**Contact Information (TYPE or PRINT):** Date Prepared:

Legal Name and Address of Interconnecting Customer

Interconnecting Customer:      Contact Person:

Mailing Address:

City:      State:      Zip Code:

Telephone (Daytime):      (Evening):

Facsimile Number:       E-Mail Address:

Ownership Information (include % ownership by any electric utility):

Site Control: Does the Interconnecting Customer have site control? [ ]  Yes [ ]  No

Confidentiality Statement: “I agree to allow information regarding the processing of my application (without my name and address) to be reviewed by the Massachusetts DG Working Group that is exploring ways to further expedite future interconnections.” [ ]  Yes [ ]  No

Group Study Agreement: “I understand and agree if my project becomes part of a Group Study, the Company is authorized to share my contact information and project details with other parties that are also involved in the Group Study.” [ ]  Yes [ ]  No

Host Retail Customer Contact Information (complete any that are different than Interconnecting Customer information above):

Retail Customer:       Contact Person:

E-Mail Address:       Telephone:

Landowner Name (if neither Interconnecting Customer nor Customer):

Landowner email:       Landover telephone:

Landowner Mailing Address:

City:       State:       Zip Code:

Alternative Contact Information (e.g., system installation contractor or coordinating company, if appropriate):

Company Name:       Contact Person:

Mailing Address:

City:       State:       Zip Code:

Telephone (Daytime):       (Evening):

Facsimile Number:       E-Mail Address:

Electrical Contractor Contact Information (if appropriate):

Name:       E-mail Address:

Mailing Address:       Telephone:

City:       State:       Zip Code:

Interconnection Seminars: “I have attended one of the utility-hosted Interconnection Seminars.” (Recommended) [ ]  Yes [ ]  No

Interconnection Tariff: “I have reviewed the entire MDPU 1248 Standards for Interconnection of DG.” (Recommended) [ ]  Yes [ ]  No

**Facility Information (TYPE or PRINT):**

*Please provide all Pre-Application Reports (either mandatory or optional as per MDPU 1248) as attachments.*

Address of Facility:

City:       State:       Zip Code:

Single Parcel: Will the Facility be constructed on a single parcel of land? [ ]  Yes [ ]  No

Authorized/Proposed generation capacity already exists (check all that apply):

 [ ]  On Current Account [ ]  On Same Legal Parcel of Land [ ]  In Same Building/Structure

 If any apply, include existing generation capacity on design diagrams, and provide Application Number(s):

Electric Service Company: National Grid Account Number:       Meter Number:

Work Request Number (For Upgrades or New Service):       MTC ID:

System Size Capacity: Nominal       (kWac)       (kVA) Maximum      (kWac)       (kVA)

 For Solar PV provide the DC-STC rating:       (kWDC)

Prime Mover: [ ]  Photovoltaic [ ]  Reciprocating Engine [ ]  Fuel Cell [ ]  Turbine [ ]  Other:

Energy Source: [ ]  Solar [ ]  Wind [ ]  Hydro [ ]  Diesel [ ]  Natural Gas [ ]  Fuel Oil [ ]  Other:

IEEE 1547.1 (UL 1741) Listed? [ ]  Yes [ ]  No

1. Generating Unit Type 1

 Manufacturer:       Model Name and Number:       Quantity:

 AC Rating:

Nominal:       (kw) :       (kVA) :       (AC Volts)

Maximum:       (kW)       (kVA)       (AC Volts) [ ]  Single or [ ]  Three Phase

2) Generating Unit Type 2 (if applicable)

 Manufacturer:       Model Name and Number:       Quantity:

 AC Rating:

Nominal:       (kw) :       (kVA) :       (AC Volts)

Maximum:       (kW)       (kVA)       (AC Volts) [ ]  Single or [ ]  Three Phase

3) Generating Unit Type 3 (if applicable)

 Manufacturer:       Model Name and Number:       Quantity:

 AC Rating:

Nominal:       (kw) :       (kVA) :       (AC Volts)

Maximum:       (kW)       (kVA)       (AC Volts) [ ]  Single or [ ]  Three Phase

Does this project need an air quality permit from the DEP? [ ]  Yes [ ]  No [ ]  Not Sure

