

**Rhode Island Energy**<sup>™</sup>

a PPL company

Special Commission for the Placement of Solar Panels on Interstate Highways December 6, 2023

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## Agenda



- Interconnection Summary
- Interconnection Process & Challenges
- Contact Information





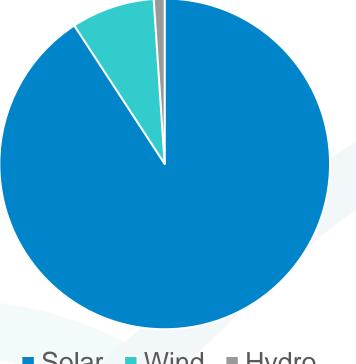
## Interconnection Summary

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## Total MW interconnected to-date and in queue



#### 616 MW Interconnected as of November 27, 2023



- Solar breakdown
  - 135 MW from systems under 25 kW •
  - 481 MW from systems over 25 kW
- Remaining MW in queue
  - 573 MW •
- Total connected applications to date ٠
  - 22,637 •

■ Solar ■ Wind ■ Hydro





#### Interconnection Process & Challenges

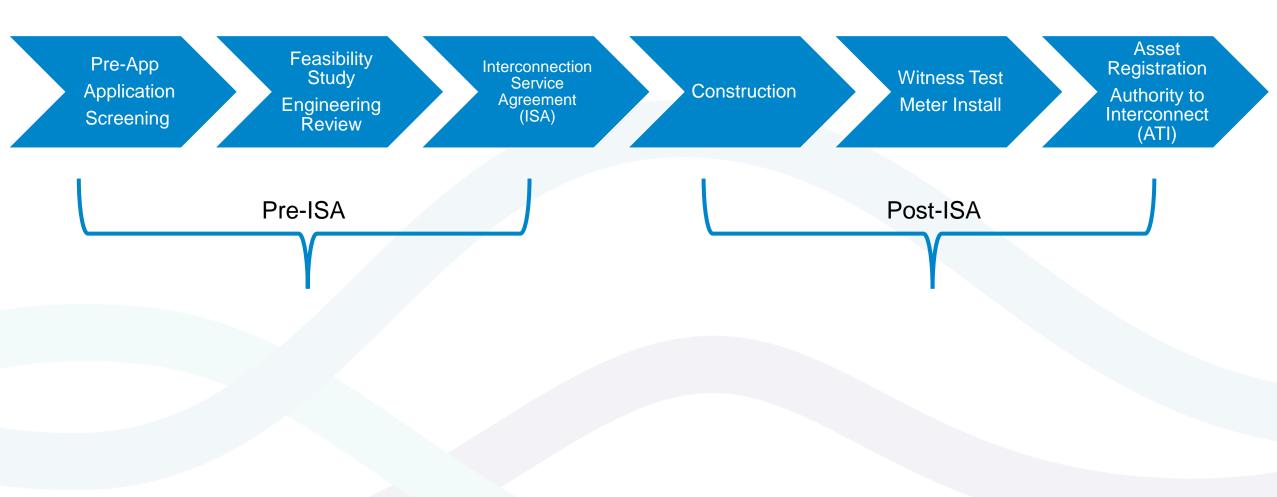
#### Interconnection statutes and tariffs



	Statute	Tariff
Distributed Generation (DG) Interconnection	R.I. Gen. Laws § 39-26.3	Standards for Connecting Distributed Generation: <u>RIPUC 2258 (September 1, 2022)</u>
Renewable Energy Growth	R.I. Gen. Laws § 39-26.6	Renewable Energy Growth Program for Residential and Non- Residential Customers <u>RIPUC 2151-I (April 1, 2022)</u> <u>RIPUC 2152-I (April 1, 2022)</u>
Net Metering	R.I. Gen. Laws § 39-26.4	Net Metering Provision: <u>RIPUC 2257</u> (September 1, 2022) RIPUC 2268 (Pending, Docket 23- 05-EL)

