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Attorneys for Sorenson Engineering, Inc.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON

IN THE MATTER OF RULEMAKING TO
ADOPT RULES RELATED TO SMALL
GENERATOR INTERCONNECTION

)
) CASE NO. AR 521
)

) COMMENTS OF SORENSON
) ENGINEERING, INC.
)
)
)

COMES NOW, Sorenson Engineering, Inc. ("Sorenson") by and through its attorney of record, Peter J. Richardson, and pursuant to the schedule established by the Administrative Law Judge in the above captioned matter and hereby lodges its Comments to the Commission Staff's proposed rules and forms.

I

INTRODUCTION

Sorenson is an engineering firm with offices located in Idaho Falls, Idaho. It is a successful engineer, developer, owner and operator of numerous small power production facilities. Sorenson Engineering is working with or is in the planning stages of developing

similar
Sorenson Engineering, Inc.'s Comments AR 521

projects in Oregon. Sorenson has many years of experience in the subject matter of this proceeding. Sorenson's comments have been prepared with the expert assistance of Mr. John Lowe, who has many years of experience in facilitating the interconnection of small power production facilities to the electric system of investor-owned utilities. Sorenson appreciates the opportunity to comment herein and applauds this Commission's efforts to make the interconnection and operation of small power production facilities in Oregon a transparent, efficient and safe transaction.

II

INTERCONNECTION FACILITIES O&M REIMBURSEMENT

Interconnection costs include both initial costs to study and interconnect a generating project ("Interconnection Customer") as well as ongoing costs to operate and maintain both the project's interconnection equipment and the Public Utility's Interconnection Facilities. The Interconnection Customer is responsible for all these costs. The proposed rule AR-521 ("Rule") emphasizes the process of interconnect study and initial interconnection. The Rule should provide both the Public Utility and the Interconnection Customer with assurances as to the timing, process and responsibilities of the parties in completing the study process and in managing or controlling the cost of such studies. The Rule also addresses interconnection standards and provides an excellent basis by which the interconnection requirements can be determined and the costs therefore controlled. However, the Rule does not adequately address the subject of operation and maintenance (O&M) costs of the Public Utility's Interconnection Facilities usually paid for by the Interconnection Customer in the form of an annual O&M reimbursement.

These annual reimbursements in total over the term of an agreement can be very significant and in most cases dwarf the actual study costs. This is particularly significant for distribution level interconnections where such reimbursement may be as much as 12% of the original total interconnection cost annually. Average system O&M costs for the Public Utility's distribution system in the State of Oregon is the derivation for the O&M percentage applied to distribution interconnections in Oregon.

The Rule and the proposed interconnection agreement is generally vague regarding the Interconnection Customer's obligations regarding O&M reimbursements. The historic method of using average system cost for distribution interconnections should be abandoned in favor of a method utilizing actual costs incurred by the Public Utility. This actual cost approach has several advantages because it: (1) aligns more closely with the underlying cornerstone of ratepayer neutrality, which is elemental to any PURPA transaction; (2) creates consistency between the transmission and distribution interconnection O&M reimbursements where a Public Utility may already be utilizing actual cost for transmission interconnections; (3) creates consistency among the Interconnection Facilities for an Interconnection Customer to the extent that certain elements of such Interconnection Facilities are anticipated to reimburse the Public Utility based upon actual O&M costs. (*See PacifiCorp initial comments, page 6, Metering . . . "The Interconnection Customer should pay the actual cost of such metering and its maintenance"*); (5) minimizes the significance of the actual original interconnection costs, especially when such costs may be disputable; (6) establishes consistent treatment of Interconnection O&M reimbursements among all Public Utilities operating in Oregon; and most importantly (7) it will likely result in a dramatic reduction in O&M reimbursements during the period when most Interconnection Customers are making debt payments usually for ten to

twenty years. This is demonstrated by existing Interconnection Customers who have observed little need on the Public Utility's behalf to incur costs maintaining or replacing their Interconnection Facilities.

