Appendix R Storage Capacity Form Term Sheet

2023 All-Source RFP



Portland General Electric Company

Non-Binding Indicative Term Sheet for Storage resources

Subject to Mutual NDA

Note: The following represents a summary of certain material terms and conditions for Bidders to PGE's 2023 All-Source RFP (RFP) seeking to execute a Storage Capacity Agreement (SCA). This term sheet is tailored for an on-system battery storage resource. To the extent a <u>bB</u>idder would like to propose an off-system or non-battery storage resource, certain terms and conditions will need to be updated (e.g., interconnection and transmission requirements, scheduling requirements, procurement of charging energy, etc.). 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 herein mentioned. Full-form, definitive terms shall beare set forth in PGE's form SCA issued in connection with the RFP. Capitalized terms not otherwise defined in this Term Sheet will be defined in the SCA.

Buyer:	Portland General Electric Company ("PGE")
Seller:	[Name of Seller]
Facility:	-The [XX] MW _{AC} grid-connected energy storage facility [insert location and description of energy storage facility, and any other relevant identifying details, including technology, e.g., lithium ion] ["Facility"], located in in [Name of County] County, in the State of [Name of State].
<u>Guaranteed</u> Storage Contract Capacity:	-[XX] MW _{AC} for [XX] hour discharge. The Storage Contract Capacity shall be adjusted during the Delivery Term in accordance with a Storage Capacity Test set forth in the SCA.
Facility Nameplate Capacity:	[XX] MW _{AC}
Duration:	[_4+] hours
Product(s):	The Product includes the following:
	 "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, or accounting construct, associated with the electric charge and discharge capability and capacity of the Facility or the

	 Facility's capability and ability to discharge 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 PTCsproduction tax credits, ITCsinvestment tax credits, or any other 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; Storage Capacity: All rights, products and attributes associated with the maximum dependable operating capability of the Facility to charge, sort and discharge electric energy; and Ancillary Service Attributes: All ancillary services, products and other attributes, defined in Section 3 of the Portland General Electric Company Pro Forma Open Access Transmission Tariff, if any, that may be obtained from or generated by the Facility. 	
No Sales to third parties:	Seller shall sell one hundred percent (100%) of the Storage Capacity to Buyer.	
Delivery Term:	<u>"Delivery Term" means nNo</u> less than fifteen (15) <u>Contract Yearsyears</u> after the Commercial Operation Date. <u>"Contract Years" means a period of</u> twelve (12) consecutive months beginning on January 1st and continuing through December 31st of each calendar year, except that the first Contract Year shall commence on the Commercial Operation Date and the last Contract Year shall end at the end of the day prior to the anniversary of the Commercial Operation Date.	
Interconnection Point:	The Facility shall interconnect to [XX substation] (the "Interconnection Point") . Seller shall be responsible for all costs of interconnecting the Facility to the Interconnection Point.	
Delivery Point:	Interconnection Point.	



Commercial Operation Date (COD):	"Commercial Operation Date" means t <u>T</u> he date on which the total nameplate storage capacity of the Facility (expressed in MW- _{AC}) is fully operational, reliable and available to Buyer, and the Facility is fully interconnected, fully integrated, and synchronized with the transmission system.
Scheduled Commercial Operation Date:	<i>"Scheduled Commercial Operation Date" means</i> [Date]. In no event shall the Scheduled Commercial Operation Date be later than December 31, 2024 2027.
	If the Commercial Operation Date is not achieved on or before the Scheduled Commercial Operation Date, Seller shall pay Delay Damages to PGE from and after the Scheduled Commercial Operation Date up to, but not including the first to occur of (i) the Commercial Operation Date, or (ii) the Guaranteed Commercial Operation Date. "Delay damages" means, for any given day, the product of (a) the Guaranteed Storage Capacity, expressed in MW _{AC} , multiplied by (b) the quotient of (i) the Contract Price in the first contract year (in \$/MW/month) divided by (ii) 30.4"Delay Damages" are equal to \$150 per MW of Storage Contract Capacity of the Facility per day beginning on the first day through the 30 th day after the Scheduled Commercial Operation Date, \$250 per MW of Storage Contract Capacity of the Facility per day beginning on the 31 st day through the 60 th day after Scheduled Commercial Operation Date, and \$350 per MW of Storage Contract Capacity of the Facility per day beginning on the 61 st day after Scheduled Commercial Operation Date until the Commercial Operation Date is actually achieved or the Guaranteed Commercial Operation Date, whichever occurs first.
Guaranteed Commercial Operation Date:	<u>"Guaranteed Commercial Operation Date" means t</u> The date that is one hundred <u>twenty eighty (182</u> 0) days after the Scheduled Commercial Operation Date.
	Buyer shall have the right to terminate the SCA if the Commercial Operation Date is not achieved by the Guaranteed Commercial Operation Date <u>and Seller shall</u> pay Buyer damages in the amount of \$200/kW of Nameplate Capacity.



