- All bids must be considered and evaluated against the Benchmark option on a fair and comparable basis;
- Environmental risks and weight factors must be applied consistently and comparably to all bid responses and the benchmark option;
- The Solicitation must allow power purchase contract terms equivalent to the projected facility life of the Benchmark Option. The Commission may waive this requirement.

(9) Issuance of a Solicitation

- The utility shall issue the solicitation promptly after Commission approval;
- Bids shall be submitted directly to the IE;
- The utility shall hold a pre-bid conference.

(10) Evaluation of Bids

- The utility shall provide all data, models, materials and other information used in developing the solicitation, preparing the Benchmark option, or screening, evaluating or selecting bids to the IE and the Division staff;
- The IE shall pursue a reasonable combination of auditing the utility's evaluation and conducting its own independent evaluation, in consultation with the Division;
- Communications with bidders should occur through the IE on a confidential or blinded basis;
- The IE shall have access to all information and resources utilized by the utility in conducting its analyses. The utility shall provide the IE with access to documents, data, and models utilized by the utility in its analyses;
- The IE shall monitor any negotiations with short listed bidders;
- The Division and IE may ask the PacifiCorp Transmission group to conduct reasonable and necessary transmission analyses concerning bids received.

B. Role of the Independent Evaluator

The Scope of Work for the IE is presented in several documents including the Request for Proposals for Consulting Services for the IE issued by the Commission, Utah statutes

(Section 54-17-101 and Rule R746-420), and RFP Appendix M (Role of the Independent Evaluator) in the 2017R RFP. The scope of work for the assignment requires the Independent Evaluator (IE) to participate in all three phases of the solicitation process: (1) Solicitation process approval; (2) Monitor solicitation process and (3) Energy resource decision. The specific tasks for the Independent Evaluator under each phase of the solicitation process are listed below. The specific tasks outlined guide the activities of the Independent Evaluator throughout the solicitation process.

1. Requirements Outlined for the IE

The requirements of the IE are summarized below for each stage of the process.

a. Solicitation Process Approval

1. Review PacifiCorp's proposed solicitation process to assure it will most likely result in the acquisition, production, and delivery of electricity at the lowest reasonable cost to PacifiCorp's retail customers taking into consideration long-term and short-term impacts, risk, reliability and the financial impacts on PacifiCorp.

2. Review PacifiCorp's proposed solicitation process to assure the evaluation criteria, methods and computer models are sufficient to evaluate the benchmark option and prospective bids in a manner that is fair, unbiased and comparable, to the extent practicable, and that the evaluation tools will be sufficient to determine the best alternative for PacifiCorp's retail customers.

3. Review the adequacy, accuracy and completeness of all proposed solicitation materials including bid evaluation templates, bidding documents (i.e. RFP, Bid Form or Response Package, and the proposed Contracts), disclosure of evaluation criteria (including financial and credit requirements), methods and modeling methodology to ensure the process is fair, equitable and consistent.

4. Review, analyze and validate potential benchmark options (including cost assumptions) for adequacy, accuracy, completeness, reasonableness, and consistency with the evaluation process.

5. Review and validate the adequacy and reasonableness of the proposed evaluation methods, any computer models used to screen and rank bids from initial screening to final resource selection (including spreadsheet screening models and production cost models), and input assumptions. This task requires an assessment of the extent to which the evaluation methods and models are consistent with accepted industry standards and/or practices and the appropriateness of any adjustments made for debt imputation are assessed. Provide input to the Soliciting Utility on the development of screening and evaluation criteria and evaluation methodologies.

6. Provide a written evaluation including recommendations to the Commission regarding the results of the above tasks. Include recommendations on approval of the proposed solicitation or modifications required for approval and the bases for recommendations.

7. Provide input on the development of screening and evaluation criteria, ranking factors, and evaluation methods. Ensure that screening and evaluation criteria take into consideration the assumptions included in PacifiCorp's most recent IRP, any recently filed IRP update, any PSC Order on the IRP or IRP Update, and in its Benchmark Option.

8. Testify before the Commission regarding approval of the proposed solicitation, if necessary.

b. Solicitation Process Bid Monitoring and Evaluation

1. Monitor, observe, validate and offer feedback to the Soliciting Utility, the Commission, and the Division of Public Utilities on all aspects of the solicitation process, including: (1) content of the Solicitation; (2) communications between bidders and PacifiCorp; (3) evaluation and ranking of bid responses; (4) selection of the "short list" of bidders for more detailed analysis and negotiation; (5) negotiations between short list bidders and PacifiCorp; (6) ranking of the final list of alternatives; (7) negotiations of the proposed contracts with successful bidders; and (8) selection of energy resource(s).

2. Provide input to the Soliciting Utility on: (1) the development of screening and evaluation criteria, ranking factors and evaluation methodologies to ensure the solicitation process is fair, reasonable and in the public interest; (2) the development of initial screening and evaluation criteria that take into consideration the assumptions included in the most recent IRP; (3) whether a bidder has met the criteria specified in any RFQ and whether to reject or accept non-conforming RFQ responses; (4) whether and when data and information should be distributed to bidders to facilitate a fair and reasonable competitive bidding process; (5) negotiation of proposed contracts with successful bidders; and (6) other matters as directed by the Commission.

3. Participate in the pre-bid conferences.

4. Following the pre-bid conference, and before the bids are due submit a status report to the Commission and the Division noting any unresolved issues that could impair the equity or appropriateness of the solicitation process.

5. Facilitate and monitor communications between the Soliciting Utility and Bidders.

6. Review and validate the assumptions and calculations of any Benchmark options.

7. Analyze the Benchmark option for reasonableness and consistency with the Solicitation Process.

8. Participate in the receipt of bids and "blind" bid responses.

9. Establish a webpage for information exchange between bidders and PacifiCorp.

10. Monitor all communications with bidders after receipt of bids and negotiations conducted by PacifiCorp and any bidders. Communications between a Soliciting Utility and potential or actual bidders shall be conducted through or in the presence of the Independent Evaluator.

11. Monitor and audit the evaluation process and validate that evaluation criteria, methods, models and other solicitation processes have been applied as approved by the Commission and consistently and appropriately applied to all bids. Audit the bid evaluations to verify that assumptions, inputs, outputs and results are appropriate and reasonable.

12. Advise the Commission, Division and PacifiCorp at all stages of the process of any issue that might reasonably be construed to affect the integrity of the solicitation process and provide PacifiCorp an opportunity to remedy the defect identified.

13. Periodically submit written status reports to the Commission and Division on the solicitation as directed by the Commission or as the IE deems appropriate.

14. File a report with the Commission and Division detailing the methods and results of PacifiCorp's initial screening evaluation of all bids. Include a description of the bids, selection criteria, and provide the basis for the selection of the short-listed bids and rationale for eliminating bids.

Also, upon advance notice to the Soliciting Utility, the IE may conduct meetings with intervenors during the Solicitation Process to the extent determined by the Independent Evaluator or as directed by the Commission. The IE shall also document all substantive correspondence and communications with the Soliciting Utility and the bidders.

c. Participation in the Energy Resource Decision Approval Process

1. File a detailed Final Report (confidential and public versions) with the Commission and provide a copy to the Division as soon as possible following the completion of the Solicitation Process. The Final Report shall include analyses of the Solicitation, the Solicitation Process, the Soliciting Utility's evaluation and selection of bids and resources, the final results, and whether the selected resources are in the public interest.

2. Participate in any Utah technical conferences related to the Energy Resource Decision Approval Process.

3. Participate in and testify at Commission hearings on approval of the solicitation process and/or approval of a Significant Energy Resource Decision.

Merrimack Energy performed all these functions as IE in this process. Examples of the specific functions undertaken by Merrimack Energy are described within the Report for each of the phases of the solicitation process. This Report is the Final Report required of the IE as described above.

III. Summary of the 2017R RFP Process and Key Provisions of the RFP

This Chapter of the Report will provide a high-level description of development and issuance of the 2017R RFP and the associated Appendices and Attachments.

PacifiCorp, d.b.a. Rocky Mountain Power ("PacifiCorp") notified the Public Service Commission of Utah of its intent to seek approval of a solicitation process under Part 2 of the Energy Resource Procurement Act, Utah Code Ann. Title 54, Chapter 17 on April 17, 2017. PacifiCorp indicated it anticipated filing its application for approval of its Request for Proposals for new wind resources on June 16, 2017. The 2017R RFP would solicit bids for up to 1,270 MW of wind resources capable of interconnecting to, and/or delivering energy and capacity across PacifiCorp's transmission system in Wyoming. To ensure eligibility for the full value of federal production tax credits, the 2017R RFP would seek bids that can achieve commercial operation no later than December 31, 2020.

On June 16, 2017, PacifiCorp (d/b/a Rocky Mountain Power) filed an application with the Utah Public Service Commission ("Commission") in Docket No. 17-035-23 requesting approval of a solicitation process for the 2017R RFP. The Application requests that the Commission issue an order approving the Company's 2017 Renewable Request for Proposals seeking up to approximately 1,270 of new wind resources capable of interconnecting to, and/or delivering energy and capacity across PacifiCorp's transmission system in Wyoming. A Scheduling Conference on the approval of the solicitation process was held on June 27, 2017, with a Scheduling Order issued by the Commission on June 28, 2017. PacifiCorp held a Pre-Issuance Bidders Conference on May 31, 2017, as required.

The scope of the draft 2017R RFP was focused on PacifiCorp attempting to capture a time limited resource opportunity arising from the expiration of the federal production tax credits ("PTC") through procurement of proposed wind resources in conjunction with a new 140-mile, 500 kV transmission line and associated infrastructure running from the new Aeolus substation near Medicine Bow, Wyoming, to a new annex substation, Bridger/Anticline, located near the existing Jim Bridger substation ("Transmission Project"). The combination of wind generation and the transmission option proposed was

determined by PacifiCorp to have positive value to customers as identified in its 2017 Integrated Resource Plan ("IRP"). Bidders could submit proposals under the following structures: (1) Power Purchase Agreement ("PPA") with or without a purchase option provided to PacifiCorp; (2) Build-Transfer structure in accordance with the terms of an Asset Purchase and Sale Agreement ("APSA"), and (3) a Bidder-proposed ownership structure.

The initial draft of the 2017R RFP was provided to the IE and posted on PacifiCorp's website on or around June 16, 2017. The draft RFP provided a detailed description of the resource alternatives sought by PacifiCorp, the logistics for submitting a bid including the information, forms, and schedules required with each type of resource alternative proposed, a description of the bid evaluation process and a description of the evaluation criteria to be used to evaluate and select bids. The draft RFP contained seventeen Appendices. In addition, there were Forms in the document for bidders to fill out and submit with their proposal. Finally, the draft RFP contained a description of the role of the Independent Evaluator in the bidding process, and a Code of Conduct.

Subsequent to submission of the draft RFP, the IE prepared a list of questions regarding the RFP, objectives of the RFP and basis for the proposed approach and sent the questions to PacifiCorp for review.

Merrimack Energy staff and members of the Division staff met with PacifiCorp on July 19, 2017 to primarily observe the Code of Conduct training process for employees who are subject to the Code of Conduct as well as to discuss the evaluation methodology, models, and input assumptions to be used by PacifiCorp to prepare for the bid evaluation process. Prior to the meeting, the IE reviewed the RFP and related documents with PacifiCorp and raised a number of questions to PacifiCorp as well as providing comments on certain provisions in the RFP. PacifiCorp also noted that it had retained an IE in Oregon. Both IEs made suggestions regarding revisions to the draft RFP that PacifiCorp agreed to adopt.

Some of the primary revisions to the RFP proposed by Merrimack Energy that PacifiCorp indicated a willingness to review and assess in the draft RFP included the following:

1. Revised the schedule slightly to move the Notice of Intent to bid from September 6 to September 15, 2017 after the bidder's workshop on the 12$^{th.}$ The IE proposed this revision to provide an opportunity for bidders to assess whether to submit a Notice of Intent to bid until after it has had the opportunity to participate in the Bidder's workshop;

2. Revised the initial minimum requirement of requiring a system impact study to only demonstrating that the bidder has initiated the study phase of the interconnection process (i.e. signed agreement and paid deposit to begin feasibility study). Added a condition that the RFP would require a System Impact Study by the initial shortlist to confirm costs and that it can be interconnected to support a 12/31/2020 project commercial operation date;

3. Re-allocated the weights in the non-price table to put higher weighting on the transmission progress criteria;

4. Revised the requirement to meet 100% of the federal PTC to accept full or partial PTC still subject to the December 31, 2020 COD deadline;

5. Revised the Code of Conduct to reflect the presence of a self-build option consistent with other PacifiCorp RFPs for which there was a self-build or benchmark option. The IE notified PacifiCorp that the Code of Conduct initially included in the solicitation documents was from the 2016 All Source RFP which did not include a benchmark resource. Since this RFP included a benchmark resource, the IE suggested that PacifiCorp include a Code of Conduct that reflected the presence of a benchmark resource.

One of the requirements of the Commission's June 28, 2017 Scheduling Order was for the soliciting utility to provide data, information, and models to the IE pursuant to Utah Admin. Code R746-420-1(2).[7] According to the Scheduling Order, comments of the parties were due on Friday, August 4, 2017 and comments from the IE were due one week later on August 11, 2017. Reply comments of all parties were due on August 18th, with a requested Decision from the Commission on August 25, 2017.

Based on the schedule, several parties submitted comments on August 4, 2017, and the IE filed the Report of the Independent Evaluator on the draft RFP as required by Task A7 of the IE Scope of Work on August 11, 2017.

In its report on the proposed solicitation process, the IE identified additional issues of concern and also identified positive aspects of the draft RFP. A list of conclusions and recommendations from the IE Report on the Draft RFP are listed below.

Conclusions

- The RFP documents and process are generally consistent with the Utah Admin. Code, Regulations and Statutes pertaining to the requirements for the design and development of the competitive bidding process. The IE believes that PacifiCorp has adequately addressed most of the requirements listed in the Statutes. However, under the current structure of the RFP it is not certain if the solicitation process will lead to the acquisition and delivery of electricity at the lowest reasonable cost to the retail customers. The IE and others have suggested revisions to the RFP which should hopefully result in a more competitive process that will verify the IRP action plan identified by PacifiCorp without extending the solicitation process schedule, which could jeopardize the potential benefits to customers;

[7] PacifiCorp provided the RFP Base model to the IEs on July 27, 2017 for review. PacifiCorp noted the model did not include the update assumptions and inputs but the model structure would generally be the same as provided.

- The integration of the wind generation resources in conjunction with a new 140-mile 500 kV transmission line from the Aeolus substation to the Bridger/Anticline substation (Aeolus to Bridger/Anticline transmission line) could pose risks to bidders and consumers if the transmission project is not built on time to allow bidders or benchmark resources to achieve Production Tax Credit ("PTC") benefits;

- The 2017R RFP is a reasonably transparent RFP, with a significant amount of information provided to bidders on which the bidders could base their proposals;

- The 2017R RFP is designed to provide the same information to all bidders including the benchmark options;

- The products sought in this RFP are clearly defined and the information required for each type of resource alternative is specified in the RFP in a clear and concise manner;

- The RFP documents clearly describe the products requested, the requirements of bidders, the evaluation and selection process, and the risk profile of the buyer. In this regard, there is sufficient information to allow bidders to assess whether or not to compete, the product of choice to bid to be most competitive, and the process by which their proposals will be evaluated;

- There are a number of safeguards included in the solicitation process which should ensure that all bidders will have access to the same information at the same time with no undue benefit for the benchmark bids;

- Parties have raised the issue of ensuring comparability for resource evaluation, notably ensuring that utility benchmarks and third-party PPA and Build Transfer bids are required to compete based on the same set of rules or on a level playing field. The IE also views comparability to be the most challenging issue in a solicitation process in which utility-owned resources compete with third-party resources. The nature of these resources is very different to begin with. Third-party PPA options submit a price schedule that is firm at the time of submission. Changes in the cost of equipment or market prices can affect the final economics either positively or negatively, with the bidder absorbing the risk of higher project costs or enjoying the benefits or lower project costs. Utility-owned options, on the other hand are submitted as reasonable estimates. If costs increase, the utility could request the ability to pass through the costs to customers assuming the costs are deemed to be prudently incurred. Cost decreases, on the other hand, are passed through to customers. Given the different risk profiles, contract terms, etc. it is extremely difficult to create a fully level playing field on which both types of resources can compete. Merrimack Energy has proposed several ways to create a more level playing field in the solicitation process.

- The evaluation process and quantitative methodologies developed by PacifiCorp for undertaking the initial price screening evaluation (spreadsheet model formerly referred to as RFP Base Model) and for selecting the final short list (System Optimizer and PaR models) are applicable for the modeling of the proposals expected in this RFP. Furthermore, the model methodology is consistent with and likely exceeds industry standards applied by others for conducting such a price and risk analysis. While the spreadsheet model may be unique to PacifiCorp, the model methodology and concept is consistent with the approaches applied by others, notably a comparison of the costs and benefits for each proposal. The portfolio evaluation and risk assessment methodologies are very detailed and are generally pertinent to the requirements of the Energy Procurement Resource Act.

- The evaluation and selection process appears to be a comprehensive process designed to evaluate the cost implications associated with different resource portfolios, the important non-price factors required in the Act that influence project viability, and assesses the risk parameters associated with the portfolios.

- PacifiCorp met the requirements of Utah Admin. Code R746-420-1(2) and the Scheduling Order in Docket No. 17-035-23 by providing the IE with data, information and models necessary for the IE to analyze and verify the models. PacifiCorp provided the IE with the latest version of its price screening spreadsheet model that will be used for the phase 1 shortlist evaluation as well as the latest input assumptions, which may be subject to revisions.

Recommendations

- Both Merrimack Energy and UAE have raised issues with regard to comparability associated with the risk issues allocated to each resource type (i.e. PPA, BTA, and benchmark) and comparability associated with the resources evaluation process (contract term/evaluation horizon). Merrimack Energy has undertaken a detailed assessment of the Power Purchase Agreement ("PPA") and Build Transfer Agreements ("BTA") and identified the risks in each contract. Merrimack Energy concluded that there are very different risk provisions in the PPA and BTA agreements which could unduly favor the Benchmark options. PPA and BTA bidders were allocated significant risk which could either eliminate potential bid options or lead to much higher prices for these options if the bidder prices the risk into its bid price. We suggested that PacifiCorp either revise the contracts to create a more balanced risk profile or allow bidders to provide comments on contract issues with their proposals. For example, in response to a question from Merrimack Energy regarding contract risk allocation, PacifiCorp stated that the contracts will be subject to negotiations, apparently meaning that PacifiCorp is willing to recognize that bidders may take exception with certain provisions of the contracts. The IE has suggested that bidders be allowed to either red-line the PPA or provide comments on the Agreements with their proposals to assess if there are 'deal breaker" provisions in the contracts that will affect all or a significant

portion of the bidders. PacifiCorp could then decide to make revisions to the contracts in conjunction with input from the IEs to ensure the contract provisions do not unduly bias a resource selection decision;

- The IE has also provided recommendations associated with meeting the requirements in the statute for equivalent contract terms. Section R746-420-3(8)(k) states that the solicitation must allow power purchase contract terms equivalent to the projected facility life of the Benchmark option, which we understand to be 30 years. The recommendation of the IE is to allow PPA bidders to offer either a 30-year term or a 20-year contract with up to a 10-year extension that is a firm price and would be exercised at the option of the buyer;

- Merrimack Energy has also recommended that the eligibility provisions in the RFP be expanded. This includes removing the requirement that only new wind projects who can quality for the full PTC benefits are eligible. Instead, the IE supports PacifiCorp's recent decision to lift the full PTC requirement and allow other bidders that may also have unique competitive advantages to compete. The IE also recommended that existing projects that are not under contract at the time of bid submission and who proposed repowering their wind projects were also eligible to bid. Finally, the IE agreed with the Division of Public Utilities regarding the proposal to allow broader access to PacifiCorp's load center by eliminating the requirement in the Draft RFP that the bidder must use the proposed Aeolus to Bridger/Anticline ("Gateway Segment D2" or "D2") transmission facilities or demonstrate they can deliver the power into Wyoming. This would allow PacifiCorp to determine if its action plan for 1,270 MW of wind generation combined with construction of the transmission facilities associated with Aeolus to Bridger/Anticline transmission line would be economic and provide value to customers;

- Merrimack Energy recommended that the Commission grant PacifiCorp's request for a waiver of the bid binding requirements in the Statute (Utah Admin. Code R746-420-3(10)(a). However, the IE still suggested that questions and answers would be blinded in that PacifiCorp would not know the identity of the bidder when the questions from the bidder was provided to them by the IE. Merrimack Energy would remove the name or reference to the bidder prior to submitting the question to PacifiCorp for a response;

- The IE recommended that PacifiCorp allow bidders to submit a base bid and two alternatives for the bid fee of $10,000 instead of the base bid and one alternative, particularly since PacifiCorp was encouraging PPA bidders to include a purchase option proposal with their bid. If bidders offer a purchase option presumably this would serve to use up their one allowable alternative;

- Given the importance of transmission, the IE suggested that PacifiCorp consider either providing a workshop on transmission and interconnection requirements

and status of options or include a detailed discussion of these issues as part of the Bidders Conference to be held on September 12, 2017;

- The IE suggested that PacifiCorp consider revising its non-price factors to include project viability characteristics for the projects. In the view of the IE, some of the factors identified by PacifiCorp were really eligibility or threshold criteria (i.e. bids provide all required RFP information) and not non-price factors. The IE identified factors such as experience of the bidder, access to generating equipment, financing plan, O&M plan, etc. as criteria or factors to consider;

- There is little information regarding credit requirements to allow bidders to reflect the credit requirements in their bids or affect their decision to compete, unlike previous PacifiCorp RFPs. PacifiCorp could either include credit requirements based on $/kW bid or update its previous credit methodology;

- The IE recognized the potential issues associated with new lease accounting rules and Variable Interest Entity (VIE) treatment, particularly since PacifiCorp had stated in the RFP that it would not be subject to projects that trigger VIE treatment, for example. Merrimack Energy included suggested language in this section of the RFP to require PacifiCorp to provide documentation to the IE justifying any decision to reject a bid due to accounting issues;

- Task B3 of the IE Scope of Work as listed in the Commission's RFP for Independent Evaluator required the IE to set up and maintain a webpage or database for information exchange between bidders/potential bidders and PacifiCorp **only if directed by the PSC in its Approval of the Solicitation Process.** Merrimack Energy proposed to establish a webpage on its website to accommodate this requirement similar to the webpages we established for previous PacifiCorp RFPs. The webpage would be used to accept questions from bidders, which Merrimack Energy staff will blind by removing the name of the bidder, before sending the questions to PacifiCorp for a response. Merrimack Energy would then review the responses and post the Question and Answer to the webpage for bidders to review. Merrimack Energy would also post any RFP documents on the webpage as well as posting any Notices to bidders of upcoming schedule items or changes to RFP documents.

