**Section 466.APPENDIX C Levels 2 to 4 Application**

**Level 2, Level 3 & Level 4**

**Interconnection Request Application Form**

**(Greater than 25 kW to 10 MVA or less)**

**Interconnection Customer Contact Information**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name: | |  | | | | | | | | |
| Mailing Address: | | |  | | | | | | | |
| City: |  | | | | | State: |  | | Zip Code: |  |
| Telephone (Daytime): | | | | |  | (Evening): | |  | | |
| Facsimile Number: | | | |  | | E-Mail Address: | | |  | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Alternative Contact Information (if different from Customer Contact Information) | | | | | | | | | | |
| Name: | |  | | | | | | | | |
| Mailing Address: | | |  | | | | | | | |
| City: |  | | | | | State: |  | | Zip Code: |  |
| Telephone (Daytime): | | | | |  | (Evening): | |  | | |
| Facsimile Number: | | | |  | | E-Mail Address: | | |  | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Facility Address (if different from above): | | | |  | | | | | | | |
| City: |  | | | | State: | |  | | | Zip Code: |  |
| Electric Distribution Company (EDC) Serving Facility Site: | | | | | | | |  | | | |
| Electric Supplier (if different from EDC): | | |  | | | | | | | | |
| Account Number of Facility Site (existing EDC customers): | | | | | | | |  | | | |
| Inverter Manufacturer: | |  | | | | Model: | | |  | | |

**Equipment Contractor**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name: | |  | | | | | | | | |
| Mailing Address: | | |  | | | | | | | |
| City: |  | | | | | State: |  | | Zip Code: |  |
| Telephone (Daytime): | | | | |  | (Evening): | |  | | |
| Facsimile Number: | | | |  | | E-Mail Address: | | |  | |

**Electrical Contractor** (if different from Equipment Contractor)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name: | |  | | | | | | | | | |
| Mailing Address: | | | |  | | | | | | | |
| City: |  | | | | | | State: |  | | Zip Code: |  |
| Telephone (Daytime): | | | | | |  | (Evening): | |  | | |
| Facsimile Number: | | | | |  | | E-Mail Address: | | |  | |
| License Number: | | |  | | | | | | | | |

**Electric Service Information for Customer Facility Where Generator Will Be Interconnected**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Capacity: |  | | | (Amps) | | | Voltage: | |  | | (Volts) |
| Type of Service: | | Single-Phase | | | | | | Three-Phase | | | |
| If Three-Phase Transformer, Indicate Type: | | | | | | | | | | | |
| Primary Winding | | | Wye | | Delta | | | | | | |
| Secondary Winding | | | Wye | | Delta | | | | | | |
| Transformer Size: | |  | | | | Impedance: | | | |  | |

**Intent of Generation**

Offset Load (Unit will operate in parallel, but will not export power to EDC)

Net Meter (Unit will operate in parallel and will export power pursuant to Illinois Net Metering or other filed tariffs)

Wholesale Market Transaction (Unit will operate in parallel and participate in PJM or MISO markets pursuant to a PJM Wholesale Market Participation Agreement or MISO equivalent)

Back-up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds)

Note: Backup units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.

**Generator & Prime Mover Information**

|  |  |  |
| --- | --- | --- |
| ENERGY SOURCE (Hydro, Wind, Solar, Process Byproduct, Biomass, Oil, Natural Gas, Coal, Storage, etc.): | | |
| ENERGY CONVERTER TYPE (Wind Turbine, Photovoltaic Cell, Fuel Cell, Steam Turbine, etc.): | | |
| NAMEPLATE CAPACITY:  kW or  kVA | NUMBER OF UNITS: | TOTAL EXPORT CAPACITY:  kW or  kVA |
| GENERATOR TYPE (Check one):  Induction  Inverter  Synchronous  Other | | |

**Requested Procedure Under Which to Evaluate Interconnection Request1**

Please indicate below which review procedure applies to the interconnection request. The review procedure used is subject to confirmation by the EDC.

**Level 2** – Lab-certified interconnection equipment with an aggregate electric nameplate capacity not exceeding the specifications in Section 466.90(b)(2). Lab-certified is defined in Section 466.20. (Application fee is $100 plus $1.00 per kVA.)

**Level 3** – Distributed energy resource facility does not export power. Nameplate capacity rating is less than or equal to 50 kW if connecting to area network or less than or equal to 10 MW if connecting to a radial distribution feeder. (Application fee amount is $500 plus $2.00 per kVA.)

**Level 4** – Nameplate capacity rating is less than or equal to 10 MVA and the distributed energy resource facility does not qualify for a Level 1, Level 2 or Level 3 review, or the distributed energy resource facility has been reviewed but not approved under a Level 1, Level 2 or Level 3 review. (Application fee amount is $1,000 plus $2.00 per kVA, to be applied toward any subsequent studies related to this application.)

