


# Generator Interconnection Application

Form Subtitle (Optional) 

## Applicant Information

### Customer/Applicant Contact Information

Name \*

First	Last
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Company


Address \*

City		Zip Code
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Email \*

Phone \*

Parent Company \* 

Project Name \* 

Level \* 

Pre-Application Project Number \*

If the applied equipment is not certified, the project will be considered as a level 3. If this is the case, please select level 3.

Please note that solar projects under this level are not eligible for Rider 18/DG Tariff.

Generator Interconnection Requirements:

Projects between 150 and 550 kW

Generator Interconnection Requirements  
Projects between 550 kW and 1 MW

Generator Interconnection Requirements  
Projects greater than 1 MW

A three-line diagram indicating relay protection scheme will be required for projects greater than 150 kVA. See attachment section.

Are you applying for Rider 18/DG Tariff program? \* ?

Certain rate categories are not available under Rider 18/DG Tariff. These include but are not limited to "D1-A", "D1-B", "D3.1", "D12". Please call 800-482-8720 and select option #4 to discuss your rate options.

Mode of Operation \* ?

Note: Changing mode of operation once a project has been submitted will require a new application to be submitted.

Select the distribution/ sub-transmission voltage level the project will connect too \*

Description of Service \* ?

New Facility : Reference Data ?

New Facility : Square Footage ?

Are you applying under PURPA? \* ?

Project is in MISO queue

MISO Queue Number ?

DTE's distribution system has been identified as an affected system. [?](#)

For the "DTE Service Account Number" and "Meter Number", please do not include any letters or spaces. Examples:  
DTE Account number as shown on DTE bill: 9200 012 3456 7

Entry into PowerClerk application: 920001234567

DTE meter number as shown on DTE bill: 7000000 20

Entry into PowerClerk application: 7000000

DTE Service Account Number \* [?](#)

The data entered into the data field "DTE Service Account Number" contains more than 12 digits. Please remove any spaces.

DTE Electric Meter Number \* [?](#)

The data entered into the data field "DTE Electric Meter Number" contains more than 8 digits. Please remove any spaces or extra numbers.

Will you have an Alternative Electric Supplier? \* [?](#)

Name of Alternative Electric Supplier \* [?](#)

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## Site

A new service application will be required first. [Click here](#) to navigate to the new service application form.

Physical Site Service Address \*

## Coordinates

*For Level 3-5 Projects*

Geospatial position in decimal degrees North (Latitude) and West (Longitude).

*ex. 40.226707*

Each of these coordintes must be unique as they represent different locations across project site and are required to be identified in site plan (detailed below).

Latitude of Proposed Line Tap [?](#)

Longitude of Proposed Line Tap [?](#)

Latitude of Service Line Entry Point [?](#)

Longitude of Service Line Entry Point [?](#)

Latitude of Access Road [?](#)

Longitude of Access Road [?](#)

Latitude of On-Site DTE Facilities [?](#)

Longitude of On-Site DTE Facilities [?](#)

Location Type \*

Is there a DTE account manager for this customer and/or site? \*

DTE Account Manager Name \*

Last

DTE Account Manager Email Address

Type of Electric Service \* ?

- Single Phase
- Three Phase

Electric Service Voltage (V) \* ?

Electric Service Voltage (V) - Other \*

Annual Site Requirements Without Generation (kWh) ?

Peak Annual Site Demand (kW) \* ?

Is this application for a non-renewable backup generator? \*

*Note: Emergency generators are not a qualified source of energy for the Distributed Generated Program. If you have a generator that is greater than 250 kW, then you could qualify for dispersed generation (Rider 13).*

Other than electrically isolated backup generators, are there any other existing, planned or currently pending generating systems on site? \* ?

Existing Generation project number DE-#####

Existing Generator Type \*

If Other, please describe: \*

Existing Generator Nameplate Capacity (kW) \*


How is this existing generation currently being used? \*

If Other, please describe: \*

## System

Proposed/Requested In-Service Date



Generator Wiring Configuration \* 



Generator Configuration \* 

- Wye
- Delta

Generator Type \*



Please Describe: \*

Please Describe: \*

System Type \*

Select...



Is the inverter tested to IEEE 1547.1 / UL 1741 \*

Select...



Aggregate Generator Nameplate AC Rating (kW) \*

Aggregate Generator Nameplate DC Rating (kW) \*

Generator AC Output Voltage (V) \*

Expected Annual Output (kWh)

Expected Annual Usage (kWh)

Will this project enter into an FERC841 agreement to participate in the market? \*

Please specify the intent to participate in the market. \*

## Storage System Information

Is the storage system connected behind a single inverter (DC coupled) or separate inverters (AC coupled)? \* ?