As a result of the comments of parties and the report submitted by the IE, PacifiCorp agreed in its Reply Comments on August 18, 2017 to make several revisions to the RFP prior to the Commission hearings on the RFP, including the following:

- Expanded the eligibility provisions to allow both new wind projects and repowered existing wind resources to submit proposals, as long as the repowered project does not have an existing PPA with PacifiCorp;
- Revised the non-price factors to include project viability characteristics, such as experience of the bidder, access to generating equipment, financing plan, O&M plan, etc.;

- Included credit requirements for bidders in the RFP to allow bidders to reflect the credit requirements in their bids;
- Provided equivalent contract terms for PPA bidders, allowing PPA bidders to offer either a 30-year term or a 20-year contract with up to a 10-year extension that is a firm price and would be exercised at the option of the buyer;
- Company proposed to require Bidders to provide a System Impact Study by the date of the initial shortlist rather than at the time of proposal submission;
- PacifiCorp objected to the request of the Division and IE to eliminate the requirement that the bidder must use the proposed Aeolus to Bridger/Anticline transmission facilities or demonstrate they can deliver into Wyoming.

On August 22, 2017, the Commission issued its Order and Notice of Scheduling Conference. The Commission concluded that it had an insufficient record to make a finding of fact. The Commission also concluded that additional time to analyze the RFP is warranted and in the public interest.

Hearings on the Company's application took place on September 19, 2017. At the hearing, PacifiCorp agreed to broaden the scope of the RFP to wind resources that could deliver output from anywhere on PacifiCorp's transmission system. Therefore, an eligible bid would now include all wind facilities located in the PacifiCorp system outside of Wyoming with the proven ability to directly interconnect with the PacifiCorp transmission system, or deliver energy to PacifiCorp through the use of third-party firm transmission service.

The Commission issued its Order on September 22, 2017 approving the RFP with suggested modifications. The Order:

1. Approved the RFP as proposed by PacifiCorp, including modifications proffered during the hearings to be accepted by PacifiCorp;
2. Suggested a modification to the RFP that PacifiCorp expand the RFP to include solar resources that can interconnect at any point in PacifiCorp's system. Whether or not PacifiCorp accepts this suggested modification, the Commission did not require any additional approval prior to RFP issuance;
3. Approved PacifiCorp's request for a waiver of Utah Admin. Code R746-420-3(10)(a) requiring the IE to blind all bids for the evaluation process;
4. Directed the IE to set up and maintain a webpage or database for information exchange between bidders, potential bidders, and PacifiCorp.

The RFP was issued on September 27, 2017.

Table 1 lists the key provisions in the 2017R Renewable RFP included in Docket No.17-035-23 on the Commission website.

Table 1
Summary of Key Provisions of the Draft 2017R RFP

RFP Characteristics	All Source RFP
Resource Requirements	PacifiCorp is seeking cost-effective bid for up to 1,270 MW of wind energy resources interconnecting with or delivering to PacifiCorp's Wyoming system and any additional wind energy located outside of Wyoming that will reduce system costs and provide net benefits for customers. Bidders should assume that Wyoming projects can interconnect to, or deliver via third-party transmission to the proposed 500-kV Energy Gateway segment D2 Aeolus-to-Bridger/Anticline substation and transmission system. Proposals for wind resources claiming PTC eligibility must demonstrate to PacifiCorp's satisfaction that projects will qualify for the federal PTC, if applicable.
Resource Timing – On-line Date	PacifiCorp will only consider projects that demonstrate a unique value opportunity for its customers and achieve commercial operation by December 31, 2020, without compromising system reliability.
Eligibility	PacifiCorp will accept proposals for new or repowered existing wind resources capable of directly interconnecting and delivering energy to PacifiCorp's network transmission system in PACW and PACE or capable of delivering energy to PacifiCorp's transmission system in PACW and PACE with the use of third-party transmission service. Minimum project size is 10 MW Bids submitted with repowered wind resources will only be allowed for an existing wind resource that currently: • Does not have a power purchase agreement with PacifiCorp for the offtake of the energy, or • Has an active power purchase agreement with PacifiCorp that naturally expires before December 31, 2020. • Failure to demonstrate a commercial operation date prior to December 31, 2020. Failure to provide two years of wind resource data for a proposed wind project submitted as a BTA and one year of wind resource data if the wind project is proposed as a PPA
Resource Alternatives/Transaction Structures	PacifiCorp will consider proposals for the following transaction structures: (1) Build-Transfer transaction whereby the bidder develops the project, assumes responsibility for construction and ultimately transfers the operating asset to

	PacifiCorp upon or prior to December 31,2020; and. (2) Power Purchase Agreement for up to a 30-year term with exclusive ownership by PacifiCorp of any and all environmental attributes associated with all energy generated. At the Bidders option, the PPA bid submittal can include two distinct alternatives: • A proposed contract term ranging between 20 and 30 years, with or without the right for PacifiCorp to purchase the project assets during or at the end of the proposed contract term at fair market value (FMV) to retain the value of the site for customers, or • A 20-year PPA term with an option for PacifiCorp to extend the PPA term at a proposed fixed price ($/MWh) for up to 10 years. PacifiCorp also announced plans to offer at least 860 MW of new wind projects as self-build options. The benchmark resources would be completed via an Engineering, Procurement, and Construction ("EPC") contract.
Bid Alternatives	For each bid proposal, bidders must submit a bid fee of $10,000, which allows a bidder to submit a base proposal and two alternatives for the same $10,000 bid. Bidders will also be allowed to offer up to three additional alternatives at a fee of $3,000 each. Alternatives will be limited to different bid sizes, contract terms, in-service dates, and/or pricing structures.
Bidding Process	The Company will conduct a multi-stage process. In the first stage, the bidder must submit both the "Intent to Bid Form" and the Bidder's Credit Information Appendices B and D). In the second stage, bidders are required to submit their proposals and respond to the requirements for the type of resource alternative they are proposing. All bidders must submit Appendix C – Bid Summary and Pricing Input Sheet. Bids that make the short list will be allowed to provide a Best and Final Offer. Best and Final Prices must be within 10% of the Bidders original total bid cost relative to the cost of the bid selected in the initial short list.
Utility Bid Options	The Company proposes to submit four individual wind Benchmark Resources to satisfy approximately 860 MW of targeted wind resources. A description of the projects is included in Appendix L.
Evaluation Process – Short List Selection	PacifiCorp proposes a two-phase price evaluation process, with multiple steps as will be described in more detail below. The two phases include (1) an Indicative Bid stage as the basis for selecting a short list and (2) Best and Final Offer.

	In the first phase, PacifiCorp will establish an initial shortlist based on both price and non-price factors, The Company intends to evaluate each bid received in a consistent manner by separately evaluating the non-price characteristics of the resource and the price characteristics. Price will account for 80% of the score and non-price for 20% (or a maximum of 20 points). From a pricing perspective, all bids will be evaluated using PacifiCorp's proprietary spreadsheet model to calculate the delivered revenue requirement cost of each benchmark resource and market bid, inclusive of any applicable carry cost and net of production tax credit benefits. The delivered revenue requirement cost will be netted against energy, capacity, and terminal value benefits, as applicable, to calculate the net cost of each benchmark resource and market bid. The net cost calculation will be used to assign a price score to each benchmark resource and each market bid. This will be achieved by calculating the nominal levelized (discounted) revenue requirement cost and the nominal levelized (discounted) benefit for each benchmark resource and market bid, where revenue requirement costs are reported as a negative value and customer benefits are reported as a positive value. The calculated net benefit for each benchmark resource and market bid will be forced ranked based for the $/MWh price category with an upper boundary of 80 points. Forced ranked bids grant the maximum of 80 points to evaluated bids with the highest calculated net benefit and the lowest evaluated bid get 0 points. PacifiCorp will use the combined price and non-price results to rank benchmark resources and market bids. Based on these rankings, PacifiCorp will select an initial shortlist based on total bid score (maximum at 100%, with a maximum of 80% for price and a maximum of 20% for non-price factors). Bid that make the short list will be allowed to provide a Best and Final Offer. Best and Final pricing shall not exceed 10% of the original total bid cost, which PacifiCorp will assess on a present value revenue requirements basis. In the event that best and final pricing increases the total benchmark resource or market bid cost by more than 10%, PacifiCorp reserves the right to either (a) reject the best and final proposal or, (b) replace the shortlisted bid or bid alternative with a final proposal solicited from another bid not originally selected to the initial shortlist.
Non-Price Evaluation	In phase 1 of the evaluation process, price and non-price

	weights are combined to select the short list within each resource Category. The non-price characteristics include: (1) Conformity to RFP Requirements; (2) Project Deliverability; and (3) Transmission Progression.
Phase 2 – Final Shortlist	PacifiCorp will use the System Optimizer (SO) model to develop a resource portfolio containing the 2017R RFP bids with the Aeolus to Bridger/Anticline transmission project. For purposes of the 2017R RFP, the SO model will be used to select the combination of wind projects from the initial shortlist, up to approximately 1,270 MW, that minimizes system costs among a range of different environmental policy and market price scenarios. The SO model will also be used to establish least cost resource portfolios for each policy-price scenario without any new wind and without the Aeolus to Bridger/Anticline transmission project. For each policy-price scenario, PacifiCorp will calculate the present value revenue requirement differential (PVRR(d)) between the portfolio containing 2017R RFP wind resources with the Aeolus-to-Bridger/Anticline project, including all transmission costs, and the portfolio without 2017R RFP wind resources and without incremental transmission costs. PacifiCorp will also evaluate each of the resource portfolios developed with the SO model using Planning and Risk (PaR). For purposes of the 2017R RFP, PaR will be used to calculate the stochastic mean PVRR(d) and the risk-adjusted PVRR(d) for each policy-price scenario. Based on the results of the evaluation and in consultation with the IEs, PacifiCorp will select one or more 2017R RFP wind resource portfolios for further scenario risk analysis. Before establishing a final shortlist, PacifiCorp may take into consideration, in consultation with the IEs, other factors that are not expressly or adequately factored into the evaluation process described above, particularly any factor required by applicable law or Commission order.
Credit Requirements	PacifiCorp will evaluate credit requirements for shortlisted bidders. Credit requirements for bidders are described in Appendix D of the RFP.
Transmission	PacifiCorp is seeking resources capable of (1) directly interconnecting with PacifiCorp's system in its PACW and PACE balancing areas or (2) interconnecting with a third-party system and using third-party firm transmission service to deliver to PacifiCorp's transmission system. With either method, PacifiCorp prefers bids that will not face significant transmission costs or constraints between the resource and

	PacifiCorp network load. While PacifiCorp provides these general guidelines, the available transfer capability from the project or project delivery points to PacifiCorp's network load cannot be known or estimated until the bidder identifies its proposed point of interconnection/point of delivery.
Accounting Issues	All contracts proposed to be entered into as a result of this RFP will be assessed by PacifiCorp for appropriate accounting and tax treatment. Given the term length of the PPA, or the useful life of the asset to be acquired under an asset acquisition or alternative ownership proposal, accounting and tax rules may require either: (i) a contract be accounted for by PacifiCorp as a capital lease or operating lease pursuant to ASC 840, or (ii) the seller or asset owned by the seller, as a result of an applicable contract, be consolidated as a variable interest entity (VIE) onto PacifiCorp's balance sheet. PacifiCorp is unwilling to be subject to accounting or tax treatment that results from VIE treatment. As a result, after bidders are selected for the shortlist, if required by PacifiCorp accounting department, bidders will be required to certify, with supporting information sufficient to enable PacifiCorp to independently verify such certification, that their proposals will not be subject to VIE treatment.
Imputed Debt	PacifiCorp will not take into account potential costs to the Company associated with direct or inferred debt as part of the economic analysis in the shortlist evaluation. However, after completing the shortlist and before the final resource selections are made, PacifiCorp may take direct or inferred debt into consideration. In so doing, PacifiCorp may obtain a written advisory opinion from a rating agency to substantiate PacifiCorp's analysis and final decision regarding direct or inferred debt.
Code of Conduct	A Code of Conduct is included in the RFP as Appendix N.
Benchmark Bids	Appendix L of the RFP provides a summary of PacifiCorp's Company Alternatives (Benchmark Resources).
Role of the IE	Appendix M to the RFP describes the role of the IE in the process.
Contracts	The Company provides a sample PPA and Build-Transfer Agreement (BTA).
Schedule	A detailed schedule was provided in the RFP including the following important dates: • RFP Issued to Market – September 27, 2017 • Bidders Conference – October 2, 2017 • Notice of Intent to Bid – October 9, 2017 • Benchmark Bids Due – October 10, 2017 • Wyoming Bids Due – October 17, 2017

	• Non-Wyoming Bids Due – October 24, 2017 • Initial Shortlist Evaluation/Scoring Completed – November 12, 2017 • IE Review of Initial Shortlist Completed – November 17, 2017 • Best and Final Price Update – November 22, 2017 • Final Shortlist Evaluation Completed – January 8, 2018 • IE review of Final Shortlist Completed – January 15, 2018 • Execute Agreements – April 16, 2018

In addition to the RFP document, PacifiCorp provided a number of Appendices to the RFP with its filing. The Appendices to the RFP are listed below.

1. RFP Main Document
2. Appendix A – 2017R Renewable Project Technical Specification
3. Appendix B – Notice of Intent to Bid and Information Required in Bid Proposals
4. Appendix C – Bid Summary and Pricing Input Sheet (Instructions for PPA and BTA)
5. Appendix D – Bidder's Credit Information
6. Appendix E-1 – PPA Instructions to Bidders
7. Appendix E-2 – Power Purchase Agreement (PPA) Documents
8. Appendix F-1 – BTA Instructions to Bidders
9. Appendix F-2 – Build Transfer Agreement (BTA) Documents
10. Appendix G – Confidentiality Agreement and Non-Reliance Letter
11. Appendix H – Reserved
12. Appendix I – FERC's Standards of Conduct
13. Appendix J – Qualified Reporting Entity Services Agreement
14. Appendix K – General Services Contract - Operations and Maintenance Services for Project
15. Appendix L – PacifiCorp's Company Alternative (Benchmark Resource)
16. Appendix M – Role of the Independent Evaluator
17. Appendix N – Code of Conduct Governing PacifiCorp's Intra-Company Relationships for RFP Process
18. Appendix O – Description of PacifiCorp's Proposed Gateway Segment D Transmission Project

Bidders Conference

The Bidder's Conference/Workshop was held on October 2, 2017 at two locations: Salt Lake City and Portland. In addition, participants could call in to the webinar. The key agenda items addressed at the Bidder's Conference included the following:

- RFP Key Points
- RFP Schedule
- Bid Proposal Types and Structures

- Benchmark Resources
- Interconnection and Transmission Service
- Credit and Credit Requirements
- Bid Submission Requirements
- Minimum Eligibility Requirements
- Instructions for PPA and BTA Submissions
- Bid Evaluation Process and Shortlist Selection
- Independent Evaluators
- Communication
- Next Steps
- Questions and Comments

There were 125 participants present at the Bidder's Conference/Workshop including 11 in person at the Salt Lake City site, 15 in Portland and 99 via the Webinar. A copy of the attendees is provided on the PacifiCorp website for this RFP.

Questions and Answers

Consistent with the Commission's Order, Merrimack Energy set up a separate webpage for the PacifiCorp 2017R RFP on its website. Bidders who wished to remain anonymous could submit questions to the Merrimack Energy webpage for the PacifiCorp RFP and Merrimack Energy would blind the Bidder's name prior to sending the question to PacifiCorp for a response. In addition, Bidders could also submit questions directly to PacifiCorp. The IE and PacifiCorp collaborated on exchanging the questions and responses to ensure there was consistency regarding the Q&As posted to each website. PacifiCorp's website contained 12 Q&As associated with the Bidder's Conference/Workshop, and 23 Q&As submitted after the Bidder's Conference. Merrimack Energy's webpage included 26 Q&As, including some Q&As that were posted to both websites.

Input Assumptions

An important part of any bid evaluation process is the development of the input assumptions that will be used as the basis for consistently evaluating proposals received. Ideally, a utility will prepare its input assumptions, share the assumptions with the IE, and lock-down the assumptions prior to submission of proposals. PacifiCorp sent its input assumptions for the 2017R RFP to the IEs on October 6, 2017 (Task B1), prior to receipt of proposals. PacifiCorp and the IEs participated in a call to discuss any questions of the IEs on October 9, 2017. In preparation for the call, Merrimack Energy sent several questions to PacifiCorp regarding the input assumptions. The input assumptions file submitted by PacifiCorp included the flowing Tabs:

- Financial Tab
  - Inflation rates – from 2017 IRP
  - AFUDC rate
  - Capital Structure – from 2017 IRP
  - Asset Lives

        - Property tax rates
        - Bonus Depreciation
        - ITC for Wind
        - PTC for Wind[8]
    - Owners Costs (for utility-owned wind projects)
        - Owners costs
        - O&M costs
        - Insurance
        - Decommissioning
    - Wind Integration Costs – From 2017 IRP
    - Third-party Transmission Costs
    - System Benefits Curves
        - Combined energy and capacity system benefit by major location
        - Monthly price curves (high and low load hours) for Mona (Wyoming); Mona (UT/ID); Mid-C (OR/WA).

PacifiCorp proposed Operation and Maintenance and Administrative and General Costs ("OMAG") to be [redacted]kW for Tier 1 wind turbines escalated by inflation after year 3. PacifiCorp included an Insurance cost of [redacted] per $100 of capital. PacifiCorp also provided a backup cost table which verified the costs used for the evaluation based on PacifiCorp's experience operating wind turbine projects.

For integration costs, PacifiCorp provided its estimate based on its 2017 Flexible Reserve Study from the 2017 IRP. The latest study results include wind integration costs of $.57/MWh in $2017 compared to $3.06/MWh from the 2014 Wind Integration study. The latest cost estimate is comprised of $.43/MWh for Intra-hour Reserves and $.14/MWh for inter-hour/System Balancing.

PacifiCorp's input assumptions also include Monthly ACC (Alternative Cost of Compliance) values for Wyoming (Mona), UT/ID (Mona) and OR/WA (Mid-C) regions. The ACC uses system costs and benefits from an IRP model run as a replacement for market and leaves out a Renewable Energy Certificate ("REC") assumption.

The IEs and PacifiCorp held a conference call on October 9, 2017 to discuss the assumptions and any issues associated with any values or the methodology for generating the forecast. Merrimack Energy asked questions relating to the basis for developing the forward price curves for electricity, financial inputs, and the basis of the O&M cost estimates and their relationship to the O&M costs for the benchmark. Merrimack Energy was particularly concerned about the OMAG assumptions which appeared to be low relative to the IEs experience and low relative to the inputs used by PacifiCorp in its 2017 IRP.

Merrimack Energy reviewed the input assumptions provided by PacifiCorp and had several follow-up questions relating to the following cost items:

[8] Section 2 of this report provides a description of the basis for the PTC assumptions used in the evaluation.

