



Generating Facility Standard Process
Interconnection Application

Send the completed Interconnection Application to:

Unitil
Attn. Generator Interconnections
6 Liberty Lane West
Hampton, NH 03842

Tel: (603) 773-6480
Email: generator@unitil.com

The following documentation is required with the completed application:

- Documentation that the applicant has control for the property on which the proposed facility is located. The documentation may include proof of ownership, leaseholder agreement, right to develop, or option to acquire the site.
 - Site documentation describing and detailing the location of power equipment and protective interface equipment on property.
 - Electrical one-line and three-line diagrams showing the configuration of the facility, all current and potential circuits, and schematic diagrams of protection and control schemes. All electrical drawings must be signed and stamped by a licensed Professional Engineer.
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Application Information

Has a Pre-application request with fee been submitted? Yes ____ No ____
Pre-Application Number _____

Is this Interconnection request for:
An expansion or modification of an existing facility? Yes ____ No ____
If yes, please describe:

Planning to Export Power? Yes ____ No ____
Net Metering: Yes ____ No ____
Qualified Facility (QF) Yes ____ No ____
Third Party Power Contract Yes ____ No ____
If QF or third party sale, anticipated power purchaser(s):

Who is the existing Energy Service Provider?

Provider: _____
Telephone # _____



Contact Information

Date Prepared _____

Legal Name and address of Interconnecting Customer

Company Name: _____ Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Alternative Contact Information (if different from Applicant)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Generating Facility Information

Location (if different from above): _____

Customer Name: _____ Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Electric Service Company: _____ Account Number (if available): _____

Meter Number (if available): _____

Total System Peak AC Rating (kW): _____

(This is the sum of all Peak AC Nameplate Ratings.)

Type of Generating Unit:

Synchronous _____ Induction _____ Inverter _____

Manufacturer: _____ Model: _____

(If there are various multiple generators with various models, please specify in the **Generating Facility Technical Detail** section on following page(s))



Nameplate Rating (Peak AC):

Real Power: _____(kW) Reactive Power: _____ (kVAr)

at _____ (Volts) Single _____ or Three _____ Phase

Prime Mover: Fuel Cell___ Recip Engine___ Gas Turb___ Steam Turb___ Microturbine___
PV___

Other _____(Please Specify)

Energy Source: Solar___ Wind___ Hydro___ Diesel___ Natural Gas___ Fuel Oil_____ (Specify)

Other _____(Please Specify)

UL1741 Listed? Yes___ No ___

Est. Install Date: _____ Est. In-Service Date: _____ Agreement Needed By: _____

Application Process

I hereby certify that, to the best of my knowledge, all of the information provided in this application is true:

Customer Signature: _____ Title: _____ Date: _____



Generating Facility Technical Detail

List components of the Generating Facility that are currently certified and/or listed to national standards

	Equipment Type	Manufacturer	Model	National Standard
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

Total Number of Generating Units in Facility? _____

Generator Unit Power Factor Rating: _____

Max Adjustable Leading Power Factor? _____ Max Adjustable Lagging Power Factor? _____

Generator Characteristic Data (for all inverter-based machines)

Max Design Fault Contribution Current? _____ Instantaneous _____ or RMS _____

Harmonics Characteristics: _____

Start-up power requirements: _____

Generator Characteristic Data (for all rotating machines)

Rotating Frequency: _____ (rpm) Neutral

Grounding Resistor (If Applicable): _____

Additional Information for Synchronous Generating Units

Synchronous Reactance, X_d : _____ (PU) Transient Reactance, $X'd$: _____ (PU)

Subtransient Reactance, X''_d : _____ (PU) Neg Sequence Reactance, X_2 : _____ (PU)

Zero Sequence Reactance, X_0 : _____ (PU) KVA Base: _____

Field Voltage: _____ (Volts) Field Current: _____ (Amps)

Additional information for Induction Generating Units

Rotor Resistance, R_r : _____ Stator Resistance, R_s : _____

Rotor Reactance, X_r : _____ Stator Reactance, X_s : _____

Magnetizing Reactance, X_m : _____ Short Circuit Reactance, X_d'' : _____

Exciting Current: _____ Temperature Rise: _____



Frame Size: _____

Total Rotating Inertia, H: _____ Per Unit on KVA Base: _____

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Additional information for Induction Generating Units that are started by motoring

Motoring Power: _____ (kW) Design Letter: _____

Interconnection Facilities Technical Detail

Will a transformer be used between the generator and the point of interconnection? Yes ___
No _____

Will the transformer be provided by Customer? Yes ___ No ___

Transformer Data (if applicable, for Customer-Owned Transformer):

Nameplate Rating: _____ (kVA) Single ___ or Three ___ Phase

Transformer Impedance: _____ (%) on a _____ KVA Base

If Three Phase:

Transformer Primary: _____ (Volts) ___ Delta ___ Wye ___ Wye Grounded ___ Other

Transformer Secondary: _____ (Volts) ___ Delta ___ Wye
___ Wye Grounded ___ Other

Transformer Fuse Data (if applicable, for Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____ Load Rating: _____ Interrupting Rating: _____ Trip Speed: _____
(Amps) (Amps) (Cycles)

Interconnection Protective Relays (if applicable):

(If microprocessor-controlled)

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____



(If discrete components)

(Enclose copy of any proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

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Current Transformer Data (if applicable):

(Enclose copy of Manufacturer's Excitation & Ratio Correction Curves)

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (if applicable):

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____