- Single Inverter
- Separate Inverters

*Please select Separate Inverters*

The storage system is intended to export power to the electric grid. \*

*Export designated systems are not allowed under the Rider 18/DG Tariff program. This application will not be able to proceed with a storage system designed for export.*

This system is intended to be islandable. ?

Is the inverter tested to UL 1741 Power Control System (PCS)? \* ?

Select all of the operating modes your inverter is capable of. \*

Import Only ?

Export Only ?

No Exchange ?

Unrestricted ?

Which of the following operating modes will the inverter be set to? \*

- Unrestricted
- Export Only
- Import Only
- No Exchange



This project will implement Power Limiting

Desired Power Limited Export (kW) \*

Energy Storage System Manufacturer \*

Energy Storage System Model \*

Energy Storage System Quantity (number of storage units) \* ?

Energy Storage System Size (kW of each storage unit) \* ?

Energy Storage Chemistry Type \*

## Storage System Discharge Ratings

Rated Discharge Capacity (kW) \* ?

Max Discharge Capacity (kW) \* ?

Peak Discharge Duration (sec) ?

## Storage System Charge Ratings

Rated Charge Capacity (kW) \* ?

Peak Charge Capacity (kW) \* ?

Peak Charge Duration (sec) ?

## Storage System General Data

Total Stored Energy (kWh) \* ?

Charge/Discharge Cycle Efficiency (%) ?

Ramp Time (kW/sec) ?

Charging Source \*

- DTE Electric Service
- On-Site Generation
- DTE Electric Service and On-Site Generation

## Storage System Inverter Data

Storage System Inverter Manufacturer \*

Storage System Inverter Model \*

Storage System Inverter Quantity \* ?

Storage System Inverter Size (kW per Inverter) \* ?

Frequency Response Capability ?

Voltage Response Capability ?


Storage System Nominal AC Output Voltage

Storage System Nominal DC Input Voltage

Storage System Inverter Rated Temperature ?

My battery and/or energy storage system model is not listed below

**Notice:** Any equipment that is not listed in the below drop-downs, are subject to approval by DTE. Entering equipment information below is solely for the submission of the application. Proceeding with equipment not listed in the below drop-downs may increase project cost, delays and/or require additional equipment.

Energy Storage System \* 

Add Integrated Energy Storage

Add Inverter and Battery

Calculate

## Generator Information Specific to PV Systems

Please setup the PV section as shown in the one-line diagram. Any equipment that is not listed in the below drop-downs, are subject to approval by DTE.

PV System Specification \* 

Add Inverter

Calculate

My Inverter and/or PV Array model is not listed above

Notice: Any equipment that is not listed in the above drop-downs, are subject to approval by DTE. Entering equipment information below is solely for the submission of the application. Proceeding with equipment not listed in the above drop-downs may increase project cost, delays and/or require additional equipment.

## PV Array Information

Number of Modules \*

Module Manufacturer \*

Module Model Name \*

Module Model Number \*

Module Rating (W) \*

## Inverter Information

Number of Inverters \*

Does your system have a collector? \*

Collector Impedance (format:  $Z = R + jX + \text{Beta}$ ) \*

Inverter Manufacturer \*

Inverter Model Name \*

Inverter Model Number \*

Inverter Rated Temperature ?

Inverter Power Rating (kW) \*

Inverter Power Rating (kVA) \*

Total Harmonic Distortion (%) \*

Maximum Design Fault Contribution Current at the Point of Common Coupling (A) \*

Generation is for a Combined Heat & Power (CHP) system.

## Combined Heat & Power Systems

Combined Heat & Power (CHP) system needs to run during an outage.

What is the primary purpose of the Combined Heat & Power (CHP) system? \*

Select...



How often is the Combined Heat & Power (CHP) system expected to run? \*

Select...



Fuel Source \*

Select...