1. Basis of the AFUDC rates;

2. Owners Costs including the basis and reasonableness of OMAG costs, inclusion of Capital expenditures, and the relationship between the OMAG costs included in the assumptions tab compared to the O&M costs included in the IRP;[9]

3. System Benefits Curves, including questions on the factors that explain the much lower monthly ACC forecast for Mona for the UT/ID area as opposed to Wyoming;

4. The basis for the integration cost assumptions for wind presented in the input assumptions backup based on the Flexible Reserve Study as described in the IRP relative to the higher values used in the 2014 IRP.

A copy of the input assumptions file submitted by PacifiCorp to the IEs is included as Appendix A to the IE Shortlist Report.

Notices of Intent to Bid

As described in the 2017R RFP document, bidders who intended to participate in the RFP must submit an Intent to Bid Form and Credit information to PacifiCorp and the IEs as an initial non-binding step in the process. Bidders were required to provide this information by October 9, 2017. Table 2 provides a high-level summary of the Notices of Intent to Bid results. Appendix B to the IE Shortlist Report contains the summary of the Notices of Intent by bidder as compiled by PacifiCorp.

Table 2: Summary of Notices of Intent to Bid Responses

Region	Number of Potential Bidders	Project Options	Total Potential Capacity (MW)
Wyoming	12	36	9,559
Non-Wyoming	8	10	1,652
Total	20	46	11,211

[9] PacifiCorp provided a comparative response regarding the basis for the O&M costs contained in the input assumptions file and the O&M costs included in the IRP.

IV. Bid Evaluation Methodology

A. Summary of PacifiCorp's Evaluation and Selection Process

Section 6 of the 2017R RFP provides a description of the bid evaluation process and methodology for the 2017R RFP. According to the RFP "PacifiCorp's bid evaluation and selection process is designed to identify the combination and amount of new or repowered wind projects bid into the 2017R RFP that will maximize customer benefits. The method used to evaluate and select bids is consistent with the methods that were used to evaluate new or repowered wind resources and transmission infrastructure in PacifiCorp's 2017 IRP." The same method will be used to evaluate benchmark resources and market bids.

PacifiCorp indicated that it intended to utilize a two-phase evaluation process. The two phases include (1) an initial bid stage as the basis for selecting a shortlist and (2) Best and Final Offer process. In the first phase, PacifiCorp would establish an initial short-list based on both price and non-price factors. Updated pricing was not permitted during this phase. After the initial short-list was established, all bids (and alternatives) for the selected bid would be given the opportunity to provide best and final pricing.[10] In the second phase, the updated pricing for short-listed bids would be analyzed with the same production cost models used to develop PacifiCorp's 2017 IRP preferred portfolio. These production cost models would be used to perform a net customer benefit analysis by simulating PacifiCorp's system costs with and without initial shortlist bids. PacifiCorp's production cost modeling would be used to calculate the expected net present value revenue requirement impacts, accounting for risk.

B. Shortlist Evaluation Methodology

According to the RFP, PacifiCorp will use the combined price and non-price results to rank benchmark resources and market bids. Based on these rankings, PacifiCorp would select the initial short list based on price and non-price factors, with price weighted up to 80% and non-price up to 20%. The RFP stated that PacifiCorp would seek to establish an initial shortlist of up to approximately 2,000 MW of aggregate wind capacity for Wyoming projects that are reliant on the Aeolus-to-Bridger/Anticline transmission project and up to 2,000 MW for projects not dependent on the Aeolus-to-Bridger/Anticline. However, PacifiCorp, in consultation with the IEs, may establish an initial shortlist containing less or more aggregate capacity depending upon the relative total bid score among benchmark resources and market bids.

From a pricing perspective, all proposals would be evaluated using PacifiCorp's proprietary spreadsheet model to calculate the delivered revenue requirement cost and benefit of each benchmark resource and market bid, inclusive of any applicable carrying costs and net of production tax credit benefits and other benefits. The delivered revenue

[10] As noted, PacifiCorp's evaluation process included a best and final pricing option. However, due to the passage of the Federal Tax Bill and the possible impacts on corporate tax rates and the value of the PTC benefits, PacifiCorp offered bidders the opportunity to update pricing in late December, 2017.

requirement cost would be netted against energy, capacity, and terminal value benefits, as applicable, to calculate the net cost of each benchmark resource and market bid. The net cost calculation would be used to assign a price score to each benchmark resource and each market bid. This would be achieved by calculating the nominal levelized (discounted) revenue requirement cost and the nominal levelized (discounted) benefit for each benchmark resource and market bid, where revenue requirement costs are reported as a negative value and customer benefits are reported as a positive value.

The nominal levelized net benefit reflects interconnection network upgrade costs, but does not include the cost of the Aeolus-to-Bridger/Anticline transmission line, which would be captured in the economic analysis informing selection of the final shortlist. As stated in the RFP, PacifiCorp would use cost data for each benchmark resource and market bid. The assumptions made for financial inputs and PacifiCorp carrying costs would be applied consistently to benchmark and market offers. For Build-Own-Transfer options in which PacifiCorp would eventually own the project, project costs include operating costs required of PacifiCorp as well as capital related costs associated with rate base treatment for the project under cost of service regulations. PacifiCorp also considered the value of the Production Tax Credit ("PTC")[11] or Investment Tax Credit ("ITC") as a benefit to the BTA option for the bid evaluation process. PPA bidders would incorporate the benefit of PTCs in their PPA pricing proposal.

The nominal levelized revenue requirement cost (negative value) and benefit (positive value) for each bid will be used to calculate the net cost in order to rank the bids. According to the RFP document, the calculated nominal levelized $/MWh net benefit for each benchmark resource and market bid will be forced ranked, with a maximum of 80 points to the evaluated bid with the highest calculated net benefit, a minimum of zero points to the evaluated bid with the lowest calculated net benefit, and the remaining bids scored on a 0 to 80-point scale according to the relationship of their respective calculated net benefits to those of the highest and lowest bids. PacifiCorp stated it would also rank the bids per the IE-recommended ranking methodology used in PacifiCorp's previous RFPs for purposes of comparison as part of the initial shortlist evaluation.[12] If the methodologies result in different initial shortlists, PacifiCorp indicated it would include in its initial shortlist all bids supported by both methodologies.

As noted above, for the initial price evaluation, PacifiCorp would run its traditional RFP Base spreadsheet model to calculate both the costs and benefits associated with each proposal. The cost/benefit components and values vary depending on whether a bid is a

[11] In its application for issuance of the RFP, PacifiCorp stated that the target date for the 2017R RFP was driven by the need to capture a time-limited resource opportunity arising from the expiration of the federal production tax credits ("PTCs"). The Company indicated it would procure the proposed wind resources in conjunction with a new 140-mile, 500 kV transmission line and associated infrastructure running from the new Aeolus substation near Medicine Bow, Wyoming, to a new annex substation, Bridger/Anticline, located near the existing Jim Bridger substation. The project must achieve commercial operation by the end of 2020 to qualify for the full value of the PTCs.

[12] PacifiCorp used these two methodologies as well as a third methodology for allocating price and non-price points. These methodologies will be discussed in greater detail later in this report in the section pertaining to actual shortlist evaluation and selection.

PPA or BTA. Table 3 provides a summary of the cost and benefit components for each option to set the stage for review of the summary results for each proposal. A value in parentheses (i.e. (X)) reflects a cost component while Z reflects a benefits component for purposes of assessing the net benefits of each option.

Table 3: Summary of Cost/Benefit Components for Each Bid Type

Component	PPA Option	BTA Option
PPA Bid Price ($/MWh)	(X)	
Capital Revenue Requirements	-	(X)
PTC Benefit	-	***Z***
Integration Cost	(X)	(X)
O&M, Lease, Insurance	-	(X)
Property Taxes	-	(X)
Wyoming Wind Tax	-	(X)
Network Upgrade Revenue Requirements	(X)	(X)
Terminal Value	-	***Z***
Energy and Capacity Value	***Z***	***Z***

The components included in the cost of energy category vary by bid type. For PPA options, the cost of energy is based on the fixed price or base price and fixed escalation rate submitted by the bidder on its Pricing Input Sheets (Appendix C) times the expected energy generated by the proposal.[13] For BTA options, PacifiCorp calculates Capital Revenue Requirements over the life of the asset. The total in-service capital cost of the project will be the primary starting point for this cost component. This will include the capital cost of the project, interconnection and network upgrade costs, owner's costs and development costs, contingency, AFUDC and capitalized property taxes. PacifiCorp will include the capital cost of the project in rate base and amortize the costs over 30 years based on utility revenue requirements principles.

In developing revenue requirements costs, PacifiCorp will use cost data for each benchmark and market bid. Any internal assumptions for key financial inputs (i.e. inflation, discount rates, marginal tax rates, asset lives, AFUDC rates, etc.) and PacifiCorp carrying costs (i.e. integration costs, owner's costs, etc.) would be applied consistently to benchmark resources and market bids, as applicable. The cost of the Aeolus-Bridger/Anticline transmission project would not be directly assigned to specific benchmark resources or market bids during the initial shortlist price evaluation.

The value of the Production Tax Credit (PTC) applies only to BTA options since the PPA bidder incorporates the value of the PTC in its own project cost proposal. PacifiCorp assumes a PTC value of $24/MWh in 2017 dollars which is assumed to escalate annually

[13] For this stage of the evaluation, PacifiCorp generally accepts (subject to discussions with bidders or clarification questions) the generation profile and capacity factor as given and does not conduct due diligence on the generation profile or capacity factor at this stage of the process.

at 2%. PacifiCorp indicated it prefers projects that can meet the requirements to provide the full value of the PTCs for the benefit of customers.[14]

Integration costs are applied to all proposals. Wind integration costs included in the evaluation are equal to $.57/MWh based on PacifiCorp's 2017 Flexible Reserve Study ("FRS") as included in the 2017 IRP. Integration costs include $.43/MWh for Intra-hour reserve and $.14/MWh for Inter-hour/System Balancing.

Operation and Maintenance Costs and Admin and General (OMAG) costs are included for BTA and benchmark options. The basis for these costs include the O&M costs proposed by the equipment supplier for the first 3 years of operations followed by estimates prepared by PacifiCorp based on its own experience owning and operating wind projects. The proposed OMAG costs estimated by PacifiCorp was provided to the IEs as an input assumption. Merrimack Energy questioned the estimate as being on the low side based on other solicitations. PPA bidders include OMAG costs in their bid price.

Network upgrade revenue requirements are included for all proposals. All bids would be evaluated individually for the initial shortlist evaluation based on the direct assigned interconnection costs and any third-party transmission upgrade costs associated with the specific interconnection, if so relied upon for delivery to a specified point of delivery, that were submitted in the bids. All proposals will require firm transmission to PacifiCorp's network transmission system.

Terminal value benefits are included for benchmark and BTA options. In the RFP, PacifiCorp noted that one of the components of project value is terminal value. Generally, terminal value for a generation facility at the end of its useful life is equal to its net salvage value. However, the other assets associated with a wind site, such as land, site characteristics and generation interconnection and transmission facilities may have value beyond the assumed useful life of wind energy facilities. [redacted] Under this approach, the terminal value reflects the depreciated value of assets that have not fully depreciated at the end of the assumed 30-year life for the wind facility (i.e. transmission assets associated with a wind facility) and the appreciated value of other elements of the project that remains at the end of the assumed 30-year life for the wind facility (i.e. development rights and land, as applicable).

Energy and capacity benefits are included for all proposals submitted. Energy and Capacity Value will be based on two production cost model runs for prospective bids delivering output to varying locations on PacifiCorp's system. For each location (Wyoming, Utah, Idaho, and Washington/Oregon), one simulation would include proxy wind resources and new transmission, as applicable, at a zero cost and one simulation would exclude proxy wind resources and new transmission, as applicable. The

[14] Under the IRS Safe Harbor requiring continuity of construction, generally the wind facility must be placed in service no later than the end of the fourth calendar year following the year that construction work started, i.e. if construction was started in December of 2016, the facility would need to be placed in service by December 31, 2020 to qualify for the 100% PTC.

differential in system fixed and variable costs between the two production cost model simulations would serve as the basis for the expected energy and capacity benefits associated with new or repowered wind facilities at varying locations.

As previously noted, PacifiCorp provided the model output results of the evaluation for all the bids submitted to the IEs. Merrimack Energy's project team reviewed the results and prepared a summary of the bids based on the comparison metrics for the price component of the evaluation. The model runs also included comparative costs in $/MWh. In addition, PacifiCorp also conducted a non-price evaluation of the bids received.

The primary purpose of the non-price assessment was to help gauge other factors that may influence project viability. PacifiCorp developed 3 different non-price categories for a total of 20% for non-price. The three non-price categories were: (1) conformity to RFP requirements with 4% weight; (2) project deliverability for 8%; (3) transmission progression for 8%. [15] The percentages in each category were divided into 3 specific percentage weights: (1) 100%; (3) 50%; and (5) 0%. Thus, if a bid received a score of 50% for conformity to RFP requirements, the score for that category would be 2%. The non-price scores will not be force ranked. Each bid will have its price score added to the non-price score. The bidders with the highest total score (price and non-price), and representing up to approximately 2,000 MW of aggregate capacity at any given location, would be considered for the initial shortlist.

C. Final Shortlist Evaluation Methodology

Proposals that make the short list would be allowed to provide a Best and Final Offer. Best and final pricing must be provided for the same site using the same or similar technologies as originally proposed. Best and Final pricing shall not exceed 10% of the original total bid cost, which PacifiCorp would assess on a present value revenue requirements basis. In the event that best and final pricing increases the total benchmark resource or market bid cost by more than 10%, PacifiCorp reserves the right to either (a) reject the best and final proposal or, (b) replace the shortlisted bid or bid alternative with a final proposal solicited from another bid not originally selected to the initial shortlist.

To determine the final short list, PacifiCorp utilized the same cost model used for the initial short list price evaluation, with bids updated for best and final pricing and projected performance, to process bid costs for input into IRP production cost models. In processing benchmark resource and market bid costs, PacifiCorp stated that it would convert the calculated revenue requirement associated with capital costs (i.e. return on investment, return of investment, and taxes, net of PTCs, as applicable) to first year real levelized costs, consistent with the treatment of capital revenue requirements in PacifiCorp's IRP modeling. All other benchmark resource and market bid costs would be summarized in nominal dollars and formatted for input into the IRP models, consistent with the treatment of non-capital revenue requirement in PacifiCorp's IRP modeling.

[15] The non-price criteria involved a combination of objective assessment (i.e. bidder provides the information requested) and subjective assessment designed to assess the viability or quality of the project.

Projected resource performance data (expected hourly capacity factor information) would also be processed for input into the IRP models.

PacifiCorp utilized the System Optimizer ("SO") model, which was used to develop resource portfolios in the 2017 IRP, to develop a resource portfolio containing the 2017R RFP bids with the Aeolus-to-Bridger/Anticline transmission project.[16] For purposes of the RFP, the SO model would be used to select the combination of wind projects from the initial shortlist. For Wyoming wind that requires construction of the Aeolus-to-Bridger/Anticline transmission project for interconnection, the model would be able to select up to approximately 1,270MW of new or repowered wind capacity.[17] The model would also identify resource portfolios containing projects that are not dependent on the Aeolus-to-Bridger/Anticline transmission project. For bids that are not dependent upon the Aeolus-to-Bridger/Anticline transmission project for interconnection, the model would be able to select new or repowered wind capacity at any level that reduces system costs, thereby demonstrating net benefits for customers. In addition, the model would establish the least cost resource portfolio without any new wind and without the transmission project. For each scenario, PacifiCorp would calculate the present value revenue requirement (PVRR) to determine the best-case scenarios that have the highest benefit for customers.

Once the portfolios are calculated in the SO model, PacifiCorp then uses the Planning and Risk (PaR) model to perform stochastic risk analysis of the portfolios produced by SO. PaR uses the same common input assumptions described for the SO model. Once unique resource portfolios are developed using the SO model, additional modeling is performed to produce metrics that support comparative cost and risk analysis among the different resource portfolio alternatives. Stochastic risk modeling of resource portfolio alternatives is performed in PaR.

For each SO portfolio, PaR studies are developed for three natural gas price scenarios (base, high, and low) and two carbon dioxide (CO2) emissions limit assumptions. The resulting cost and risk metrics are then used to compare portfolio alternatives and inform selection of the preferred portfolio.[18] While PaR cost-risk metrics are ultimately used in

[16] The System Optimizer model produces unique resource portfolios across a range of different planning assumptions. The SO model calculates the system present value revenue requirement (PVRR) by identifying least cost resource portfolios and dispatching system resources over a 20-year forecast period. The SO model operates by minimizing operating costs for existing and prospective new resources, subject to system load balance, reliability and other constraints. Over the 20-year planning horizon (2017-2036 for this RFP), it optimizes resource additions subject to resource costs and capacity constraints. To accomplish these optimization objectives, SO performs a time-of-day least-cost dispatch for existing and planned generation, while considering cost and performance of existing contracts and new demand side management alternatives within PacifiCorp's transmission system.

[17] PacifiCorp informed the IEs that there is a 240 MW QF project in the interconnection queue that will absorb a portion of the transmission capacity on the Aeolus-Bridger/Anticline line, leaving approximately 1,030 MW for RFP proposals on this system.

[18] Resource portfolios developed with SO are simulated in PaR to produce metrics that support comparative cost and risk analysis among the different resource portfolio alternatives. Stochastic risk modeling of resource portfolio alternatives is performed using Monte-Carlo sampling of stochastic variables across the

the preferred portfolio selection, SO model results remain valuable and informative, especially in their role as a magnitude and direction indicator to compare to PaR outcomes.

V. Bid Submission and Bid Evaluation Process

This section of the report describes the evaluation and selection process from receipt of proposals through final selection of the revised final shortlist. This phase of the solicitation process occurred from early October, 2017 through mid-February, 2018, taking approximately one month longer than the schedule included in the RFP. PacifiCorp began conducting its evaluation of the proposals shortly after proposals were received. Proposal submissions dates were staggered in order to conduct evaluations in a fair and appropriate manner and provide reasonable time to adequately submit and evaluate bids in three categories: PacifiCorp's benchmark bids, Wyoming bids, and non-Wyoming bids. As a result, PacifiCorp's Benchmark Bids were due October 10, 2017 while the Wyoming bids and Non-Wyoming bids were due on October 17, 2017 and October 24, 2017, respectively. The evaluations of the Benchmark Bids were completed prior to the receipt and evaluation of the market bids.

During the months of October, 2017 through mid-February 2018, PacifiCorp provided the IEs with presentations containing the evaluation results for shortlist selection, model runs for each proposal, summaries of the results of the best and final pricing, and updated pricing to reflect the bidder's incorporation of the Federal Tax Bill ("Tax Cuts and Job Act") in their final pricing. In addition, the IEs and PacifiCorp held discussions regarding potential updates to input assumptions and proposed changes made by PacifiCorp to the generation profiles of Bidders due to the report prepared by its consultant, Sapere Consulting, based on the consultant's review of the generation estimates provided by each shortlisted project. The documents provided by PacifiCorp to the IEs served as the basis for review and discussions and as supporting information for the selection of the final shortlist. PacifiCorp presented the results to the IEs at each phase of the evaluation process (i.e. Phase 1 – Initial Shortlist and Phase 2 – Final Shortlist). Conference calls were held with the parties to discuss the results and address any questions. The evaluation results presented by PacifiCorp and reviewed and verified by the IEs will be discussed in this Report.

Each of the major activities and milestones associated with the receipt, evaluation and selection of the final proposals are described and discussed in this section of the report.

A. Benchmark Resources

Another requirement for the IE (Task B4) was to review and validate the assumptions and cost calculations of any benchmark resource options and analyze the benchmark option(s) for reasonableness and consistency with the solicitation process prior to submission of

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20-year study horizon, which includes load, natural gas and wholesale electricity prices, hydro generation, and unplanned thermal outages.

third-party bids.[19] To undertake this task the IEs held conference calls with PacifiCorp's Benchmark team to review and assess the benchmark resources. PacifiCorp provided copies of the 4 benchmark proposals (Ekola Wind, TB Flats I and II; TB Flats I; and McFadden Ridge Wind) to the IEs on or around October 11, 2017 (Task B4). Merrimack Energy reviewed the benchmark proposals submitted, prepared a list of follow-up questions and submitted the questions to PacifiCorp, and prepared a summary of the proposals for inclusion into Merrimack Energy's report on the Benchmark resources as required by the IE Scope of Work.

