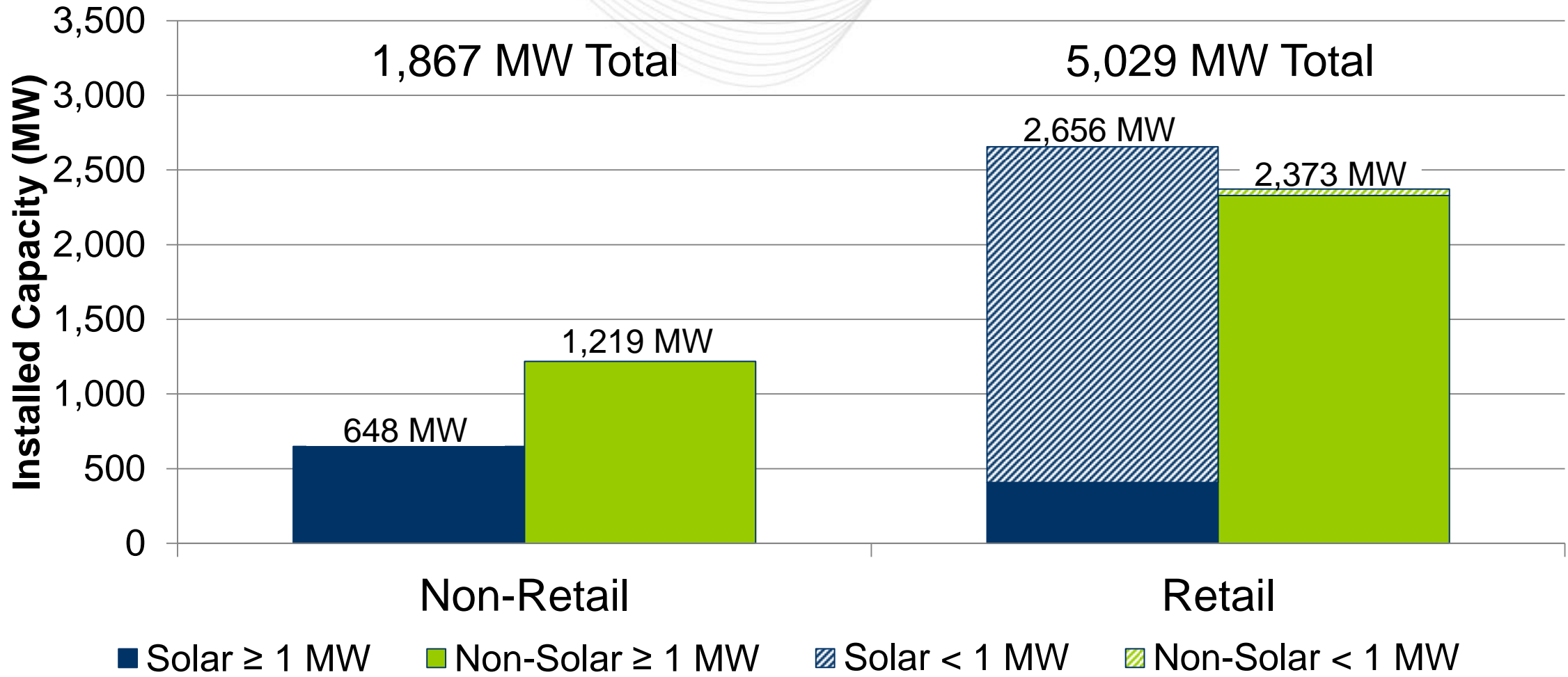


Non-Wholesale Distributed Energy Resources Data Collection

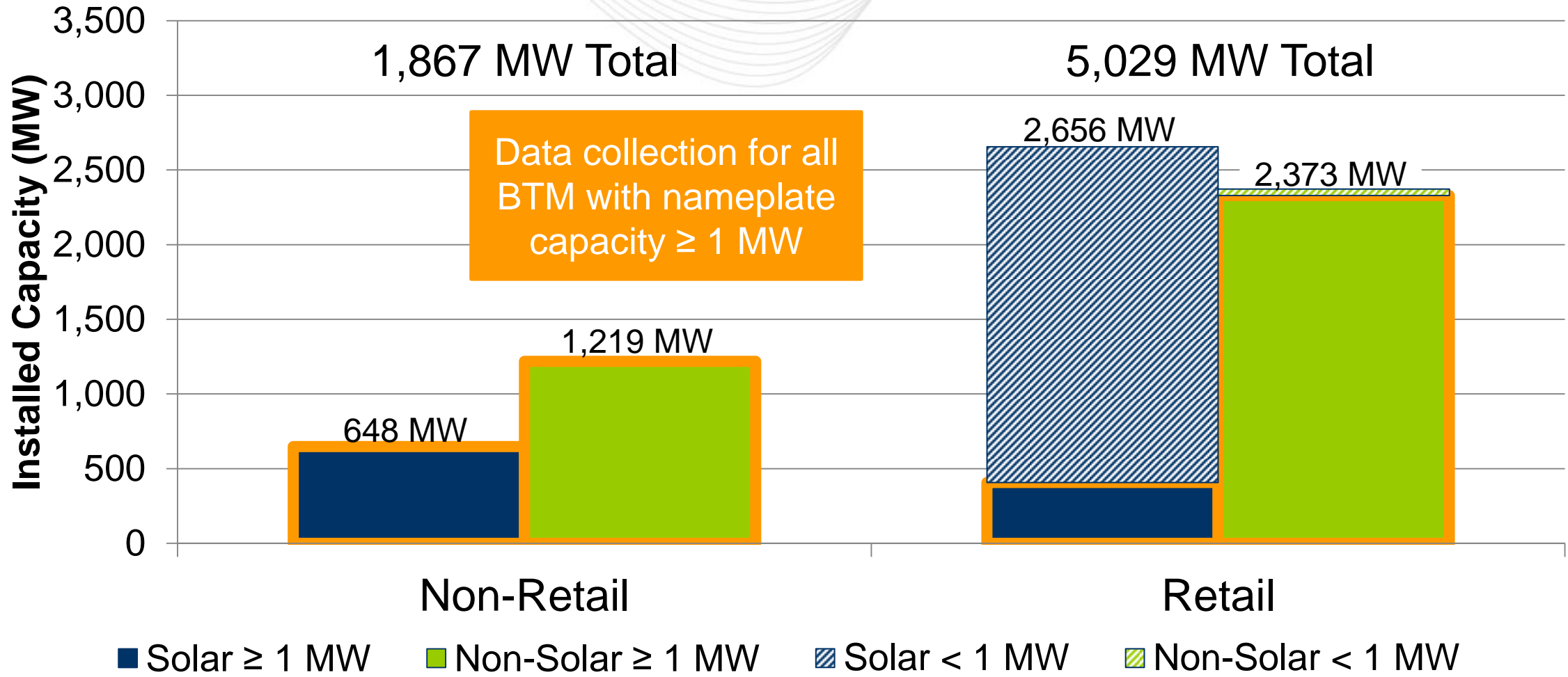
Joseph Mulhern
Sr. Engineer, Generation

June 19, 2019

Installed Capacity of BTM Generation in PJM by Category



Installed Capacity of BTM Generation in PJM by Category



≥ 1 MW

**Adding to
Dispatch maps**

**Including in
PCLLRW reports**

≥ 10 MW

Modeling in EMS

**Obtaining real-
time telemetry**

- In 2018, the Distributed Energy Resources Subcommittee discussed increasing visibility of Non-Wholesale DER units
 - *Non-Wholesale DER* is synonymous with *BTMG*
- Process for data collection and coordination was endorsed through stakeholder process:
 - PJM will use publicly available data to identify relevant plants
 - TOs will submit additional modeling data outlined in Manuals 14D
 - Modeling information: Substation, voltage, PJM equipment name
 - Telemetry links for plants with capacities ≥ 10 MW
 - Other optional information, including contact information



