



Portland General Electric
121 SW Salmon Street · Portland, Ore. 97204

November 18, 2022

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street, S.E.
P.O. Box 1088
Salem, OR 97308-1088

RE: UM 1953 PGE's Green Energy Affinity Rider, Schedule 55, Phase 1, CSO Option, Rate and Credit Calculations, Submitted in Compliance with Order No. 19-075

Portland General Electric (PGE) submits these confidential work papers pursuant to Schedule 55 adopted by Public Utility Commission of Oregon (OPUC or Commission) Order No. 19-075 (Docket No. UM 1953). PGE's tariff specifically directs PGE to submit rate and credit calculations to OPUC Staff for review. Confidential Attachment A provides the work paper demonstrating the rate and credit calculations that were performed in accordance with the filed tariff Schedule 55 using the IRP methodologies specified in the UM 1953 Phase I proceeding and Commission Order No. 19-075. The work paper will be submitted to puc.workpapers@puc.oregon.gov.

The attached calculations are related to a renegotiated power purchase agreement for the capacity available under the 300 MW Phase 1 cap, reserved for the Customer Supplied Option (CSO). These calculations remain consistent with the credit methodology applied to the previous filing under Phase 1 as filed on January 22, 2021, in Docket No. UM1953 and approved under Order 21-053 but are updated to reflect the renegotiated power purchase agreement, and its impacts to PGE's resource portfolio at the time of execution.

In its Phase I testimony PGE committed to bring the completed customer agreements before Staff in a compliance filing. Highly Confidential Attachment B provides the amended customer-executed agreement for the CSO portion.

As noted, Attachments A and B contain highly confidential information and are subject to Modified Protective Order No. 20-302. They are being submitted electronically using an encrypted file.

PGE acknowledges that the highly confidentiality identification in Attachment A as it relates to the disclosure of energy and capacity value is departing from Chief

Administrative Law Judge Nolan Moser's ruling dated March 19, 2021. PGE's confidentiality treatment departs from the previous ruling due to two issues related to new circumstance. The first issue is that the energy curve used to value the resource is the current curve being used in PGE 2021 All-Source Request for Proposal (RFP) in UM 2166. Modified Protective Order 22-025 was issued in the RFP docket to restrict access to information that is within the scope of ORCP 36(C)(1), is not publicly available, and is not adequately protected by a general protective order. Secondly, PGE is under active negotiations with RFP participants, as well as for resources under the remaining capacity available under Phase II for GFI. The disclosure of energy and capacity values during *active* negotiations can disclose highly sensitive commercial information relating to CSO GFI participant's willingness to pay, which in some instances could lead to increased costs for customers. During the course of PGE's previous Phase I filings, PGE did not have other active negotiations for which this information could harm its competitive position or customers.

PGE respectfully requests that the OPUC Staff review this filing and submit acknowledgement of PGE's compliance during the December 13, 2022 public meeting.

Please direct questions to Korissa Mehdikhan at korissa.mehdikhan@pgn.com. Please direct all formal correspondence and requests to the following email address pge.opuc.filings@pgn.com.

Sincerely,

\s\ Robert Macfarlane

Robert Macfarlane
Manager, Pricing and Tariffs

Enclosures

UM 1953
Green Energy Affinity Rider, Schedule 55
Phase 1, CSO Option Amended, Rate and Credit
Calculations
Submitted in Compliance with Order No. 19-075

Attachments A & B

Portions are Highly Confidential
Submitted under Modified Protective Order No. 20-302

Attachments A (Partially Redacted)

Attachment B (Fully Redacted)

Begin Highly Confidential

Subscriber Cost	
PPA Cost (\$/MWh)	
PGE admin (\$/MWh)	\$0.05
Energy Credit (\$/MWh)	
Capacity Credit (\$/MWh)	
Net Cost Before Risk Adder	
Subscriber Cost w/o Adder	\$ 0.05

End Highly Confidential

Assumptions	
Resource	GFI - Phase 1 CSO
Project Size (MW)	140
ELCC	10.00%
Term Length (years)	20
Start Year	2024
Start Date	1/1/2024
End Date	12/31/2043
PPA Cost	Begin Highly Confidential
Inflation	2.18%
After Tax Nominal Cost of Capital	6.48%
After Tax Real Cost of Capital	4.21%
Net Cost of Capacity (\$/kW-yr)	\$146.80
Degradation	0.50%

End Highly Confidential

Begin Highly Confidential

Begin Highly Confidential

Cost & Credit Analysis								
Year	Year #	MWh's	PPA Cost	PGE Admin Cost	Energy Value	Capacity Value	Net Cost/ (Benefit)	
2024	1	355,012		18,410				
2025	2	352,636		18,286				
2026	3	350,873		18,195				
2027	4	349,118		18,104				
2028	5	347,965		18,044				
2029	6	345,636		17,923				
2030	7	343,908		17,834				
2031	8	342,188		17,745				
2032	9	341,057		17,686				
2033	10	338,775		17,568				
2034	11	337,081		17,480				
2035	12	335,396		17,392				
2036	13	334,287		17,335				
2037	14	332,050		17,219				
2038	15	330,390		17,133				
2039	16	328,738		17,047				
2040	17	327,651		16,991				
2041	18	325,459		16,877				
2042	19	323,831		16,793				
2043	20	322,212		16,709				
0	0	-		-				
NPV				\$195,522.28				
Average		338,213						
LCOE (\$/MWh)				0.05				

End Highly Confidential

End Highly Confidential

Net Cost of Capacity

DSP

2021\$

Resource	6-Hour Battery
COD	2025

	\$/kW-yr	
FixedCosts	\$	163.97
VariableCosts	\$	-
IntegrationCosts	\$	-
EnergyValue	\$	(10.98)
FlexibilityValue	\$	(29.43)
ELCC		86%
<hr/>		
Net Cost of Capacity	\$	146.80

2022(\$)

Effective Load Carrying Capability (ELCC)

	Capacity shortage	Capacity Contribution	ELCC
Base case at the time of negotiation	385.0		
with 140 MW GFI Resource Addition	371.0	14.00	10.00%

****No change since originally filed January 22, 2021****

Costs*	<i>Annual Operations</i>
	2023 - 2036
System Integration, IT, billing, misc.	\$556
Resource Procurement	\$2,000
Marketing	\$0
Communications	\$0
Project Management FTE	0.0667
Product Management	\$13,020
Subtotal	\$15,576
Amortized development costs	\$1,963
Total annual budget	\$17,539

	CSO Admin fee (per MWh)
\$/MWh	\$0.05
\$/kWh	\$0.00005
Generation (MWh)	338,213
Salary	\$90,000
Loadings	117%
Fully allocated salary	\$195,300
Program length	15

*Integration, shaping, and firming costs are included in the PPA price.

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the Highly Confidential Documents in UM 1953 to be served by electronic mail to those parties whose e-mail addresses appear on the attached service list for OPUC Docket UM 1953.

Dated at Portland, Oregon, this 18th day of November, 2022.

/s/ Danielle McCain

Danielle McCain
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