

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1755

In the Matter of

Portland General Electric, 2016

Renewable Portfolio Standard
Implementation Plan

Staff's Initial Comments

Staff of the Public Utility Commission of Oregon (Staff) presents its Initial Comments on Portland General Electric's (PGE or Company) 2016 Renewable Portfolio Standard Implementation Plan (RPIP). Staff's Initial Comments address the substance of the Company's RPIP. Staff's final report to the Commission will include a comprehensive review of the responsiveness of PGE's RPIP to the reporting requirements found in OAR 860-083-0400 and ORS 468A.075, in addition to the standard of review associated with Commission acknowledgement, review of pertinent discovery, and an expanded summary of Staff's review and conclusions.

Solar Capacity Standard

In reviewing previous RPIPs, Staff found in UM 1568 (PGE's 2011 RPIP) that the Company had failed to comply with OAR 860-084-0080.¹ PGE is required to maintain a minimum of 10.9 megawatts of solar photovoltaic (PV) capacity by January 1, 2020.² Although PGE stated in its UM 1568 reply comments that it intended "to comply with the new rule in future Implementation Plans," the Company subsequently stated that a compliance status report was excluded due to the misalignment of the 2009 IRP (Integrated Resource Plan) Update filing and the promulgation of OAR 860-084-0080. Further Staff could not find mention of compliance with the minimum solar PV capacity standard in either the Company's 2013 RPIP (UM 1683) or the current RPIP. Staff requests the Company describe its compliance with OAR 860-084-0080 in its reply comments in this docket as well as in all future RPIPs.

Order No. 14-265 Requirements

Included in the Commission's acknowledgement of PGE's 2013 RPIP was the following recommendation presented in the joint parties' stipulation agreement.

¹ OAR 860-084-0080 states "Each electric company must incorporate its plan to achieve, or exceed, and maintain the minimum solar photovoltaic capacity standards specified in OAR 860-084-0020 into its renewable portfolio standard implementation plans filed pursuant to OAR 860-083-0400."

² See OAR 860-084-0020.

[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]

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Renewable Generation Production Forecast

Staff is concerned that PGE’s forecasted renewable generation output values for individual resources are static throughout the 2017-2021 compliance period.⁶ In turn these assumptions create uncertainty when calculating the least-cost, least-risk way of meeting RPS compliance during the compliance period because of the relatively unrealistic production of associated RECs. This situation is particularly concerning when in two modeled cases the four percent cost cap is approached, met or exceeded. Staff needs PGE to provide further information on PGE’s chosen output forecast methodology in order to better understand the accuracy and reasonableness of the methodology employed by the Company.

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⁵ The four percent cost cap is described in OAR 860-83-0400(5)(a).
⁶ PGE’s 2016 RPIP, at pages 2-4, UM 1755, December 31, 2015. This concern excludes Low-impact-hydro, which is statutorily limited to 50MWa annually.



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PacifiCorp utilized forecasted dynamic renewable generation output for each year in the compliance period. In contrasting the two methodologies and subsequent data used by the Company, Staff is trying to determine the merits of PGE's approach. Staff discusses this concern as it impacts PGE's banked REC strategy below. Staff would like to work with PGE to determine if any opportunity exists to use dynamic, forecasted renewable generation.

Banked Renewable Energy Credit (REC) Strategy

In response to OAR 860-083-0400(4), PGE states that conditions have not materially changed between the Company's 2013 IRP Update and the 2016 RPIP. As reported in the 2013 IRP Update, PGE represents in its 2016 RPIP that RPS compliance will be met entirely with banked bundled RECs for the 2017 to 2021 period. PGE accounts for a number of contingencies in modeling RPS compliance scenarios. After doing so, the Company arrives at its RPS compliance recommendation to defer a physical renewable resource addition until 2024 and meet Oregon's existing RPS compliance requirements with banked RECs through 2023. Additionally, PGE intends to "maintain a minimum REC bank balance of 300-600 MWa."⁷ However, in its review of the 2013 IRP Update, Staff identified a few of these assumptions and positions, discussed immediately below, that suggest revisiting the purchase of unbundled RECs as a means to achieve a low cost and low risk long-term compliance strategy.