(A) SORENSON'S SPECIFIC RECOMMENDATIONS

Rule § 860-082-0010 – Definitions:

Add the following new definition:

“Actual Cost of Interconnection Facility Operation and Maintenance” means the total documentable cost of services provided by the Public Utility associated with maintaining and operating the Public Utility's Interconnection Facilities for a Small Generator Facility.

Rule § 860-082-0030:

Add the following language to the end of the paragraph (3) on Cost Responsibility:

The Interconnection Customer is also responsible for reimbursing the Public Utility for the Actual Cost of Interconnection Facility Operation and Maintenance (O&M) as further described in the Interconnection Agreement.

Form 8: Article; add the following language as a new paragraph

4.7 The Public Utility may bill the Interconnection Customer not more often than annually for the Actual Cost of Interconnection Facility Operation and Maintenance (O&M) for the previous year.

IV

INTERCONNECTION CUSTOMER'S OPTION TO PERFORM STUDIES, DESIGN,
CONSTRUCT, OWN AND OPERATE INTERCONNECTION FACILITIES

The Interconnection Customer should be permitted to minimize potential interconnection costs and to maximize the financial benefits of self operation, maintenance, and ownership of

facilities that may otherwise be Interconnection Facilities. Therefore, the Interconnection Customer should have the option -- provided in all circumstances that electrical system safety and reliable operations are not compromised; and provided further that the Interconnection Customer pays all appropriate costs -- to perform interconnection studies or portions thereof. The Interconnection Customer also should have the option to design, construct, own, operate and maintain electrical facilities necessary for the project which otherwise might be designed, constructed, owned, operated and maintained by the Public Utility as Interconnection Facilities. Typical examples would be a line extension to be located on property controlled or owned by the Interconnection Customer or a substation for the Small Generating Facility that has intermingled electrical facilities. The Rule anticipates the Interconnection Customer having the rights described above, but may not go far enough to encourage or facilitate the Interconnection Customer's option. Additionally, there may be circumstances within a Utility where design, construction, operation and maintenance of transmission extensions is a requirement of the Interconnection Customer, and in trying to create some uniformity, it would be appropriate for a distribution Interconnection Customer to have at least the option, but certainly not be foreclosed from the benefits by the Public Utility.

(A) SORENSON'S SPECIFIC RECOMMENDATIONS

Rule 860-082-0030, § (1) Study Costs:

Add the following language to the end of Paragraph (1)

The Interconnection Customer or Applicant shall have the option to perform studies or portions of studies through an agreed-upon third party consultant provided that the Interconnection Customer: (i) pays all appropriate costs incurred by the Public Utility; (ii) waives any timeframes in the Rule associated with that required study; and (iii) holds the Utility harmless.

Rule 860-082-0055

Tier 4 Interconnection, (6) Interconnection Facilities Studies, subparagraph (b). Delete the first sentence and replace it with the following:

The Interconnection Customer shall have the option of having an agreed-upon third party consultant design and estimate the construction costs for the required Interconnection Facilities.

Add to the end of the subparagraph (4) the following language:

The Interconnection Customer must waive the required timeframes associated with the Interconnection Facilities Study, and hold the Utility harmless with regard to its results.

Rule 860-082-0030: Cost Responsibilities, paragraph (3)

Revise this paragraph by adding the following language to the end of the paragraph:

The Interconnection Customer shall have the option to design, construct, own, operate and maintain certain electrical facilities, i.e. line extension, that otherwise may have been designated as Interconnection Facilities, provided such facilities are located on property owned or adequately controlled by the Interconnection Customer, are for the exclusive use of the Interconnection Customer, and the design and construction of such facilities have been reviewed and inspected by the Public Utility (or inspected and certified by a registered professional electrical engineer), and the Interconnection Customer pays all costs. Such facilities will be designated as Interconnection Equipment regardless of the location of the Interconnection Customer's metering.

