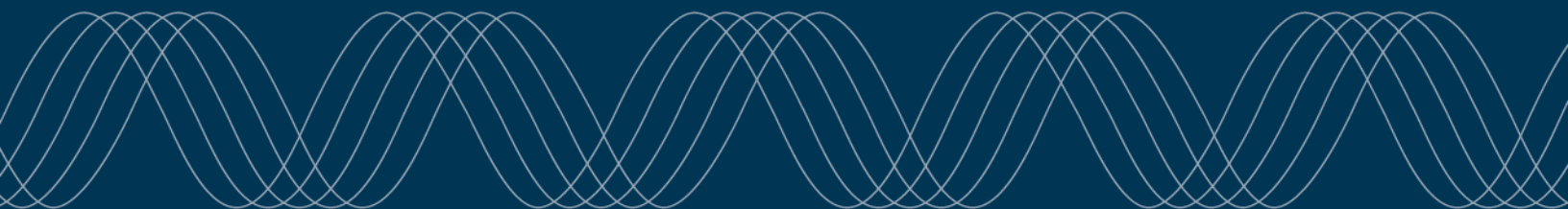


Appendix E

# Renewable PPA Form Term Sheet



2025 All-Source RFP



## Portland General Electric Company

### Non-Binding Indicative Term Sheet for Renewable Energy PPA

*Note: The following represents a summary of certain material terms and conditions for Bidders to PGE's 2025 All-Source RFP (RFP) seeking to execute a Renewable Energy Power Purchase Agreement (PPA), that are in addition to the Minimum Bid Requirements set forth in the RFP. The following is not an exhaustive list of all material terms, nor does it purport to comprehensively express PGE's expectations for any of the terms set forth in this term sheet. Full-form, definitive terms are set forth in PGE's form PPA issued in connection with the RFP.*

Buyer:	Portland General Electric Company
Seller:	[Name of Seller]
Facility:	[type of technology] generating facility (the "Facility"), located in [Name of County] County, in the State of [Name of State].
Facility Nameplate Capacity:	<b>[For solar resources: ____MW<sub>DC</sub>] [For non-solar resources: ____MW<sub>AC</sub>]</b>
Net Available Capacity:	The full (maximum) net energy the Facility is capable of delivering to the interconnecting balancing authority area continuously for at least sixty (60) minutes, which is equivalent to the Facility Nameplate Capacity less station service (parasitic power and electrical losses) and inverter limitations, expressed in MW <sub>AC</sub> as represented in the final e-tag.
Facility Output:	All electric energy, produced by the Facility, less station service (parasitic power and electrical losses), if any, all as measured at the Facility meter.
Product:	<p>The Product includes the following:</p> <ol style="list-style-type: none"><li>1. Energy: all electric energy, expressed in MWh, generated by the Facility.</li><li>2. Environmental Attributes: any and all claims, credits, benefits, emissions reductions, offsets and allowances, however named, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water or otherwise arising as a result of the generation of electricity from the Facility, regardless of whether or not (i) such environmental attributes have been verified or certified, (ii) such environmental attributes are creditable under any applicable legislative or regulatory program, or (iii) such environmental attributes are</li></ol>



