



North Carolina | Interconnection Grade

Interconnection policies specify the processes, timelines, and costs associated with connecting distributed energy resources — like solar and energy storage systems — safely and reliably to the grid. This state’s interconnection grade is based on the following criteria:*

Recommendations

- Incorporate the definition of "export capacity" in the rules and provide more details on acceptable export control methods, including certified Power Control Systems
- Increase the system size limits for both simplified (20 kW Inverter Process) and Fast Track review and base eligibility on export capacity
- Update the penetration screen in initial review to set 90% of minimum load as the default screening threshold (cont.)



Rule Applicability

Facility types and system sizes eligible to interconnect



Updated Standards & Export Provisions

Incorporation of IEEE 1547-2018 and export provisions



Streamlined Review

Use of simplified and expedited screening processes



Initial Review Screens

Technical screens used as part of expedited review



Modifications

Facility and distribution system modifications



Supplemental Review Screens

Technical screens used in supplemental review



Timelines & Efficiency

Timelines specified for review and other processes



Data Sharing & Reporting

Provision of queue, timeline, cost, and site-specific data



Interconnection Costs & Requirements

Fees and other requirements for interconnection



Dispute Resolution

Interconnection-specific processes for resolving disputes

NOTEWORTHY BEST PRACTICES

ENERGY STORAGE

Awarded to states that have included energy storage as an eligible technology in their interconnection rules, incorporated the concept of export capacity, and identified acceptable export control methods.



TRANSPARENCY

Awarded to states that require pre-application reports, detailed screening and study results, itemized upgrade cost estimates, and at least monthly public queue reporting that allows for the tracking of the interconnection process steps.



IEEE 1547-2018

Awarded to states that have incorporated the IEEE 1547-2018 Standard and identified or referenced performance categories as well as voltage and frequency settings.



This section recognizes noteworthy interconnection best practices, from among the evaluation criteria. Badges () are awarded to the states that meet these noteworthy criteria.

Recommendations continued

- Adopt a more defined Supplemental Review process with specified screens, including a penetration screen based on at least 100% of minimum load

*For a detailed summary of all evaluation criteria, please visit FreeingtheGrid.org/Criteria

Freeing the Grid is a joint initiative of the Interstate Renewable Energy Council (IREC) and Vote Solar that grades states on specific policies that help to increase clean energy adoption and access to the grid. The state grades are intended to assist policymakers and other stakeholders with identifying policy best practices for enabling the growth of distributed energy resources (DERs), such as solar and energy storage, and benchmarking their existing policies against those adopted in other states. Between 2007 and 2017, the project team released ten report cards that included state grades for both interconnection and net metering policies.

IREC updated its interconnection scoring criteria in 2023 based on best practices that have emerged in recent years and issued another set of state interconnection grades. This 2026 report card uses that same criteria to grade all 50 U.S. states plus the District of Columbia and Puerto Rico.



For more information, visit FreeingtheGrid.org