

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

UM 1719

In the Matter of:

PUBLIC UTILITY COMMISSION OF
OREGON,

STIPULATION

Investigation to Explore Issues Related to a
Renewable Generator's Contribution to
Capacity.

This Stipulation is entered into for the purpose of resolving all issues in this Docket.

PARTIES

The Parties to this Stipulation are: the Staff of the Public Utility Commission of Oregon (Staff), the Citizens' Utility Board of Oregon (CUB); the Oregon Department of Energy (ODOE), Renewable Northwest (RWN), Renewable Energy Coalition (REC), Idaho Power Company (Idaho Power), the Industrial Customers of Northwest Utilities (ICNU), Portland General Electric Company (PGE), and PacifiCorp d/b/a Pacific Power (PacifiCorp) (collectively, Parties). The Parties represent all persons and entities that intervened and were active in this proceeding.¹

BACKGROUND

1. The Commission opened this Docket pursuant to its Order No. 15-077 (issued March 10, 2015). In its Order, the Commission adopted Staff's recommendation to open an investigation into the determination of a renewable generator's contribution to peak-load capacity.

2. Subsequently, on May 11, 2015, the Administrative Law Judge (ALJ) issued her Corrected Memorandum. In her Corrected Memorandum, the ALJ requested Staff to file a report identifying independent experts able to appear at a future Commission workshop.

¹ Community Renewable Energy Association (CREA) is also a party to this Docket. Staff is authorized to state that while CREA does not object to the terms of the Stipulation, it does not intend to be a signatory on it.

1 Probability (LOLP) or Loss-Of-Load Expectation (LOLE). ELCC is expressed as a percentage
2 of nameplate capacity of the particular resource or group of resources. In the ELCC study, the
3 particular resource or group of resources shall be modeled as a stochastic variable or through an
4 alternative comparable method that captures the variability of such resource or group of
5 resources.

6 8. As used in this Stipulation, "Capacity Factor approximation" is defined as an
7 approximate estimate of the ELCC of a particular generator or class of generators based on the
8 weighted sum of the following ratio, calculated for each hour for all hours of the year:

$$\text{(mean generator output/maximum generator output)}$$

10 The weight for each hour is the loss of load probability for that hour divided by
11 the sum of loss of load probabilities for all hours.

12 9. Idaho Power, PacifiCorp and PGE (Utilities) will use either an Effective Load
13 Carrying Capability (ELCC) or Capacity Factor (CF) approximation for estimating capacity
14 contributions from wind and solar generators for Integrated Resource Planning (IRP).

15 10. The Utilities will prepare contribution estimates based on an assessment of all
16 hours in a year.

17 11. The Utilities may interpolate or extrapolate from calculated ELCC/CF
18 approximation values as needed.

19 12. The Utilities may apply to the Commission for a waiver to allow the use of other
20 methodologies in the Integrated Resource Plan. Utilities must demonstrate that the proposed
21 methodology produces results reasonably comparable to the ELCC method.

22 13. Idaho Power's existing methodology for estimating capacity contribution of wind
23 and solar generators for Integrated Resource Planning is an acceptable CF approximation
24 methodology with the addition of an LOLP analysis that is based on all hours in a year.

25 14. This Stipulation does not establish the translation from renewable capacity
26 contribution percentages to prices or dollar values for other dockets or filings.

1 15. This Stipulation will be offered into the record in this proceeding as evidence
2 pursuant to OAR 860-001-0350(7). The Parties agree to support this Stipulation throughout this
3 proceeding and any appeal. The Parties further agree to provide witnesses to sponsor the
4 Stipulation at any hearing held, or, in a Party's discretion, to provide a representative at the
5 hearing authorized to respond to the Commission's questions on the Party's position as may be
6 appropriate.

7 16. If this Stipulation is challenged by any other party to this proceeding, the Parties
8 to this Stipulation reserve the right to cross-examine witnesses and put on such case as they deem
9 appropriate to respond fully to the issues presented, including the right to raise issues that are
10 incorporated in the Settlement embodied in this Stipulation. Notwithstanding this reservation of
11 rights, the Parties agree that they will continue to support the Commission's adoption of the
12 terms of this Stipulation.

13 17. The Parties have negotiated this Stipulation as an integrated document. If the
14 Commission rejects all or any material portion of this Stipulation, or imposes additional material
15 conditions in approving this Stipulation, any Party disadvantaged by such action shall have the
16 rights provided in OAR 860-001-0350(9) and shall be entitled to seek reconsideration or appeal
17 of the Commission's Order.

18 18. By entering into this Stipulation, no Party shall be deemed to have approved,
19 admitted, or consented to the facts, principles, methods, or theories employed by any other Party
20 in arriving at the terms of this Stipulation. No Party shall be deemed to have agreed that any
21 provision of this Stipulation is appropriate for resolving the issues in any other proceeding.

22 19. This Stipulation may be executed in counterparts and each signed counterpart
23 shall constitute an original document. The Parties further agree that any facsimile copy of a
24 Party's signature is valid and binding to the same extent as an original signature.

25 20. This Stipulation may not be modified or amended except by written agreement
26 among all Parties who have executed it.

1 This Stipulation is entered into by each Party on the date entered below such Party's
2 signature.

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4 STAFF OF THE PUBLIC UTILITY
5 COMMISSION OF OREGON

CITIZENS' UTILITY BOARD OF OREGON

6 By: Mike [Signature]

By: _____

7 Date: 4/27/16

Date: _____

8 OREGON DEPARTMENT OF ENERGY

RENEWABLE NORTHWEST

9 By: _____

By: _____

10 Date: _____

Date: _____

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12 RENEWABLE ENERGY COALITION

IDAHO POWER COMPANY

13 By: _____

By: _____

14 Date: _____

Date: _____

15 INDUSTRIAL CUSTOMERS OF
16 NORTHWEST UTILITIES

PORTLAND GENERAL ELECTRIC

17 By: _____

By: _____

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20 PACIFICORP d/b/a PACIFIC POWER

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STAFF OF THE PUBLIC UTILITY
COMMISSION OF OREGON

By: _____
Date: _____

CITIZENS' UTILITY BOARD OF OREGON

By: Michael P. Sutz
Date: 4/18/16

OREGON DEPARTMENT OF ENERGY

By: _____
Date: _____

RENEWABLE NORTHWEST

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By: M.H.O'Brien

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Date: 4/27/16

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12 RENEWABLE ENERGY COALITION

IDAHO POWER COMPANY

13 By: *Eric Seng*

By: _____

14 Date: 4/28/16

Date: _____

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PORTLAND GENERAL ELECTRIC

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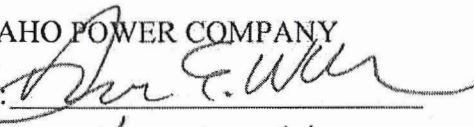
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IDAHO POWER COMPANY

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By: 

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Date: 4-22-16

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By: _____

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Date: _____

Date: _____

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RENEWABLE NORTHWEST

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By: _____

Date: _____

Date: _____

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IDAHO POWER COMPANY

By: _____

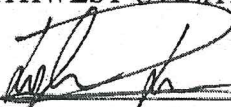
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INDUSTRIAL CUSTOMERS OF
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Date: 4/5/16

Date: _____

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Date: _____

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By: _____

Date: _____

Date: _____

INDUSTRIAL CUSTOMERS OF
NORTHWEST UTILITIES

PORTLAND GENERAL ELECTRIC

By: _____

By: V. Denise Sams

Date: _____

Date: 04/22/2016

PACIFICORP d/b/a PACIFIC POWER

By: _____

Date: _____

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