

May 25, 2022

TO: Richard Whitman, Director

FM: Office of Greenhouse Gas Programs

RE: Proposed Order determining the baseline emissions level for each electric company and the amount of emissions reduction necessary for each retail electricity provider, under Oregon Laws 2021, chapter 508, section 5 (HB 2021 (2021))

Purpose

For the purposes of verifying emissions and determining compliance with the clean energy targets set forth in Section 3 of enrolled House Bill 2021 (2021) (Oregon Laws 2021, ch. 508, § 3), the Office of Greenhouse Gas Programs is requesting that the Director approve an order determining the baseline emissions levels for electric companies subject to enrolled House Bill 2021, and the amount of emissions reductions necessary for retail electricity providers subject to enrolled House Bill 2021 to meet clean energy targets.

Recommendation

The Office of Greenhouse Gas Programs recommends that the Director approve the proposed order, attached to this report.

Background

The reasons for this proposed order are described in the findings in the order.

Attachments

A. Proposed Order

Order Determining Baseline Emissions and Emissions Necessary to Reach Clean Energy Targets
Under 2021 Oregon Laws, Chapter 508

BEFORE THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

In the matter of determining the greenhouse gas baseline)
emissions and amount of emissions reductions necessary) FINDINGS and
for electric companies and retail electricity service) ORDER
providers as required by 2021 Oregon Laws, chapter 508)

Findings

This order implements the responsibilities given to the Oregon Department of Environmental Quality (DEQ) by Oregon Laws 2021, chapter 508 (“HB 2021”). Section 3(1) of that law states that “[a] retail electricity provider shall reduce greenhouse gas emissions * * * by 2030, 80 percent below baseline emissions level [and] by 2035 by 90 percent below baseline emission level [and] by 2040, and for every subsequent year, 100 percent below baseline emissions level.” The term “retail electricity provider” is defined in section 1(9) of HB 2021 to include both electric companies and electricity service suppliers.¹ The terms “electric company” and “electricity service supplier” are defined in ORS 757.600 as follows (in sections (11) and (16) of that statute, respectively):

“Electric company” means an entity engaged in the business of distributing electricity to retail electricity consumers in this state, but does not include a consumer-owned utility.

“Electricity service supplier” means a person or entity that offers to sell electricity services available pursuant to direct access to more than one retail electricity consumer. “Electricity service supplier” does not include an electric utility selling electricity to retail electricity consumers in its own service territory.

Section 5(1)(a)(A) of HB 2021 requires DEQ to determine the baseline greenhouse gas emissions level for each electric company. There are two entities that are an “electric company” for purposes of section 5(1)(a)(A): Portland General Electric Company (PGE) and PacifiCorp (dba Pacific Power).²

Section 5(1)(a)(B) of HB 2021 requires DEQ to determine the amount of emissions reduction necessary for each retail electricity provider to meet the clean energy targets in section 3 of HB 2021. The term “retail electricity provider” is defined to include both electric companies (the two entities identified above) and electricity service suppliers (HB 2021, section 1(9)). As set forth in more detail below, there are currently six electricity service suppliers for purposes of section 5(1)(a)(B): Avangrid Renewables, LLC; Brookfield Renewable; Calpine Energy Solutions, LLC; Constellation NewEnergy, INC; EDF Energy Services, LLC; Shell Energy North America, (US) L.P.

¹ All terms used in this order that are defined in HB 2021 have the meanings provided in HB 2021.

² There are other entities that fall within the definition of an “electric company.” However, HB 2021 section 17 exempts electric companies that serve 25,000 or fewer retail electricity customers in Oregon from the otherwise applicable aspects of HB 2021 addressed in this order. This section has the effect of limiting section 5(1)(a) to only PGE and PacifiCorp.

Baseline Emissions Levels for Electric Companies

HB 2021, section 1(1)(a) defines “baseline emissions level” for an electric company as “the average annual emissions of greenhouse gas for the years 2010, 2011 and 2012 associated with the electricity sold to retail electricity consumers as reported [to DEQ] under ORS 468A.280, or rules adopted pursuant thereto.”³ As a result, and as of the date of this order, DEQ must determine baseline emissions levels for two electric companies: Portland General Electric Company (PGE) and PacifiCorp (dba Pacific Power).

To determine the baseline emissions levels for PGE and PacifiCorp, DEQ made the following adjustments to DEQ’s published emissions data for years 2010, 2011, and 2012:

1. Consistent with HB 2021, section 8(2), DEQ excluded greenhouse gas emissions associated with electricity acquired from net metering of customer resources and excluded emissions from a qualifying facility under the terms of the Public Utility Regulatory Policies Act.
2. To align with the current requirements in OAR 340-215-0120 (2)(a), adopted pursuant to ORS 468A.280, DEQ assigned a default emission factor of 0.428 metric tons of carbon dioxide equivalent per megawatt-hour for calculating emissions from unspecified power. Utility reports for 2010, 2011, and 2012 had used different default emission factors for unspecified power supplied during those years.