Contract Price:	Fixed monthly capacity payment for the entire Delivery Term equal to [(\$/ <u>MW_{AC}</u> +W-month of Storage Contract Capacity)]. Such payment constitutes the entirety of the amount due to the Seller from Buyer for the Product.
Testing <u>Storage</u> <u>Capacity Test</u> :	Prior to the Commercial Operation Date, Seller shall schedule and complete a storage capacity test. Thereafter, at least once per year, Seller shall schedule and complete a storage capacity test. Buyer may require a storage capacity retest at any time during the Delivery Term. The Parties shall coordinate all storage capacity tests in good faith to minimize the burden to each of the Parties. Buyer may witness all storage capacity tests of the Facility. Buyer shall pay for the Charging Energy used to charge the Facility in connection with the first storage capacity test during any C <u>c</u> ontract Y <u>y</u> <u>ear</u> . All other costs related to a storage capacity test, including costs for Charging Energy for subsequent storage capacity tests in the same C <u>c</u> ontract Y <u>y</u> <u>ear</u> (unless such subsequent retest is initiated by Buyer), shall be borne by Seller.
Transmission Requirements:	Buyer must be able to designate the Facility as a network resource and Seller must have requested NRIS interconnection for Facility Output. In such case, Buyer will be responsible for all costs associated with the delivery of energy to the PGELOAD.
Charging Energy:	During the Delivery Term, Buyer shall be responsible, at its sole cost, for managing, purchasing, scheduling and delivering all energy necessary to charge the Facility to supply its Discharge Request (defined in the Scheduling Procedure).
Control Area Services and other costs :	Seller shall procure and pay for all Control Area Services that may be required by its transmission provider(s) or balancing authority area as a condition of interconnection.
	Control Area Services include, but are not limited to, generation imbalance, variable energy resource balancing service and any EIM costs associated with interconnection. Control Area Services do not include ancillary service costs associated with the transmission provider's provision of firm transmission service.
Scheduling of	For each day during the Delivery Term:
Charging Energy	Buyer shall, by 12:00 p.m<u>06.00a.m</u>. PPT of the customary WECC Pre-Schedule Day communicate to Seller's pre-

and Discharge Energy:	schedule desk via an Application Program Interface (API) or as directed by Buyer, the expected charging energy to be delivered to the Facility by Buyer and the amount of energy Seller shall discharge and deliver each hour at the Delivery Point for the delivery day to Buyer.
	The SCA shall include charging and discharging protocols based on the technology and software communication available to the Seller, but at a minimum the Buyer shall communicate intraday adjustments no later than one- hundred and twenty (120) minutes prior to the flow hour.
Storage Capacity Guarantee:	If the Storage Capacity for the Storage Facility is determined during a Storage Capacity Test to be less than the Guaranteed Contract Storage Capacity, Seller shall pay to Buyer as liquidated damages for such deficiency an amount determined by <i>multiplying</i> (i) the number of months since the last Storage Capacity Test (including the month in which the most current Storage Capacity Test was completed) by (ii) the Contract Price (adjusted to \$/MW/month (<i>multiplied by</i> 1,000), <i>multiplied by</i> 125% by (iii) the difference between the Guaranteed Contract Storage Capacity and the Storage Capacity Test until such deficiency is cured. During the Delivery Term, Seller shall maintain the Facility with guaranteed storage contract capacity for the Facility is determined during a storage Contract Capacity for the Facility is determined during a storage Contract Capacity Seller shall pay to Buyer as liquidated damages for such deficiency an amount determined by multiplying the number of months since the last Storage Capacity Test (including the month in which the most current Storage Capacity test to be less than the Guaranteed Storage Contract Capacity Seller shall pay to Buyer as liquidated damages for such deficiency an amount determined by multiplying the number of months since the last Storage Capacity Test (including the month in which the most current Storage Capacity Test was completed) by (i) Contract Price multiplied by [125%] multiplied by (ii) the difference between the Guaranteed Storage Contract Capacity for the Facility as determined during the most recent storage Capacity Test ("Guaranteed Storage Contract Capacity for the Facility as determined during the most recent storage Contract Capacity test ("Guaranteed Storage Contract Capacity for the Facility as determined during the most recent storage Contract Capacity test ("Guaranteed Storage Contract Capacity for the Facility as determined during the most recent storage Contract Capacity test ("Guaranteed Storage Contract Capacity LDs"). Payment of Guaranteed