	<p>recognized as of the effective date of the PPA or at any time during the Delivery Term.</p> <p>3. Capacity Attributes: any current or future attribute, as may be currently defined or otherwise defined in the future, including but not limited to a characteristic, certificate, tag, credit, ancillary service or attribute thereof, or accounting construct, associated with the electric generation capability and capacity of the Facility or the Facility's capability and ability to produce or curtail energy, including any attribute counted towards any current or future resource adequacy or reserve requirements. Capacity Attributes are measured in MW. Capacity Attributes do not include: (i) any tax credits, deductions, or tax benefits associated with the Facility, or (ii) any state, federal, local, or private cash payments, grants, or costs relating in any way to the Facility or the electric power output of the Facility.</p>
<i>Specified Amounts:</i>	The amount of Facility Output that Seller is expected to deliver to Buyer at the Delivery Point for each monthly period during the Delivery Period.
<i>Delivered Energy Quantity:</i>	The sum of Facility Output delivered to Buyer by or on behalf of Seller to the Delivery Point each hour during the Delivery Term as represented on the final e-Tag. The Delivered Energy Quantity shall not exceed Net Available Capacity in any given hour.
<i>Excess Energy Quantity:</i>	The Delivered Energy Quantity in excess of 105% of the Specified Amount.
<i>No Sales to third parties:</i>	Seller commits to deliver and sell one hundred percent (100%) of the Facility Output to Buyer.
<i>Delivery Term:</i>	The Delivery Term shall commence on the Commercial Operation Date and expire [fifteen (15) contract years] after the Commercial Operation Date.
<i>Interconnection Point:</i>	<p>The Facility shall interconnect to [XX substation].</p> <p>Seller shall be responsible for all costs of interconnecting the Facility to the Interconnection Point.</p>
<i>Delivery Point:</i>	PGE scheduling point [BPAT.PGE or PGE BA]



<i>Commercial Operation Date:</i>	The date on which the Facility Nameplate Capacity is fully operational and reliable, and the Facility is fully interconnected, fully integrated, and synchronized with the transmission system.
<i>Scheduled Commercial Operation Date:</i>	<p>September 30, [year].</p> <p>If the Commercial Operation Date is not achieved on or before the Scheduled Commercial Operation Date, Seller shall pay Delay Damages to Buyer from and after the Scheduled Commercial Operation Date up to, but not including, the first to occur of (i) the date on which the Facility achieves commercial operation, and (ii) the Guaranteed Commercial Operation Date.</p> <p>Delay Damages are equal to \$150 per MW of Facility Nameplate Capacity per day beginning on the first day through the 30<sup>th</sup> day after the Scheduled Commercial Operation Date, \$250 per MW of Facility Nameplate Capacity per day beginning on the 31<sup>st</sup> day through the 60<sup>th</sup> day after Scheduled Commercial Operation Date, and \$350 per MW of Facility Nameplate Capacity per day beginning on the 61<sup>st</sup> day after Scheduled Commercial Operation Date through the date commercial operation is actually achieved or the Guaranteed Commercial Operation Date, whichever occurs first.</p>
<i>Guaranteed Commercial Operation Date:</i>	<p>The date that is one hundred eighty (180) days after the Scheduled Commercial Operation Date.</p> <p>Buyer shall have the right to terminate the PPA if commercial operation is not achieved by the Guaranteed Commercial Operation Date.</p>
<i>Contract Price:</i>	_____ (\$/MWh)
<i>Market Index Price:</i>	The EIM real-time pre-dispatch nodal price for the Delivery Point. In the event Buyer is participating in an organized market other than the EIM, then the Market Index Price will mean the locational marginal price associated with the pricing node or aggregate pricing node for the Delivery Point within such organized market.
<i>Market Index Settlement Price:</i>	The production-weighted sum of the Market Index Price for each hour during the delivery month.
<i>Test Energy:</i>	<p>All Facility Output generated prior to the Facility achieving commercial operation.</p> <p>Seller shall use its best efforts to schedule and deliver Test Energy to its transmission provider, to a third-party or to an organized market via its transmission provider's system. Seller shall be</p>