1 **Note:** Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to 83 Ill. Adm. Code 466, Electric Interconnection of Distributed Energy Resource Facilities.

**Distributed Energy Resource Facility Information**

**Commissioning Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**List interconnection components/systems to be used in the DER facility that are lab-certified.**

|  |  |  |
| --- | --- | --- |
| Component/System | | NRTL Providing Label & Listing |
| 1. |  | |
| 2. |  | |
| 3. |  | |
| 4. |  | |
| 5. |  | |

Please provide copies of manufacturer brochures or technical specifications.

**Energy Production Equipment/Inverter Information:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Synchronous | | | Induction | | Inverter | | | | | | Other | | |  | |
| Rating: |  | | | kW | | | | | Rating: | | |  | | | kVA |
| Rated Voltage: | |  | | | | | Volts | | | | | | | | |
| Rated Current: | |  | | | | | Amps | | | | | | | | |
| System Type Tested (Total System): | | | | | |  | | Yes | |  | | | No; attach product literature | | |

**For Synchronous Machines:**

**Note: Contact EDC to determine if all the information requested in this section is required for the proposed DER facility.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manufacturer: | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model No.: | |  | | | | | | | | | | | | | | Version No.: | | | | |  | | | | | | | |
| Submit copies of the Saturation Curve and the Vee Curve | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salient | | | | Non-Salient | | | | | | | | | | | | | | | | | | | | | | | | |
| Torque: |  | | | lb/ft | | Rated RPM: | | | | |  | | | | | | | | Field Amperes: | | | |  | | | at rated generator | | |
| voltage and current and | | | | | |  | | | | | | % PF over-excited | | | | | | | | | | | | | | | | |
| Type of Exciter: | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |
| Output Power of Exciter: | | | | | | |  | | | | | | | | | | | | | | | | | | | | | |
| Type of Voltage Regulator: | | | | | | | |  | | | | | | | | | | | | | | | | | | | Locked Rotor | |
| Current: |  | | | | | | | | | Amps | | | | Synchronous Speed: | | | | | | | |  | | | | | | RPM |
| Winding Connection: | | | | |  | | | | | | | | Min. Operating Freq./Time: | | | | | | | | | | | |  | | | |
| Generator Connection: | | | | | | | | Delta | | | | | | | Wye | | | | | | Wye Grounded | | | | | | | |
| Direct-axis Synchronous Reactance: | | | | | | | | | | | | | (Xd) | | |  | | | | ohms | | | | | | | | |
| Direct-axis Transient Reactance: | | | | | | | | | | | | | (X'd) | | |  | | | | ohms | | | | | | | | |
| Direct-axis Sub-transient Reactance: | | | | | | | | | | | | | (X''d) | | |  | | | | ohms | | | | | | | | |
| Negative Sequence Reactance: | | | | | | | | |  | | | | | | | | | ohms | | | | | | | | | | |
| Zero Sequence Reactance: | | | | | | |  | | | | | | | | | | | ohms | | | | | | | | | | |
| Neutral Impedance or Grounding Resister (if any): | | | | | | | | | | | | | | | | |  | | | | | | | ohms | | | | |

**For Induction Machines:**

**Note: Contact EDC to determine if all the information requested in this section is required for the proposed DER facility.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manufacturer: | | |  | | | | | | | | | | | | | | | | | | | | |  |
| Model No.: |  | | | | | | | | | | Version No.: | | | | | |  | | | | | | |  |
| Locked Rotor Current: | | | |  | | | | | | | Amps | | | | | | | | | | | | | |
| Rotor Resistance (Rr): | | | |  | | | | ohms | | | Exciting Current: | | | | | | |  | | | | | Amps | |
| Rotor Reactance (Xr): | | | |  | | | | ohms | | | Reactive Power Required: | | | | | | | | | |  | | |  |
| Magnetizing Reactance (Xm): | | | | | |  | | | | | | ohms | | |  | | | VARs (No Load) | | | | | | |
| Stator Resistance (Rs): | | | |  | | | | | ohms | | | | | | |  | | | VARs (Full Load) | | | | | |
| Stator Reactance (Xs): | | | |  | | | | | ohms | | | | | | | | | | | | | | | |
| Short Circuit Reactance (X"d): | | | | | | |  | | | | | | ohms | | | | | | | | | | | |
| Phases: | Single  Three-Phase | | | | | | | | | | | | | |  | | | | | | | | | |
| Frame Size: | |  | | | Design Letter: | | | | |  | | | | Temp. Rise: | | | | | |  | | °C. | | |