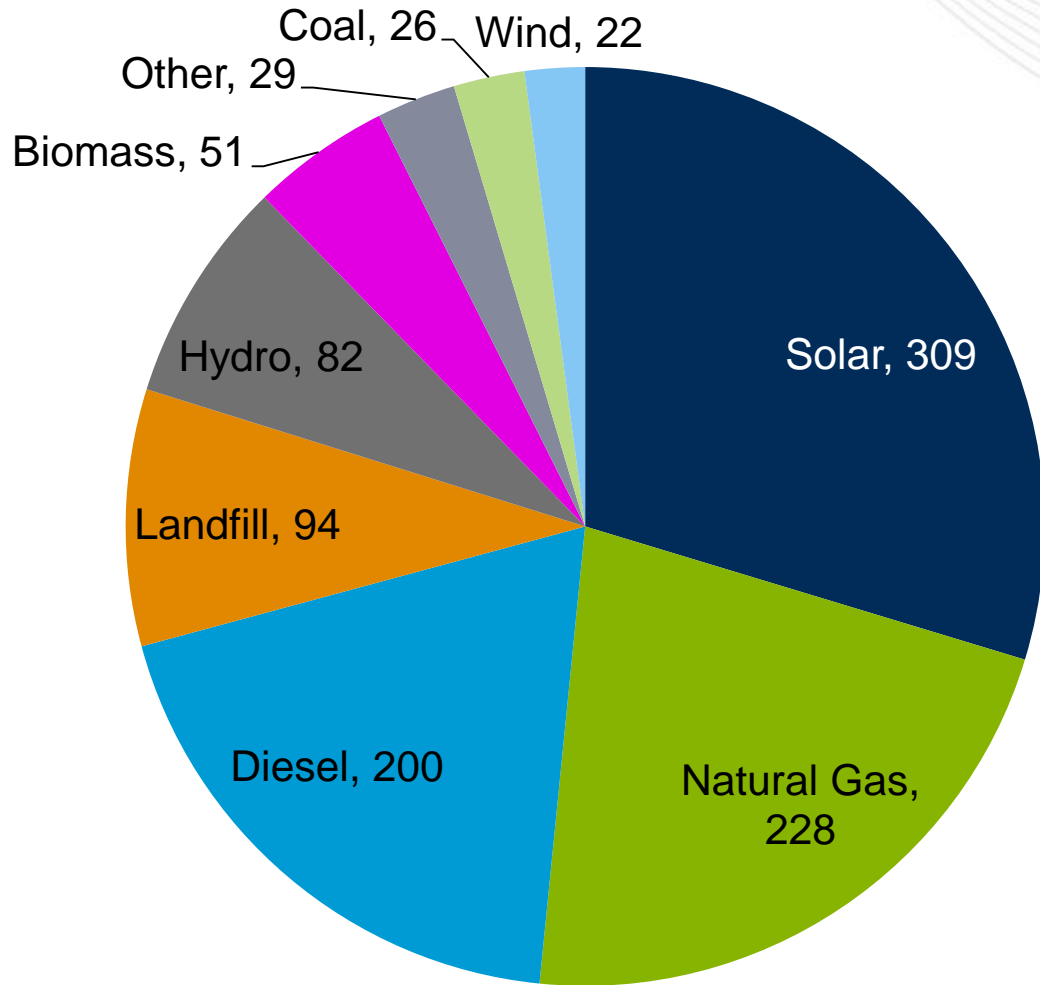
EIA-860 Generator File used as Data Source