	entitled to any and all compensation received from its transmission provider or any third-party or organized market for such Test Energy. Otherwise, Seller shall schedule and deliver Test Energy to Buyer in accordance with the scheduling procedure set forth in the PPA, in order to complete start-up testing for the Facility. In such case, the parties shall coordinate in good faith to schedule deliveries of Test Energy to Buyer that minimizes the burden to each of the parties, and Buyer shall receive the Test Energy. The price for such Test Energy received by Buyer shall be zero dollars (\$0.00) and Seller shall pay any costs or additional expenses that are required for Buyer to receive the Test Energy, including but not limited to reimbursement for negative pricing and any necessary capacity costs or reserves costs.
<i>Control Area Services Costs:</i>	<p>Seller shall procure and Buyer will reimburse Seller for all Control Area Services that that may be required by the transmission provider or balancing authority area as a condition of interconnection, from an entity that is mutually agreed upon by the parties. Control Area Services costs will not include Persistent Deviation Penalties and Intentional Deviation Penalties, which shall be the responsibility of Seller.</p> <p>Control Area Services costs include, but are not limited to, costs associated with generation imbalance, variable energy resource balancing service, and any EIM costs associated with interconnection. Control Area Services costs do not include ancillary service costs associated with the transmission provider's provision of firm transmission service.</p> <p>For off-system resources, Control Area Services costs do not include real power losses.</p>
<i>Forecasting:</i>	<p>Seller shall provide Buyer with (i) a rolling generation forecast, updated hourly, for the next fourteen (14) days, (ii) a rolling generation forecast for five (5) minute and fifteen (15) minute intervals, updated every five (5) and fifteen (15) minutes respectively, for the next twenty-four (24) hours, and (iii) an updated hourly generation forecast ninety (90) minutes prior to each delivery hour for the balance of the delivery day (collectively, "Generation Forecast").</p> <p>Each Generation Forecast shall be performed by a third-party forecasting agent that is mutually agreed to by the parties ("Forecasting Agent"). At Buyer's request, Seller will cause the Forecasting Agent to provide Buyer with an application program interface ("API") from which Buyer may access raw forecasting files. Seller shall ensure that the Forecasting Agent provides Buyer</p>

	real time access to information and forecasts concerning the Facility's availability status.
<i>Scheduling:</i>	<p>Seller shall schedule and deliver Facility Output to Buyer at the Delivery Point, commencing on the Commercial Operation Date and continuing through the end of the Delivery Term. Seller's delivery of Facility Output may not intentionally exceed the Generation Forecast.</p> <p>For On-System Facilities:</p> <p>For each day during the Delivery Term, Seller shall comply with the following scheduling procedure:</p> <ul style="list-style-type: none"> <li>- Seller shall, by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day, communicate to Buyer's pre-schedule desk via an API or as directed by Buyer, the expected energy to be delivered each hour at the Delivery Point for the delivery day, consistent with the Generation Forecast.</li> <li>- Seller shall communicate to Buyer's real-time desk via API, or as otherwise directed by Buyer, energy deliveries consistent with the Generation Forecast no later than ninety (90) minutes prior to the flow hour.</li> <li>- Seller and Buyer agree that the intent of the scheduling procedure is for Seller to schedule and deliver energy resembling actual production from the Facility for each interval.</li> </ul> <p>For Off System Facilities:</p> <p>For each day during the Delivery Term, Seller shall comply with the following scheduling procedure:</p> <ul style="list-style-type: none"> <li>- Seller shall, by 5:00 a.m. PPT of the customary WECC pre-scheduling day, communicate to Buyer's pre-schedule desk via API or as directed by Buyer, the expected energy to be delivered each hour at the Delivery Point for the delivery day, consistent with the Generation Forecast.</li> <li>- Seller shall schedule the energy by submitting a NERC e-Tag ("e-Tags") prior to 1:00 p.m. PPT of the applicable WECC pre-scheduling day for all hours of the applicable delivery day(s); and</li> <li>- Seller shall schedule energy from the Facility with e-Tags according to prevailing WECC pre-scheduling provisions and protocols. Seller shall schedule energy from the Facility as the identified e-Tag source. Seller may not net or otherwise combine schedules from resources other than the Facility, except as necessary for ancillary services.</li> </ul> <p>Seller shall not schedule any energy to be delivered to Buyer using a dynamic or pseudo-tie e-tag as such terms are defined and used by NERC.</p>