According to Appendix L of the RFP, PacifiCorp intended to submit four individual wind benchmark resources to satisfy approximately 860 MW of targeted wind resources. The benchmarks would be new greenfield wind resources that would be constructed in Wyoming on property either currently leased by PacifiCorp or that PacifiCorp has acquired rights to develop.[20]

All projects had a proposed in-service date of 2020 and would qualify for the full Production Tax Credit. PacifiCorp indicated in its proposal that it intends to hold a separate competitive solicitation to secure firm fixed pricing for an Engineering, Procurement and Construction ("EPC") agreement to construct the project. PacifiCorp indicated that the benchmark resources would include 30-year pro-forma estimates for operations, maintenance and on-going capital expenditures. Benchmark resource costs would also include allocated development costs, fees, permitting, project management and safe harbor equipment costs.

Based on discussions with PacifiCorp, the benchmark cost estimates were based on a number of factors. These include: actual cost for turbines acquired, EPC and Balance of Plant ("BOP") costs based on the average of the three lowest bids submitted by the five EPC contractors contacted to provide estimates, experience from operations and development for other wind projects owned by PacifiCorp, and inputs from the IRP input files.

Table 4 presents overall summary information for each Benchmark resource as provided in the benchmark proposal. Table 5 provides a breakdown of the capital cost components by category as provided by PacifiCorp in a presentation provided to the IEs on October 16, 2017. This information was also included in the project cost spreadsheets included in PacifiCorp's benchmark proposals as submitted to the IEs.

[19] PacifiCorp was required to evaluate and score the benchmark resources consistent with the shortlist evaluation methodology to be applied to all proposals. The IE was required to validate the evaluation results prior to evaluation of third-party proposals.

[20] PacifiCorp entered into a Development Transfer Agreement with Invenergy Wind Global LLC for three projects from Invenergy (TB Flats I and II, TB Flats I, and Ekola Flats). Through its Development Transfer Agreement, PacifiCorp secured long-term exclusive leasehold rights to develop and construct the majority of the sites required. Invenergy also had the rights to submit these proposals into the PacifiCorp 2017R RFP.

Table 4: Summary Information for the Benchmark Options

Benchmark Options Summary Information	**TB Flats 1 and TB Flats 2**	**Ekola Flats**	**McFadden Ridge**	**TB Flats 1**
Summary Info				
Project Name	TB Flats 1 and TB Flats 2	Ekola Flats	McFadden Ridge	TB Flats 1
Size (MW)	501.2	249.8	109.2	250.6
Location	12 miles northeast of Medicine Bow in Carbon and Albany counties, Wyoming	7 miles northwest of Medicine Bow in Carbon County, Wyoming	7.6 miles northeast of Arlington in Carbon and Albany County Wyoming	16 miles north of Medicine Bow in Carbon County, Wyoming
In-Service Date	11/1/2020	11/1/2020	11/1/2020	11/1/2020
Interconnection Point	Shirley Basin Substation	Aeolus Substation	Foote Creek substation	Shirley Basin substation
Annual Generation (GWh) (P50)	[redacted]	[redacted]	[redacted]	[redacted]
Net Capacity Factor (%)	[redacted]	[redacted]	[redacted]	[redacted]
Interconnection Agreement	No	No	No	No
Studies Completed	System Impact Restudy	System Impact Study	None	System Impact Study
Direct Assigned Transmission costs	[redacted]	[redacted]	[redacted]	[redacted]
Network Upgrade Costs	[redacted]	[redacted]	[redacted]	[redacted]
Pricing Information				
Capital Cost[21]	[redacted]	[redacted]	[redacted]	[redacted]
Installed Cost/kW	[redacted]	[redacted]	[redacted]	[redacted]
O&M Cost – Year 1	[redacted]	[redacted]	[redacted]	[redacted]
O&M Cost – Year 4	[redacted]	[redacted]	[redacted]	[redacted]
Safe Harbor Amount	[redacted]	[redacted]	[redacted]	[redacted]
Percent Safe Harbor	[redacted]	[redacted]	[redacted]	[redacted]

[21]Capital costs include Wind Project costs, Direct Assigned Interconnection costs, Owners and Development costs and Contingency as described in Table 4. Interconnection Network Upgrade costs, AFUDC, and Capitalized Property Taxes are not included in Capital costs.

Table 5 Capital Cost Components for Each Benchmark Resource

Cost Components	TB Flats 1 and TB Flats 2	Ekola Flats	McFadden Ridge	TB Flats 1
Capital Costs (million $)				
Wind Project				
Interconnection (direct Assigned)				
Interconnection (Network Upgrades)				
Owner's and Development Cost[22]				
Contingency				
AFUDC				
Capitalized Property Tax				
Total Capital Cost				
Cost - $/kW				

One of the focuses of this report was an assessment of the reasonableness of the costs of the benchmark resources. For this report, the IE relied upon generic cost information to assess the reasonableness of the capital and O&M costs of the benchmark resources. The IE concluded that the capital costs of the benchmarks (with the exception of the McFadden Ridge project) appeared to be [redacted] than market indicators based on the studies reviewed and analyzed by Merrimack Energy. As a result, the IE felt that the capital costs of the benchmarks should be scrutinized during the evaluation process to ensure that the costs were reasonable with regard to actual bids and would not be subject to cost uncertainty and possible requests for increases in costs if the project(s) are selected for the final shortlist.

Consistent with the requirements of the IE for assessing the benchmark resource as identified in Utah Rule R746-420 Requests for Approval of a Solicitation Process, Merrimack Energy reviewed the detailed information submitted by PacifiCorp and prepared a report on the benchmarks. In preparation of the report, Merrimack Energy reviewed the information provided by PacifiCorp, submitted a list of questions to PacifiCorp, and participated in a lengthy conference call with PacifiCorp and the Oregon IEs to review the benchmarks and the responses to the IE questions.

22 [redacted]

Merrimack Energy assessed and evaluated the benchmark resource relative to the following factors:

1. The level of detail presented for the benchmark resource to support the cost and operating parameters for the benchmark;

2. Whether PacifiCorp included all cost elements in their project cost;

3. Reasonableness of the capital costs for the benchmark option;

4. Reasonableness of the fixed and variable operations and maintenance cost projections;

5. Reasonableness of the proposed availability for the unit;

6. Generation profiles and reasonableness of the level of generation and the net capacity factor for each proposal;

7. Capital additions;

8. Completeness of the information presented relative to the requirements for information from other bidders.

With regard to the first two factors, Merrimack Energy completed a review and assessment of the detailed cost data supporting the cost information included in the benchmark resource proposal. As presented in its benchmark proposals, PacifiCorp stated that the capital cost cash flows associated with development, property, equipment, construction, startup, and commissioning of the project are provided in a detailed worksheet in its proposals which identify a wide range of cost components. The capital costs presented include the owner-supplied equipment (wind turbine generators), Engineering, Procurement and Construction ("EPC") Balance of Plant Construction, project contingency, development fees (success fee to Invenergy), owner provided builders risk insurance, direct assigned transmission interconnection costs, working capital (critical spare parts), project management, permitting, capitalized environmental mitigation costs, startup and commissioning, training and other owner's costs.

Our assessment of the information provided by PacifiCorp in its benchmark proposals indicate that PacifiCorp has compiled a significant level of information on which to base its costs in this RFP process. The information on capital cost and annual operating cost was well organized and clearly labeled in the spreadsheets provided to the IE's. The level of information is thorough and reviewable and represents credible and detailed sources of information. Based on our review, it is obvious PacifiCorp has undertaken a detailed assessment of the capital and operating costs of the benchmark resources at this stage in the process. Furthermore, we have not identified any major cost category that was not included in the detailed backup information or that will be included in the evaluation by PacifiCorp's Evaluation Team.

One of the general concerns in auditing the benchmark capital costs is to ensure that the estimated capital cost is reasonable and within industry cost bounds for the technology proposed. As a result, Merrimack Energy was focused on ensuring that the Company did not offer an unrealistically low estimate relative to market benchmarks or competitive options.

A comparison of the capital cost of the benchmark resources relative to the market benchmark capital costs from recent studies illustrates that three of four benchmark proposals have [redacted] on a $/kW basis than the cost levels illustrated by the studies. Only the McFadden Ridge project (109 MW) has a similar capital cost to those presented in the market benchmark studies. The McFadden Ridge project is the smallest of the project proposed by PacifiCorp. This may explain the relative economics with other smaller, 100 MW projects identified in the studies and furthermore, may support the reasonableness of the costs for larger wind projects submitted by PacifiCorp having a [redacted] than the study benchmarks. Nevertheless, three of the projects proposed by PacifiCorp have [redacted] on a $/kW basis than the market price benchmark, which may merit oversight during the evaluation process as more data becomes available from the actual proposals submitted.

The same trend is true for O&M costs. All the benchmark studies reviewed estimate O&M costs of over [redacted]. Merrimack Energy has estimated O&M costs for wind turbines to be about [redacted], in previous wind benchmark cost studies. Three of the four benchmark projects have O&M costs that are below $30/kW when comparing the O&M costs beginning in year 4 of the contract term. Only McFadden seems to fit the market price benchmark estimates. The other three projects are all lower cost from an O&M perspective in addition to a capital cost perspective. PacifiCorp may be able to take advantage of its portfolio of wind projects and its strategy of retaining an O&M contractor for all its projects based on economies of scale. The cost information provided by three of the four benchmark proposals are lower than the market price benchmarks in terms of capital and O&M costs. These lower costs could be attributed to economies of scale. PacifiCorp has indicated that most of the costs are fixed which would lead us to believe that PacifiCorp would be willing to stand by these cost estimates.

For wind projects, an important consideration for calculating costs and benefits is the level of generation expected from this project. This is particularly important for wind projects where a large percentage of the costs of the project are fixed costs. High capacity factor wind projects, for example, could have a higher overall cost but a lower unit cost if the level of generation is higher than a competitor. PacifiCorp intends to have a third-party firm review the generation profiles of the bidders to ensure their generation profiles are not unreasonable given their location and past history of the area with regard to wind speeds.

In addition to presenting its capital and operating costs for each benchmark, PacifiCorp's Evaluation Team was also required to evaluate and score the benchmark resources and lock-down the scores prior to the evaluation of other proposals. The IE was required to

audit and verify the evaluation results. Table 6 provides the results of the evaluation and analysis prepared by PacifiCorp and scrutinized and validated by the IE. In this case, PacifiCorp presented the IEs with their spreadsheet model results for each project and convened a conference call to take questions and comments from the IEs. In addition, PacifiCorp provided the non-price evaluation results based on the non-price criteria specified in the RFP. After review of the model results, the IE did not find any inconsistencies or errors in the analysis.

Table 6: PacifiCorp Price Evaluation Results for the Benchmark Resources Nominal Levelized Benefits and Costs $/MWh[23]

Category	Ekola Flats	TB Flats 1 and 2	McFadden Ridge	TB Flats 1
Wind Capital Revenue Requirements	[redacted]	[redacted]	[redacted]	[redacted]
Transmission Capital Revenue Requirements	[redacted]	[redacted]	[redacted]	[redacted]
PTC Benefit	[redacted]	[redacted]	[redacted]	[redacted]
O&M, Lease, Insurance	[redacted]	[redacted]	[redacted]	[redacted]
Property Taxes	[redacted]	[redacted]	[redacted]	[redacted]
WY Wind Tax[24]	[redacted]	[redacted]	[redacted]	[redacted]
Integration	[redacted]	[redacted]	[redacted]	[redacted]
Delivered Cost	[redacted]	[redacted]	[redacted]	[redacted]
Energy & Capacity Value	[redacted]	[redacted]	[redacted]	[redacted]
Terminal Value	[redacted]	[redacted]	[redacted]	[redacted]
Total Value	[redacted]	[redacted]	[redacted]	[redacted]
Net Benefit/(Cost)	[redacted]	[redacted]	[redacted]	[redacted]

The results of the pricing analysis illustrate that all of the benchmark resources have a significant positive value for customers (i.e. positive net benefits value). This is marked by delivered cost in the [redacted] range and reasonably high capacity and energy value. As a utility-owned project, PacifiCorp is also including terminal value in its calculations to reflect the value remaining for assets such as interconnection facilities, access roads and infrastructure, and other assets that have value going forward after the useful life of the wind generation asset. While terminal value is relatively low, in a competitive solicitation it could contribute to influencing proposal ranking since terminal value is only applied to utility ownership options.

[23] Merrimack Energy has revised the presentation of results relative to PacifiCorp's approach. For example, the above table includes benefits as positive values and costs as negative values ($).

[24] The Wyoming generation tax is $1.00/MWh. Since the tax goes into effect on 11/1/2023, the projects affected are operable for nearly two years before the tax goes into effect, resulting in a lower levelized cost of $.80/MWh.

As noted, PacifiCorp also evaluated the benchmark options from a qualitative perspective based on the non-price evaluation criteria included in the 2017R RFP. Table 7 presents a summary of the results of the non-price evaluation, including the final scores for each benchmark resource.

Table 7: Non-Price Evaluation Results

Project	Conformity to RFP Requirements (4% possible)	Project Deliverability (8% possible)	Transmission Progression (8% possible)	Total Non-Price Score (20% Possible)
Ekola Flats	[redacted]	[redacted]	[redacted]	[redacted]
TB Flats I & II	[redacted]	[redacted]	[redacted]	[redacted]
TB Flats I	[redacted]	[redacted]	[redacted]	[redacted]
McFadden Ridge II	[redacted]	[redacted]	[redacted]	[redacted]

Based on Merrimack Energy's review of the benchmark proposals submitted, discussions with the Benchmark Team, and review and assessment of the supporting information, Merrimack Energy reached the following conclusions with regard to the reasonableness of the benchmark options as described in the IE report:

1. PacifiCorp developed detailed cost information about the benchmark resources and provided their proposals along with the background information and spreadsheets detailing the cost by line item to the IEs for review and assessment of the benchmark resources. The information presented in its submittals, notably Appendix C Input Pricing and Data Sheets is consistent with overall solicitation requirements for all proposals and is thorough in describing the benchmark

proposals. Furthermore, in our view all relevant cost information appears to be included in the cost of the benchmark options;

2. The capital cost estimates provided PacifiCorp for three of the four benchmark resources appear to be [redacted] information included in the benchmark market studies reviewed. The capital cost of the smallest project, the McFadden Ridge II project, a 109 MW wind project, is similar in cost to the 100 MW options commonly applied in the market benchmark studies. The capital costs for the other three PacifiCorp benchmark resources may reflect economies of scale associated with larger projects. Overall, we feel that the capital costs are reasonable for the benchmark resources but if there is any deviation from the average we feel it would be on the [redacted] of the cost spectrum;

3. We also conclude that the O&M costs presented by PacifiCorp are reasonable, but like capital costs, may be a bit [redacted] relative to competitive options;

4. The benchmark proposals contain all the information required of other bidders and will be evaluated consistent with the methodology used to evaluate all bids submitted. The level and detail of information provided by PacifiCorp was very thorough and exceeds industry standards for benchmark resources at this stage in the process. The evaluation results described in the IE report were generated using the same methodology and assumptions as PacifiCorp intended to use to evaluate third-party BTA and PPA options;

5. In our view, PacifiCorp has conformed to the requirements of Rule R746-420 based on the amount of information provided, the level of detail provided for this information, and the methodology for calculating the cost and value of the benchmark proposals;

6. In conformance to the requirements of Utah Rule R746-420, the IE can confirm that we did assess and validate the benchmark options. The IE expects that there will be no changes to any aspects of the benchmark evaluation results after validation by the IE. The IE can confirm that the benchmark option will not be subject to any changes unless updates to other bids are permitted;

7. The IE confirms that all relevant costs and characteristics of the benchmark resource were audited and validated by the IE. The final evaluation results and scores of each benchmark resource should be reasonable and consistent;

8. The review, assessment and scoring of the benchmark resources was conducted in a fair and equitable manner with no outward perception of bias.

B. Proposals Submitted

Proposals were submitted on three different dates, with the Benchmarks submitted first, followed by the Wyoming proposals a week later, and the non-Wyoming proposals one

week after the Wyoming proposals were submitted. PacifiCorp received a total of 72 bids, including all alternatives, which included 4 Benchmark bids, 49 bids from independent power producers for Wyoming projects and 19 bids from independent producers for non-Wyoming projects.[25] By type of proposals, 4 were benchmarks, 50 were PPA options, and 15 were BTA options. There were also proposals that included a combined PPA/BTA proposal. One bidder offered the opportunity to purchase the development rights for specific projects. A summary of the proposals submitted is included in Table 8. Appendix C to the IE Shortlist report contains a full summary of the all the proposals and options submitted, with detailed information about each proposal, including proposal pricing.

Table 8: Summary of Proposals Submitted

	Number of Bidders[26]	Bids Submitted
Benchmarks	1	4
Wyoming		
PPA	8	35
BTA	5	11
PPA/BTA	1	1
Purchase Development Rights	1	2
Non-Wyoming		
PPA	6	15
BTA	2	4
Total		72

The participants in the RFP included many of the largest wind developers in the country, who are active in many power markets in the US and elsewhere. Table 9 provides a list of the project developers who submitted proposals, along with the number of specific projects proposed and proposal options submitted. Since most developers submitted multiple proposals that varied by proposal size or pricing structure, we have listed the sizes also submitted.

Table 9: Summary of Proposals Submitted By Bidder

Bidder Name	Project Name	Number	Number of	Sizes (MW)

[25] Merrimack Energy's totals for proposals submitted include all proposals and options submitted, including those that were eliminated as non-conforming.

[26] Several bidders included both PPAs and BTAs. Bidders who propose both PPAs and BTAs are included in both categories for consistency sake.

		of PPA Options	BTA options	
Wyoming Wind Proposals				
[redacted]	[redacted]			[redacted]
[redacted]	[redacted]			[redacted]
[redacted]	[redacted]			[redacted]
[redacted]	[redacted]			[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]		[redacted]	[redacted]
[redacted]	[redacted]		[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]		[redacted]	[redacted]
[redacted]	[redacted]		[redacted]	[redacted]
[redacted]	[redacted]		[redacted]	[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]		[redacted]	[redacted]	[redacted]
[redacted]				
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]		[redacted]	[redacted]	[redacted]
[redacted]		[redacted]	[redacted]	[redacted]

The amount of MWs submitted (based on the largest project by MW) submitted exceeded the amount PacifiCorp indicated it was seeking in the solicitation by a factor of over [redacted] times, illustrating a very robust response from the market to the RFP.

Based on the initial review of the proposals received, a number of bidders still had outstanding data gaps that prevented PacifiCorp from initiating the evaluation. This required the Company to communicate with a number of bidders, including the Benchmark team, to clarify information presented in the proposals prior to undertaking the initial price and non-price assessment. During this phase of the process several bids were initially classified as non-conforming. The primary reasons for non-conformance included the following:

[redacted]

[redacted]

The IEs were both in agreement with PacifiCorp's decision to classify the above proposals as non-conforming.

C. Evaluation of Wyoming and Non-Wyoming Proposals

PacifiCorp provided the economic models with the evaluation results for each Wyoming proposal to the IEs on or around November 9, 2017 followed by the non-Wyoming proposals shortly thereafter. Merrimack Energy reviewed and scrutinized the models in detail for a number of the proposals, including [redacted] to ensure the evaluation results were reasonable and consistent.

Merrimack Energy's team members participated on calls with the PacifiCorp evaluation team shortly after receipt of the model results and outputs for each proposal and posed several clarifying questions as a result of reviewing the model evaluation results prior to shortlist selection, including questioning whether BTA offers had an inherent competitive advantage over PPAs based on the evaluation methodology. These questions included:

1. Why do [redacted] generally have significantly more AFUDC included than [redacted] projects? Is it attributed to the progress payment schedule or some other factors?
2. Why do the BTA options for [redacted] have a higher Energy and Capacity value than the PPAs for the same projects? The values are quite a bit different. The same is true for other cases where a bidder offers both a BTA and PPA for the same project (i.e. [redacted]). Is it related to the longer term for the BTA?
3. Are all the projects located in Wyoming delivering to the same pricing point for evaluation purposes? There appears to be some differences for different proposals.

PacifiCorp provided reasonable responses to all outstanding questions raised by the IEs.[27]

[27] With regard to the first question above PacifiCorp noted that the timing for incurring capital cost for the Invenergy proposal was earlier in the development cycle and at a higher level than for the benchmark option, which would result in higher AFUDC values for the Invenergy proposal. PacifiCorp also stated that the term of the proposals (30-year BTA vs 20-year PPA) result in higher capacity and energy values for the longer-term option based on forecasts of these values. In response to the third question, PacifiCorp noted that the differences in value for each proposal delivering to the same pricing point would be attributed to the generation profile of each proposal based on the timing of output.

Merrimack Energy also prepared a summary of the results by benefit and cost component for the top ranked projects for each proposal and conducted further review in cases where the results appeared inconsistent. Table 10 provides evaluation results for each proposal based on the best option for each proposal. Appendix D to the IE Shortlist report provides a summary of each eligible proposal and option submitted by cost and component as well as identifying the capacity factor and equipment proposed for each proposal.

