



Portland General Electric Company
121 SW Salmon Street • 1WTC0306 • Portland, OR 97204
portlandgeneral.com

June 1, 2022

Via Electronic Filing

Public Utility Commission of Oregon
Attention: Filing Center
P.O. Box 1088
Salem, OR 97308-1088

Re: UM 2241 PGE 2021 Renewable Portfolio Standard Compliance Report

Dear Filing Center:

Enclosed for filing is Portland General Electric Company's (PGE) 2021 Renewable Portfolio Standard (RPS) Compliance Report. The Report is submitted pursuant to OAR 860-083-0350 and ORS 469A.170 and provides information about how PGE has met its 2021 RPS target.

Attachment E contains protected information and will be submitted to the filing center as an encrypted zip file as outlined by Order 20-088 after approval of a Protective Order. Work papers A through D and F have been submitted to puc.workpapers@state.or.us.

If you have any questions or require further information, please call me at (503) 464-7488 or Richard George at (503) 464-7611. All formal correspondence and requests should be directed to the following email addresses: richard.george@pgn.com and pge.opuc.filings@pgn.com

Sincerely,

/s/ Jaki Ferchland

Jaki Ferchland
Manger, Revenue Requirement

JF/np
Enclosure

As an introduction and summary of the Compliance Report, answer the following questions:

Why is PGE submitting a Compliance Report? What information was used as the basis of this Compliance Report?

As required by ORS 469A.170, PGE is submitting this 2021 Renewable Portfolio Standard Compliance Report to fulfill the requirements of Oregon’s renewable portfolio standard (RPS). The report is based on actual renewable energy certificates (REC)-related activity, information from PGE’s 2019 Integrated Resource Plan (IRP), and PGE’s 2020 RPS Revised Renewable Portfolio Implementation Plan (RPIP), UM 2048, filed December 31, 2019.

Did the company meet its RPS target, and if not, describe in detail why not?

Yes, PGE has met its 2021 RPS target. The compliance details are provided in this report.

Provide the following information in response to the requirements of OAR 860-083-0350:

OAR 860-083-0350(2)(a)
The total number of megawatt-hours sold to retail electricity consumers covered by ORS 469A.052 by the electric company or sold in the service areas of each electric company covered by ORS 469A.052 by the electricity service supplier.

Response:

For 2021, the total number of megawatt-hours sold to retail electricity consumers was:

PGE's Total Billed Load: 18,157,685 megawatt-hours

Source: 2021 PGE FERC Form 1 (Page 304, Row 41, Column (b)).¹

OAR 860-083-0350(2)(b)
The total number of renewable energy certificates, identified as either unbundled or bundled certificates, acquired in the compliance year and used to meet the renewable portfolio standard.

Response:

There were 307,364² unbundled renewable energy certificates (RECs) and 1,244,339³ bundled RECs acquired for the compliance year 2021 (January 1, 2021 - December 31, 2021) that were used to meet the 2021 RPS requirement.

See Confidential Attachment E and Attachment F for additional support.

¹ Attachment A, tab “2(a) FERC Form 1”

² Attachment E, tab “2(b)(d)”, cell B72

³ Attachment F, tab “2(b)(e)(f)(l)”, cell B56

OAD 860-083-0350(2)(c)

The total number of renewable energy certificates, identified as either unbundled or bundled certificates, acquired on or before March 31 of the year following the compliance year and used to meet the renewable portfolio standard.

Response:

There were no bundled RECs acquired between January 1, 2022 and March 31, 2022 that will be used to meet the RPS requirement for compliance year 2021.

There were no unbundled certificates acquired and/or issued between January 1, 2022 and March 31, 2022 that will be used to meet the RPS requirement for compliance year 2021.

See Confidential Attachment E⁴ for additional support.

OAD 860-083-0350(2)(d)

The total number and cost of unbundled renewable energy certificates, identified as either banked or non-banked certificates, used to meet the renewable portfolio standard.

Response:

PGE used a total of 418,943⁵ banked unbundled RECs, and a total of 307,364⁶ non-banked unbundled RECs, to meet the 2021 RPS requirement. Confidential Attachment E provides the total number and cost by facility of the unbundled RECs used to meet the RPS. PGE is using the maximum allowable unbundled RECs, which is 20% of PGE's total obligation.