	<p>Seller may make adjustments to the pre-scheduled energy scheduled from the Facility each hour in real-time consistent with the Generation Forecast. For such real-time adjustments, Seller will:</p> <ul style="list-style-type: none"> <li>- Submit and receive approval of e-Tag adjustment no later than seventy-five (75) minutes prior to the flow hour, in accordance with the requirements of the applicable transmission provider.</li> <li>- Make all NERC e-Tag adjustments.</li> <li>- Seller's e-tag shall match the adjustment communicated to Buyer.</li> <li>- Be responsible for any costs, charges, or fees associated with adjustments to the e-tag after seventy-five (75) minutes prior to the flow hour.</li> </ul> <p>In the event that the regional market design, balancing authority, Reliability Entity (defined in the Failure to Deliver section below) or regulatory entity (e.g., PGE Transmission, BPA, WECC, NERC, RC West, FERC) causes or otherwise reasonably requires Buyer's scheduling practices to change after the effective date of the PPA, Buyer and Seller shall meet within thirty (30) days after written notice to Seller of such proposed change and mutually agree on updated scheduling procedures. Seller shall not unreasonably withhold agreement to proposed changes to the scheduling procedures.</p>
<i>Mechanical Availability Guarantee:</i>	<p>Beginning with the first full calendar year following the contract year in which commercial operation is achieved, a Seller event of default will occur if Seller fails to maintain a minimum mechanical availability percentage for the Facility of ninety-five percent (95%) for any two (2) out of three (3) contract years on a rolling basis.</p> <p>The mechanical availability of the Facility shall be determined by Seller by dividing the total operational hours for such calendar year [non-solar resources: by the total number of hours in the calendar year] [solar resources: by the total number of daylight hours in the calendar year]. On or before January 31<sup>st</sup> of each year, Seller shall provide Buyer written documentation, which shall be subject to audit by Buyer, to verify or otherwise substantiate Seller's calculation of the mechanical availability of the Facility for the prior calendar year. The operational hours for the Facility shall be the hours that the Facility is potentially capable of producing power at the Facility Nameplate Capacity regardless of actual weather conditions or season, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Delivery Point with the transmission provider.</p>
<i>Failure to Deliver:</i>	<p>If Seller fails to deliver Facility Output or the associated Environmental Attributes, and such failure is not excused by Force</p>



Majeure, or by Buyer's breach of the PPA, Seller shall owe Buyer an amount as calculated below:

- (a) Seller shall owe Buyer an amount for such deficiency equal to the positive difference (if any) of the applicable Market Index Settlement Price minus the Contract Price multiplied by the positive difference (if any) of the Facility Output Seller failed to deliver for the applicable monthly On-Peak and Off-peak period minus the Delivered Energy Quantity delivered during that monthly On-Peak and Off-peak period; and
- (b) Seller shall owe Buyer any penalties or fines imposed by a Reliability Entity as a result of Seller's failure to deliver; and
- (c) Seller shall owe Buyer for any incremental carbon emission costs associated with replacement energy procured as a result of Seller's failure to deliver; and
- (d) Seller shall owe Buyer for any incremental ancillary services and transmission costs associated with replacement energy procured as a result of Seller's failure to deliver; and
- (e) Seller shall be obligated to settle any shortfall in the delivery of Environmental Attributes as follows:
  - (i) Seller shall, within one hundred twenty (120) days after the end of the shortfall month, deliver an equivalent amount of Qualifying Replacement RECs that are generated in the same calendar year; or
  - (ii) If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs under subpart (i) and Buyer elects in its sole discretion to purchase Qualifying Replacement RECs, Seller shall owe Buyer the price that Buyer actually pays for Qualifying Replacement RECs; or
  - (iii) If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs under subpart (i) and Buyer does not elect, in its sole discretion, to purchase replacement bundled RECs under subpart (b), Seller shall owe Buyer the Qualifying Replacement REC Price identified by Buyer multiplied by the number of Bundled RECs Seller failed to deliver.