	and Buyer's sole and exclusive remedy, in connection with
	the Storage Contract Capacity being less than the
	Guaranteed Storage Contract Capacity for a Contract Year.
	Additionally, it will be an event of default if the Storage Contract Capacity, as determined by the most recent Storage Contract Capacity Test, is less than the Guaranteed Storage Contract Capacity, which remains uncured for a period of thirty (30) days as shown by a new Storage Capacity Test.
Actual Round-Trip Efficiency:	The round-trip efficiency for each month is calculated as a percentage, based on the amount of MWhs <u>of energy</u> used to charge the Facility and the amount of MWhs <u>of energy</u> discharged from the Facility, as measured by the Storage Facility meter at the Interconnection Point.
Guaranteed Round-Trip Efficiency:	("Guaranteed Round-Trip Efficiency") means [ninety <u>eEighty</u> <u>five</u> percent (9085%) for all contract years during the Delivery <u>Term</u>)].
	Contract Year Guaranteed Round- Trip Efficiency
	1 90.0%
	2 - XX [Seller to fill out rest of table]
	It will be an event of default if the Round-Trip Efficiency is less than the Guaranteed Roundtrip Efficiency and such failure continues for [90] days after Seller's receipt of written notice or discovery of such failure.
Guaranteed Round-Trip Efficiency Adjustment:	If during any month during the Delivery Term, the Actual Round-Trip efficiency for such month is less than the Guaranteed Round-Trip Efficiency, the Seller shall pay the Buyer the following amount: (i) the charging energy for the months since the last Storage Capacity Test (including the month
	in which the most current Storage Capacity Test was completed), multiplied by (ii) the percentage amount by which the Actual Round-Trip Efficiency is less than the Guaranteed Round-Trip

l

	<u>C Physical Off-Peak (bilateral) indices, weighted by the count of hours in each index during which Charging Energy was supplied by Buyer to the Point of Delivery (i) the total Charging Energy for such month, multiplied by (ii) the percentage amount by which the Actual Round-Trip Efficiency is less than the Guaranteed Round-Trip Efficiency, multiplied by (iii) average day-ahead Intercontinental Exchange Mid-C Physical Peak (bilateral) or Mid-C Physical On-Peak (bilateral) indices.</u>
Maximum Annual Discharge MWh:	Buyer may discharge a maximum of [MWhs] per year, subject to the Facility Operating Limits and Parameters.
Daily Dispatch Limits:	Full Charging limits (if any): [XX] times per day Full Discharging limits (if any): [XX] times per day Partial Charging limits (if any): [XX] times per day Partial Discharging limits (if any): [XX] times per day
Other Operating Limits and Parameters:	[Seller to describe all applicable operating limits on charging and discharging from the Facility, if any]
Guaranteed Monthly Availability:	Seller guarantees the Facility availability shall be no less than [98 <u>95</u> %] for each month <u>annually</u> during the Delivery PeriodTerm. Facility availability shall be calculated using a methodology set forth in the SCA that is generally consistent with the method prescribed by the Facility's equipment manufacturers. The Contract Price shall be adjusted if the Facility fails to meet the Minimum Monthly Availability in any month during the Delivery Term.
	In the event Seller fails to meet the Guaranteed Monthly Annual Availability during any two [2] out of three [3] consecutive years months during any [12] month rolling period during the Delivery Term, Buyer may terminate the SCA.
Guaranteed Monthly Availability Adjustment:	If the Facility has Actual Availability in a contract year less than the Guaranteed Availability, then Seller shall pay Buyer liquidated damages in the amount equal to the product of (a) the positive difference between the Guaranteed Availability and the Actual Availability, multiplied by (b) the Storage Capacity during the contract year, multiplied by (c)