OAD 860-083-0350(2)(e)

The total number of banked bundled renewable energy certificates that were used to meet the renewable portfolio standard.

Response:

The total number of banked bundled RECs that will be used to meet the RPS for compliance year 2021 is 1,649,016.⁷

See Attachment F for additional support.

OAD 860-083-0350(2)(f)

The total number of renewable energy certificates, identified as either bundled or unbundled certificates, issued in the compliance year that were banked to serve Oregon electricity consumers.

Response:

⁴ Tab "2(c)"

⁵ Attachment E, tab "2(b)(d)", cell B71

⁶ Attachment E, tab "2(b)(d)", cell B72

⁷ Attachment F, tab "2(b)(e)(f)(l)", cell B52

There were 0⁸ unbundled RECs that were issued in the compliance year that were banked to serve Oregon electricity consumers.

As of this filing, there are 2,289,862^{9,10} bundled RECs issued for the compliance year 2021 that will be banked to serve Oregon electricity consumers.

See the 2021 column in Attachment B for detail by facility of total RECs generated.

OAD 860-083-0350(2)(g)
For electric companies, unless otherwise provided under subsection (2)(k) of this rule, the total number of renewable energy certificates included in the rates of Oregon retail electricity consumers that were sold since the last compliance report, including:
(A) The names of the associated generating facilities; and
(B) For each facility, the year or years the renewable energy certificates were issued.

Response:

The table below shows the total number by facility and year issued of RECs included in the rates of Oregon retail electricity consumers that were sold since the last compliance report:

Facility	Year	Total
Biglow Canyon Wind Farm - Biglow Canyon 3	2021	254,142
Biglow Canyon Wind Farm - Biglow Phase 2	2021	354,764
Tucannon River Wind Farm - Tucannon River 1	2021	318,316
Tucannon River Wind Farm - Tucannon River 2	2021	300,840
Grand Total		1,230,562

The table below shows the total number by facility and year issued of RECs included in the rates of Oregon retail electricity consumers that were transferred to Electric Service Suppliers as required under Commission Order No. 19-129.

Facility	Year	Total
Biglow Canyon 1	2021	19,759

⁸ Attachment F, tab “2(b)(e)(f)(l)”, cell J54

⁹ Attachment B, cell L150

¹⁰ Total RECs generated in 2021 (See Attachment B – 2,301,737), less 2:1 RECs (See Attachment B – 11,875), plus purchased bundled RECs issued in 2021 (0).

OAR 860-083-0350(2)(h)

Unless otherwise provided under subsection (2)(k) of this rule, for each generating facility associated with the renewable energy certificates included in subsections (2)(b), (c), (f), or (g) of this rule the following information:

- (A) The name of the facility;**
- (B) The county and state where the facility is located;**
- (C) The type of renewable resource;**
- (D) The total nameplate megawatt capacity of the facility;**
- (E) For an electric company, the Oregon share of the nameplate megawatt capacity of the facility;**
- (F) The year of the first delivery of qualifying electricity or the first year of the contract for the purchase of unbundled renewable energy certificates; and**
- (G) The duration of the contract or the amortization period of a facility owned by the electric company or the planned lifetime of a facility owned by the electricity service supplier.**

Response:

See Attachment C.

OAR 860-083-0350(2)(i)

The amount of alternative compliance payments the electric company or electricity service supplier elected to use or was required to use to comply with the applicable renewable portfolio standard.

Response:

There were no alternative compliance payments that PGE elected to use or was required to use to comply with the applicable renewable portfolio standard.

OAR 860-083-0350(2)(j)

For an electric company, sufficient data, documentation, and other information to demonstrate that any voluntary alternative compliance payments were a reasonable compliance method.

Response:

PGE has not made any voluntary alternative compliance payments for 2021.

OAR 860-083-0350(2)(k)

Documentation of use of renewable energy certificates from the system under OAR 330-160-0020 established for compliance with the applicable renewable portfolio standard.