Table 10: Evaluation Results – Wyoming and Non-Wyoming Proposals

Bidder Name	Project Name	Size (MW)	PPA or BTA	Levelized Net Benefit ($/MWh)[28]	Non-Price Scores
Wyoming Proposals					
Non-Wyoming Proposals					

D. Initial Shortlist Selection

PacifiCorp also submitted slide deck presentations to the IEs for the Wyoming and non-Wyoming proposals separately, which included a detailed summary of the evaluation results for each proposal in early November. PacifiCorp and the IEs held a conference call to review and discuss the proposed shortlist as presented in PacifiCorp's slide decks.

PacifiCorp noted that the nominal levelized net benefits calculated reflect interconnection network upgrade costs but did not include the cost of the Aeolus-Bridger/Anticline transmission line, which would be included in the economic analysis informing selection of the final shortlist. The presentation included a preliminary viability assessment for the top ranked projects as well as summary information on each of the proposals submitted. Appendix E to the IE Shortlist report is the slide deck for the Wyoming proposals while Appendix F is the slide deck for the non-Wyoming proposals.

[28] Positive value means that benefits exceed costs.

Table 10 includes the projects proposed by PacifiCorp for inclusion on the initial shortlist based on the projects identified in its slide deck. Table 11 contains the summary evaluation results of the price and non-price scores for each eligible proposal. The proposals are organized by shortlist location (WY and non-WY). In total there are nine WY projects selected for the initial shortlist for a total of [redacted] of cumulative capacity. There were an additional three projects selected to the initial shortlist for non-WY projects totaling [redacted] of cumulative capacity.

Based on the results of the evaluation, PacifiCorp, the Oregon IE and the Utah IE discussed the selection of the initial short list and agreed upon the selected resources. PacifiCorp recommended selection of shortlisted bids significantly above the level of capacity proposed in the RFP. For example, the RFP stated that PacifiCorp would seek to establish an initial shortlist of up to approximately 2,000 MW of aggregate wind capacity for Wyoming projects that are reliant on the Aeolus-to-Bridger/Anticline transmission project and up to 2,000 MW for projects not dependent on the Aeolus-to-Bridger/Anticline transmission project. PacifiCorp recommended nearly [redacted]. In addition, in its slide deck presentation, PacifiCorp did not include its [redacted] The Oregon IE inquired whether PacifiCorp would include its benchmark resource for [redacted] on the shortlist and PacifiCorp indicated the project was on the shortlist based on its ranking as the 6th highest ranked project but was not listed because the [redacted] was ranked higher for shortlist evaluation.

Table 11: Proposed Initial Short List

Bidder Name	Project Name	Size (MW)	PPA or BTA	Cumulative Capacity (MW)	Price Score[29]	Non-Price Scores	Total Score
Wyoming Proposals							
[redacted]							

[29] PacifiCorp calculated the price score using three scoring methodologies: (1) scores were scaled so that the lowest net cost (NC) minus benefit (NB) (or highest net benefit) was awarded the full 80 points and a breakeven proposal was awarded 0 points; (2) Scores were scaled such that the highest net cost – benefit (or highest net benefit) was awarded 80 points and the lowest was awarded 0 points, with scores pro-rated in between; and (3) Scores were scaled so that the highest ranked net cost minus benefit (highest net benefit) was awarded 80 points and lowest ranking proposal was awarded 0 points with points for the remaining projects pro-rated. For the first methodology Bidder Score (Bidder x) = 1-([NC/(B)lowest – NC/(B) (Bidder x)]/NC/(B) lowest) x 80. For the second methodology Bidder Score (Bidder x) = [(NC)/B (Bidder x) – (NC)/B lowest)/((NC)/B highest – (NC)/B lowest] x 80. For the third methodology Bidder Score (Bidder x) = (80 points – ((Rank of (NC)/B (bidder x -1) x (80 points/ Number of Ranked Bidders - 1)))).

Non-Wyoming Proposals							

For the Wyoming proposals, PacifiCorp's rationale for selecting such a robust shortlist was that the proposals were all ranked closely with no defined break points until the drop off in benefits beginning with the [redacted]. The IE recognized the competitiveness of the highest ranked proposals and attempted to identify other potential break points but after discussion of other options the IE agreed with the shortlist selection by PacifiCorp. PacifiCorp's shortlist selection was designed to be project specific. In other words, a project was selected to the shortlist and bidders still had the option of providing a best and final offer for any of the options submitted by the bidder for that project. The IEs also agreed with this approach because it may lead to an overall more efficient selection for portfolio development since there is a possibility that a smaller project size from one bidder could be a better option than another larger project with a lower value (i.e. net benefit).

PacifiCorp notified the shortlisted bidders of their selection to the shortlist on November 17, 2017. PacifiCorp informed bidders of the date for submitting best and final offers. Also, PacifiCorp informed the bidders that one of the requirements of shortlist selection was that each bidder was required to provide an acceptable Commitment Letter within 20 business days after the bidder was notified that the bidder was selected for the shortlist.[30]

Several shortlisted bidders took exception to the Commitment Letter requirement (i.e. submit 20 days after shortlist notification) identified by PacifiCorp in its notification letter to shortlisted bidders. Merrimack Energy recognized this issue as a similar issue that emerged in the 2012 PacifiCorp RFP nearly ten years ago. Merrimack Energy contacted PacifiCorp and also took exception to this requirement. Merrimack Energy and PacifiCorp reviewed prior RFP documents, including IE reports, and realized that PacifiCorp had agreed in the 2012 RFP, at Merrimack Energy's recommendation, to move the due date for the Commitment Letter to 20 days after final selection, not shortlist selection.[31] The IE and PacifiCorp agreed with the revision in this requirement.

[30] The Credit Requirements listed in Appendix D of the RFP states "If necessary, the bidder will be required to demonstrate the ability to post any required credit assurances in the form of a commitment letter from a proposed guarantor or from a financial institution that would be issuing a Letter of Credit. PacifiCorp will require each bidder to provide an acceptable commitment letter(s), if applicable, twenty (20) business days after the bidder is notified that the bidder has been selected for the Shortlist. Bidder will be required to provide any necessary guaranty commitment letter from the entity(ies) providing guaranty credit assurances on behalf of the bidder and/or any necessary letter of credit commitment letter from the financial institution providing credit assurances in the form of a Letter of Credit.

[31] One of the issues raised by bidders in the 2012 RFP was that Credit Support Providers would be required to identify this commitment or obligation on its financial statements even though there was no guarantee of a contract award at this stage. Credit Support Providers appeared amendable to providing a commitment

PacifiCorp informed bidders of the revision to the schedule. There were no further comments from bidders.

E. Best and Final Pricing

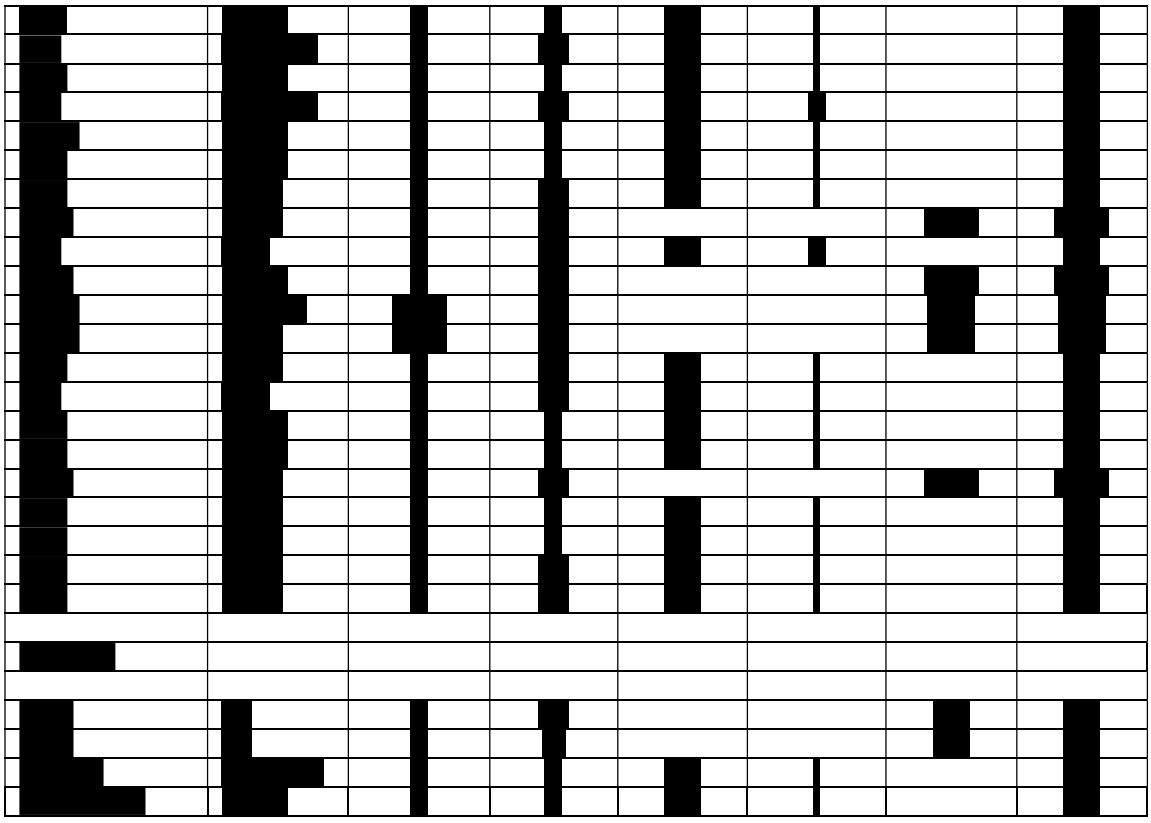
As described in the RFP, all initial shortlisted bidders were requested to offer best and final pricing for their shortlisted projects. Bidders were notified of their shortlist selection on November 17, 2017 and were required to submit best and final pricing by November 22, 2017. As outlined in the RFP, best and final pricing must be based on the same site with the same or similar technology as the original proposal. In addition, best and final pricing cannot exceed 10% of the original bid cost. Many of the shortlisted bidders decided to offer a best and final price, with some proposing increases and others decreases. [redacted] was generally the most aggressive of the bidders, proposing fairly significant reductions in the [redacted] Table 12 presents a comparison between the initial pricing contained in the original proposal and the best and final pricing submitted on November 22, 2017. As Table 12 demonstrates, [redacted] proposals and also experienced the largest reduction for the best and final pricing, further expanding the differential in capital cost with other comparable options. For example, [redacted]

Table 12: Best and Final Pricing

Bidder	Project	Bid Type	Capacity (MW)	First Year Price ($/MWh)	Annual Escalation (%)	Capital Cost ($/kW)	Best and Final Price[32]
Wyoming Proposals							
[redacted]							

letter later in the selection process (i.e. final shortlist selection) if the project was selected for contract negotiations.

[32] This column provides any updated base prices proposed by each bidder. In all cases, the rate of escalation is the same as in column 6 in Table 11.



The best and final pricing results illustrate several different directions regarding pricing changes.

In addition, in its best and final offer

agreement approved by the Commission. PacifiCorp indicated it suggested this option because parties in the Company's ongoing EV2020 regulatory approval dockets have indicated a reluctance to support Company acquisition of additional wind resources on the basis that cost and performance risks may exceed customer benefit. To address this concern,

. As noted above, the alternative structure relative to the Company's currently submitted benchmarks would incorporate an unregulated affiliate of the Company which would develop and own the project and deliver energy to the Company pursuant to a PPA. The PPA would include an option to purchase the asset at the end of the term at fair market value. PacifiCorp stated that this alternative structure and approval of the project would be subject to and conditioned upon approval of the power purchase agreement by relevant state and federal regulatory agencies.

F. Independent Consultant Analysis of Shortlisted Bids Generation Profile

PacifiCorp utilized a third-party consultant, Sapere Consulting, to verify the wind capacity factors for each shortlisted project based on generation data provided by each of the shortlisted bidders for the projects included on the shortlist. At Merrimack Energy's request, PacifiCorp provided a copy of the contract with Sapere to understand their scope of work. According to PacifiCorp's schedule, the report was supposed to be available by end of November; however, the IE was not provided a copy of the report until mid-December after requesting a copy of the report. The conclusions reached by Sapere for each shortlisted project are as follows:

- [redacted] "There is a likelihood that the project will not perform as proposed."
- [redacted] "There is a likelihood that the project will not perform as proposed."
- [redacted] "This project is likely to perform as proposed unless the [redacted] is constructed on the adjacent property as proposed.
  This has the potential to significantly impact the wind output at [redacted]
- [redacted] "This project is likely to perform as proposed."

2. [redacted])
   - "There are material omissions and inconsistencies relating to the wind resource assessment compared to industry practice… Consultant suggests obtaining a full wind resource analysis with financing-level detail, to confirm what looks like an otherwise attractive wind resource, before accepting this project."
   - [redacted] "There are material omissions and inconsistencies relating to the wind resource assessment compared to industry practice… Given the uncertainties and limitations of the wind resource analysis proposed, it is Sapere's opinion that the [redacted] has a material likelihood to not perform as proposed."
   - [redacted] "This Project is likely to perform as proposed, but further diligence relating to the possibility of wake effects from the proposed McFadden II project is prudent."
   - [redacted] "This project is likely to perform as proposed."
   - [redacted] "This project has a likelihood of not performing as proposed. Further due diligence relating to wind resource analysis and assumptions is prudent prior to accepting this project."

- [redacted] "Based on results from an admittedly "preliminary" wind resource assessment, this project is likely to perform as proposed, but further diligence, including securing a final or "financing level" wind resource study would be prudent prior to accepting this project."

- [redacted] "There is a likelihood that this project will not perform as proposed. Further due diligence relating to the wind resource analysis is prudent before accepting this project."

- [redacted] "The wind resource analysis methodology appears to be consistent with industry practice."

The IE noted that a couple shortlisted projects were not included in the independent analysis prepared by Sapere Consulting, including [redacted]

As a result of Sapere's analysis, PacifiCorp made adjustments to the capacity factors of two bids as part of the final evaluation process:

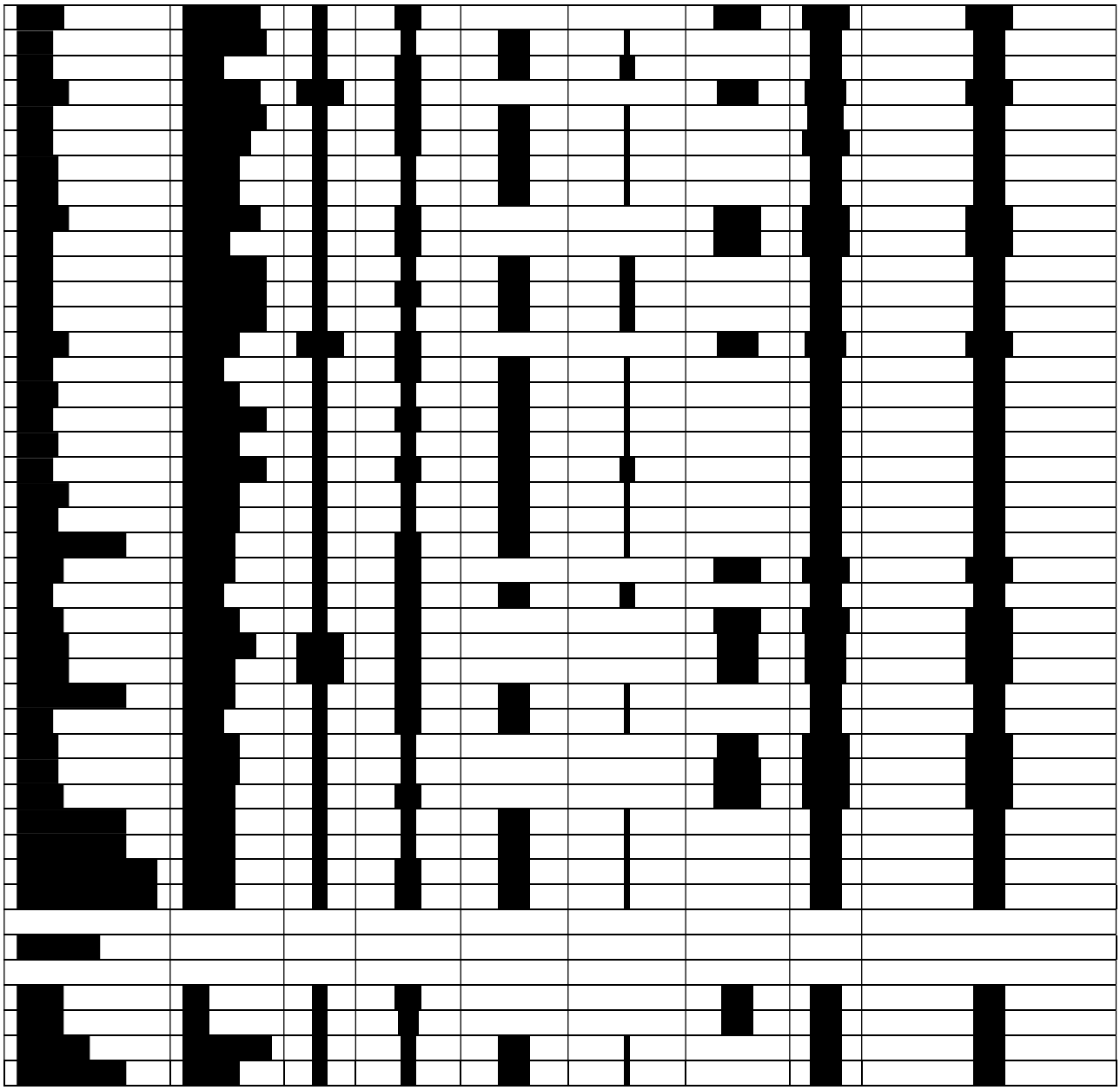
[redacted]

G. Tax Bill Re-Pricing

On December 7, 2017, PacifiCorp notified bidders selected to the initial shortlist that there could be a request for updated pricing to reflect changes to the federal income tax law once the process was complete. On December 15, 2017, the conference committee approved its report on H.R. 1, "The Tax Cuts and Jobs Act." Subsequently, PacifiCorp contacted all shortlisted bidders and requested that they provide updated pricing in response to changes in tax law by 5 PM on December 21, 2017. In PacifiCorp's email, bidders were instructed to identify the specific price or cost components that changed but they should not modify any other items such as schedule, equipment, etc. Table 13 identifies any revisions to project pricing made by shortlisted bidders as a result of the Tax Bill relative to the pricing submitted in the original proposals and the best and final pricing submitted.

Table 13: Revised Pricing to Reflect Federal Tax Bill

Bidder	Project	Bid Type	Capacity (MW)	Original Proposal - First Year Price ($/MWh)	Annual Escalation (%)	Original BTA Proposal - Capital Cost ($/kW)	Best and Final Price – PPA or BTA	Pricing Update to Reflect Tax Bill
Wyoming Proposals								
[redacted]								
[redacted]								



The most significant change in pricing related to the implications of the Tax Bill was the significant increase in PPA pricing for the [redacted] proposals. As Table 12 illustrates, all proposal options by [redacted] were increased significantly. Since several PPA options submitted by [redacted] were ranking high in the shortlist stack, it was expected that the price increase could change the final rankings in the final shortlist evaluations. [redacted]

The final pricing submitted by the shortlisted bidders to reflect the impact of the Federal Tax Bill was used by PacifiCorp to conduct its final shortlist evaluations.

H. PacifiCorp Proposal to Reduce O&M Costs for Larger Wind Turbines

PacifiCorp's evaluation team contacted the IEs in late December, 2017 with a proposal to include lower O&M costs for projects proposing to use the larger wind turbines (in excess of 2 MW and up to 4.2 MW) in their projects. PacifiCorp provided a two-page white paper to the IEs supporting its position that on a per-MW basis, the pricing for a larger turbine should be reduced by 42% as the individual nameplate capacity increases from 2 MW up to 4.2 MW. PacifiCorp recommended that a scaling factor be applied to the cost elements that are covered by the contracted service and maintenance agreement components. This would result in no change to current costs for turbines with nameplate capacities of 2.0 MW, with linearly scaled per-MW cost reductions up to a 4.2 MW nameplate capacity. For a 4.2 MW turbine, this would reduce the cost per turbine down from [redacted].

Merrimack Energy took exception to this recommendation for two reasons:

- The input assumptions, including the O&M cost for the BTA options were already locked-down and these assumptions were applied to the shortlist evaluation results. To make a change in O&M assumptions at this time was not reasonable;
- The IE did not believe the white paper provided by PacifiCorp in support of reducing the O&M costs for larger wind turbines included adequate support or justification for the reduction. The white paper was apparently prepared by PacifiCorp and did not include any third-party support for the magnitude of the change in O&M costs proposed by PacifiCorp.

The proposals that would be affected positively by the proposed reduction in O&M costs included [redacted] While the cost of the smaller turbine options was generally higher than the costs of the same project based on the larger turbines, the generation output based on the smaller turbine configuration was quite a bit higher, which offset all or a significant portion of the capital cost difference when calculating the levelized cost and benefits of each proposal.