Storage System Quantity  
{Result}

Storage System Manufacturer  
{Result}



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Storage System Model  
{Result}

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Storage System Capacity  
{Result}

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## Generator Information Specific to Induction Generators

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Quantity of Induction Generators \*

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Generator Nameplate Voltage \*

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Generator Nameplate Volt-Amperes \*

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Generator Nameplate Power Factor (pf) \*

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RPM \*

## Technical Information Specific to Induction Generators

Synchronous Rotational Speed

Rotational Speed at Rated Power

Slip at Rated Power

Minimum and Maximum Acceptable Terminal Voltage

Motoring Power (kVA)

Neutral Grounding Resistor (If Applicable)

1/2 2t or K (Heating Time Constant)

Stator Resistance

Stator Reactance

Rotor Reactance

Magnetizing Reactance

Short Circuit Reactance

Exciting Current

Temperature Rise

Frame Size

Design Letter

Reactive Power Required in Vars (No Load)

Reactive Power Required in Vars (Full Load)

Short Circuit Current Contribution from Generator at the Point of Common Coupling

Rotating Inertia, H in Per Unit on kVA Base, of Overall Combination Generator, Prime Mover, Couplers and Gear Drives

Station Power Load when Generator is Off-Line, Watts, pf

Station Power Load During Start-Up, Watts, pf

Station Power Load During Operation, Watts, pf

## Generator Information Specific to Synchronous Generators

Quantity of Synchronous Generators \*

Generator Nameplate Voltage \*

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Generator Nameplate Volt-Amperes \*

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Generator Nameplate Power Factor (pf) \*

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RPM \*

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## Technical Information Specific to Synchronous Generators

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Minimum Maximum Acceptable Terminal Voltage

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Direct Axis Reactance (Saturated)

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Direct Axis Reactance (Unsaturated)

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Quadrature Axis Reactance (Unsaturated)

Direct Axis Transient Reactance (Saturated)

Direct Axis Transient Reactance (Unsaturated)

Quadrature Axis Transient Reactance (Unsaturated)

Direct Axis Sub-Transient Reactance (Saturated)

Direct Axis Sub-Transient Reactance (Unsaturated)

Leakage Reactance

Direct Axis Transient Open Circuit Time Constant

Quadrature Axis Transient Open Circuit Time Constant

Direct Axis Sub-Transient Open Circuit Time Constant

Quadrature Axis Sub-Transient Open Circuit Time Constant

Short Circuit Current Contribution From Generator at the Point of Common Coupling

Rotating Inertia of Overall Combination Generator, Prime Mover, Couplers and Gear Drives

Station Power Load When Generator is Off-Line, Watts, pf



Station Power Load When Generator During Start-Up, Watts, pf

Station Power Load When Generator During Operation, Watts, pf

Back

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## Installer/Contractor Information

I the property owner, plan on installing my own system.

System Installer

*Name*

First

Last

*Company*

Company

*Address*

Street

*Email*

*Phone*

**Licensed Contractor**

*Name*

*Company*

*Address*

*Email*

*Phone*

**Document Attachments**

Method of Service - Pre-Site Photos

Site Plan (PDF) \*

KML Sample

If you are a developer applying to interconnect a facility for the first time, the DTE Interconnect Team will create a Secure File Transfer (SFT) group account for you before the application is approved. You will receive an email with username, password, and instructions for using the account after it has been created.

If your company already has an SFT group account, please upload the KML file of your Site Plan to the DTE Electric Company SFT site before submitting this application. Include details such as polygon of site, location of DTE facilities, access road, line entry point on property border, proposed line tap, and all related coordinates.

File Name: [Project Number DE-####]-Site Plan.kml

Your application will be considered incomplete if the KML file is not received.

Note: KML is a file format used to display geographic data in an Earth browser such as Google Earth.

Pre-Application Report \*

Proof of Site Control

One-Line Diagram Callout Sample

One-line Diagram \*

The attached One-line Diagram has been signed and sealed by either: (1) a professional engineer licensed in the State of Michigan or (2) by an electrical contractor licensed in the State of Michigan with the license number noted on the diagram (Required by MPSC R 460.620.2 for Levels 2 & 3) \*

The attached One-line Diagram has been signed and sealed by a professional engineer licensed in the State of Michigan (Required by MPSC R 460.620.3 for Level 4 & 5) \*

License Number \*

Three-line Diagram with Relaying Information \*

Relay Settings File \*

Collector System Information (.xls) \*

If you are a developer applying to interconnect a facility for the first time, the DTE Interconnect Team will create a Secure File Transfer (SFT) group account for you before the application is approved. You will receive an email with username, password, and instructions for using the account after it has been created.

If your company already has an SFT group account, please upload the following to the DTE Electric Company SFT site before submitting this application.

Dynamic Model of the Inverter (File Name: [Project Number DE-####]-Inverter.dll)

Collector System (File Name: [Project Number DE-####]-Collector.psse)

Your application will be considered incomplete if the above files are not received.

