



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

# Utah Interconnection Rules

Commissioner Richard Campbell    May 23, 2012



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Utah Interconnection Procedures Step by Step Guide

- Utah Administrative Code Rule R746-312 Electrical Interconnection:
  - <http://www.rules.utah.gov/publicat/code/r746/r746-312.htm#T2>
- Table of Contents
  - R746-312-1. Authority
  - R746-312-2. Definitions
  - R746-312-3. Purpose, Scope, Applicability and Exceptions
  - R746-312-4. Installation, Operation, Maintenance, Testing and Modification of Generating and Interconnection Facilities
  - R746-312-5. Certifications
  - R746-312-6. General Interconnection Request Provisions
  - R746-312-7. Level 1 and Level 2 Interconnection Review Screens
  - R746-312-8. Level 1 Interconnection Review
  - R746-312-9. Level 2 Interconnection Review
  - R746-312-10. Level 3 Interconnection Review
  - R746-312-11. Interconnection Metering
  - R746-312-12. Interconnection Monitoring
  - R746-312-13. Interconnection Fees and Charges
  - R746-312-14. Requirements After Interconnection Approval
  - R746-312-15. Aggregation of Meters for Net Metering Interconnection
  - R746-312-16. Public Utility Maps, Records and Reports
  - R746-312-17. Interconnection-related Agreements



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Utah Electrical Interconnection Rule – General Requirements

- Interconnection requests must be submitted using the public utility's standard forms and must be accompanied by the required processing fee.
- Confidential information must be protected.
- Generating facilities associated with the interconnection must be inspected by the jurisdictional local building code official.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Utah Electrical Interconnection Rule – General Requirements

- Requires interconnection customers to install, operate and maintain generating and interconnection facilities in compliance with the IEEE standards, including IEEE 1547, “*Standard for Interconnecting Distributed Resources with Electric Power Systems.*”
- For good cause shown, the Commission may waive or modify any provision of the Electrical Interconnection rule.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Utah Electrical Interconnection Rules – Levels of Review

- Determine Level of Interconnection Review:
  - Level 1 Interconnection Review: an interconnection review process applicable to an inverter-based facility having a *generation capacity of 25 kilowatts or less*.
  - Level 2 Interconnection Review: an interconnection review process applicable to a facility having a *generation capacity of 2 megawatts or less and which does not qualify for or fails to meet Level 1 interconnection review requirements*.
  - Level 3 Interconnection Review: an interconnection review process applicable to a facility having a *generation capacity of 20 megawatts or less and which does not qualify for or fails to meet Level 1 or Level 2 interconnection review requirements*.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Utah Electrical Interconnection Rule – Fees and Charges

- Level 1: no charge.
- Level 2: may charge fees of up to \$50.00 plus \$1.00 per kilowatt of the generating facility's capacity for review, plus the reasonable cost of any required minor modifications to the electric distribution system or additional reviews. Costs for such minor modifications or additional review will be based on the public utility's non-binding, good faith estimates and the ultimate actual installed costs. Costs for engineering work done as part of any additional review or studies shall not exceed \$100.00 per hour which may be adjusted for inflation.
- Level 3: may charge fees of up to \$100.00 plus \$2.00 per kilowatt of the generating facility's capacity, as well as charges for actual time spent on any required impact or facilities studies. Costs for engineering work done as part of a feasibility, impact, or facilities study shall not exceed \$100.00 per hour which may be adjusted for inflation.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Examples of Interconnection Screens

- For interconnection of a proposed generating facility to a radial distribution circuit, the aggregate generation on the distribution circuit, including the proposed generating facility, must not exceed 15 percent of the distribution circuit's total highest annual peak load, as measured at the substation.
- The proposed generating facility, in aggregation with other generation on the distribution circuit to which the proposed generating facility will interconnect, must not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.





**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Examples of Interconnection Screens

- If the proposed generating facility is to be connected to a single-phase shared secondary, the aggregate generation capacity connected to the shared secondary, including the proposed generating facility, must not exceed 20 kilowatts.
- If a proposed single-phase generating facility is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the proposed generating facility must not create a current imbalance between the two sides of the 240 volt service of more than 20 percent of nameplate rating of the service transformer.
- No construction of facilities by the public utility on its own system shall be required to accommodate the generating facility.





**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Levels 1 through 3 – Preliminary Review

Step 1: Interconnection Customer files Interconnection Request on the public utility's standard form and the public utility date and time stamps the Request upon receipt.

Step 2: Within 3 days of receipt, public utility acknowledges receipt of Request to Customer.

Step 3: Within 10 days of receipt, public utility evaluates Request and notifies Customer whether or not it is complete.

- If yes, proceed to Step 4.
- If no, return Application to Customer indicating deficiencies. Customer then has 10 days to submit missing information or to request an extension of time. If no response is provided, Request is deemed withdrawn.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Level 1 Specific Review

- Step 4: Within 15 days after issuing notification of completeness public utility completes review and notifies Customer either:
- a. generating facility meets all applicable screens/criteria and interconnection is approved; or
  - b. generating facility fails to meet one or more screens/criteria. Customer may resubmit Request under Level 2 or Level 3 Review process.
- Step 5: If approved, either along with or within 5 business days after notifying Customer that the Request has been approved, a public utility must provide the procedures, requirements, and associated forms, including any required standard form interconnection agreement, for final authorization of the interconnection.



**USAID**  
FROM THE AMERICAN PEOPLE



National  
Association of  
Regulatory  
Utility  
Commissioners

## Level 1 Specific Review

Step 6: If approved, Customer installs generating resource, notifies public utility of anticipated start date at least 10 business days prior to starting operations, and provides required documentation.

Step 7: Within 10 business days of receipt of all required documentation, public utility must conduct any company-require inspection or witness test, set the new meter, approve the interconnection and provide written notification authorization.

Step 8: If witness test is not acceptable Customer has 30 days to resolve deficiencies.