FTC DG Solar Conference 21 June 2016

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Net Metering in Wisconsin



- Federal Jurisdiction Section 210 of the Public Utility Regulatory Policy Action and 18 C.F.R. Part 292
 - Directed FERC to establish regulations to encourage cogeneration and small power production
 - Purchases from Qualifying Facilities (QFs)
- State Jurisdiction
 - Exclusive jurisdiction in establishing retail rates
 - FERC gave states latitude in determining how avoided costs are to be calculated for the purposes of setting rates for purchases from QFs
 - In 1982, PSCW required that all electric utilities file tariffs providing net energy billing per PURPA (docket 5-ER-11) and in 1983 issued an order establishing the methods and standards for implementing PURPA in Wisconsin (dockets 5-ER-11, 12, and 13)

Net Metering in Wisconsin



- Approximately 19MW of DG net metered in Wisconsin (2015)
- Average annual growth rate of 22% per year since 2008
- Size Limits
 - Range from 20kW to 300kW
 - One utility limits net metering for systems that only meet the needs of the customer
- Netting Period
 - Annual Netting
 - "Rollover Plans": any excess generated energy carries forward to offset future use
 - Any excess remaining at the end of the year credited at buyback rate
 - Monthly Netting
 - Generation balance does not carry forward each month
 - Customers receive monthly credit for excess at buyback rate

Net Metering in Wisconsin



| Utility | Size Limit | Netting Period | Buyback |
|-----------------------------------|---|----------------|-------------------------------------|
| Alliant Energy | 20 kW | Monthly | Avoided Cost (LMP) |
| Madison Gas & Electric | 100 kW | Annual | Avoided Cost (LMP) |
| Xcel Energy | 100 kW | Annual | Avoided Cost (LMP) |
| We Energies | 300 kW (limited to 100% of customer load) | Monthly | Avoided Cost (LMP) |
| Wisconsin Public Service | 20 kW | Monthly | Avoided Cost (LMP, Transmission) |
| Municipal Utilities & Small IOU's | 20 kW | Monthly | Retail |

Note: The PSCW does not regulate Co-ops

Cross-Subsidization



- Wisconsin has been leader in addressing cross-subsidization
 - Comprehensive effort covering net metering and rate design
- All large Wisconsin IOU's pay avoided cost for excess generation
 - PURPA sets the floor of compensation at avoided cost
- We continue to hone the definition of avoided cost
 - Transmission benefits
 - Capacity credits
 - Distribution benefits
- Innovative rate designs provide opportunity to more accurately assign benefits of DG
 - Unbundled Rates
 - TOU Rates
 - Demand metering for DG systems

Solar DG Competition



- Utility-offered community solar programs provide good alternative to customer-owned DG.
- Two basic program models in Wisconsin
 - Community Solar upfront purchase
 - Shared Solar "pay as you go"
- Both models offer competitive pricing compared to net metered DG
- Utility-offered programs allow all ratepayers to benefit from DG
- Utilities control siting to maximize benefits and minimize costs to the overall grid