Note: DLL (Dynamic Link Library) files contain instructions that other programs can call upon to do certain things. PSSE (Power System Simulator for Engineering) is a file format used to model electrical networks.

UL 1741 Power Control System (PCS) Test Report \*

Browse

Storage System Datasheets \* ?

Browse

Allowed file types: .pdf

Major Equipment Specifications \* ?

Browse

Inverter Harmonic Current (1st - 50th as a % of fundamental current rating) (.xls) \* ?

Browse

Inverter Compliance Certificate \* ?

Browse

Liability Insurance Certificate \* ?

Browse

Example Insurance Certificate

Generate Document



Insurance Valid Until \*



Upload POA for existing generation on site. ?

Browse

Reactive Capability Curve Showing Overexcited And Underexcited Limits

Browse

Open Circuit Saturation Curve

Browse

Excitation System Block Diagram with Values for Gains and Time Constants (Laplace Transforms)

Browse

FERC Qualifying Facility (QF) Form No. 556 - Proof of E-filing ?

Browse

Attachment 1

Browse

Attachment 1 Description

Attachment 2

Attachment 2 Description


Attachment 3

Attachment 3 Description

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## Acknowledgements & Signature

- I declare that this project meets FERC requirements for a qualifying small power production facility. \* 
- I understand DTE Electric is not obligated to begin reviewing my application until payment and completed application, including attachments, has been received. \*
- I understand that by providing an email for a system installer or designer, they will be copied on all communications related to this application including my eligibility regarding a satisfactory payment history. \*
- I understand that the Interconnection Agreement (IA) shall be signed before the Site Visit has been completed. \*
- I understand that once my application is approved by DTE, I have 180 days from the date of approval to upload my customer documentation, including a clear photograph of the inverter nameplate capacity rating, an executed Parallel Operating Agreement, proof of electrical inspection by my local municipality or zoning entity, and proof that my system's AC disconnect switch is within 5 feet of the meter. If I fail to meet this deadline, my application may become void. \*
- I understand that this project will comply with the latest National Electric Code (NEC), National Electric Safety Code (NESC) and DTE Service Installation Manual (SIM). \*
- I understand that if DTE informs me that my application or customer documentation is deficient, I have 60 days to cure the deficiency, if I fail to meet this deadline, my application may become void. \*
- I understand that project construction should NOT begin before the application is approved by DTE. DTE is not responsible for any costs or impacts to timelines due to changes that are required for safe installation. DTE expects the project to be constructed as it was approved. \*
- I declare, to the best of my knowledge and belief, that all the information provided in this application form is complete and correct. \*

Please review the notification below. Acknowledgement of this document in the form of a signature will be required before a project can begin the construction phase.

Acknowledgement of DTE Position

Generate Document

Additional Information for Interconnection Coordinators ?

By typing your name below, the applicant acknowledges and agrees to the above terms \*

Today's Date

[Date Picker Icon]

## Application Processing Fee

Generation Level ?

Level {Result}

Track Verification field

{Result}

This project will forgo fast track and will proceed under study track

Application Processing Fee ?

\$ {Result}

Payment Method Type \*

- Paper Check
- Online Electronic Payment

Payment Method Reference # \* ?

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## Please read before continuing :

In order to pay online successfully, follow the below steps.

- I. Click on the payment hyperlink below, this will open a new tab in your browser.
- II. Navigate back to this screen (PowerClerk).
- III. When satisfied with your application, note the "Application Processing Fee" amount, and then click the "Submit" button.
- IV. If successful, navigate to the recently open tab in step 1 and refresh the page.
- V. Ensure the "Application Processing Fee" matches the value in step 3 and continue with the payment screens.

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Unfortunately, we cannot create the payment link at this time. Please submit this application and navigate back to the commerce cloud dashboard to pay online.  
Commerce Cloud

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[Pay Online](#)  
DTE Payment Center

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[Pay Online](#)  
DTE Payment Center

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All payments must be specific to one interconnect application. A lump payment for multiple applications will not be accepted.

Include the generated Interconnection Payment Letter provided below when mailing in the payment.

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Interconnection Application Fee Payment Letter (Mail-In) [Generate Document](#)

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*When satisfied with the information you provided, please click 'Submit'. Your proposed interconnection will be assigned a DTE project number, and you will be redirected to the dashboard. The Interconnection Coordinators will be notified of your submission and will review your application after the processing fee is received.*

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