Baseline Emissions Level for Electricity Service Suppliers

Regarding electricity service suppliers, greenhouse gas emissions are measured on a per megawatt-hour basis. Under HB 2021, section 1(1), for electricity service suppliers, the baseline emissions level is equal to whichever of the following two paragraphs is applicable (using the numbering under section 1(1)):

- (b) ... 0.428 metric tons of carbon dioxide equivalent per megawatt-hour [MTCO₂e/MWh] associated with the electricity sold by the electricity service supplier to retail electricity consumers as reported under ORS 468A.280, or rules adopted pursuant thereto; or
- (c) For an electricity service supplier that is first certified under ORS 757.649 on or after the effective date of [HB 2021], the baseline emissions level [in (b), above] shall be adjusted downward in the certification of the electricity service supplier under ORS 757.649 to a level that:
 - (A) Reflects the ... progress made by other electricity service suppliers toward ... the clean energy targets ..., and
 - (B) Prevents the creation of a competitive disadvantage among electricity service suppliers.

As of the date of this order, no electricity service suppliers have been certified under ORS 757.649 for the first time following the effective date of HB 2021 (September 25, 2021). As a result, this order addresses only the following currently certified electricity service suppliers:

Avangrid Renewables, LLC

³ ORS 468A.280 requires persons who import, sell, allocate or distribute electricity for use in Oregon to report the greenhouse gas emissions resulting from the generation of that electricity to DEQ.

Brookfield Renewable
 Calpine Energy Solutions, LLC
 Constellation NewEnergy, INC
 EDF Energy Services, LLC
 Shell Energy North America, (US) L.P.

Order

1. Based on the foregoing findings, and as directed by section 5(1)(a)(A) and (B) of HB 2021, the Department of Environmental Quality determines the following baseline emission levels and emissions reduction necessary for PacifiCorp and Portland General Electric to meet the clean energy targets set forth in HB 2021 section 3:

Electric Company Baseline Emissions Level	
Electric Company	Baseline Emissions Level (MTCO₂e)
PacifiCorp	8,994,448
Portland General Electric	8,105,343

Electric Company Clean Energy Targets			
Electric Company	2030 Target 80% reduction (MTCO₂e)	2035 Target 90% reduction (MTCO₂e)	2040 and Beyond Target 100% reduction (MTCO₂e)
PacifiCorp	1,798,890	899,445	0
Portland General Electric	1,621,069	810,534	0

Emissions Reductions Necessary for Electric Companies to Meet Clean Energy Targets			
Electric Company	2030 (MTCO₂e)	2035 (MTCO₂e)	2040 (MTCO₂e)
PacifiCorp	(7,195,559)	(8,095,003)	(8,994,448)
Portland General Electric	(6,484,274)	(7,294,809)	(8,105,343)

2. Based on the foregoing findings, and as directed by section 5(1)(a)(B) of HB 2021, the Department of Environmental Quality determines the following emissions reduction necessary for electricity service suppliers. DEQ notes that this currently applies to those electricity service suppliers certified with the Oregon Public Utility Commission, which include⁴:
 - Avangrid Renewables, LLC
 - Brookfield Renewable

⁴ A list of certified electricity service suppliers and applicants is available at the Oregon Public Utility Commission website: [https://www.oregon.gov/puc/utilities/Pages/Electric-Service-Suppliers-\(ESS\).aspx](https://www.oregon.gov/puc/utilities/Pages/Electric-Service-Suppliers-(ESS).aspx)

- Calpine Energy Solutions, LLC
- Constellation NewEnergy, INC
- EDF Energy Services, LLC
- Shell Energy North America, (US) L.P.

Electric Service Supplier Baseline	
Emissions Intensity Rate (MTCO _{2e} /MWh)	0.428

Electricity Service Supplier Clean Energy Targets		
2030 Target 80% reduction (MTCO _{2e} /MWh)	2035 Target 90% reduction (MTCO _{2e} /MWh)	2040 Target 100% reduction (MTCO _{2e} /MWh)
0.0856	0.0428	0

Emission Reduction Necessary for Electricity Service Suppliers to Meet Clean Energy Targets		
2030 (MTCO _{2e} /MWh)	2035 (MTCO _{2e} /MWh)	2040 (MTCO _{2e} /MWh)
(0.3424)	(0.3852)	(0.428)

Dated: May 25, 2022

By: _____
 Richard Whitman
 Director
 Oregon Department of Environmental Quality