V

METERING AND MONITORING

PacifiCorp's initial comments on page 6, Section 4 indicate that PacifiCorp believes that the requirement for telephonic access to its metering for the Interconnection Customer is

appropriate. While this is a noble objective and one that utilizes technological advances and efficiencies, it does not impact safety or reliability of the electrical system and adds an interconnection requirement or standard that could raise the overall Interconnection Facility's costs. Also, for small projects approximately 1,000 kW or less, this requirement could be especially burdensome if both cellular service or hardwire telephone system are unavailable. Many small facilities may not have the sophisticated communications equipment that larger facilities typically have for operational monitoring. The requirement is generally reasonable for those projects afforded low-cost access to cellular service but should not be an absolute requirement if an expensive extension of a hardwire system is the only alternative. The parties should have the flexibility to resolve the meter reading issue as creatively as necessary, provided that the Interconnection Customer pays all the costs. As long as the telephone access requirement is universal, it may cause some existing small projects to shut down operations or potential new projects to not be able to afford moving forward. Sorenson understands that creative alternatives to cellular/hardwire connections are already being utilized for some projects in Oregon.

An Interconnection Customer's obligation to provide and/or pay for a telemetry system should be limited to those circumstances or conditions on a Public Utility's system when the lack of such telemetry system would have negative impacts upon safety, reliability or efficient operations. The proposed 3 MW threshold for Tier 4 interconnections is a significant improvement over PacifiCorp's past threshold of 1 MW. However, the 3 MW threshold is not necessarily the appropriate threshold to be applied to all Public Utilities and may not be the appropriate value for any of the Public Utilities. For example, Sorenson Engineering is aware of at least two hydroelectric projects of 4 MW or greater that have been connected to PacifiCorp's

distribution system for a least fifteen years where the required and installed telemetry has not been maintained and the potential data not utilized by PacifiCorp for a very long time. Each Public Utility should be required to provide the evidence supporting their telemetry needs and requirements. Telemetry data for existing projects connected to distribution systems is irregularly utilized and projects over 5 MW connected to distribution systems are very rare. Therefore, Sorenson recommends that the telemetry requirement for all distribution system interconnections be either eliminated or raised to 5 MW. Additionally and typically, the larger the project the easier to absorb telemetry expenses. The Commission should raise the telemetry threshold to 5 MW until such time that the Public Utilities demonstrate and provide evidence of their actual needs. Alternatively, the Commission should require the Public Utilities to provide evidence of their existing telemetry applications and demonstrate their usefulness. That is the only way to provide resolution of this controversial issue.

(A) SORENSON'S SPECIFIC RECOMMENDATIONS

Rule 860-082-0065: Metering and Monitoring, paragraph (1)

Revise paragraph (1) by adding the following language at the very end:

The Interconnection Customer shall provide for remote or telephonic access of the Public Utility's metering either through cellular, hardwire or other technologically appropriate means except this requirement shall not apply to an Interconnection Customer who is operating or plans to operate a facility of 1,000 kW or less if such Interconnection Customer does not have cellular service available at the time of entering into the Interconnection Agreement.


Rule 860-082-0065

Change the reference to 3 MW to 5 MW throughout this rule.

Respectfully submitted this 27th day of November 2007.

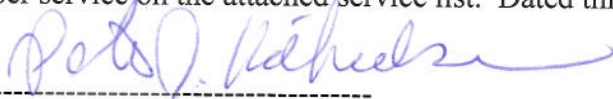
Sorenson Engineering, Inc.'s Comments AR 521

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By 
Peter J. Richardson
Attorneys for Sorenson Engineering, Inc.

CERTIFICATE OF SERVICE

I certify that I have caused to be served the foregoing Sorenson Engineering Comments in OPUC Docket No. AR 521 by electronic mail and first class mail to those who have not waived paper service on the attached service list. Dated this 27th day of November 27, 2007.



Peter Richardson OSB # 066687



eDockets

Docket Summary

Docket No: AR 521

Docket Name: SMALL GENERATOR INTERCONNECTION RULEMAKING

[Print Summary](#)

In the Matter of a Rulemaking to Adopt Rules Related to Small Generator Interconnection. (Staff report for July 24, 2007, Public Meeting [Item No. Reg 1]); filed by Ed Durrenberger.)

Filing Date: 7/24/2007

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<p>W=Waive Paper service</p>	<p>C=Confidential HC=Highly Confidential</p>	<p>Sort by Last Name Sort by Company Name</p>
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