I. Final Evaluation Results and Initial Final Shortlist Selection

On January 8, 2018 PacifiCorp provided the final shortlist selection slide deck presentation and evaluation model results for the shortlisted proposals to the IEs for review as stated in the RFP schedule. The evaluation model results for the projects not selected to the final shortlist were sent via USB three days later on January 11, 2018.

The final proposed shortlist included four new wind projects located in Wyoming from three different bidders totaling [redacted]. Of the total capacity, [redacted] MW is in eastern Wyoming with possible interconnection to the Aeolus-to-Bridger/Anticline transmission line. The selected projects included [redacted] MW of capacity under a combined PPA/BTA arrangement, [redacted] MW developed under BTA contracts, one of which is located in Wyoming but is not connected to the Aeolus-to-Bridger/Anticline transmission line, and

[redacted] MW of nameplate capacity for a benchmark resource that will be developed under an EPC agreement. The projects selected for the final shortlist are listed in Table 14.

Table 14: Final Shortlist Selection

Bidder	Project Name	Contract	Capacity (MW)	Net Annual Capacity Factor	Total In-Service Capital Cost ($/kW)	PPA Price ($/MWh)
Invenergy	TB Flats I & II	BTA	499	42.46%	[redacted]	[redacted]
NextEra	Cedar Springs	200 MW BTA/200 MW PPA	400	42.78%	[redacted]	[redacted]
PacifiCorp	McFadden Ridge II	Benchmark/EPC	109	44.78%	[redacted]	[redacted]
Invenergy	Uinta	BTA	161	36.42%	[redacted]	[redacted]

As noted, the final evaluation results reflect the [redacted] However, pricing and terms would have to be negotiated. The BTA component of the [redacted] AFUDC costs relative to other proposals which proposed a progress payment structure and thus incurred AFUDC costs based on this structure. This includes the [redacted] The [redacted] project was a high cost project that was selected based on the size of the project relative to the total interconnection capability of the Aeolus-to-Bridger/Anticline transmission line.[33] PacifiCorp's presentation also included an initial project viability assessment for each proposal. PacifiCorp indicated that a final due diligence assessment would occur in parallel with contract negotiations.

The slide deck presentation also included the portfolio results generated by the SO model and the risk assessment results from the PaR model. PacifiCorp informed the IEs that the natural gas price assumptions underlying the SO and PaR model results were based on PacifiCorp's December, 2017 official forward price curve.[34] Natural gas and CO2 price assumptions were based on assumptions adopted from third-party experts.[35] In addition,

[33] The total interconnection capability of the Aeolus-to-Bridger/Anticline transmission line was 1,030 MW. The SO model analysis establishes a constraint of 1,030 MW when selecting project portfolios. Since the [redacted] was the only proposal that would fit in the portfolio within the constraint and provided benefits, it was selected even though its costs were higher than other shortlisted proposals.

[34] [redacted]

the evaluation includes the cost of the Aeolus-to-Bridger/Anticline transmission line, estimated to cost $679 million.

As described in the RFP, the SO model was used to develop bid portfolios for nine price-policy scenarios (3 gas price cases (medium, high and low), and three CO2 cases (medium, high and low)). PacifiCorp used the final pricing based on the bidder's response to the Tax Bill as inputs. In addition to identifying the bid portfolios chosen by the SO model, the present value revenue requirement differential (PVRR(d)) between two system simulations – one with new wind and transmission and one without the wind and transmission – was calculated for each price-policy scenario.

With regard to the SO portfolios, four proposals were selected in all nine cases. These are the projects listed in Table 14 above. For four portfolios (medium gas and high CO2 case plus all high gas cases) the [redacted] proposal was also selected. Based on these results, PacifiCorp advanced the two portfolios to the scenario risk analysis phase of the evaluation using the PaR model. Table 15 provides the SO model results for each portfolio. While this table replicates a table included in PacifiCorp's slide deck, the negative (benefit) values are positive relative to the costs for each of the portfolios.

Table 15: Portfolio Results for SO Model Scenarios

Price-Policy Scenario	Bid Portfolio 1 PVRR(d) (Benefit)/Cost ($ million)	Bid Portfolio 2 PVRR(d) (Benefit)/Cost ($ million)	PVRR(d) (Benefit)/Cost of Bid Portfolio 1 Relative to Bid Portfolio 2
Low Gas, Zero CO2	($198)	($170)	($28)
Low Gas, Medium CO2	($229)	($216)	($13)
Low Gas, High CO2	($347)	($359)	$12
Medium Gas, Zero CO2	($372)	($379)	$7
Medium Gas, Medium CO2	($399)	($407)	$8
Medium Gas, High CO2	($493)	($493)	$0
High Gas, Zero CO2	($692)	($704)	$12
High Gas, Medium CO2	($709)	($720)	$11
High Gas, High CO2	($770)	($782)	$12

The results of the SO evaluation illustrate that significant benefits are expected with either portfolio, totaling $399 million in the case of Portfolio 1 and $407 million for Portfolio 2 under a Medium Gas/Medium CO2 scenario.

PacifiCorp then subjected the two portfolios to the PaR model by evaluating the stochastic-mean and risk-adjusted PaR results. As illustrated in PacifiCorp's presentation, the stochastic-mean and risk-adjusted PaR results show greater benefits overall with Portfolio 1. For example, under the Stochastic Mean PaR scenario risk analysis results, both Portfolio 1 and 2 have the same benefits under the Medium Gas, Medium CO2 case

of ($349) million. Portfolio 1 has higher benefits in all cases except the high gas scenarios. Under the Risk-Adjusted PaR scenarios, Portfolio 1 had a benefit of ($367) million while Portfolio 2 showed a benefit of ($366) million. Overall, the results were fairly close with Portfolio 1 having higher benefits in low and medium gas cases and Portfolio 2 having higher benefits in high gas cases. Based on the SO model and PaR results, PacifiCorp chose Portfolio 1 as the least cost, least-risk portfolio to establish the 2017R RFP final shortlist.

PacifiCorp also provided the results associated with SO model runs for Solar Sensitivities based on the bid prices from the 2017S RFP, Wind Repowering Sensitivities, and O&M Sensitivity cases based on projected O&M costs related to increased turbine size.

Appendix G to the IE Shortlist report is the January 8, 2018 initial Final Shortlist presentation deck as described in this section of the report.

In reviewing the updated model results from the RFP Base or spreadsheet model sent by PacifiCorp along with the final shortlist evaluation results, Merrimack Energy noticed that the benefit associated with the PTC had declined quite significantly for BTA projects. For example, for the [redacted] in the initial shortlist evaluation results. PacifiCorp indicated this was a result of the new Tax Bill impacts. The IE questioned why PPAs would not be more competitive or even selected in the portfolios since the economics of BTAs and PPAs for initial shortlisting results were so competitive with a small differential in overall benefits on a $/MWh basis.

In a conference call with PacifiCorp on January 9, 2018, both IEs raised this issue. PacifiCorp reminded the IEs that in developing its model inputs for the SO model, the PTC values and benefits are included as nominal dollars because this reflects how the benefits would be recovered in rates. The capital cost inputs for the benchmarks and BTAs are based on real levelized costs for the period 2017-2036, consistent with the IRP methodology. The IEs raised the issue that this approach could bias the evaluation results towards BTA options if only a portion of the capital costs associated with the benchmarks and BTAs are recovered during the 20-year evaluation period, since these projects have a 30-year life and capital cost recovery period. The Oregon IE asked PacifiCorp to run a sensitivity case in which the PTC values would also be levelized as opposed to treating the PTCs on a nominal dollar basis to assess the impact of this methodology for portfolio selection.

The IEs requested that PacifiCorp set up a conference call on January 12, 2018 to discuss the results of the sensitivity analysis requested by the Oregon IE and to address any other questions from the IEs. Merrimack Energy sent four additional questions to PacifiCorp prior to the call focused on the impact of the lower PTC values, the impacts of a 20-year (i.e. 2017-2036) analysis vs a 30-year analysis, the basis of the methodology to treat the capital costs of utility-ownership options as inputs to the SO model using a real levelized

cost methodology over the 2017-2036 timeframe only, and the basis for reducing the net capacity factor for the [redacted].[36]

During the conference call on January 12, 2018, PacifiCorp reported on the results of the evaluation it conducted based on the Oregon IE's request. The results of the SO model indicated that based on use of levelized cost for PTCs a portfolio that included the [redacted] instead of the [redacted] would be selected. PacifiCorp, however, refuted the basis for evaluating the PTCs on a levelized cost basis since PacifiCorp would flow through all the PTC benefits to customers as incurred during the initial 10-year period to reduce customer costs in the near term. PacifiCorp also provided a 30-year analysis of the costs and benefits of the initial portfolio and updated portfolio with the [redacted] to demonstrate that the original portfolio would still provide greater benefits over a 30-year timeframe. Furthermore, PacifiCorp stated that the initial portfolio would provide near term savings as a result of passing through the PTC benefits over the initial 10-years of the project term.

On January 13, 2018 PacifiCorp contacted the IEs to inform the IEs that it had uncovered errors in its analysis while preparing materials for its regulatory filing due on Tuesday, January 16, 2018. As reported by PacifiCorp to the IEs via email, the first issue was that the SO model and PaR analysis had overstated the energy output from the [redacted] PacifiCorp noted that it had adjusted the capacity factor for the bid by [redacted] at the recommendation of Sapere Consulting. This adjustment was correctly reflected in the net bid costs (including PTC benefits) entered into the models, but the energy produced by the project and delivered to the system did not reflect the 8% adjustment. This meant that NPC benefits associated with this bid were overstated. The same issue also applied to [redacted], which also received an [redacted] net capacity factor discount.

The second issue was that PacifiCorp discovered that the [redacted] did not include sales tax. [redacted]. Based on the sales tax applicable to PacifiCorp's own wind repowering project, [redacted]. PacifiCorp re-ran the SO model for the medium/medium and low/zero price-policy gas/CO2 scenarios, incorporating fixes for the [redacted] and adding sales tax estimates to the [redacted]. In both of the price-policy scenarios, the SO model continued to select the [redacted] However, as a result of the sales tax impact, the SO model now selected the [redacted]. In the email to the IEs, PacifiCorp indicated that it reran the SO studies for all nine price-policy scenarios reflecting the corrections and are also re-running the PaR studies. PacifiCorp stated that as a result of this revision, it planned to include the results of these studies in their

[36] According to the Sapere report, "given the uncertainties and limitations of the wind resource analysis proposed, it is Sapere's opinion that the [redacted] is likely overstated by as much as 6% to 8%, and as a result, the Project has a material likelihood to not perform as proposed."

application to be filed on Tuesday, January 16, 2018, reflecting the inclusion of the [redacted]

The IEs were required to complete their review of the final shortlist evaluation and selection and provide its opinion of the final shortlist selection on January 15, 2018. Merrimack Energy requested that PacifiCorp provide the assessment of the [redacted] which was not included in Sapere's report, even though the project was selected for the shortlist.[37] Merrimack Energy also provided written comments to PacifiCorp and the Division regarding the final shortlist selection. Merrimack Energy had reached the following conclusion regarding shortlist selection:

> "Based on the questions identified by the IEs, the last-minute revisions to the analysis to address errors in inputs, and uncertainty over the reasonableness of the evaluation methodology, Merrimack Energy feels that a logical solution would be to include the [redacted] as an option to the [redacted], which total approximately [redacted]. While we recognize that there appears to be significant benefits associated with the combination of new wind and transmission and that the methodology appears to be the same methodology used in the Company's IRP, we feel the final portfolio selection should be scrutinized further and the risks associated with each portfolio option addressed in more detail. Since the size of the portfolio alternatives proposed are essentially the same, such a selection should not jeopardize the timing of the application or affect the assessment of the Aeolus-to-Bridger/Anticline transmission option at the regulatory level."

The complete written comments document provided by the IE to PacifiCorp on January 15, 2018 is included as Appendix H to the IE Shortlist report.

On January 16, 2018, PacifiCorp provided the IE Supplement 2 to the Wind Assessment Report prepared by Sapere Consulting. [redacted] project, Sapere concluded:

> "The wind resource analysis provided by [redacted] seems reasonably consistent with industry practice at a high level. While the analysis and proposal describe a wind project that would behave in a manner relatively consistent with other operating projects in this region, there is a slight concern raised by the somewhat optimistic wake losses of 4.9 and 5.3 percent. Sapere's opinion is that the resource assessment seems reasonable as proposed, but the wake losses may be optimistic and should be reviewed by PacifiCorp."

On January 19, 2018, PacifiCorp provided a Revised Final Shortlist Presentation to the IEs and also scheduled a conference call to discuss the presentation. As noted above, [redacted]

[37] It is important to note that PacifiCorp could not just rely on the analysis completed by Sapere on the Invenergy TB Flats I and II project since the benchmark and Invenergy proposals for TB Flats I and II proposed different equipment and had a slightly different capacity amount.

[redacted] connecting to the proposed Aeolus-Bridger/Anticline transmission system. The revised final shortlist is projected to deliver at least [redacted] in present value revenue requirements benefits for customers under the medium natural gas price and medium CO2 price input cases under the SO model runs and [redacted] under the two PaR model runs. The Revised Final Shortlist Presentation is included as Appendix I to the IE Shortlist report.

PacifiCorp also addressed the proposal of the IEs to consider a PPA bid in the final portfolio. According to PacifiCorp's analysis, based on PacifiCorp's on-going review of the transmission interconnection queue shows that the PPA bid [redacted] will be unable to achieve interconnection without construction of elements of the Energy Gateway transmission project included in PacifiCorp's long-term transmission plan (i.e. Gateway West and Gateway South). In other words, even if the [redacted] were selected, there are a number of projects in the interconnection queue before this project to result in the conclusion that the project would not be able to interconnect to the Aeolus-Bridger/Anticline system. PacifiCorp concluded that considering both the timing and cost for such an interconnection, it is not reasonable to expand the final shortlist to include this PPA bid. PacifiCorp also raised the issue that because the [redacted] was also lower in the queue, the above concerns related to interconnection to the Aeolus-to-Bridger/Anticline was applicable to [redacted] as well. However, PacifiCorp noted that given [redacted], it may be possible to use one of the advancement provisions in PacifiCorp's Open Access Transmission Tariff. PacifiCorp concluded with regard to [redacted] that because of [redacted] and relative queue position, it is reasonable to keep the project on the final shortlist pending receipt of additional information.

Table 16 provides the revised final results (as of January 19, 2018) for the SO and PaR cases for the final portfolio. While the PVRR(d) benefits are lower than under the previous portfolio, the results still illustrate significant positive benefits.

Table 16: Revised Portfolio Results for SO Model Scenarios

Price-Policy Scenario	Final Portfolio – SO Model PVRR(d) (Benefit)/Cost ($ million)	Final Portfolio Stochastic-Mean PaR PVRR(d) (Benefit)/Cost ($ million)	Final Portfolio Risk-Adjusted PaR PVRR(d) (Benefit)/Cost ($ million)
Low Gas, Zero CO2	($145)	($104)	($109)
Low Gas, Medium CO2	($186)	($124)	($131)
Low Gas, High CO2	($297)	($258)	($272)
Medium Gas, Zero CO2	($306)	($246)	($258)
Medium Gas, Medium CO2	($343)	($311)	($327)
Medium Gas, High CO2	($430)	($388)	($406)
High Gas, Zero CO2	($619)	($509)	($535)
High Gas, Medium CO2	($636)	($539)	($567)
High Gas, High CO2	($696)	($605)	($636)

PacifiCorp also addressed two of the IEs concerns raised in discussions on shortlist evaluation and selection. The first issue dealt with the application of the PTCs in the evaluation methodology. As noted, PacifiCorp's analysis assumes that the PTC inputs to the SO model would be based on nominal dollar values since the actual benefits would be flowed through to customers. The Oregon IE requested a sensitivity where the PTC benefits produced by BTA and benchmark options would be levelized over the full 30-year life of the project. A second issue raised by the IEs was whether the term of the analysis through 2036 (approximately 16 years) and the real levelized cost treatment for capital revenue requirements adequately reflects all the capital costs associated with utility ownership options over a thirty-year project life. In response, PacifiCorp completed an analysis of the expected benefits and costs through 2050 comparing the results of PacifiCorp's selected portfolio and the IE sensitivity case. In its presentation, PacifiCorp concluded that the PVRR(d) benefits through 2036 from the final shortlist portfolio total $343 million and the benefits from the IE Sensitivity with the PPA included in the bid portfolio total $277 million. Through 2050, the benefits from the final shortlist bid portfolio of $223 million are closely aligned with the IE Sensitivity bid portfolio that provides an estimated $224 million in benefits through 2050. The revised shortlist portfolio provides greater near-term benefits.[38]

PacifiCorp also informed the IEs that the Company had publicly stated that it was re-studying the projects in the interconnection queue that have existing studies, but have not signed LGIAs to reflect the revised assumptions that Segment D.2 would be in service by the end of 2020. PacifiCorp stated that its assumption at this point is that the restudies are unlikely to show that projects lower in the interconnection queue will be able to interconnect without Gateway West and Gateway South. This is true of [redacted] as well as other RFP bidders with low queue positions.

On January 31, 2018, PacifiCorp provided seven System Impact Studies for projects in its interconnection queue that were part of the restudy process due to the staging of the Energy Gateway West project, whereby the Aeolus-to-Bridger/Anticline D.2 segment of the project is now expected to come online in 2020. PacifiCorp also listed the conclusions resulting from this restudy effort, including:

- The [redacted] triggers Energy Gateway South [redacted], top of page 8)[39];
- It is accurate to assume that any project behind the [redacted] with an interconnection queue position greater than [redacted] would also trigger Energy Gateway South, which included [redacted]The

[38] This analysis compares the PVRR of Project Net Costs relative to System Impacts where Project Net Costs include: (1) Transmission Project Capital Recovery, (2) Incremental Transmission Revenue, (3) Capital Recovery – Wind, (4) Network – Wind, (5) O&M costs; (6) PTC benefits, (7) PPA costs, and (8) Terminal value. System Impacts include: (1) Net Power Costs (savings), (2) Emissions, (3) Changes in DSM, and (4) System Fixed Costs.

[39] The SIS report states "Additionally, [redacted] triggers the need for the Transmission Provider's planned Energy Gateway South Project. This project consists of a new 400-mile 500 kV transmission line from the planned Aeolus substation in Wyoming to the Transmission Provider's existing Clover substation in central Utah, with ancillary improvements".

restudy work also supports an increase in total interconnection capacity created by segment D.2 from 1,270 MW to 1,510 MW;

- After reserving capacity for the 240 MW QF project that has a signed interconnection agreement, the amount of interconnection capacity available for bids with interconnection queue positions or project locations that are capable of interconnection with just [redacted]
- Eliminating bids located behind the [redacted] with queue positions greater than [redacted] leaves the bid alternatives for [redacted] PacifiCorp is still reviewing SO model studies to assess how this affects the final shortlist, but with the increased interconnection capacity available and restricted to the bids listed above, it looks like the final shortlist would be modified by swapping out the [redacted]. All other selections would be unchanged.

PacifiCorp also stated that it was targeting early in the first week of February to send out a full round of the latest SO model and PaR model studies. PacifiCorp and the IEs also scheduled a call for February 2, 2018 to review the slide deck and latest results.

During the call on February 2, 2108 PacifiCorp noted the cost of the Aeolus-to-Bridger/Anticline would be the same. Also, the inclusion of the [redacted] as a lower cost and larger project than [redacted] should increase the overall benefits of the portfolio.

The IEs, on the other hand, expressed some frustration that the bid selection process ended up being limited to selection of only those projects with favorable queue positions, which included the [redacted]. All other proposals submitted were behind the interconnection queue constraint and would have no chance of being selected.

On February 5, 2018, PacifiCorp contacted the IEs via email and informed the IEs that based on technical discussions with [redacted] and the modeling of their turbines in power flow studies, a risk had been identified that may require installation of a synchronous condenser at the Aeolus Substation. This risk translates into the potential for additional costs associated with bid selections that rely on the [redacted]. Considering that the [redacted] bids are available with [redacted] and [redacted] PacifiCorp is taking a little extra time to analyze the cost trade-offs between bid portfolios with and without [redacted]. PacifiCorp wanted to make sure that its analysis factors this risk into the updated final shortlist before sending the final results. PacifiCorp also indicated it would also include a sensitivity analysis assuming the [redacted] as a 100% PPA.

PacifiCorp stated it expected to send its findings to the IE by Monday, February 12, 2018. PacifiCorp also indicated it planned to delay its supplemental filing in Utah until Friday, February 16, 2018 and will file the final shortlist in Oregon on February 16, 2018 as well.

J. Final Evaluation Results and Updated Final Shortlist Selection

On February 13, 2018 PacifiCorp provided the updated final shortlist selection slide deck presentation and evaluation model results for the shortlisted proposals to the IEs for review. The Updated Final Shortlist slide deck is included as Appendix J to the IE Shortlist Report.

