

# National Renewable Energy Laboratory

Evaluating the Role of Pre-Application  
Reports in Improving Distributed  
Generation Interconnection Processes

Zachary Peterson and Eric Lockhart

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- Report analyzed the effects of pre-application reports on solar PV interconnection applications from four utilities in Massachusetts.
- Focuses on large PV projects (500 kW and larger).

# Pre-Application Report

- Provides technical information about a specific point of interconnection on a utility's distribution system.
- Pre-Application Reports are prepared by a utility before a developer submits an interconnection application.

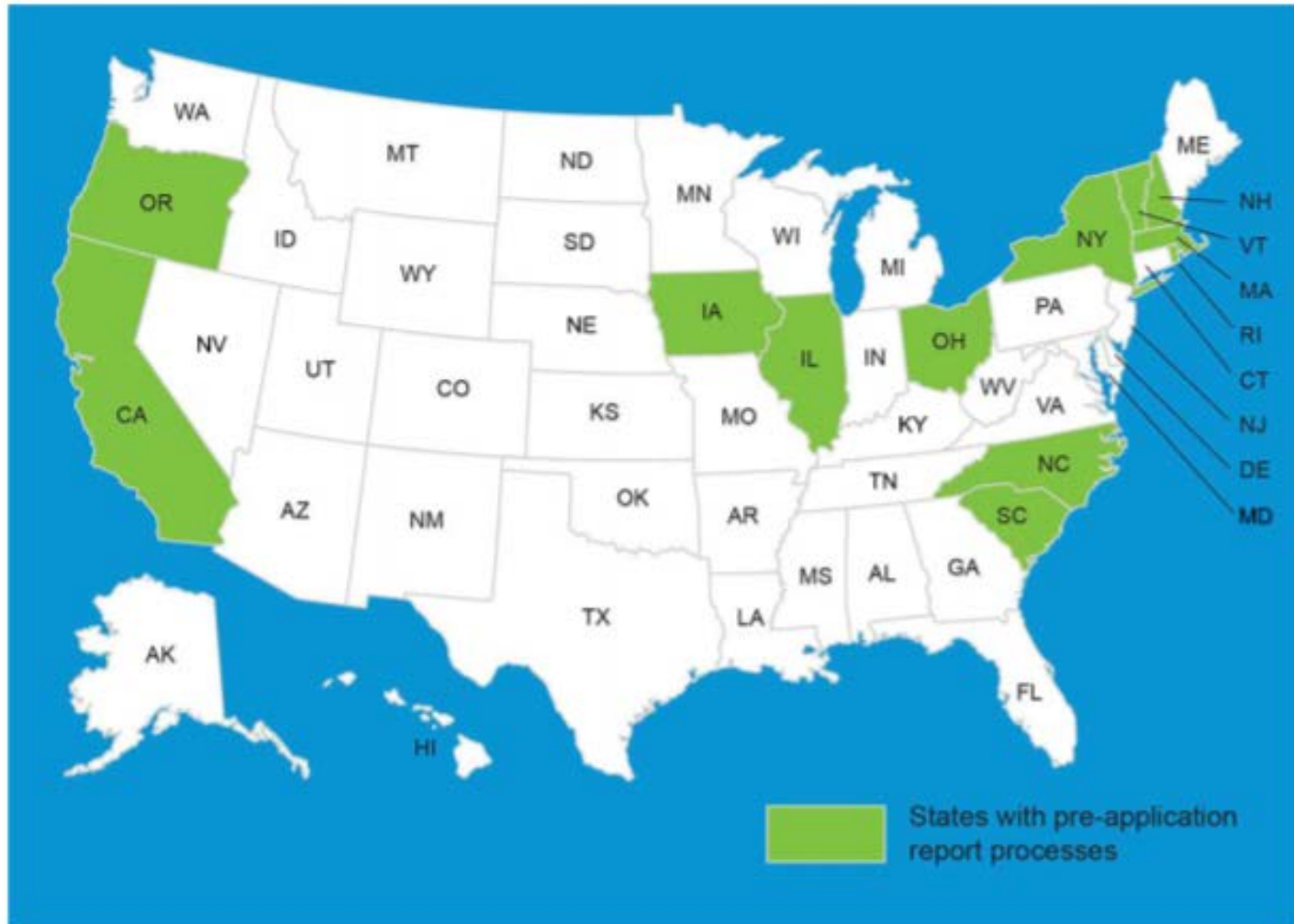


Figure 1. Map of states with formal pre-application processes (as of January 2018)

**Table 1. Alignment with FERC SGIP Pre-Application Report Criteria**

FERC SGIP Pre-App Criterion	CA	IA	IL	NC	OH	SC	VT	RI	NY	MA	NH	OR	No. of States
Existing Generation Capacity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	10
Queued Generation Capacity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	10
Distribution Circuit Voltage	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	10
Number of Phases	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	10
Substation Distribution Voltage	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	8
Total Capacity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	8
Circuit Distance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	8
Peak/Minimum Load Data	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	8
Constraints	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	8
System Configuration	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	7
Protective Devices	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	7
Limiting Conductor Ratings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	7
Available Capacity	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	No	No	5
SGIP Criteria Adopted	13	13	13	12	12	12	11	7	7	6	0	0	

**Table 2. State and Federal Fees and Timelines for Pre-Application Reports**

State	Fee (\$)	Timeline (business days)
CA	300	10
IA	300	20
IL	300	20
MA	0	10
NC	300	10
NH	--	--
NY	750	10
OH	300	10
RI	0	10
VT	300	10
OR	*	--
SC	500	20
FERC	300	20

-- None specified

\* Per OR legislation: "A person requesting information [under section (1)] must reimburse the public utility for the reasonable costs of gathering and copying the requested information."

- Pre-application reports are correlated with an increase in application approval rate.
- Percentage of projects 500 kW and larger being canceled decreased 24%.
- A shift was observed in the review pathways followed for projects 500 kW and larger.

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<https://www.nrel.gov/docs/fy19osti/71765.pdf>