 If “Yes”, have you applied for it? [ ]  Yes [ ]  No

Planning to Export Power? [ ]  Yes [ ]  No Is this a Cogeneration Facility? [ ]  Yes [ ]  No

Anticipated Export Power Purchaser:

Export Form? [ ]  Qualifying Facility (QF) [ ]  Net Metering [ ]  Other (explain):

Estimated Install Date:       Estimated. In-Service Date:

Agreement Need By:

*If net metering, please refer to Schedule Z of the Standards for Interconnection of Distributed Generation. Please note that if under the public cap, all off-takers must be a Municipality or other Governmental Entity (as defined in 220 C.M.R. 18.02) and therefore be certified by the DPU.*

**Application Process**

Interconnecting Customer Signature:

“I am opting to forego the Expedited Process. Please review this application under the Standard Process.” [ ]  Yes [ ]  No

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

Signature:       Title:       Date:

*Please attach any documentation provided by the inverter manufacturer describing the inverter’s UL 1741 listing.*

All Application Materials Received (For Company use only):

The information provided in this application is complete, all attachments and supplemental application materials have been received, and the application may proceed to the initial/screening review stage of the interconnection process:

Signature:       Title:       Date:

Application ID number:

**Generating Facility Technical Detail**

Information on components of the generating facility that are currently Listed

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 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, Xd:       (PU) Transient Reactance, X’d:       (PU)

Subtransient Reactance, X”d:       (PU) Neg Sequence Reactance, X2:       (PU)

Zero Sequence Reactance, Xo:       (PU) kVA Base:       (PU)

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

Additional information for Induction Generating Units

Rotor Resistance, Rr:       Stator Resistance, Rs:

Rotor Reactance, Xr:       Stator Reactance, Xs:

Magnetizing Reactance, Xm:       Short Circuit Reactance, Xd”:

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 Equipment Technical Detail** Date:

Will a transformer be used between the generator and the point of interconnection? [ ]  Yes [ ]  No

Will the transformer be provided by Interconnecting Customer? [ ]  Yes [ ]  No

Transformer Data (if applicable, for Interconnecting 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 Interconnecting 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:       (Amps)

Interrupting Rating:       Trip Speed:       (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:

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

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

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

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

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:

**General Technical Details**

Submit all of the customer’s Interconnection Application materials and proposed design diagrams using the following process:

1. Email the following materials to National Grid at Distributed.Generation@nationalgrid.com:

* 1. [ ]  P.E.-stamped One-Line Diagram (and [ ]  Three-Line Diagram if applicable), including:

* + 1. [ ]  Schematics for all (internal & redundant) protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable)

* 1. [ ]  Site Plan, which indicates the precise physical location of the proposed:

* + 1. [ ]  Generating Facility

* + 1. [ ]  AC Utility Disconnect Switch

* + 1. [ ]  All meters (utility- and customer-owned)

* + 1. [ ]  Related interconnection equipment

* 1. [ ]  Technical Specifications (pdf files only)

* 1. [ ]  Exhibit C (this form) – completed and signed (available on the website)

* 1. [ ]  Legal Information Document – completed (available on the website)

* 1. [ ]  Schedule Z (net metering only) – completed, initialed, and signed (available on the website)

* 1. [ ]  Copy of electric bill (if applicable)

* 1. [ ]  Copy of any Pre-Application Reports related to this application (if applicable)

* 1. [ ]  Copy of Interconnection Application fee check

* 1. [ ]  Any other information pertinent to this Interconnection Application (if applicable)
1. Mail the [ ]  Interconnection Application fee check and the [ ]  first two pages of the signed copy of this Interconnection Application form to:

National Grid
Attn: Distributed Generation
40 Sylvan Rd
Waltham, MA 02451

*Note: The Schedule Z may be updated as needed at any point prior to the Authorization to Interconnect.*

Refer to National Grid’s Distributed Generation website for more detailed instructions:

Massachusetts:

 Residential: <http://www.nationalgridus.com/masselectric/home/energyeff/distributed_generation.asp>

 Commercial: <http://www.nationalgridus.com/masselectric/business/energyeff/distributed_generation.asp>

Nantucket:

 Residential: <http://www.nationalgridus.com/nantucket/home/energyeff/distributed_generation.asp>

 Commercial: <http://www.nationalgridus.com/nantucket/business/energyeff/distributed_generation.asp>