ORDER NO. 16 316

ENTERED: AUG 19 2016

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1751

In the Matter of PUBLIC UTILITY COMMISSION OF OREGON, Implementing Energy Storage Program Guidelines pursuant to House Bill 2193.	ORDER

DISPOSITION: COMMENTS ON DRAFT GUIDELINES SOUGHT

We seek further input on the implementation of House Bill 2193 and the requirement for electric companies to submit, by January 1, 2018, proposals to develop energy storage systems. Specifically, we seek comment related to the provisions of HB 2193 that (1) we adopt, by January 1, 2017, guidelines for the electric companies to use in submitting the proposals; and (2) that electric companies include, in their proposals, an evaluation of the potential to store energy on their respective electric systems.

Earlier, an administrative law judge issued a ruling in this docket seeking comments on these two requirements. After considering the comments, we seek responses to the proposals outlined below.

We will use the comments to inform our final decision on how to implement these provisions. We will adopt, by January 1, 2017, final guidelines for the electric companies to use in submitting proposals, requirements for the electric companies' storage potential evaluations, and requirements for competitive bidding.

A. Project Guidelines

We present the following draft Commission guidelines for electric companies to use in considering and designing energy storage projects:

PROJECT GUIDELINES

Electric companies should consider the following when selecting projects to submit for authorization:

1. Electric companies are encouraged to submit multiple projects with an aggregate capacity close to the full one percent of 2014 peak load allowed by HB 2193.

2. Electric companies are encouraged to submit a range of projects that are differentiated by use case, application, or other differentiating factor.

3. Electric companies are encouraged to submit a portfolio of projects that balance technology maturity, technology potential, short- and long-term project performance and risks, and short- and long-term potential value.

4. Electric companies are encouraged to submit projects that can serve multiple applications.

5. Electric companies are encouraged to submit projects that are strategically located to help defer or eliminate the need for system upgrades, provide ancillary services, provide supplemental generation capacity, or supply some other location-specific service.

6. Electric companies are encouraged to identify qualified vendors and viable storage technologies through a Request for Information (RFI) process.

7. Electric companies are encouraged to use established models—such as the Pacific Northwest National Laboratory's Battery Storage Evaluation Tool or the Electric Power Research Institute's Energy Storage Valuation Tool—to estimate the value of storage applications.

We seek comments on these draft project guidelines by September 30, 2016.

B. Proposal Guidelines

HB 2193 identifies certain information that electric companies must submit with each proposal. To further assist our evaluation and review of proposals, we propose the electric companies provide additional description and analysis. We present for comment the following combined list of information electric companies must submit with their proposals:

PROPOSAL GUIDELINES

Each proposal must include the following description and analysis of each proposed project:[1]

1. Technical specifications for each project, including:
    a. The capacity of the project to store energy;
    b. The location of the project;
    c. A description of the electric company's electric system needs and the application that the energy storage system will fulfill as the basis for the project;
    d. A description of the technology necessary to construct, operate and maintain the project, including a description of any data or communication system necessary to operate the project.

[1] The first three elements (including their sub-elements) in the list are taken verbatim from HB 2193. The remaining elements are additional specifications to be adopted by the Commission.

e. A description of the types of services that the electric company expects the project to provide upon completion; and
f. An analysis of the risk that the electric company will not be able to complete the project.

2. The estimated cost of each project, including:
   a. The estimated capital cost of the project;
   b. The estimated output cost of the project; and
   c. The amount of grant moneys available to offset the cost of the project.

3. The benefits of each project to the electric company's electric system, including:
   a. Projected in-state benefits to the electric system;
   b. Projected regional benefits to the electric system; and
   c. The potential benefits to the electric company's entire electric system if the electric company installs the energy storage system technology that is the basis for the project system-wide.

4. Reasoning for selecting chosen technology, grid location, application, and ownership structure, with supporting analysis;

5. Comprehensive description of the project;

6. Plan for constructing, maintaining, and operating the storage system;

7. Comprehensive analysis of all identified costs over the life of the project;

8. Comprehensive assessment of project risks over the life of the project;

9. Comprehensive assessment of all quantitative and qualitative benefits over the life of the project;

10. Description of methodology for assessing project benefits, including the aggregation of benefits;

11. Cost-effectiveness of the storage system including benefit-cost ratios and net present value revenue requirements over the storage system lifetime, and all underlying inputs and assumptions used in the calculation;

12. Projected trends in storage system cost and performance;

13. Strategy for large-scale deployment of the technology over time, if applicable;

14. Comparative analysis of: (1) the proposed storage solution, and (2) other storage and non-storage solutions for the proposed application; and

15. Data collection and evaluation plan with identified research objectives.

We seek comments on these draft proposal guidelines by September 30, 2016.