## Interconnection process overview









- All proposed interconnections 250 kW and greater will submit a pre-application
- Applications are on a per-site basis
- Optional feasibility study after <u>application</u> and screening
- Engineering Review
  - Study the system to determine adverse impacts
  - Identify the scope of work and cost associated with interconnection
- Executed Interconnection Service Agreement (ISA)
  - The contract between the Customer & Electric Distribution Utility
  - Identifies the terms and conditions, timeline, scope of work, and payment schedules

## Engineering considerations when applying to connect

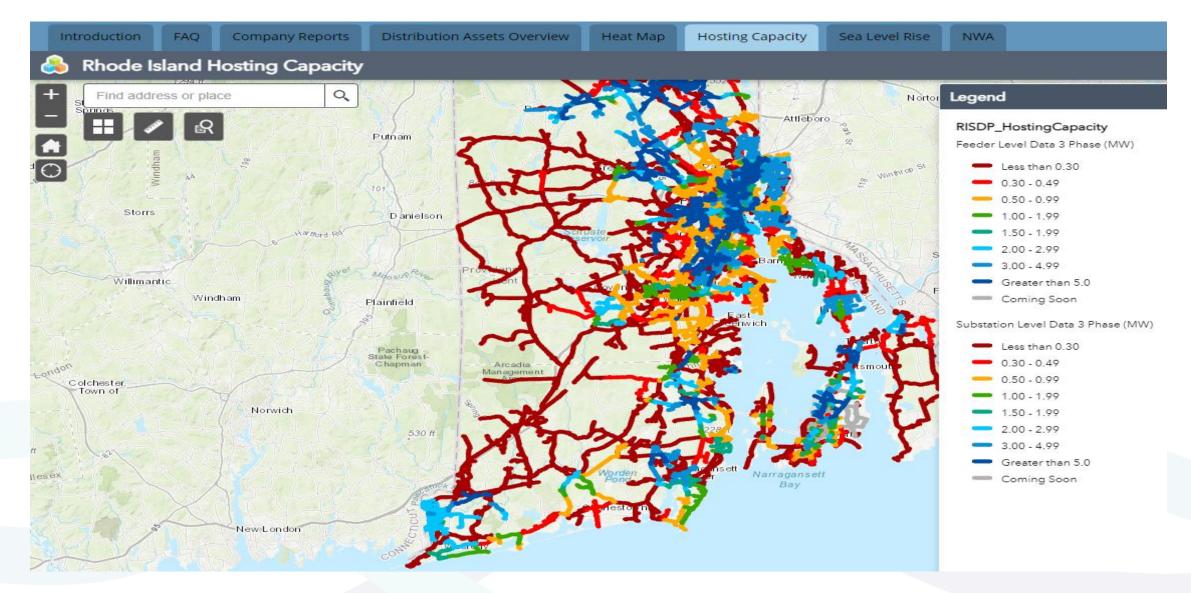


- RI Energy offers an overview of Distributed Generation (DG) hosting capacity via its System Data Portal: <u>https://systemdataportal.nationalgrid.com/RI/</u>
  - This includes hosting capacity for a particular substation and/or feeder capacity shown in a color code by percent available.
- Large influx of DG has rendered some substations and feeders at their limit of hosting capacity. This means any significant sized generator will tip the scale and trigger need for system upgrades when applying for interconnection.
  - These types of feeders are placed on a challenging feeder list.
- A pre-application report (required for 250KW or greater) indicate if interconnecting customer is in the vicinity of a challenging feeder.

# Engineering considerations when applying to connect



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- Construction
  - RIE construction and Customer construction
  - Municipal inspection is required during construction
- At the conclusion of construction prior to interconnection, there is a Witness Test (WT)
  - This ensures that the system is programmed correctly and operates as expected
- Meter will be set after the conclusion of the WT
- All systems 25 kW and above will be registered with ISO-NE
  - Systems 5 MW and above will be fully dispatchable by ISO-NE





Thank You!

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