1. "Mitigating timing differences in acquiring and constructing new renewable generation"/"Renewable resource overnight capital costs"⁸

Under this consideration, PGE chooses not to integrate the potential impacts of the Clean Power Plan (CPP) to future cost and availability of renewable (and non-renewable) energy resources. Until regional states and Oregon choose a CPP compliance plan, impacts to regional REC and renewable generation resource markets are uncertain. Due to the significant uncertainty from the final aspects of the rule and regional state compliance plans, Staff at this time does not oppose this position in an absolute sense. However, when the Company states under the same consideration that "other emissions constraints and costs (such as a state-or regional-level CO₂ tax) could have impacts similar to the Clean Power Plan," Staff is concerned that ongoing regional efforts concerning carbon emissions could seriously impact the Company's current

⁷ PGE's 2013 IRP Update Plan, at page 60, LC 56, December 2, 2015.

⁸ Ibid., at page 54 and 57.

physical compliance plan.⁹ As PGE describes in its 2013 IRP Update, the Company could be subject to higher overnight capital costs, delays in physical renewable (or non-renewable) resources, or less productive generation sites, all of which could result in higher costs to the Company and ratepayers. These regional efforts include:

- Carbon executive branch efforts in Washington State, including carbon cap and trade;
- Carbon legislative efforts in Washington State, including a carbon tax;
- Ongoing and increasingly likely efforts to eliminate power derived from coal in Oregon;
- Potential political efforts in Washington and California to follow Oregon's coal approach due to the interlinked nature of the region; and
- California's RPS increase to 50 percent by 2030.¹⁰

With these regional efforts underway with varying levels of certainty, Staff is highly concerned that PGE's current banked REC approach *that does not currently account for CPP impacts*, underestimates the risk of time differences in acquiring and constructing new renewable generation, and subsequently RECs, resulting from regional regulations. Additionally, these regional environmental efforts may have a substantial impact on the capital cost of renewable resources as discussed in the 2013 IRP Update.¹¹ In turn, Staff believes that a more conservative and comprehensive assessment of renewable generation on-line date delays is warranted.

2. "Replacing RECs from physical resources generating at levels less than forecast (e.g., below forecast wind year)"¹²

As discussed earlier in these comments, Staff is concerned that PGE's static forecast of renewable wind resource generation may lead to fewer (or, less likely, possibly more) RECs produced than currently modeled. Though PGE accounts for a wind resource underproduction risk in determining its RPS recommendation, Staff believes PGE's analysis of Oregon RPS compliance does not fully capture the uncertainty of future REC production and the subsequent cost implications of renewable resource underperformance.

3. "Providing a temporary means of compliance with increased RPS targets (beyond those currently enacted)"¹³

Current legislative and possible ballot-initiated efforts to increase Oregon's RPS to 50 percent by 2040 are ongoing and increasingly likely to be enacted at some point in the future. PGE accounts for a possible RPS increase in its RPS compliance modeling by incorporating a five percent increase in REC need. However, neither this buffer nor

⁹ Ibid., pages 57-58.

¹⁰ Ibid., at page 55.

¹¹ Ibid., at page 54.

