



RAP[®]

Energy solutions
for a changing world

DER Deployment and Regulatory Proceedings Survey

Mid-Atlantic Distributed Resources Initiative (MADRI)

Presented by John Shenot

December 13, 2016

The Regulatory Assistance Project (RAP)[®]

Process

- Survey questions drafted by MADRI steering committee member from NJ
- Survey sent by RAP to all MADRI state utility commissions October 7
- Responses received from:
 - Delaware
 - DC
 - Maryland
 - New Jersey
 - Pennsylvania

DER Definition (for this survey)

Includes individual generation or storage resources less than 20 MW and aggregated resources totaling less than 20 MW that are “behind-the-meter” but interconnected to the distribution grid and able, in theory or in practice, to access the larger PJM wholesale market. The DER technology provides on-site power (electric and/or thermal) to a single customer or several customers that are geographically contiguous.

Does PUC Collect Detailed Data on DERs?

State	Response
All	Generation data via GATS for RPS-eligible DERs
DE	Type, location, capacity for RPS-eligible DERs
DC	Type, location, capacity; future: must collect generation data for all solar DERs
MD	No
NJ	Type, location, capacity for projects that received state incentive
PA	EDCs annually report <i>number</i> of customer generators

Does PUC Approve DER Installations?

State	Response
DE	No, but certifies RPS-eligibility
DC	No; behind-the-meter and “community” RE facilities are exempt from approval requirements
MD	Approves installation of generators > 2 MW
NJ	Approves state incentives for eligible DERs, but doesn't approve DER installations
PA	No

Does Environmental Agency Permit/Approve DERs?

State	Response
All	Normal air permits may be required for fossil-fueled DERs based on emission characteristics
DE	No other approvals they are aware of
DC	No
MD	No response
NJ	NG CHP < 3MW eligible for general permit; NG fuel cell < 500kW permit by rule; additional restrictions for floodplains, Pinelands, farmland
PA	No

What DERs Require Interconnection Approval?

State	Response
DE	Solar, wind, hydro, fuel cells, biogas
DC	Grid-connected generators up to 10 MW not subject to PJM interconnection requirements; open docket considering storage interconnection
MD	Solar, wind, diesel, natural gas, biomass
NJ	Class 1 RE generators and PURPA QFs; process for gas fuel cells similar to CHP QFs
PA	All types of RE, fuel cells, small CHP

What types of DERs and capacity limits are eligible for net metering?

State	Response
DE	RE, fuel cells not to exceed 110% of customer's expected annual load AND up to 25 kW residential, 100 kW farm, 2 MW other
DC	RE, CHP, fuel cells, microturbines up to 1 MW
MD	RE, CHP, fuel cells up to 2 MW intended to primarily supply customer; 1500 MW statewide
NJ	RE not to exceed 100% of expected annual load
PA	RE, CHP, fuel cells up to 50 kW residential or 3 MW other, or up to 5 MW if designed to serve critical infrastructure during emergencies

Does PUC Require Net Metering or Interconnection Reports from EDCs?

State	Response
DE	IOU EDC submits detailed annual report on net metered and community DERs
DC	EDC reports annually on number, type, and size of interconnections; interconnection performance; and RPS compliance including solar carve-out; locations of small generators reported as confidential information
MD	PSC staff surveys EDCs on capacity and types of net metered DERs
NJ	IOU EDCs submit quarterly reports on net metered DERs; CHP and fuel cell projects also submit operational data before earning state incentive
PA	EDCs annually report number of customer generators, capacity by resource type, and interconnection performance metrics

Does PUC Have Active Proceedings on DER Rate Design or DER Tariffs?

State	Response
DE	No, but rate design for all customers is under development
DC	Open docket on Modernizing the Energy Delivery Structure for Increased Sustainability; preparing staff report; community NEM tariff currently under review
MD	Public conference December 2016 addressing this and other topics; planning for an Order in 2018
NJ	Informal proceeding produced staff microgrid report in November 2016; report recommends initiating a formal DER tariff proceeding
PA	Reviewing comments from March 2016 hearing on alternative ratemaking methodologies

Rate design/tariff info on PUC website?

State	Response
DE	No
DC	Yes http://www.dcpsc.org/Newsroom/HotTopics/MEDSIS-Initiative.aspx
MD	Yes www.psc.state.md.us/wp-content/uploads/PC-44-Notice-Transforming-Marylands-Electric-Distribution-System.pdf
NJ	Not yet, but will be if formal DER tariff adopted
PA	Yes http://www.puc.pa.gov/filing_resources/issues_laws_regulations/alt_ratemaking_methodologies.aspx

About RAP

The Regulatory Assistance Project (RAP) is a global, non-profit team of experts that focuses on the long-term economic and environmental sustainability of the power sector. RAP has deep expertise in regulatory and market policies that:

- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

Learn more about RAP at www.raonline.org

jshenot@raonline.org



The Regulatory Assistance Project (RAP)[®]

Beijing, China • Berlin, Germany • Brussels, Belgium • Montpelier, Vermont USA • New Delhi, India

www.raonline.org