**Limited Export and Non-Export Controls Information**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manufacturer: |  | | | | | | | | | | |
|  |  | | | | | | | | | | |
| Model Number: |  | | | | M | | | |  | | |
|  | | | |  | | | |  | | | |
| Limited Export or Non-Export? | | | | Limited Export | | | | Non-Export | | | |
|  | | | |  | | | |  | | | |
| Control Type: |  | Reverse Power Protection | | | | |  | | | Minimum Power Protection | |
|  | Relative Distributed Energy Resource Rating | | | | |  | | | Configured Power Rating | |
|  | Limited Export Power Control Systems | | | | |  | | | Limited Export using mutually agreed-upon means | |
|  |  | Directional Power Protection | | | | |  | | | |
| Export Capacity Value (in kW): | | |  | | | | | | | | |
| Control Power Setting: | | | |  | | | | | | | |
| Control Power Time Delay (if any): | | | | | |  | | | | | |

**Additional Information For Inverter-Based Facilities**

**Inverter Information:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manufacturer: | | |  | | | | | | | | | Model: |  | | |  |
| Type: | Forced Commutated | | | | | | | | Line Commutated | | | | | | | |
| Rated Output: | |  | | | | | | Watts | |  | | | | Volts | | |
| Efficiency: |  | | | | % | Power Factor: | | | | |  | | | | % | |
| Inverter UL 1741 Listed: | | | | Yes | | | No | | | | | | | | | |

**DC Source / Prime Mover:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Rating: |  | | kW | Rating: | | | |  | | kVA | |
| Rated Voltage: | |  | | | Volts | | | | | | |
| Open Circuit Voltage (if applicable): | | | | | | |  | | | | Volts |
| Rated Current: | |  | | | | Amps | | | | | |
| Short Circuit Current (if applicable): | | | | | | |  | | Amps | | |

**Other Facility Information:**

One Line Diagram attached:  Yes

Plot Plan attached:  Yes

**Battery Storage Facility Information (If Applicable)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Do the batteries share an inverter with a renewable energy system? | | | | | | | | ☐ Yes | ☐ No | | |
| Does the applicant intend to have the batteries charged by the distribution grid? | | | | | | | | | | ☐ Yes | ☐ No |
| System Manufacturer: | | |  | | | | | | | | |
| Model: |  | | | | | | | | | | |
| Battery Type: | |  | | | | | | | | | |
| Battery Charge/Discharge Rating (kW AC): | | | | | |  | | | | | |
| Maximum Battery Charge/Discharge Rate (kW AC per second): | | | | | | |  | | | | |
| Battery Energy Capacity (kWh): | | | | |  | | | | | | |
| Power Factor Settings Range: | | | |  | | | | | | | |

**Battery Storage Inverter Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Energy System  Manufacturer: |  | Model: |  | Type: ☐ Forced ☐ Commutated |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Line Commutated Rated Output | Watts: |  | Volts: |  | Efficiency: | \_\_\_\_ % | Power Factor: | \_\_\_\_ % |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Inverter IEEE 1547 / UL 1741 Listed: | | | | | | | ☐ Yes | | | | ☐ No | | | | | | |
| Number of Inverters: | | |  | | | | | | Total Capacity: | | | | | kW | |  | |
| DC Source / Prime Mover: | | | |  | | | | | | - Rating: | |  | | | kW Rating: | |  |
| kVA Rated Voltage: | | Volts | | | | | |  | | | | | | | | | |
| Open Circuit Voltage (If Applicable): | | | | | | Volts | | | | | | |  | | | | |
| Rated Current: | Amps | | | |  | | | | | | | | | | | | |

**Battery Operational Information**

Backup – allows for partial or whole home transition to off-grid during a grid outage. ☐ Yes ☐ No

Solar Self-Powered – the battery will charge from the renewable energy source during normal operation and discharge to serve loads behind your meter. ☐ Yes ☐ No

Solar Non-Export – limits the export of energy to the grid to zero for both the battery and inverter, even if the battery system is fully charged and there is excess renewable source energy. ☐ Yes ☐ No

Time-Based Control (sometimes called time-of-use or TOU mode) – the battery charges during off-peak hours and discharges to serve onsite loads during on-peak hours. ☐ Yes ☐ No

|  |  |  |
| --- | --- | --- |
| Describe any other intended operation of the battery: | |  |
|  |  | |

**Customer Signature**

I hereby certify that all of the information provided in this Interconnection Request Application Form is true.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Applicant Signature: | |  | | |
| Title: |  | | Date: |  |

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application:

Amount: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**EDC Acknowledgement**

Receipt of the application fee is acknowledged and this interconnection request is complete.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| EDC Signature: |  | | Date: | |  |
| Printed Name: |  | Title: | |  | |

(Source: Amended at 46 Ill. Reg. 9666, effective May 26, 2022)