

PJM Panel Net Energy Metering Overview



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PHI “Net Metering” Tariffs

- Maryland – includes Pepco & DelMarva
 - Alternative Generation Metering Rider (AGM)
 - Aggregated Net Energy Metering Pilot (ANEM)
- District of Columbia
 - Net Energy Metering (Rider NEM)
- Delaware
 - Net Energy Metering (NEM)
 - Aggregated Net Energy Metering (ANEM)
 - Community Energy Facility (CEF)
- New Jersey
 - Net Energy Metering (NEM)
 - Red Skye Pilot

Note: NEM Governed in most Jurisdictions by Small Generation Interconnection Rules (SGIR)

Interconnection Requirements

- Available to any PHI Customer served who owns/leases and operates a qualified electric generation facility that:
 - Is intended primarily to offset all or part of the customer's own electrical needs
 - Allowable system capacity is typically based on the Customer's prior 12-month usage
 - Note: DE is 110% & MD is 200%*
 - Uses qualified renewable energy resource
 - i. e.: wind, solar, photovoltaic, hydro, Micro Combine Heat & Power (CHP), etc.
 - Is located on the Customer's premises or contiguous property; and

Interconnection Requirements

- Interconnected & operated in parallel with the Company's transmission and distribution facilities; must disconnect during customer outage
 - Must meet NEC, IEEE, & UL to meet the Company's interconnection requirements
 - Is not a Qualifying Facility (QF) served under:
 - Rate Schedule Small Power Purchase (SPP/ CG-SPP)
 - PJM Interconnection intended for wholesale purposes
- Qualifies as small generation facility per jurisdictional requirements
 - All Jurisdictions - Level 1 (less than 10 KW capacity)
 - Level 2, 3 & 4 (10 KW capacity & up - maximum varies per jurisdictional rules)

Interconnection Rules

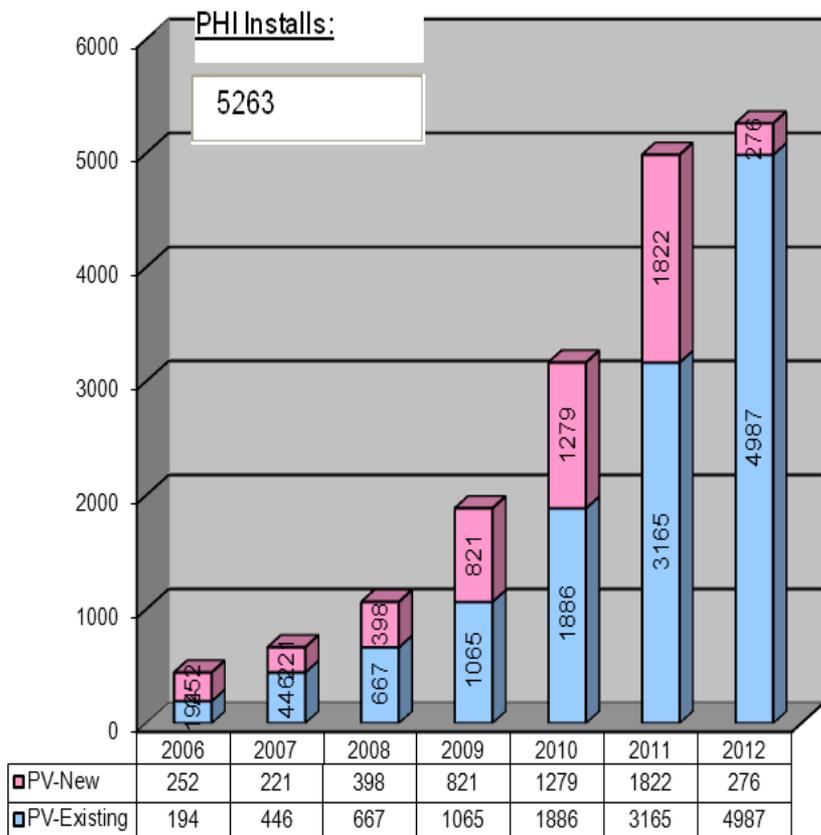
- Interconnection rules established per jurisdictional legislation and PSC/BPU approved Tariffs/Regulations
- Application Forms and Agreements are established by the State/Municipality and approved by the Commissions (PSC/BPU)
- Customers, Contractors & Utilities are all responsible for familiarity and compliance with jurisdictional interconnection rules