C. Storage Potential Evaluation Requirements

After considering the varied comments regarding timing, form, and substance of the electric companies' storage potential evaluations, we propose that the electric companies submit draft evaluations for review by the Commission and stakeholders and that the framework for the evaluations be developed through Staff-led workshops outside of the contested case process.

We offer the following four-part process:

1. Staff will convene workshops starting in late 2016 to develop a framework for the electric companies' evaluations. Staff will present the agreed-upon framework to the Commission at a special public meeting no later than March 31, 2017.

   At a minimum, the following issues should be addressed, examined, and—if possible—resolved at the workshops:

   a. Establish a consistent list of use cases or applications to be considered in the evaluation;

   b. Determine the time frame for analyses;

   c. Determine the valuation methodology or methodologies for estimating storage potential in each use case or application;

   d. Establish criteria for identifying the main opportunities for investment in storage;

   e. Determine the approach for identifying system locations with the greatest storage potential; and

   f. Establish the level of detail required in the evaluation results and required supporting data.

2. The electric companies will then prepare and file with the Commission draft evaluations by June 1, 2017.

   At a minimum, the draft evaluations should:

   a. Identify storage potential by use case or application for specified time frames;

   b. Identify higher- and lower-value applications;

   c. Describe criteria for designating higher- and lower-value applications and explain how the criteria were applied;

   d. Identify system locations with the greatest storage potential;

e. Describe the methodology for determining storage potential, explain how methodology was applied, and identify all limiting factors that affect estimates of storage potential by application;

f. Provide all input, assumptions, and other calculations used to designate higher-and lower-value applications and identify locations with greatest potential;

g. Provide high-level summary of results of electric company's RFI, including description of RFI and the number and types of responses; and

h. Include any other provisions identified in the Staff-led workshops.

3. The Commission and stakeholders will have the opportunity to review and comment on the draft evaluations. We will hold a special public meeting by July 31, 2017 for informal input from the Commission and stakeholders on the draft evaluations.

4. The electric companies will file final versions of their evaluations with their formal project proposals, which must be filed by January 1, 2018.

We seek comments on these proposed storage potential evaluation requirements by September 16, 2016. We request these comments first so that we can expeditiously issue an order on the storage potential evaluation and allow Staff, the electric companies, and stakeholders to start the workshop process without delay.

D. Competitive Bidding Requirements

HB 2193 states that the Commission may require an electric company to develop an authorized project in accordance with competitive bidding guidelines. We propose to not apply our docket UM 1182 major resource acquisition guidelines or adopt new storage-specific guidelines in the context of this exploratory legislation. As the technology matures, project scale increases, and the market expands, future energy storage procurements may start to meet the threshold for our existing guidelines or trigger the need for new guidelines.

For the present purpose of bidding HB 2193 projects, we propose the following limited requirements:

1. An electric company may award a contract for a project without competition if it determines and presents justification that only a single vendor or contractor is capable of meeting the requirements of the project.

2. Where the requirements for sole source procurement are unmet, electric companies must use a competitive process to award contracts.

    a. The electric companies will bear the burden of demonstrating that they followed a fair, competitive solicitation process to identify vendors with requisite expertise, experience, and capability to install viable projects.

b. The electric companies must give the Commission and stakeholders the opportunity to review the companies' Request for Proposal (RFP) design and offer nonbinding input.

c. The electric companies must summarize and report to the Commission their solicitation process and scoring approach. The report should be included with the formal project proposal submitted to the Commission, or, if bidding occurs after Commission authorization, at a special public meeting to follow.

We seek comments on these proposed competitive bidding requirements by September 30, 2016.

ORDER

IT IS ORDERED that:

1. Comments on the Commission's draft project guidelines and proposal guidelines are due by September 30, 2016;

2. Comments on the Commission's proposed storage potential evaluation requirements are due by September 16, 2016; and

3. Comments on the Commission's proposed competitive bidding requirements are due by September 30, 2016.

Made, entered, and effective AUG 19 2016.

Lisa D. Hardie
Chair

John Savage
Commissioner

Stephen M. Bloom
Commissioner