With the higher interconnection limits, the updated final shortlist included four new wind projects located in Wyoming from three different bidders totaling 1,311 MW. Of the total capacity, 1,150 MW is in eastern Wyoming with possible interconnection to the Aeolus-to-Bridger/Anticline transmission line. [redacted] but is not connected to the Aeolus-to-Bridger/Anticline transmission line. Table 17 below provides the updated summary of the final shortlist of projects.

Table 17: Updated Final Shortlist Selection

Bidder	Project Name	Contract	Capacity (MW)	Net Annual Capacity Factor	Total In-Service Capital Cost ($/kW)[40]	PPA Price ($/MWh)
PacifiCorp	TB Flats I & II	Benchmark/EPC	500	38.68%	[redacted]	[redacted]
NextEra	Cedar Springs	200 MW BTA/200 MW PPA	400	42.78%	[redacted]	[redacted]
PacifiCorp	Ekola Flats	Benchmark/EPC	250	37.42%	[redacted]	[redacted]
Invenergy	Uinta	BTA	161	36.42%	[redacted]	[redacted]

Table 18 provides the updated final shortlist results (as of February 12, 2018) for the SO and PaR cases for the final portfolio. Based on the substitution of the larger and lower cost [redacted], the SO and PaR results are more robust, with higher benefits associated with the updated final shortlist selected. For example, the medium gas, medium CO2 case now shows a benefit of [redacted] in PVRR(d) benefits relative to the revised shortlist results from January 19, 2018 which illustrated a benefit of [redacted] as depicted in Table 16 above.

[40] Total In-Service Capital Cost includes all equipment/capital costs, direct assigned interconnection costs, Wind owner's capital cost, property taxes, AFUDC, contingency, and interconnection network upgrade costs.

Table 18: Updated Portfolio Results for SO Model Scenarios

Price-Policy Scenario	Final Portfolio – SO Model PVRR(d) (Benefit)/Cost ($ million)	Final Portfolio Stochastic-Mean PaR PVRR(d) (Benefit)/Cost ($ million)	Final Portfolio Risk-Adjusted PaR PVRR(d) (Benefit)/Cost ($ million)
Low Gas, Zero CO2	($185)	($126)	($132)
Low Gas, Medium CO2	($208)	($155)	($164)
Low Gas, High CO2	($370)	($313)	($331)
Medium Gas, Zero CO2	($377)	($295)	($310)
Medium Gas, Medium CO2	($405)	($333)	($362)
Medium Gas, High CO2	($489)	($424)	($445)
High Gas, Zero CO2	($699)	($545)	($572)
High Gas, Medium CO2	($716)	($579)	($609)
High Gas, High CO2	($781)	($671)	($705)

The Updated Final Shortlist slide deck also includes updated sensitivity results for solar from the 2017S RFP, wind repowering sensitivity, O&M sensitivity, sensitivity case to reflect the impact of selection of a 400 MW PPA from [redacted] as opposed to the split [redacted] option, and turbine equipment sensitivity to reflect the implication of adding a synchronous condenser to effectuate the [redacted] option.

For the 400 MW PPA assessment, PacifiCorp assessed how customer net-benefits are affected by selection of the [redacted] in which the full output of the project is proposed as a PPA. PacifiCorp conducted the analysis over two timeframes: (1) through 2036 similar to the IRP timeframe; and (2) through 2050 to reflect the 30-year life of the asset. In the first case, the shortlist combined portfolio had a PVRR(d) benefit of [redacted] compared to the PPA only with a benefit of [redacted]. For the second case, the combined bid had a benefit of [redacted] compared to the PPA only bid of [redacted]

For the turbine equipment sensitivity case the inclusion of the [redacted] advantage compared to the [redacted] options, assuming a synchronous condenser and other equipment is required.

K. PTC Benefits Associated with the Selected Portfolio

As noted above, the final portfolio includes 1,111 MW of wind projects that will be developed as either a BTA and owned by PacifiCorp or as a benchmark resource owned by PacifiCorp and constructed as an EPC contract and included in rate base. In any case, PacifiCorp has stated that the PTC benefits generated by these projects will be flowed back directly to customers. The PTC benefits associated with the [redacted] will be absorbed by customers due to lower PPA prices. To get a perspective on the magnitude of the PTC benefits that PacifiCorp expects to flow back to customers on a nominal dollar basis, Table 19 includes the expected annual benefits attributed to each

project based on PacifiCorp's Base spreadsheet model results. The PTC benefits are based on the PTC value times the level of generation estimated for each project.

Table 19: Annual PTC Benefits - Shortlisted Projects

Year	TB Flats I&II	Cedar Springs BTA	Ekola Flats	Invenergy Uinta	Total
2020	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2021	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2022	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2023	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2024	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

The results of this assessment illustrate that the value of the PTC benefits to customers on a nominal dollar basis are expected to be approximately [redacted] over the 10-year period.

VI. Assessment of the Solicitation Process

This section of the Report provides our overall assessment of PacifiCorp's 2017R solicitation process with respect to (1) the consistency of the process to the solicitation requirements included in Section R746-420 and Chapter 54 of the Utah Code; (2) consistency of the process with regard to the overall objectives for an effective competitive procurement process; and (3) approach of PacifiCorp in dealing with the issues identified by the IE. In particular, issues associated with the fairness and transparency of the process are addressed in this section.

A. Consistency of the Process With Regard to Utah Statutes

Table 20 includes a detailed description and assessment of the results of the solicitation process relative to each of the applicable solicitation requirements outlined in Section R746-420-3.[41] As illustrated, the IE concludes that the design and implementation of the solicitation process is generally consistent with the solicitation requirements outlined in Section R746-420-3. Any specific issues we have with the process are also described in this Exhibit and are discussed in more detail in the Conclusions section of the report. In our view, overall the process was undertaken in a fair and reasonable manner and in the public interest based on the objectives of the solicitation.

Table 20: Adherence of the Solicitation Process with Section R746-420-3

[41] Since there was no blinding of information requirement associated with this RFP, provisions dealing with blinding were not included.

Solicitation Requirements included in Section R746-420-3	Adherence to Solicitation Requirements
1. General Requirements	
• The solicitation process must be fair, reasonable and in the public interest (Section R746-420-3(1)(a))	In our view, the solicitation process overall was fair, reasonable and generally in the public interest. All bidders and benchmarks were treated the same, had access to the same information at the same time, and had an equal opportunity to compete. Furthermore, the process was a transparent process with active involvement and oversight by the two IEs (Utah and Oregon). The IE agreed with PacifiCorp's decision to classify several bids as non-conforming and also disagreed with PacifiCorp with regard to its proposal to eliminate one other proposal. The public interest standard is served when the competitive process is effectively implemented encouraging a significant response from bidders competing to provide the lowest reasonable cost resources at minimum risk to customers. As we will discuss further, the results of the 2017R RFP targeted on wind resources to take advantage of the PTC benefits, and resulted in significant customer benefits. However, the ability of the solicitation process to account for the cost of other renewable or other resources may have also provided benefits in an overall portfolio.
• The solicitation process must be designed to lead to the acquisition of electricity at the lowest reasonable cost (Section R746-420-3(1)(A))	In our view, the solicitation documents were reasonably transparent and detailed and provided significant information on which bidders could structure their proposals and decide how to compete. The bid evaluation and selection process was designed to lead to the acquisition of wind-generated electricity at the lowest reasonable cost based on the detailed state-of-the-art portfolio evaluation methodology used, the steps taken to achieve comparability between utility cost of service resources and third-party firm priced bids, the flexibility afforded bidders via a range of eligible resource alternatives, and the attempt to allow for equal terms for PPA and BTA resources. The implementation of the solicitation was structured to maintain competition between wind projects at every step of the process. From the perspective of evaluation of the wind resources in combination with the Aeolus-to-Bridger/Anticline transmission line the resource decisions result in significant benefits to customers. However, it is not possible to determine if the wind-only resources offer the lowest reasonable cost without an integrated resource procurement and evaluation process that also includes solar and potentially other resources.
• The solicitation process should consider long and short-term	The 2017R RFP process met these requirements with regard to the high-level bid evaluation and selection

impacts, risk, reliability, financial impacts and other relevant factors (Section R746-420-3(1)(b))	methodology. In the bid evaluation stage, the analysis addressed short and long-term system impacts and risk associated with CO2 costs and gas and power price ranges. The evaluation process also considered the implications of qualitative project viability factors as prescribed in the RFP documents. The IE raised a risk associated with the selection of the benchmark resources and that was attributed to potential cost overruns based on the low capital costs offered.
• Be designed to solicit a robust set of bids (Section R746-420-3(1)(iv))	PacifiCorp has maintained a large database of potential bidders and informed the list of bidders of the issuance of the RFP. PacifiCorp's outreach activities were aggressive and led to a robust set of bids. The IE and DPU were concerned at the outset of the process that there may be limited bidders and suggested options to expand the potential pool of bidders to ensure there was a competitive process. PacifiCorp disagreed with the IE and DPU that the number of bidders may be limited but agreed with the IE and DPU to broaden bidder eligibility which led to a more competitive process in terms of the number of proposals submitted. While there was a robust response, it became obvious later in the process that based on the interconnection queue, bidders who had only initiated project development had little or no chance to compete. The IE requested that PacifiCorp hold a separate workshop for bidders on transmission issues. Perhaps such a workshop would have provided more information to bidders regarding the interconnection process and queue position and may have caused some bidders to consider not bidding if they were aware they had little chance of being successful in this process.
• Be sufficiently flexible to permit the evaluation and selection of those resources or combination of resources determined to be in the public interest (Section R746-420-3(1)(iii))	The IE found that the 2017R RFP was a reasonably flexible process. PacifiCorp allowed bidders to update their pricing after the new Tax Bill was passed to reflect the implications of the bill on their pricing, if material. PacifiCorp generally allowed bidders to be flexible in their responses, worked with bidders to conform their proposals, and made revisions to the process at the suggestions of the IEs, including revising the timing for bidder submission of the Commitment Letter. PacifiCorp also included analysis in the evaluation process requested by the IEs. The solicitation process also resulted in selection of one proposal, the Invenergy Uinta project, that provided customer benefits and was not dependent on the construction of the Aeolus-to-Bridger/Anticline transmission system.
• Be timely in the sense of ensuring adequate time is allotted to undertake the analysis and secure the resource (Section	Merrimack Energy did have some issues with regard to the timing for undertaking some of the key activities. The schedule in itself was tight and the company did not maintain the proposed schedule for the 2017R RFP very well at the end of the final shortlisting process due to

R-746-420-3(1)(v))	errors in the analysis and updated and revised evaluation results. PacifiCorp did make a valuable adjustment in the process by allowing Wyoming and non-Wyoming bidders to submit their proposals at different times. This allowed non-Wyoming bidders more time to prepare and submit proposals.
2. Screening Criteria – Screening in a Solicitation Process	
• Develop and utilize screening and evaluation criteria, ranking factors and evaluation methodologies that are reasonably designed to ensure the process is fair, reasonable, and in the public interest in consultation with the IE and Division Section R746-420-3(2)(a)).	The RFP included a description of the screening and evaluation criteria, the evaluation methodologies, and other information to ensure the process was fair, reasonable and in the public interest. In our view, the evaluation criteria and evaluation methodologies were consistently applied to all proposals and benchmarks and are consistent with standard industry practices. Furthermore, the transparency of the criteria allowed bidders to reflect the specific criteria in their proposals. The IE recommended that PacifiCorp reconsider a few of the qualitative criteria to reflect project viability in the assessment and the Company agreed to review and adjust the criteria.
• In developing the screening and evaluation criteria, the utility shall consider the assumptions in the utility's most recent IRP Section R746-420-3(2)(c)).	The Company used a consistent set of assumptions generally based on the assumptions used in the most recent IRP. The assumptions were consistent (e.g. fuel and CO2 costs), were of recent vintage, and were locked down prior to receipt of bids. PacifiCorp provided the assumptions and inputs with back-up support to the IEs prior to receipt of the bids. PacifiCorp did use updated gas and CO2 assumptions for the final shortlist evaluation results for the SO and PaR modeling activities.
• The utility may but is not required to consider non-conforming bids and will provide advance notice to the IE of its decision regarding non-conforming bids (Section R746-420-3(2)(d))	There were a few non-conforming bids eliminated from consideration in the evaluation process. PacifiCorp identified the bids it considered non-conforming to the IEs before notifying the bidders to allow for IE review of the decision. The IEs were in agreement with PacifiCorp's decision to classify some bids as non-conforming since the bids eliminated did not meet minimum eligibility requirements or were not wind-only bids. PacifiCorp notified the identified bidders after discussions with the IEs.
4. Disclosures – Benchmark Options	
• Identify whether the Benchmark is an owned option or a purchase option (Section R746-420-	PacifiCorp provided four benchmark wind projects, all of which would be utility-owned options. A description of each of the benchmarks was provided in the RFP and in

3(4)(a))	the Bidders Conference presentation.
• If the option is an owned benchmark option, provide a detailed description of the facility, including operating and dispatch characteristics. (Section R746-420-3(4)(b))	PacifiCorp provided the IEs with a complete proposal for each Benchmark option. The Company provided a very detailed description of the benchmark resource, including the technology, cost information, transmission and interconnection, permitting status, site control, etc. The Company provided all the same information as other bidders were required to submit. As noted, benchmark bids and third-party bids were required to provide the same information.
• Assurance from the utility that the Benchmark option will be validated by the IE and that no changes will be permitted unless updates to other bids are permitted. (Section R746-420-3(4)(f))	It was clear to the IE that this was a requirement. The IE participated in discussions with the Benchmark team to ensure the IE had all pertinent information required. The Benchmark team provided very detailed line-by-line information on each resource, and provided all information requested. The IE submitted a report to the Commission as required on its review and assessment of the benchmark resource validating the cost and operating information for each benchmark option but raising some concerns about the capital cost of some of the benchmark resources as being on the low end of the wind project capital cost scale.
• A description and examples of the manner in which resources of differing characteristics or lengths will be evaluated. (Section R746-420-3(4)(c))	Since this is a major issue in any solicitation process, the IE asked PacifiCorp this question during the initial meeting to discuss the bid evaluation methodology and process. The IE was particularly focused on this issue because utility-owned resources with a 30-year life for example, could potentially be competing with 20-year term PPAs. The IE also suggested, and PacifiCorp included in the RFP, options for bidders to offer up to a 30-year PPA. PacifiCorp identified in public documents regarding the RFP that the evaluation would be undertaken over the project life for the initial evaluation but that for the SO model runs, the term of the evaluation would be 2017-2036.
5. Disclosures – Evaluation Methodology	
• The solicitation shall include a clear and complete description and explanation of the methodologies to be used in the evaluation and ranking of bids including evaluation procedures, factors and weights, credit requirements, proforma contracts, and solicitation schedule. (Section R746-420-3(5))	The RFP document contains a detailed description of the methodologies to be used to evaluate the bids, as well as the evaluation procedures, factors, weights, credit requirements, proforma contracts and schedule. Also, similar information was provided to bidders through the Bidders conference presentation. The publicly available IRP was another source of information about the bid evaluation methodology and models to be used since PacifiCorp noted that it intended to use the same methodology for the RFP as it uses for the IRP.
6. Disclosures – Independent	

Evaluator	
• The solicitation should describe the role of the IE consistent with Section 54-17-203 including an explanation of the role, contact information and directions for potential bidders to contact the IE with questions, comments, information and suggestions. (Section R746-420-3(6))	The RFP (e.g. Appendix M) contains a description of the Role of the Independent Evaluator. In addition, the contact information for the Independent Evaluators is provided in the RFP and presentation materials. Bidders were also encouraged to contact the IEs either via Merrimack Energy's website or directly.
7. General Requirements	
• The solicitation must clearly describe the nature and relevant attributes of the requested resources. (Section R746-420-3(7)(b))	In our view, the RFP document was a reasonably transparent document, providing significant information about the nature, attributes, and eligibility of the requested resources including describing the specific requirements for the resources with regard to PTC and transmission. The RFP also provided copies of specific relevant contracts for the specific resource (i.e. PPA, BTA, EPC), and in some cases specifications for resource options.
• Identify the amounts and types of resources requested, timing of deliveries, pricing options, acceptable delivery points, price and non-price factors and weights, credit and security requirements, transmission constraints, etc. (Section R746-420-3(7)(c))	As noted above, the RFP documents were very transparent and detailed and met all the requirements listed in the Rules.
• Utilize an evaluation methodology for resources of different types and lengths which is fair, reasonable and in the public interest and which is validated by the IE. (Section R746-420-3(7)(d))	As noted, one of the major issues in a competitive solicitation process is the development and use by the utility of an evaluation methodology that can effectively account for the evaluation of bids with different terms, resource characteristics, and technologies. In our view, while all of the models and methodologies used by PacifiCorp are used for the IRP process evaluation of resources, the IEs were concerned that the analysis period used for the SO model evaluation was less than 20-years (i.e. 2017-2036), with the possible implication that 30-year BTA options would have an inherent competitive advantage since not all costs would be accounted for in the evaluation. The IEs asked PacifiCorp to conduct analysis over a 30-year period to ensure the overall results would not change. Overall, the results indicated that there did not appear to be an inherent advantage associated with a utility-ownership bid due to the shorter evaluation period for purposes of evaluating and selecting a portfolio of resources. The net benefits approach used may eliminate the costs for a longer-term resource but also eliminates the revenue side of the equation, which

	would likely be escalating over time. All of the models are either industry standard models and/or have been applied and refined for similar applications over time, including PacifiCorp's IRP methodology and process. The SO and PaR models are industry standard models that have been tested in the market. The RFP Base Model allows for a consistent and fair evaluation of bids of different technologies and terms and is a reasonable tool for initial evaluation of bids.
• Impose credit requirements that are and other bidding requirements that are non-discriminatory, fair, reasonable and in the public interest. (Section R746-420-3(7)(f))	Overall, the IE was of the opinion that the level, type and schedule for posting security were generally reasonable and consistent with industry standards. The IEs did request that PacifiCorp include a description of the credit methodology in the RFP, which PacifiCorp agreed to include. The issue that was problematic was the requirement that bidders had to provide a commitment letter from their credit support provider if selected for the shortlist. This was inconsistent with industry standards and was contrary to the way bidders approach project development. This issue was resolved by Merrimack Energy and PacifiCorp and the requirement for a commitment letter was now pushed back until after final shortlist selection. Several bidders raised this issue initially but dropped their concerns once the requirement was revised.
• Provide reasonable protection for confidential information. (Section R746-420-3(7)(i))	The Company was diligent in ensuring that confidential information was shared only with members of the internal team, IEs, Division and other parties as required. There did not appear to be any evidence where any violations of confidentiality took place. The Company took all reasonable measures to protect confidential information.
8. Process Requirements for a Benchmark Option	
• Evaluation team may not be members of the Bid team or communicate with the Bid team about the solicitation process. Section R746-420-3(8)(a))	The RFP and Code of Conduct clearly described the teams and requirements for each team. Each team member was instructed in writing on the separation of functions and the Code of Conduct requirements. Team members also went through an in-house training process, which was witnessed by the IE and DPU staff. These requirements were maintained throughout the process. To the best of our knowledge, there were no violations by any team members. Furthermore, the company identified the protocols clearly to bidders in its Bidders conference presentation.
• The names and titles of each member of the Bid team, non-blinded personnel, and evaluation team shall be	The names of individual team members were provided to the IEs as required along with the team to which they were assigned.

provided to the IE. (Section R746-420-3(8)(b))	
• All relevant costs and characteristics of the Benchmark options must be audited and validated by the IE prior to receiving any of the bids. (Section R746-420-3(8)(h))	PacifiCorp provided the benchmark resources to the IE one week before Wyoming bids were due. The IE audited the Benchmark resources, conducted calls with the Benchmark team, and prepared a report on the findings. The report was submitted to the Commission and Division on November 2, 2017, shortly after receipt of bids due to the quick timeframe for this solicitation.
• All bids must be considered and evaluated against the Benchmark option on a fair and comparable basis. (Section R746-420-3(8)(i))	PacifiCorp's Benchmark resources were submitted before other proposals were received, provided the same information in their proposal documents as all other bidders, and were evaluated based on the same evaluation methodology and steps. For both shortlist and final evaluation, all eligible proposals, including the benchmarks were equitably and consistently evaluated. The IE did identify a few examples where one of the [redacted] resources, the [redacted], was not specifically included in PacifiCorp's slide deck initial shortlist presentation or was subject to the evaluation of the generation profile undertaken by PacifiCorp's consultant, Sapere Consulting. These oversights were identified earlier in this report.
9. Issuance of a Solicitation	
• The utility shall issue the solicitation promptly after Commission approval. (Section R746-420-3(9)(a))	The RFP was approved on September 22, 2017 and issued on September 72, 2017.
• Bids shall be submitted directly to the IE. (Section R746-420-3(9)(b))	The initial bids were submitted to the Utah IE at its California office. Any updates were provided by PacifiCorp via email.
• The utility shall hold a pre-bid conference (Section R-746-420-3(9)(c))	PacifiCorp held a pre-bid conference on October 2, 2017.
10. Evaluation of Bids	
• The utility shall provide all data, models, materials and other information used in developing the solicitation, preparing the Benchmark option, or screening, evaluating or selecting bids to the IE and the Division staff.	PacifiCorp provided all the input data prior to receipt of bids, conducted meetings with the IEs and Division to review the models, model methodologies, and basis for input forecasts. In addition, the Company's Benchmark team provided detailed information on the benchmark resources to the IEs and responded in a timely manner to questions.
• The IE shall pursue a reasonable combination of auditing the utility's evaluation and conducting its own independent evaluation in consultation with the Division.	Given the timing of the evaluation process, the IE primarily audited the Company's analysis rather than undertaking its own independent evaluation. In other bidding processes, the IE usually undertakes an independent non-price and at times an initial price evaluation process to verify short list selection. In this case, the IE conducted a thorough review and assessment

	of PacifiCorp's evaluation results and model outputs and asked questions if any information seemed inconsistent.
• The IE shall have access to all information and resources utilized by the utility in conducting its analyses. The utility shall provide the IE with access to documents, data, and models utilized by the utility in its analyses.	PacifiCorp was diligent in providing information it compiled on each bid and also was responsive to any requests for information asked by the IE or for completion of studies requested by the IE. PacifiCorp was very forthcoming with this information and at no time did the IE feel access was restricted or limited.
• The Division and IE may ask the PacifiCorp Transmission Group to conduct reasonable and necessary transmission analyses concerning bids received.	PacifiCorp set up conference calls with the IE and PacifiCorp Transmission personnel to discuss any issues the IE may have regarding transmission and interconnection. PacifiCorp was responsive to the IEs requests in this area.