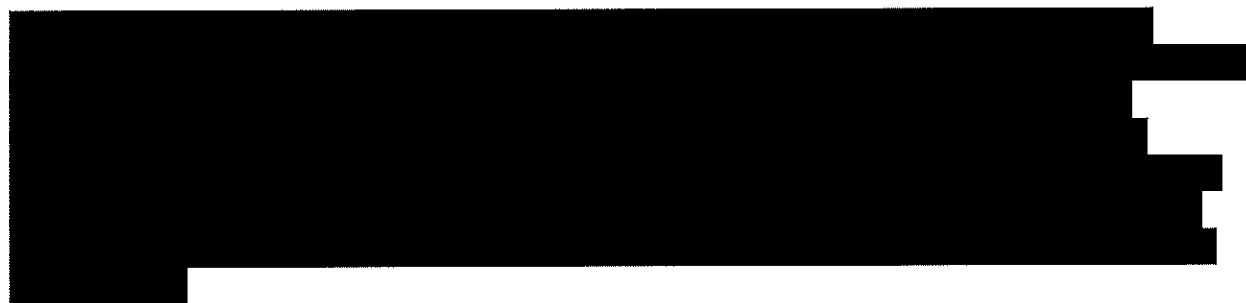
¹² PGE's 2013 IRP Update Plan, at page 58, December 2, 2015.

¹³ Ibid., page 5.

the actual modeling done in the 2013 IRP Update and the 2016 RPIP account for the steep ramp up in RPS compliance that happens after 2030 as required in legislative and ballot proposals. Furthermore, Staff is concerned about House Bill 4036's proposed changes to the utilities ability to bank and use RECs. Staff believes additional analyses are required to determine the likely Oregon RPS requirement increase and changes to banked RECs rules will have on PGE's banked REC strategy.

Though these selected assumptions made in the 2013 IRP Update ultimately impact the Company's decisions made outside of the 2016 RPIP update, Staff believes that their potential consequences, compounded by conservative impacts from CPP on renewable generation development and REC procurement, will have adverse impacts on the price and availability of unbundled RECs in the future. Therefore, PGE needs to consider the possibility of future REC price increases that necessitate the near-term procurement of unbundled RECs as a means to secure an optimum and hedged low-risk, low-cost compliance strategy.

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Approach or Exceedance of Four Percent Cap

In response to OAR 860-083-0400(5)(a), PGE states "the forecasted incremental cost of compliance will not exceed four percent of the annual revenue requirement in the reference gas/reference CO2 scenario."¹⁴ Staff notes that in years 2020 and 2021, PGE forecasts a difference of only 0.2 percent from the four percent cap.¹⁵ Due to the small delta and the fact that this proximity occurs at the end of the compliance period forecast, Staff believes that PGE should discuss in more detail how the RPIP "appropriately balances risks and expected costs" is warranted. PGE in its reply comments should state what the Company plans to do if the four percent cap is met.¹⁶

¹⁴ PGE 2016 RPIP, at page 6, UM 1755, December 31, 2015.

¹⁵ Ibid., Attachment A, Tab 1.

¹⁶ ORS 469A.100 states: Electric utilities are not required to comply with a renewable portfolio standard during a compliance year to the extent that the incremental cost of compliance, the cost of unbundled renewable energy certificates and the cost of alternative compliance payments under ORS 469A.180 exceeds four percent of the utility's annual revenue requirement for the compliance year.

Additionally, Case 2 (reference gas, no CO2 cost) meets the four percent threshold in 2017 and exceeds it in 2020 and 2021 by 0.7 and 0.6 percent, respectively. Staff notes that the CO2 adder doesn't technically start until 2020, leaving a very real possibility of a four percent cost cap threshold trigger. PGE's response to this scenario is acknowledgement of its possibility with no discussion relating to the balancing of risks and costs of the RPIP as described in OAR 860-083-0400(5) – no plan is offered for this contingency. Currently, and without further conversation with PGE, Staff finds PGE's initial filing to be deficient and non-compliant with OAR 860-083-0400(5) because of the possibility of such a scenario happening given no meaningful CO2 cost adder momentum on a state or federal level.

This concludes Staff's Initial Comments.

Dated at Salem, Oregon, this 17th day of February, 2016.

/s/ Michael Breish

Michael Breish
Utility Analyst
Energy Resources and Planning Division