	the Contract Price (adjusted to \$/MW/month), multiplied by (d) twelve (12) months. If the Facility does not meet the Guaranteed Monthly Availability, the Contract Price shall be adjusted by multiplying it by the following adjustment, which shall be calculated after any Guaranteed Round-Trip Efficiency Adjustment, if any, has been applied to the Contract Price:
	(i) If the monthly storage availability is less than the Guaranteed Storage Availability, but greater than or equal to 70%, then:
	AA – 100% - [(98 <u>95</u> % - monthly storage availability) × 2]
	(ii) If the monthly storage availability is less than 70%, then:
	AA – 0%
Failure to Deliver Damages:	In the event Seller fails to deliver energy in accordance with the Scheduling Procedure, which is not excused by Force Majeure or by Buyer's failure to perform, Seller shall compensate Buyer for such failure to deliver, for the following costs:
	 (a)-The replacement cost, calculated by multiplying (x) amount of energy not delivered, by (y) the positive difference, if any, of the Replacement Price less the Contract Price; provided, however, such amount shall not be less than zero dollars (\$0.00). The "Replacement Price" shall be the average day-ahead Intercontinental Exchange Mid-C Physical Peak (bilateral) or Mid-C Physical Off-Peak (bilateral) indices ("ICE DA Indices") for such month; plus (b)-The cost associated with incremental, Capacity Attributes, Environmental Attributes and/or carbon emissions costs borne by the Buyer; plus (c)-Any incremental ancillary services and transmission costs. Seller shall pay Buyer an amount equal to the costs incurred by Buyer; plus (d)-Any penalties or fines imposed by a Reliability Entity as a result of Seller's failure 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 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.
Curtailment:	In the event the Facility is curtailed due to Force Majeure, by the transmission provider, or for any reason other than Seller's action or inaction, Seller shall not be liable for failure to deliver such curtailed energy and Buyer shall not be obligated to pay for such curtailed energy.
Monthly Settlement and Invoice:	Within ten (10) days after the end of each month of the Delivery Term, Seller shall send a detailed invoice to the Buyer for the amount due during such month. The invoice shall include all information necessary to confirm the amount due.
	Payment shall be due ten (10) days after the invoice date The payment for each month will be equal to:
	 (i) the Contract Price multiplied by the Storage Capacity; (ii) adjusted by the Guaranteed Round-Trip Efficiency Adjustment and Guaranteed Monthly Availability Adjustment, if any; (iii)(i) minus any Guaranteed Storage Contract Capacity LDs, Duration LDs, and Failure to Deliver Damages.
Dperations and laintenance:	Seller shall not schedule any non-emergency maintenance that reduces the Facility charging or discharging capability by more than ten percent (10%) during the months of June through September, unless (i) such outage is required to avoid significant and material damage to the Facility, (ii) such maintenance is necessary to maintain equipment warranties and cannot be scheduled outside the months of June through September, (iii) such outage is required in accordance with prudent electrical practices, or (iv) the parties agree otherwise in writing.