2017 Form EIA-860 Data - Schedule 3, 'Generator Data' (Operable Units Only)

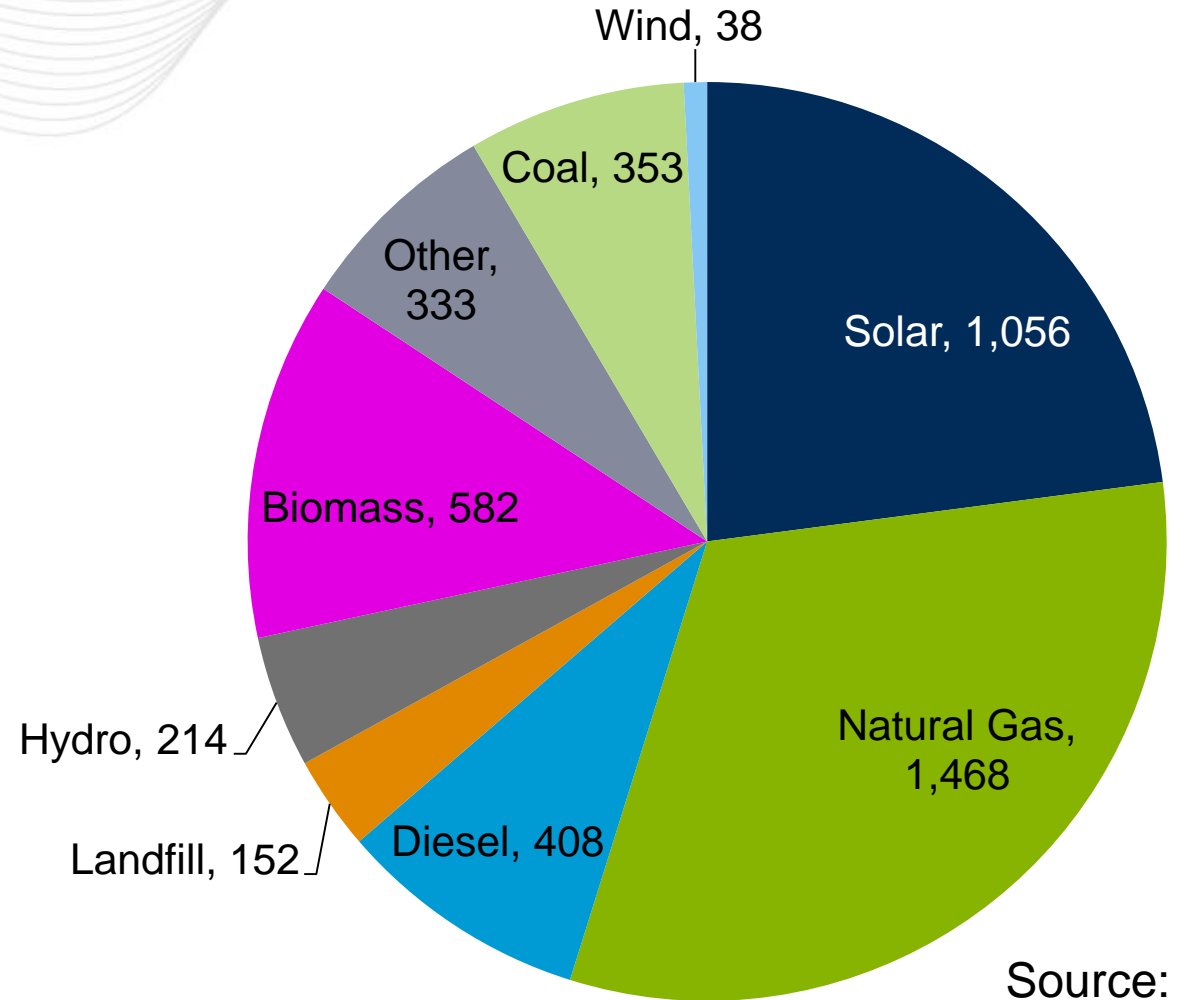
Utility	Utility Name	Plant Co	Plant Name	Stat	County	Generator ID	Technology
195	Alabama Power Co	2	Bankhead Dam	AL	Tuscaloosa	1	Conventional Hydroelectric
195	Alabama Power Co	3	Barry	AL	Mobile	1	Natural Gas Steam Turbine
195	Alabama Power Co	3	Barry	AL	Mobile	2	Natural Gas Steam Turbine
195	Alabama Power Co	3	Barry	AL	Mobile	4	Conventional Steam Coal
195	Alabama Power Co	3	Barry	AL	Mobile	5	Conventional Steam Coal
195	Alabama Power Co	3	Barry	AL	Mobile	A1CT	Natural Gas Fired Combined Cycle
195	Alabama Power Co	3	Barry	AL	Mobile	A1CT2	Natural Gas Fired Combined Cycle
195	Alabama Power Co	3	Barry	AL	Mobile	A1ST	Natural Gas Fired Combined Cycle
195	Alabama Power Co	3	Barry	AL	Mobile	A2C1	Natural Gas Fired Combined Cycle
195	Alabama Power Co	3	Barry	AL	Mobile	A2C2	Natural Gas Fired Combined Cycle
195	Alabama Power Co	3	Barry	AL	Mobile	A2ST	Natural Gas Fired Combined Cycle
195	Alabama Power Co	4	Walter Bouldin Dam	AL	Elmore	1	Conventional Hydroelectric
195	Alabama Power Co	4	Walter Bouldin Dam	AL	Elmore	2	Conventional Hydroelectric
195	Alabama Power Co	4	Walter Bouldin Dam	AL	Elmore	3	Conventional Hydroelectric
195	Alabama Power Co	7	Gadsden	AL	Etowah	1	Natural Gas Steam Turbine
195	Alabama Power Co	7	Gadsden	AL	Etowah	2	Natural Gas Steam Turbine
195	Alabama Power Co	8	Gorgas	AL	Walker	10	Conventional Steam Coal
195	Alabama Power Co	8	Gorgas	AL	Walker	8	Conventional Steam Coal
195	Alabama Power Co	8	Gorgas	AL	Walker	9	Conventional Steam Coal
5701	El Paso Electric Co	9	Copper	TX	El Paso	1	Natural Gas Fired Combustion Turbine
195	Alabama Power Co	10	Greene County	AL	Greene	1	Natural Gas Steam Turbine
195	Alabama Power Co	10	Greene County	AL	Greene	2	Natural Gas Steam Turbine