B. Consistency of the Process With Regard to an Effective Competitive Solicitation Process

Merrimack Energy has developed a set of criteria that we generally use to evaluate the performance of the soliciting utility in implementing a competitive solicitation process. In this section, the performance of PacifiCorp is assessed in more detail. [42]

This 2017R RFP process was a detailed process, encompassing the development of the RFP through selection of the final shortlist. Based on Merrimack Energy's experience with competitive bidding processes and observations regarding such processes, the key areas of inquiry and the underlying principles used by Merrimack Energy to evaluate the bid evaluation and selection process include the following:

1. Were the solicitation targets, principles and objectives clearly defined?

2. Did the solicitation process result in competitive benefits from the process?

3. Was the solicitation process designed to encourage broad participation from potential bidders?

4. Did PacifiCorp implement adequate outreach initiatives to encourage a significant response from bidders?

5. Was the solicitation process consistent, fair and equitable, comprehensive and unbiased to all bidders?

6. Were the bid evaluation and selection process and criteria reasonably transparent such that bidders would have a reasonable indication as to how they would be evaluated and selected?

[42] It should be noted that there is overlap with the criteria and assessment of PacifiCorp relative to the criteria since some of the criteria are consistent with the requirements identified in the Utah Statutes.

7. Did the evaluation methodology reasonably identify how quantitative and qualitative measures would be considered and applied?

8. Did the RFP documents (i.e. RFP, Attachments, Appendices, Pricing Form and Model Contracts) describe the bidding guidelines, the bidding requirements to guide bidders in preparing and submitting their proposals, and the bid evaluation and selection criteria.

9. Did the utility adequately document the results of the evaluation and selection process?

10. Did the solicitation process include thorough, consistent and accurate information on which to evaluate bids, a consistent and equitable evaluation process, documentation of decisions, and guidelines for undertaking the solicitation process.

11. Did the solicitation process ensure that the Power Contract was designed to minimize risk to the utility customers while ensuring that projects selected can be reasonably financed.

12. Did the solicitation process incorporate the unique aspects of the utility system and the preferences and requirements of the utility and its customers.

The implementation of the 2017R RFP process relative to the characteristics identified previously is described below. Merrimack Energy has been involved in all aspects of the solicitation process.

1. Solicitation Targets

The RFP document clearly defined the amount of wind generation capacity requested, the timing for providing the capacity, the type of products and product characteristics required, the duration of potential contracts, and the amount of wind generation capacity the Company expected to shortlist. As noted, PacifiCorp actually included more generation capacity on the shortlist than it expected to select due to the competitive nature of the responses.

2. Competitive Benefits

Competitive benefits can result from a process that encourages a large number of suppliers in combination with reasonable bidding standards and requirements and a balance of risk in the associated contracts such that the process leads to robust competition, lower prices for consumers, limited risk and reliability.

PacifiCorp's solicitation process encouraged a reasonable response from the market, with large and significant wind project development firms participating in the process. The

2017R RFP resulted in a robust response from bidders with the amount of unique capacity (based on the largest bid from each bidder) exceeding 5.5 times the amount of generating capacity requested. The proposals were very competitive from the beginning with very close ranking of proposals at the initial shortlist stage all the way through to final evaluation and selection. The final result of the solicitation was that the overall benefits to customers based on the RFP were approximately [redacted] in NPV value in the medium gas, medium CO2 case.,

3. Broad Participation from Potential Bidders

As noted above, the process encouraged a reasonable number of proposals as well as different contract and project structures. As we noted, PacifiCorp received 72 proposals from well-known, highly experienced and highly capitalized wind project developers. In addition, PacifiCorp received Wyoming and non-Wyoming bids, proposals that included PPAs, BTAs, benchmarks and combination bids. Some project developers offered both PPA and BTA options for the same projects. Proposals also included projects located in Wyoming that would interconnect with the new Aeolus-to-Bridger/Anticline transmission project as well as wind projects located in other areas of PacifiCorp's system.

4. Outreach Initiatives

PacifiCorp has done a very effective job of maintaining communications with bidders and providing information to prospective bidders in their competitive solicitation processes. PacifiCorp has a large database of potential bidders and actively marketed the RFP to those prospective bidders. PacifiCorp also maintains a section on their website devoted to open RFPs which bidders could easily access. Also, through the solicitation process, PacifiCorp initiated a number of workshops and conference calls with prospective bidders to inform them of solicitation information.

5. The solicitation process should be consistent, fair and equitable, unbiased, and comprehensive

The principal areas of focus for our assessment of PacifiCorp's 2017R RFP are on the RFP document and on the Company's performance in carrying out the process, from issuance of the RFP document to evaluation and selection of the final shortlist. The key criteria (fair, equitable, consistent and unbiased) are applied to PacifiCorp's implementation of the evaluation and selection process as well as the Company's ability to adhere to the requirements outlined in the RFP document. Therefore, the critique will focus on the implementation of the process rather than specific issues regarding the process.

In our view, PacifiCorp's solicitation process was an open, fair and consistent process in which all bidders had access to the same information at the same time. This was ensured through use of the PacifiCorp website as well as a third-party website (i.e. Merrimack Energy's website) and the role of the IEs. It is our view that the final RFP document generally provided clear and comprehensive information about the requirements of

bidders, product definition, schedule of the process, requirements for submitting a proposal, and the opportunities for competing. Bidders should have been able to understand how best to compete in such a process.

While it was our view that the bidding documents and materials were clear and comprehensive, several bidders failed to meet eligibility requirements. It appeared that a few bidders preferred to present unique and creative proposals rather than strictly meeting the requirements of the RFP. A few bidders did not comply with the delivery requirements identified in the RFP (e.g. bidders were required to ensure delivery of the power into the Company system).

The price evaluation methodologies were designed to evaluate bids using the same or consistent set of input parameters, assumptions, and modeling methodologies. This served to ensure a consistent evaluation of bids.

With regard to bias, the most obvious consideration is whether the process favors one type of bidder over another. The IE was concerned that the nature of the evaluation methodology may favor BTA bids at the expense of the PPAs. The results of the initial shortlist, however, appeared to prove that this was not the case since the shortlist was comprised on both BTAs and PPAs. We later again raised the point after bidders provided revised pricing to reflect the impacts of the Tax Bill, that since the value of the PTCs had declined, our expectation was that PPAs should have higher net benefits. Based on the comparison of BTA and PPA proposals using the Base Model, a few PPA options actually did have higher net benefit values. However, these proposals were not selected to the final shortlist due to the project queue position. We also questioned the use of nominal value for the PTCs in calculating the portfolio evaluation results. In addition, we questioned the term of the evaluation (i.e. 2017-2036). Our concern was that all these factors could bias the evaluation results toward BTA options, in which PacifiCorp would be project owner and the costs would be included in rate base. At the request of the IEs, PacifiCorp ran 30-year analysis as well as assessments without using nominal dollars for PTC benefits. The results showed the BTA and PPA for the most competitive projects to be close in value. We feel that there is perhaps a small bias favoring BTAs based largely on the value attributed to the PTCs.

We do not believe any bid had an undue inherent competitive advantage within the parameters of the solicitation process. The eligibility assessment and follow-up information requirements ensured all bidders provided the same information for evaluation purposes. PacifiCorp was inherently focused on ensuring that all bidders competed on an equal footing and had access to the same information.

The solicitation process was well structured to ensure that the information required in the RFP document was linked to the evaluation criteria.

6. Transparency of the Process

The RFP documents, Bidders conferences or webinars, interactive questions and answer process with bidders, and posting of key documents by the Company and IE all led to a process where bidders would have significant information about the process and be aware how to effectively compete. The information required of bidders was clear and concise as witnessed by the generally complete and consistent proposals submitted by bidders. The RFP and related documents were clear on the security and transmission requirements, for example. In conclusion, it is our view that the solicitation process was a reasonably transparent process and in that regard was consistent with or exceeded industry standards.

7. Application of Quantitative and Qualitative Measures

The RFP document clearly articulated the quantitative and qualitative methodologies and requirements associated with the evaluation process. The methodologies and models were clearly described in the RFP and were also consistent with the Company's Integrated Resource Plan. Also, the Pricing Input Sheets and follow-up process with bidders to review their inputs served to ensure bids would be evaluated on a consistent and unbiased manner. These processes took the "guess work" or interpretation out of the process.

8. The RFP Documents should describe the process clearly and provide adequate information on which bidders could complete their proposals

This objective addresses the quality of the documents contained in the RFP package (i.e. RFP, Contracts, Bid Forms required of all bidders, and other Attachments and pertinent information) and the integration among the documents. PacifiCorp's RFP provided considerable detail regarding the information required of bidders, the basis for evaluation and selection, and the criteria of importance. The RFP process clearly provides a direct link between the RFP document, bid form and contracts. In our experience, the 2017R RFP is a very detailed and complete document which provides a significant base of information to guide bidders in developing their proposals. As noted on several occasions, the inconsistency between the requirements for a commitment letter at shortlisting was initially a point of contention in the process. This issue was quickly resolved by PacifiCorp in discussions with the IE.

9. Documentation of Results

The initial and final shortlist evaluation results and selection processes were well documented and supported. The Company provided all necessary supporting information to the IEs, including details on the input assumptions, model outputs, and summaries of results. PacifiCorp provided all the information specifically requested by the IEs including any analysis or modeling results.

VII. Conclusions and Recommendations

A. Conclusions

Merrimack Energy has identified a number of conclusions associated with the 2017R RFP solicitation process undertaken by PacifiCorp. Our conclusions include the following:

- The response to the 2017R RFP for wind resources was very robust with 14 bidders (including PacifiCorp's benchmark resources) submitting 72 different bid alternatives. As a result, the amount of capacity submitted significantly exceeded the amount of capacity requested (up to 1,270) by a factor of nearly 5.5 to 1;

- Bidders submitted a mix of Power Purchase Agreements ("PPA") and Build Transfer Agreements ("BTA"). In addition, bidders offered other creative product solutions as part of the proposals submitted, such as combined BTA/PPA options, different pricing options for the same PPA projects such as fixed pricing and a base price times escalation, BTAs for the same project with different turbines;

- PacifiCorp has generally conformed to the requirements of Rule R746-420 as identified in Chapter VI. All proposals, including the benchmark resources, provided the same level of information as requested in the RFP. PacifiCorp maintained a consistent and equitable evaluation process for all proposals using the same input assumptions for all applicable proposals, PacifiCorp undertook an evaluation methodology and process that was consistent with the methodology adopted for its Integrated Resource Plans ("IRP") and based on the same models used for IRP assessments. The IE found that the benchmark proposals provided the same general information as all other proposals and were evaluated using the same methodology and input assumptions. This conclusion is confirmed by our assessment in Section VI of this report;

- The results of the SO and PaR evaluation on the final revised shortlist illustrate that the pursuit of these wind project to take advantage of the Production Tax Credits ("PTC") should result in significant savings for customers. For the final evaluation results, PacifiCorp estimates that the benefits associated with the portfolio of wind resources is equal to $405 million PVRR under medium gas and medium CO2 cases. The resulting bid pricing and capital costs overall were lower than the costs included in PacifiCorp's IRP cases, resulting in additional benefits relative to costs than PacifiCorp included in its IRP cases or subsequent assessment. Furthermore, since PacifiCorp intends to flow through all PTC benefits to customers over the first 10 years of the project, the near-term benefits to customers should be significant;
- PacifiCorp generally followed its proposed evaluation and selection process as outlined in the RFP. The primary deviation from the proposed evaluation and selection process was the addition of a third revision to bid pricing to reflect the implications of the federal Tax Bill passed in late December, 2017. PacifiCorp used the pricing provided in response to the request to revise prices as a result of the tax bill or the most recent pricing proposed as the basis for the final evaluation results;

- PacifiCorp required all bidders, including the benchmark resources, to be subject to the same information requirements and conducted a consistent evaluation process with all proposals treated equally in terms of the evaluation methodology and information required of each bidder;
- The IE found that the initial shortlist evaluation and selection was reasonable based on the bid pricing submitted by the Benchmark resources, PPA and BTA options submitted. The size of the initial shortlist exceeded PacifiCorp initial intent since the proposals were generally closely ranked, with little difference in net benefits for the top-rated proposals;

- One of the primary issues the IE is required to address in its assessment of the solicitation process is whether the solicitation process is consistent with Utah Statutes (54-17-101) and is in the public interest taking into consideration 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, including (1) long-term and short-term impacts; (2) risk; (3) reliability; (4) financial impacts on the affected electric utility; and (5) other factors determined by the Commission to be relevant. In the view of the IE, PacifiCorp's selection of the final portfolio of wind resources is in the public interest based on wind proposals submitted, albeit subject to cost risk associated with the benchmark resources as discussed below. Since PacifiCorp's solicitation is based solely on the solicitation for system wind resources, it is not possible to determine if other resources would have been included in a final least cost, least risk system portfolio, potentially displacing one or more wind resources. The result of this market test for wind was the proposed selection of wind resources that actually provided significantly more customer benefits than PacifiCorp had calculated in its IRP cases. The same could be true for other resources as well.

- The IE is of the opinion that PacifiCorp's selection of the final shortlist of 4 projects totaling 1,311 MW was a reasonable selection based on the constraints identified. The projects selected included PacifiCorp's TB Flats I & II benchmark resource (500 MW); NextEra's Cedar Springs BTA and PPA proposal (200 MW each); PacifiCorp Ekola Flats benchmark resource (250 MW); and Invenergy's Uinta project (161 MW). The first three projects are proposed to interconnect to the Aeolus-to-Bridger/Anticline transmission system, while the Uinta project is located in Wyoming but is not dependent on the Aeolus-to-Bridger/Anticline transmission system;

- The portfolios selected by the SO model are dependent upon the constraints imposed. In this case, the primary constraint was the capacity of the Aeolus-to-Bridger/Anticline line. The initial assessment illustrated that the constraint limited the selection of the resources to the proposals above with the exception of PacifiCorp's McFadden Ridge project being selected instead of Ekola Flats. However, once PacifiCorp Transmission conducted restudies of the System Impact Studies in the queue, the Company found that there was an increase in the interconnection capacity created by segment D2 from 1,270 MW to 1,510 MW. In

addition, the studies found that bids with a queue position of Q0713 or greater triggered the requirements for Energy Gateway South. As a result, the SO model could essentially only select the projects that were actually selected based on their position in the queue. While the IE had concerns over the basis of this constraint, these projects were the lowest cost options available. As a note, however, PacifiCorp did not provide technical studies that support the additional capacity of the Aeolus-to-Bridger/Anticline transmission line. PacifiCorp did respond to the question raised by the IE about the cost of the Aeolus-to-Anticline/Bridger line that the cost of the facilities would be the same at $697 million.

- The selection of the benchmark options, notably the selection of the [redacted] poses several risks that need to be scrutinized. The cost of the [redacted] is significantly lower (on a $/kW basis) than a comparable proposal submitted for the same project by [redacted], a sophisticated wind project developer. In addition, the capital cost proposed by PacifiCorp for the [redacted] is significantly lower than any BTA option proposed for similar resources on a $/kW installed basis. The IE had already concluded that the benchmark cost for this project appeared low when compared to market benchmarks in the IE report on the Benchmark resources. In the end, the project capital cost was low compared to actual proposals, with the benchmarks being the lowest cost options proposed by any BTA bidder by a significant margin. Since this project is a cost of service option, the IE suggests that the actual cost of the project be closely scrutinized;
- A common occurrence in the wind industry has been that the actual capacity factors of wind projects have been lower than the projected capacity factors. Such an occurrence for PPA options is not a major issue since the PPA project must conform to the contract requirements for meeting generation required levels or incur penalties. For BTA or Benchmark options, failure to meet the target capacity factor is an issue. For one, the full PTC benefits may not be realized if generation is lower than projected. Failure to meet projected generation levels for these resources results in higher unit costs and raises the question of whether these projects would have been selected if realistic generation profiles were provided. While PacifiCorp retained Sapere to conduct such an analysis to ensure the generation levels and capacity factors are reasonable, the IE feels there is some risk associated with the [redacted] based on the Sapere analysis regarding wake losses. The IE feels that the generation levels of the benchmark and BTA options should be closely monitored to ensure they perform as proposed;
- On the other hand, PacifiCorp has claimed that the O&M costs associated with the larger turbines that it has proposed will incur much lower O&M costs than the O&M costs estimated for the benchmark option. The IE rejected PacifiCorp's proposal to include lower O&M costs for those projects which were using larger wind turbines because the IE felt PacifiCorp did not provide adequate support to base its claim regarding the magnitude of the O&M cost reduction. However, this is an area where PacifiCorp could experience lower costs than project;
- While the IEs suggested that PacifiCorp include another PPA on the final shortlist, PacifiCorp made a compelling case that the queue position of the PPA in

question would result in very high interconnection and network upgrade costs for this project to achieve interconnection to the grid. PacifiCorp indicated that this project could not interconnect to the Aeolus-to-Bridger/Anticline since there were so many projects ahead of it in the queue and that the timing to be interconnected could be substantial. PacifiCorp's conclusion was that this project ([redacted]) would require construction of the Gateway West and Gateway South transmission projects;

B. Recommendations

- Merrimack Energy recommended that PacifiCorp hold a Transmission workshop for bidders as they had for previous solicitations. PacifiCorp agreed but due to the timing of completing the solicitation process, the Transmission workshop was not held. Given the issues with interconnection and changes in transmission interconnection constraints, a Transmission workshop may have shed light for bidders on their chances of success. Instead, at the end of the day, only those projects who had early queue positions had a chance to compete in the process. Essentially this came down to three bidders only: PacifiCorp, Invenergy, and NextEra;

- The IE found that PacifiCorp's Base spreadsheet model was cumbersome to review and evaluate given the large number of tabs and integration between tabs. The IE recommends that PacifiCorp consider simplifying this model;

- The IE feels that PacifiCorp's benchmark project costs are low relative to other wind generation market options. One of the primary concerns of the IE in overseeing a solicitation process with utility-ownership options is the possibility that the utility benchmark option could submit a low-cost bid, be the successful bidder at the lower price, but then experience higher actual costs and seek cost recovery later based on prudency considerations given the different resource characteristics and cost recovery considerations of utility-owned projects. The IE has concluded that the benchmark costs should be scrutinized to ensure the process remains a fair and equitable process with no undue benefits afforded to the benchmark option;

- While the application of a terminal value benefit for utility ownership options was a small factor overall and did not influence final results, the IE feels that the application of a terminal value adder and the methodology to apply terminal value should be considered in more detail in future solicitations;

- As we noted in the discussions surrounding the reassessment by PacifiCorp Transmission regarding the System Impact Restudy process, PacifiCorp Transmission concluded that more interconnection capacity was available on the Aeolus-to-Bridger/Anticline transmission system. While the [redacted] that was selected for the final shortlist had a later queue position and would not be able to interconnect to the system, PacifiCorp was able to then include the [redacted] in the final shortlist once the assessment concluded that more capacity was available. However, we did not see or review the technical studies that supported this conclusion and change in the

portfolio. The IE therefore recommends that PacifiCorp provide supporting documentation during the hearings to support its assessment.