	Seller shall provide its outage schedule no later than September 1st of each Contract Year preceding such outage(s).
	The outage schedule for each Contract Year shall not exceed 200 hours.
Progress reporting:	Seller shall provide a monthly report to Buyer that (a) describes the progress towards meeting the Facility development milestones set forth in the SCA; (b) identifies any missed Facility development milestones, including the cause of the delay; and (c) provides a detailed description of Seller's corrective actions to achieve the missed Facility development milestones and all subsequent Facility development milestones by the Guaranteed Commercial Operation Date.
Labor Requirement:	Union labor must be utilized for major construction activities related to the resource and must include a Project Labor Agreement requirement in any related executed engineering, procurement and construction agreements. <u>All project labor must comply with the requirements of House Bill 2021, as applicable.</u>
	The labor group that is responsible for construction and maintenance of the Facility must have policies in place that are designed to limit or prevent workplace harassment and discrimination. Additionally, such labor group must have policies in place that are designed to promote workplace diversity, equity and inclusion of communities who have been traditionally underrepresented in the renewable energy sector including, but not limited to, women, veterans and Black, Indigenous and People of Color, with an aspirational goal of having at least 15 percent of the total work hours performed by individuals from those communities.
Buyer Conditions Precedent:	Buyer's obligations shall be conditioned and will become effective only upon the occurrence of the each and every of the following conditions:
	f(i) receipt of approval <u>of the final shortlist</u> from the Oregon Public Utility Commission, in form and substance satisfactory in Buyer's sole discretion; and





order to determine any losses, the termination payment due to such party (each a "Termination Payment").

If the termination of this Agreement due to a Seller Event of Default occurs before the Commercial Operation Date, then the Termination Payment shall be owed to Buyer and shall be equal to the amount of the development security, less any Delay Damages paid by Seller.

If the termination of this Agreement due to a Seller event of default occurs after the Commercial Operation Date, then the Termination Payment shall be owed to Buyer and shall be equal to (i) all amounts due and owing to Buyer as of the termination of the SCA plus (ii) the positive amount, if any, equal to (x) the present value of the payments Buyer would be required to make under transactions replacing the SCA minus (y) the present value of the payments Buyer would be required to make for Product under the SCA, in each case for the period from the early termination date through the scheduled end of the Delivery Term and determined by Buyer in a commercially reasonable manner plus (iii) Buyer's Costs less (iv) all amounts due to the Seller under the SCA.

If termination of the SCA is due to a Buyer event of default occurs after the Commercial Operation Date then the Termination Payment shall be owed to Seller and shall equal (i) all amounts due and owing to Seller as of the termination of the SCA (ii) the positive amount, if any, equal to (x) the present value of the payments Seller would receive under the SCA for Product less (y) the present value of the payments Seller would receive for Product under transactions replacing the SCA, in each case for the period from the early termination date through the scheduled end of Delivery Term and determined by Seller in a commercially reasonable manner plus (iii) Seller's Costs less (iv) all amounts due to the Buyer under the SCA as of the date of such termination.



	"Costs" means, with respect to the non-defaulting party, the commercially reasonable brokerage fees, commissions, and other similar transaction costs and expenses incurred by the non-defaulting party to a person other than a party in connection with terminating any arrangement pursuant to which it has hedged its obligations under the SCA or in entering into new arrangements to replace the SCA, and all reasonable attorneys' fees and expenses incurred by the non-defaulting party in connection with the termination of the SCA.
Aggregate Limitation of LiabilityDirect Daamages	Unless expressly provided in the <u>PPASCA</u> , 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. <u>Except as expressly provided in the SCA</u> , neither party shall <u>be liable for consequential</u> , incidental, punitive, exemplary <u>or indirect damages</u> , lost profits or other business <u>interruption damages</u> , by statute, in tort or contract, under <u>any indemnity provision or otherwise</u> . <u>Delay damages</u> , <u>termination payments</u> , <u>Guaranteed Storage Contract</u> <u>Capacity LDs</u> , <u>Duration LDs</u> , and failure to deliver remedies <u>set forth in this term sheet will be deemed direct damages</u> .
Assignment:	Neither party may assign the SCA without prior written consent of the other party, which consent may not be unreasonably withheld or delayed. Any direct or indirect change of control of Seller (whether voluntary or by operation of law) will be deemed an assignment and will require the prior written consent of the Buyer. Seller shall pay Buyer's reasonable expenses incurred to provide consents, estoppels, or other required documentation in connection with Seller's financing for the Facility.
Other Standard Contract Terms to be included in the SCA:	The SCA will include additional terms and conditions that are usual and customary in transactions of its nature.
Confidentiality:	This Term Sheet and all information exchanged during negotiations of the SCA are confidential, subject to the Non-

Disclosure Agreement between Buyer and Seller dated [Date].