Response:

The attached WREGIS report (Attachment D) shows all RECs to be used to meet the 2021 RPS. The RECs are currently in an active sub-account named "2021 Compliance RPS." Within 30 days of the approval of PGE's RPS Compliance Report by the Commission, the RECs will be

retired to a retirement sub-account named “OR RPS 2021.” To validate compliance, PGE will then send a retirement report from WREGIS to the Commission.

OAR 860-083-0350(2)(I)

For each electric company, a detailed explanation of any material deviations from the applicable implementation plan filed under OAR 860-083-0400, as acknowledged by the Commission.

Response:

The table below presents a comparison between the 2021 REC requirements as forecasted in UM 2048 (PGE’s 2020 RPIP) and the proposed 2021 REC retirements for 2021 RPS Compliance (Attachment D).

Material changes arose due to:

- Slightly higher compliance obligation due to slightly higher than forecast loads; an increase of 89,624 RECs.
- REC purchases: In 2021 unbundled RECs were found to be available at attractively low prices. Accordingly, PGE purchased and retired unbundled RECs equal to 20% of the 2021 RPS obligation.¹¹
- Qualifying Facility (QF) RECs: The retirement logic employed in the 2020 RPIP (as well as the 2018 RPIP) forecasted the retirement of a higher number of 5-year RECs generated by QFs than occurred in 2021.
- Biglow Canyon, Tucannon River, Klondike, and Energy Trust of Oregon (ETO) and Other Solar RECs: RECs retired from the Biglow Canyon and Tucannon River wind projects differ from the UM 2048 forecast due to differences between the forecasted and actual REC bank positions of REC types and vintages. These differences were also driven by the absence of RECs expected to be generated from QFs and the use of inexpensive unbundled RECs. PGE prioritized the retirement by type (5-year RECs retired before infinite-life RECs) and vintage (older RECs before newer RECs). These differences, combined with purchased RECs, increased the retired RECs from Biglow Canyon Phase 3, Klondike II, and Outback Solar, and decreased the number of RECs retired from Biglow Canyon Phases 1 and 2, Tucannon River, and ETO and Other Solar.

Also included in the 2020 RPIP was a forecast that included the retirement of unbundled RECs up to 20% of PGE’s compliance obligation (in shaded columns below). The addition of the 20% unbundled RECs shifted PGE’s REC retirement order position, which among other changes removed the retirement of most of the QF RECs.

¹¹ See PGE’s to response to OAR 860-083-0350(2)(b) for more detail on unbundled REC quantities.

Resource	Actual RECs in 2021 Compliance Plan	Reference Case		20% Unbundled Scenario	
		2021 Projection from 2020 RPIP	Deviation from Forecast	2021 Projection from 2020 RPIP	Deviation from Forecast
Unbundled RECs	726,307	0	726,307	709,913	16,394
Biglow Canyon Phase 1	314,181	323,340	(9,159)	323,340	(9,159)
Biglow Canyon Phase 2	374,555	395,888	(21,333)	395,888	(21,333)
Biglow Canyon Phase 3	556,803	349,698	207,105	349,698	207,105
Tucannon River	693,431	828,687	(135,256)	142,139	551,292
Klondike II	212,019	207,954	4,065	99,082	112,937
Vansycle Wind Project	66,332	67,073	(741)	0	66,332
Pelton/Sullivan/Round Butte Low-Impact Hydro	431,053	438,000	(6,947)	438,000	(6,947)
Hydro Upgrades	7,094	142,078	(134,984)	109,888	(102,794)
Bellevue/Yamhill Solar	0	6,030	(6,030)	6,046	(6,046)
Outback Solar	16,209	554	15,655	63	16,146
ETO and Other Solar	17,875	32,710	(14,835)	0	17,875
Qualified Facilities	203,803	738,026	(534,223)	955,927	203,803
Biogas	0	0	0	0	0
Purchased Bundled	0	0	0	0	0
Total	3,619,662	3,530,038	89,624	3,529,984	89,678

See Attachment F for additional support.

OAR 860-083-0350(2)(m)
As specified in OAR 860-083-0100, the total number and cost of bundled renewable energy certificates used for compliance.

Response¹²:

¹² Per OAR 860-083-0100(1)(i), incremental costs are deemed to be zero for qualifying electricity from generating facilities or contracts that became operational before June 6, 2007 and for certified low-impact hydroelectric facilities. Therefore, only the RECs from Biglow, Tucannon, and purchased bundled RECs have incremental costs. Part 13(a) states if new qualifying electricity in a compliance year totals less than 20 MW, the incremental cost is not required to be included in compliance reports.