"Reliability Entity" may include, without limitation, NERC, WECC, the balancing authority, transmission provider, regional transmission organization, independent system operator, reliability coordinator or any other entity that has, or that may



	<p>have in the future, (i) responsibility over the reliability of the bulk power system, and (ii) by virtue of such responsibility the legal authority to affect the operations of the Facility or delivery of the Product.</p> <p>"Qualifying Replacement RECs" means environmental attributes (including renewable energy credits and renewable energy credit reporting rights) that are delivered to Buyer, bundled with energy produced simultaneously by a generating source that (A) is an Oregon Renewable Portfolio Standard eligible renewable energy resource, (B) produces environmental attributes (including renewable energy credits and renewable energy credit reporting rights) of the same type and quality as Environmental Attributes (including Bundled RECs and REC Reporting Rights), (C) is located in Oregon or Washington, and (D) achieves commercial operation after the Commercial Operation Date.</p> <p>"Qualifying Replacement REC Price" means the price for Qualifying Replacement RECs as determined by taking the lower of two dealer quotes representing a live offer to sell Qualifying Replacement RECs for the entire quantity of Bundled RECs that are being replaced and subtracting the value of the energy component of such quantity (as specified in the applicable dealer quotes) of such Qualifying Replacement RECs.</p>
<i>Reliability Entity Curtailment:</i>	<p>Buyer shall not be liable to Seller if curtailment of energy is due to the action of a Reliability Entity and such action shall not be considered a Force Majeure. Seller shall pay Buyer the replacement cost for such curtailed energy. The replacement cost during a Reliability Entity curtailment shall be the greater of zero or the amount calculated as: ((Market Index Price - Fixed Price) multiplied by curtailed energy based on the Facility's potential generation for periods of the Reliability Entity curtailment. The Forecasting Agent shall calculate the potential generation during periods of the Reliability Entity curtailment.</p>
<i>REC Tracking System:</i>	<p>Seller shall transfer RECs associated with the Facility Output from the Facility for each month via WREGIS pursuant to the requirements set forth in the WREGIS Operating Rules.</p>
<i>Negative Price Event:</i>	<p>When the Market Index Price is less than zero, Seller shall have the right, but not the obligation, to suspend part or all of its energy deliveries.</p>
<i>Monthly Settlement and Invoice:</i>	<p>All invoices shall be due on the tenth (10th) day of each month and payable on or before the later of the twentieth (20th) day of each month, or the tenth (10th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day.</p>

	<p>The payment for each month during the Delivery Term is equal to the sum of:</p> <p>(a) hourly Facility Output, up to 105% of the Specified Amount for such month, multiplied by the Contract Price; plus</p> <p>(b) hourly Excess Energy multiplied by the lesser of (i) 93% of the Market Index Price, or (ii) 75% of the Contract Price; plus</p> <p>(c) for each hour that the Market Index Price is negative, the hourly Delivered Energy Quantity multiplied by 107% of the Market Index Price.</p>
<i>Operations and Maintenance:</i>	<p>Seller shall not schedule any non-emergency maintenance that reduces the energy generating capability of the Facility by more than ten percent (10%) during the months of July through September and during the months of December through February, unless (i) such outage is required to avoid damage to the Facility, (ii) such maintenance is necessary to maintain equipment warranties and cannot be scheduled outside the months of July through September and December through February, (iii) such outage is required in accordance with prudent electrical practices, or (iv) the parties agree otherwise in writing.</p> <p>Seller shall provide its outage schedule no later than September 1st of each year preceding such outage(s).</p> <p>The outage schedule for each contract year shall not exceed 200 hours.</p>
<i>Labor and Personnel Requirements:</i>	<p>Union labor must be utilized for major construction activities related to the Facility and must include a Project Labor Agreement requirement in any related executed engineering, procurement and construction agreements. All project labor must comply with the requirements of ORS 757.306, as applicable.</p>
<i>Prevailing Wage and Apprenticeship Tax Credit Eligibility</i>	<p>As applicable, Seller must meet all requirements for tax credit eligibility under the Prevailing Wage and Apprenticeship provisions as part of the Inflation Reduction Act.</p>
<i>Buyer Conditions Precedent:</i>	<p>Buyer's obligations shall be conditioned and will become effective only upon the occurrence of each and every one of the following conditions:</p> <p>(i) receipt of acknowledgement of the final shortlist for the RFP from the Oregon Public Utility Commission, in form and substance satisfactory in Buyer's sole discretion; and</p> <p>(ii) approval of the PPA by Buyer's Board of Directors.</p>