Remove PJM wholesale generators and generators outside of PJM Balancing Authority

1,041 Units at Plants ≥ 1 MW



4,603 MW at Plants ≥ 1 MW



Source: EIA 860

Generators

Plant 12 Applegate Solar LLC

[View Generator Data Sheet](#)

[< Back to Plants](#)

Export: [CSV](#)

Generator Id ▲	Primary Source
PV1	SUN

[Reset](#)

Actions



Edit Generator PV1

Generator Detail

Outreach Transmission Owner Info

Load Station	<input type="text"/>	DER Contact Name	<input type="text"/>
Load Voltage(kV)	<input type="text"/>	DER Contact Phone	<input type="text"/>
Load Equipment Name	<input type="text"/>	DER Contact eMail	<input type="text"/>
Operational Mode	<input type="text"/>		

Modeling Data (Required for plants 10 MW or greater. Optional for others.)

Generator MW Object ID	<input type="text"/>	Generator MVAR Object ID	<input type="text"/>
ICCP Link Name	<input type="text"/>		

Generator Single Line	<input type="text"/>	Sub Station Single Line	<input type="text"/>
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[+ Choose File](#)

[+ Choose File](#)

- 2018 Efforts
 - Work with stakeholders to make manual changes
 - Collect contact information for resources from each TO
 - Create training materials
 - Upload data to DER Directory
- 2019 Efforts
 - Work with remaining TOs to identify resources and obtain access
 - Support TOs as needed throughout data entry process
 - Collect all required data