



PEDERNALES ELECTRIC COOPERATIVE

Small and Large Power Interconnection Tariff for Systems Greater than 50 kW

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Draft Interconnection Tariff for Small and Large Power Member Owned Distributed Generation over 50 kW

- Small and Large Power Members have approached PEC with their intent to install distributed generation systems over 50 kW AC in size
- PEC's current Tariff specifies that for systems greater than 50 kW AC, PEC will negotiate on a case-by-case basis
 - Systems 50 kW and below qualify for PEC's Interconnection Net Metering Rate option
- PEC should consider a new Tariff rate option to provide Small Power and Large Power members with an established method and rate for purchases and sales
 - Identified in 2016 Cost of Service study as a need
 - Given the number of potential installations greater than 50 kW
 - PEC's policy to be equitable, fair and non-discriminatory

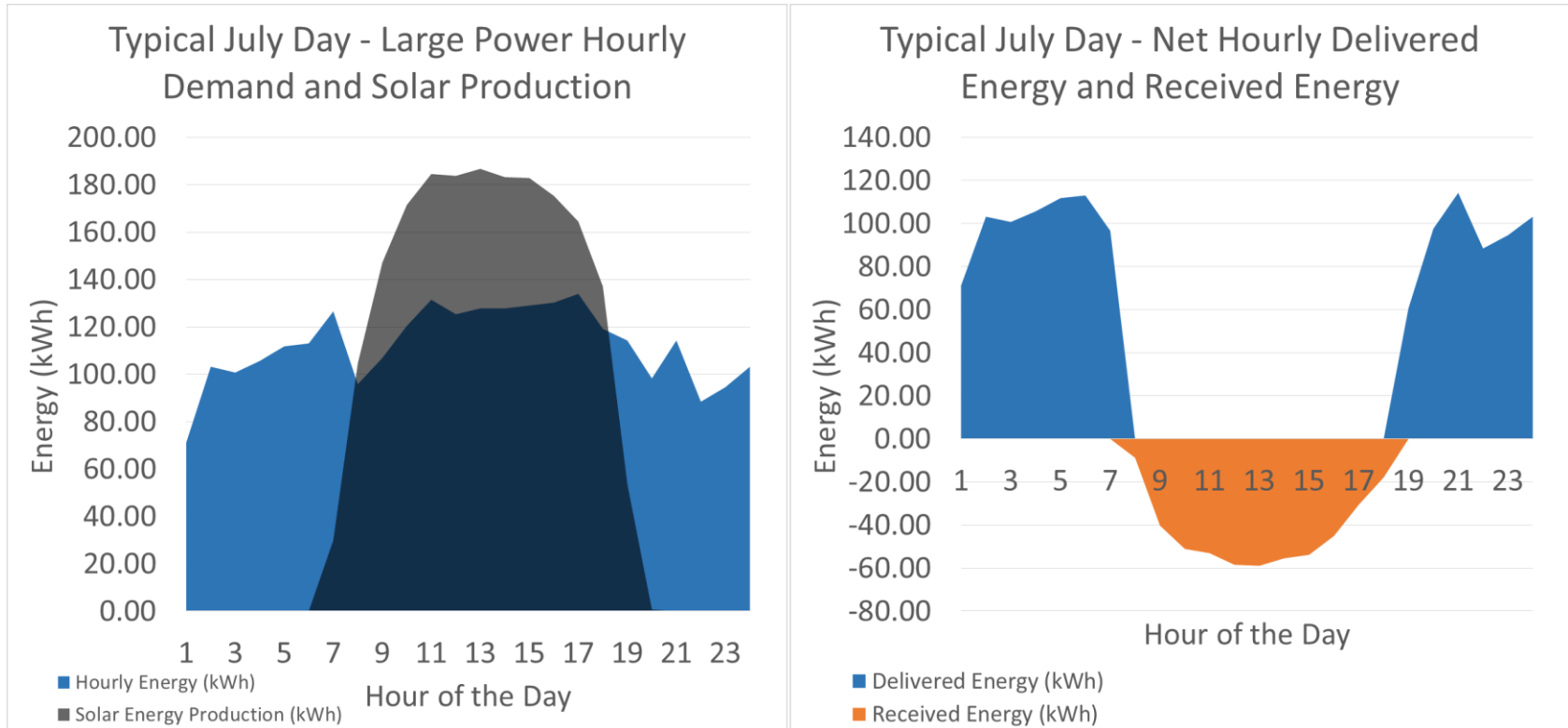


Proposed Approach

- Applicability
 - Small and Large Power Members
- Distributed Generation System Size
 - Greater than 50 kW AC and less than or equal to 500 kW AC
- Metering
 - Meter with two registers to record Delivered Energy and Received Energy
 - 2nd Meter to record output of the distributed generation system
- Net Metering
 - Delivered Energy is the total electricity delivered to a Member from PEC, not offset by DG production, during the billing cycle (Member is billed based on Delivered Energy)
 - Received Energy is the total electricity received by PEC during the billing cycle from the surplus overproduction of the DG system (Member receives credit for Received Energy)
- Rates
 - Service Availability Charge shall be increased by \$10-25/Month to account for additional costs such as metering
 - Demand, Delivery, TCOS, and Power charges shall be offset by real-time production from the DG system
 - Surplus energy shall be credited to the member at the Wholesale Energy Credit Rate
- Limit on Total System Wide Capacity
 - This Tariff will be capped at [5] MW AC of system wide total distributed generation capacity