<i>Seller Conditions Precedent:</i>	[List Seller Conditions Precedent, if any]
<i>Credit Support:</i>	<p>Within thirty (30) days after the effective date of the PPA, Seller shall deliver development security to Buyer in an amount equal to \$125/kW of Facility Nameplate Capacity and Seller shall maintain such development security until the Commercial Operation Date.</p> <p>On or before the Commercial Operation Date, Seller shall deliver delivery term security to Buyer in an amount equal to \$100/kW of Facility Nameplate Capacity and shall maintain such delivery term security through the end of the Delivery Term. Within five (5) Business Days following any draw by Buyer on the delivery term security, Seller shall replenish the amount drawn on such so that the delivery term security is restored to the full amount.</p> <p>All security shall be in the form of cash or a letter of credit from a Qualified Institution as defined below and in a form reasonably acceptable to Buyer.</p> <p>"Qualified Institution" means a major U.S. commercial bank or a U.S. branch office of a major foreign commercial bank which is acceptable to Buyer, organized under the laws of the United States (or any state or political subdivision thereof) with such bank having shareholders' equity of at least \$10 billion (U.S. Dollars) and a credit rating of at least A- by S&amp;P or A1 by Moody's, or an insurance company with assets of \$2 billion or greater, an A.M. Best financial strength rating of an A or greater and authorized to issue surety bonds in the state in which the Facility will be located.</p>
<i>Termination Payment:</i>	<p>In the event the PPA is terminated due to an event of default, the non-defaulting party shall calculate the termination payment amount.</p> <p>The Gains or Losses resulting from the termination of the PPA shall be determined by calculating the amount that would be incurred or realized to replace or to provide the economic equivalent of the remaining payments or deliveries in respect of the PPA. The Gains or Losses shall be calculated for a period equal to the remaining Term ("Settlement Period"). The quantity of Facility Output in each month of the Settlement Period shall be equal to the Specified Amount for such month under the PPA as of the time the calculation is made. If the non-defaulting party's Losses exceed its Gains, then the termination payment amount shall be an amount owing to the non-defaulting party. If the non-defaulting party's Gains exceed its Losses, then the termination payment amount shall be zero dollars (\$0).</p> <p>"Gains" means, with respect to a party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of its obligations with respect to the PPA determined in a commercially reasonable manner.</p>



	<p>"Losses" means, with respect to a party, an amount equal to the present value of the economic loss to it, if any (inclusive of Costs), resulting from termination of its obligations with respect to the PPA determined in a commercially reasonable manner.</p> <p>"Costs" means, with respect to a party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such party in entering into new arrangements which replace the PPA and all reasonable attorneys' fees and expenses incurred by a party in connection with enforcing its rights under the PPA. Costs shall not include any expenses incurred by such party in either entering into or terminating any arrangement pursuant to which it has hedged its obligations.</p>
<i>Limitation of Liability:</i>	Unless expressly provided in the PPA, a party's liability shall be limited to direct actual damages only, which direct actual damages shall be the sole and exclusive remedy and all other remedies or damages at law or equity are waived. Except as expressly provided for in the PPA, neither party shall be liable for consequential, incidental, punitive, exemplary, or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise.
<i>Other Standard Contract Terms:</i>	The PPA will include terms and conditions that are usual and customary in transactions of its nature.
<i>Confidentiality:</i>	All information exchanged during negotiations of the PPA will be confidential, subject to the Non-Disclosure Agreement between Buyer and Seller dated [Date].



**PGE Corporate Headquarters**

121 S.W. Salmon Street | Portland, Oregon 97204

[portlandgeneral.com](http://portlandgeneral.com)