Challenges

- Interconnection & NEM Rules inconsistent between jurisdictions
 - Complex & Varied
- Moving target
 - On-going New Tariffs & Legislation changes
 - Time Lags w/Legislation, Rules & Tariff
 - Inconsistencies/conflicts
- Volume of NEM/interconnection requests/projects
 - Driven by available state & jurisdictional funding, SREC values, & state Renewable Portfolio Standards (RPS) goals

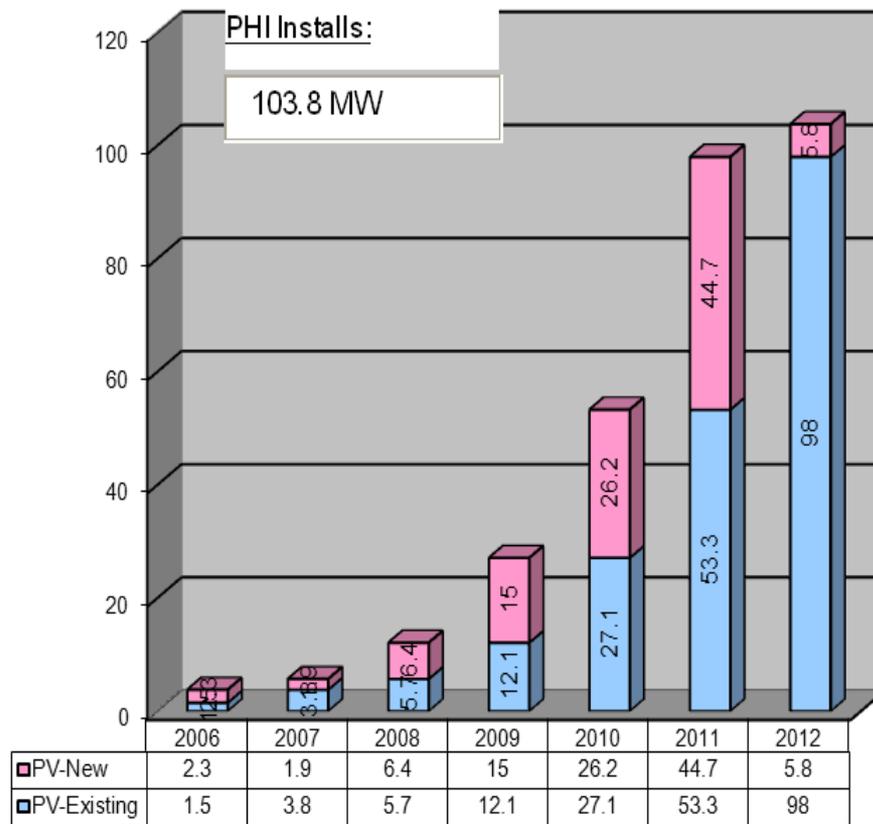
PHI Active NEM PV Customers By Year

As Of: 3/1/2012



PHI Active NEM PV Generation (MW) By Year

As Of: 3/1/2012



Challenges

- Sizing of projects associated with
 - New Construction Sites
 - New Accounts
 - Renovations/Add-ons
 - Lifestyle Changes/Temporary/Seasonal Residence
- New construction usage calculators overstated
 - Results in over sizing & excess generation
 - Not in alignment with NEM Rider to “off set” all or part of customer’s usage
- No current recovery mechanism
 - Costs to other non-NEM rate payers
 - Lack of availability to lower income customers
 - No decoupling

Challenges

- Need for education (internal/ external)
 - Customers/Contractors/Developers/Regulatory Bodies unfamiliar w/jurisdictional rules & tariffs (subject to interpretation) & electrical jurisdictional requirements
- Lack of enforcement
 - Non-compliance w/rules
 - Generator installation prior to application
 - Generator operation prior to application and/or required Utility final approval

Challenges

- Current Utility internal systems do not accommodate excess generation (negative usage)
 - Itron, Metering, Billing, & EDI Systems
- Excess generation billing performed manually outside automated billing systems
 - Time consuming
 - Subject to error
- Third Party Supplier NEMs
 - Purchase of receivables & Supplier Coordination Tariff do not allow negative usage to be sent via EDI
 - Sent via email from Utility to Supplier
 - Rates must be calculated and sent from Supplier to Utility

PHI Net Energy Metering Initiatives

- Internal/External Education
- Addressing Resources
- Building Partnerships
 - Customer, PSC/BPU Working Groups, PJM Task Forces, Solar Co-ops, Solar Contractors/Developers, Regulatory Bodies,
- On Going PHI DER Initiatives
 - Process review & improvements
- Website Enhancements
- Solar Forums
- CIS System Replacement