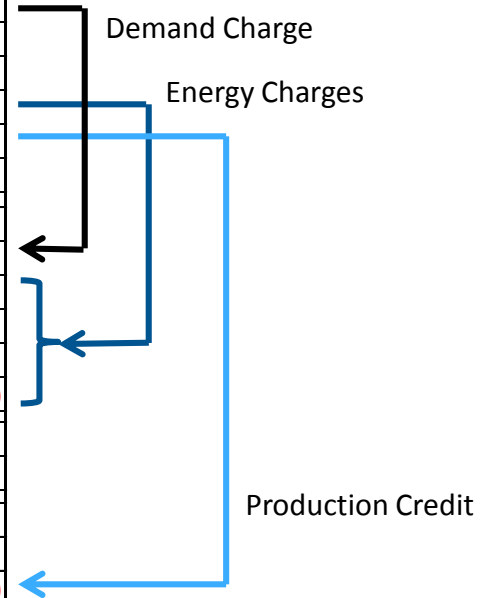
Large Power Distributed Generation Example



Large Power Hourly Net Metering Example

			Without DG	With DG
Demand		kW	155.0	150.0
Total Energy Demand		kWh	82,000.0	82,000.0
Total Solar Production		kWh	-	67,000.0
Delivered Energy		kWh	-	45,000.0
Received Energy		kWh	-	30,000.0
Real Time Energy Offset		kWh	-	37,000.0
Service Availability Charge*	\$150/\$175	mo.	\$150.00	\$175.00
Capacity Demand Charge	\$3.38000	/kW	\$523.74	\$507.00
Delivery Charge	\$0.00885	/kWh	\$725.70	\$398.25
Transmission Cost of Service	\$0.01158	/kWh	\$949.56	\$521.10
Base Power Cost	\$0.06050	/kWh	\$4,961.00	\$2,722.50
Power Cost Adjustment	(\$0.0140)	/kWh	(\$1,148.00)	(\$630.00)
Total			\$6,162.00	\$3,693.85
Effective Rate		\$/kWh	\$0.0751	\$0.0450
Net Base Power and Power Cost Adj.	\$0.04650	\$/kWh		
Wholesale Credit Rate Adjustment (%)*	85.00%			
Wholesale Credit Rate (\$/kWh)	(\$0.03953)	\$/kWh	N/A	(\$1,185.75)
Total			\$6,162.00	\$2,508.10
Difference				\$3,653.90
Effective Rate for DG Production				\$0.05454

* SAC and Wholesale Credit Rate Adjustment are not finalized at this time



Draft Tariff Language

- Applicability - Applicable to Small Power and Large Power members with Distributed Generation that is greater than 50 kW AC and equal to or less than 500 kW AC. The member must have an effective agreement for interconnection with the Cooperative according to Section 600 Interconnection found in this Tariff. Availability of this Tariff will be capped at [5] MW AC of system wide total solar capacity.
- Net Metering Service - The Cooperative shall install two meters, owned and operated by the Cooperative, for Member. The first meter will record total production. The second meter will have two registers, one which records electricity delivered (Delivered Energy) to Member, and another that records electricity returned to the Cooperative through overproduction (Received Energy). The metered over-production by Member during a monthly billing cycle will be credited on the Member's bill and purchased by Cooperative at the Net Energy Credit Rate at the time interval of the overproduction. The Cooperative shall have access to Member's meter data for billing purposes.
- Rates
 - The Service Availability Charge shall be \$[62.50]/Mo. for Small Power and \$[175.00]/Mo. for Large Power.
 - Real-time energy production shall offset real-time energy usage and demand.
 - Rates shall apply as per the otherwise applicable tariff with charges applied to Delivered Energy consumed at the premises.
 - If Received Energy is greater than 0 kWh then the Received Energy shall be credited at a Wholesale Credit Rate equal to 85% the sum of the Base Power Cost and the Power Cost Adjustment as per as the otherwise applicable tariff.



Next Steps

- Finalize cost of service analysis to determine:
 - Service Availability Cost Adjustment (estimated at \$10-25/Mo. Increase)
 - Wholesale Credit Rate (estimated at 85% of net power rate)
- Complete resource planning analysis to resolve final system wide cap
 - Current estimate is 5 MW cap
- Finalize technical metering and billing feasibility test
- Perform regulatory and legal review of draft Tariff and Interconnection Agreement
- Prepare final proposal for action at the March 2017 PEC Board meeting