Total Number and Cost of Bundled RECs		
Resource	No. Of RECs	Total Cost
Biglow Canyon Phase 1	314,181	\$25,728,405.43
Biglow Canyon Phase 2	374,555	\$17,836,859.36
Biglow Canyon Phase 3	556,803	\$6,109,401.96
Tucannon River	693,431	\$4,771,942.26
Purchased Bundled	0	\$304,165.20
Klondike II	212,019	\$0
Vansycle Wind Project	66,332	\$0
Pelton/Sullivan/Round Butte Low-Impact Hydro	431,053	\$0
Hydro Upgrades	7,094	\$0
Bellevue/Yamhill Solar	0	\$0
Outback Solar	16,209	\$0
ETO and Other Solar	17,875	\$0
Qualified Facilities	203,803	\$0
Biogas	-	\$0
Total	2,893,355	\$64,217,319.80

See Attachment F for additional support.

OAR 860-083-0350(2)(n)
For each electric company, its projected annual revenue requirement as calculated in OAR 860-083-0200 and its total cost of compliance.

Response:

PGE's annual revenue requirement for 2021 is: \$1,915,345,917¹³

PGE's total cost of compliance for 2021 is:

$$[2(d) + 2(m)] = \$398,811 + \$64,217,320 = \$64,616,131$$

Cost of compliance as percentage of revenue requirement is:

$$\$64,616,131 / \$1,915,345,917 = 3.4\%$$

See Attachment F for additional support.

¹³ Source: PGE's final revenue requirement as authorized by Commission Order No. 18-464, Docket No. UE 335 (2019 general rate cate).

OAR 860-083-0350(2)(o)

For each electricity service supplier, its total cost of compliance, its average cost of compliance, and its cost limit as specified in OAR 860-083-0300(2), including all calculations.

Response:

Not applicable.

OAR 860-083-0350(2)(p)

For each electric company, an accounting of the use of the renewable energy certificates and alternative cost payments consistent with OAR 860-083-0300(3) if the cost limit in ORS 469A.100(1) is reached for the compliance year.

Response:

PGE did not reach the 2021 Compliance Cost limit specified in ORS 469A.100(1).

OAR 860-083-0350(2)(q)

For each electricity service supplier, an accounting of the use of the renewable energy certificates and alternative cost payments consistent with OAR 860-083-0300(3) if the cost limit in OAR 860-083-0300(2) is reached for the compliance year.

Response:

Not applicable.

OAR 860-083-0350(2)(r)

As specified in OAR 860-083-0100, the number and total cost of all bundled renewable energy certificates issued.

Response:

See Attachment B.

OAR 860-083-0350(2)(s)

As specified in OAR 860-083-0100, the number and total cost of bundled renewable energy certificates issued that are associated with new qualifying electricity since the last compliance report.

Response:

See Footnote 5 on Attachment B.

OAR 860-083-0350(6)

Each electric company subject to ORS 469A.052 and each electricity service supplier subject to ORS 469A.065 must post on its web site the public portion of the four most recent annual compliance reports required under this rule and provide a copy of the most recent such report to any person upon request. The public portions of the most recent compliance report must be posted within 30 days of the Commission decision in section (5) of this rule. The posting must include any Commission determinations under section (5) of this rule.

Response:

PGE will post its compliance report in accordance with the requirement, within 30-days of the Commission decision.

OAR 860-083-0350(7)

Consistent with Commission orders for disclosure under OAR 860-038-0300, each electric company subject to ORS 469A.052 and each electricity service supplier subject to ORS 469A.065 must provide information about its compliance report to its customers by bill insert or other Commission-approved method. The information must be provided within 90 days of the Commission decision in section (5) of this rule or coordinated with the next available insert required under OAR 860-038-0300. The information must include the URL address for the compliance reports posted under section (6) of this rule.

Response:

PGE will provide information about its compliance report to its customers in accordance with this requirement, within 90-days of the Commission decision or coordinated within the next available bill insert as required under OAR 860-038-0300.