

Vermont Public Service Board Standard Application Form to Rule 5.500

STANDARD APPLICATION FOR INTERCONNECTION OF GENERATION RESOURCES IN

PARALLEL TO THE ELECTRIC SYSTEM OF: \_\_\_\_\_ Burlington Electric Department \_\_\_\_\_  
(Name of Utility)

Shaded area to be completed by Interconnecting Utility
Interconnecting Utility: \_\_\_\_\_
Interconnecting Utility's Designated Contact Person: \_\_\_\_\_
Interconnecting Utility's Address: \_\_\_\_\_
Interconnecting Utility's Fax Number: \_\_\_\_\_
Interconnecting Utility's E-Mail Address: \_\_\_\_\_
Substation \_\_\_\_\_ Circuit \_\_\_\_\_ [ ] Distribution [ ] Transmission

Preamble and Instructions:

An owner of a generation resource who requests interconnection to a State regulated distribution or transmission facility must submit an application to the Interconnecting Utility. An application is accepted as complete when it provides all applicable information required. There is a \$300.00 Application fee that must be submitted to the Interconnecting Utility along with the Application.

Section 1. Applicant Information

A. Legal Name of Interconnecting Applicant (or, if an Individual, Individual's Name)

Name: \_\_\_South Forty Solar, LLC\_\_\_\_\_
Mailing Address: \_\_\_c/o LAW OFFICES OF FJ VON TURKOVICH, PC\_\_\_\_\_ One National Life Drive\_\_\_
City: \_\_\_Montpelier\_\_\_\_\_ State: \_\_\_VT\_\_\_\_\_ Zip Code: \_\_\_05604\_\_\_\_\_
Facility Location: \_\_\_Sunset Cliff Road, Burlington, VT\_\_\_\_\_
(Facility E-911 address)
Telephone (Daytime): (802) 229-3431 (Alternate): ( ) \_\_\_\_\_ - \_\_\_\_\_
Fax Number: \_\_\_\_\_ (802) 229-3230\_\_\_\_\_ E-Mail Address: \_\_\_fvonturkovich@fvtlaw.com\_\_\_

B. Alternative Contact Information (if different from Applicant)

Contact Name: \_\_\_Leigh Seddon\_\_\_\_\_
Contact Title: \_\_\_Owners Engineering Representative\_\_\_\_\_
Address: \_\_\_L.W. Seddon, LLC 13 Bailey Ave. Montpelier, VT 05602\_\_\_\_\_
Telephone (Daytime): (802) 272-7284 (Alternate): ( ) \_\_\_\_\_ - \_\_\_\_\_
Fax Number: \_\_\_\_\_ n/a\_\_\_\_\_ E-Mail Address: \_\_\_LWSeddon@gmail.com\_\_\_\_\_

C. Will the Generation Resource be used for any of the following:

To supply power to internal loads (other than the station itself)? [ ] Yes [X] No
To participate in the SPEED Standard Offer Program? [ ] Yes [X] No

D. For generators installed at locations with existing electric service:

(Local Electric Service Provider\*) \_\_\_\_\_
(Existing Account Number\*) \_\_\_\_\_

E. Additional Information

Requested Point of Interconnection: \_\_\_Sunset Cliff Road, new pole west of P3667\_\_\_
Interconnection Applicant's requested in-service date: \_\_\_June 1, 2016\_\_\_\_\_

**Section 2. Generator Qualifications**

All data applicable only to the generator facility, NOT the necessary interconnection facilities

Energy source:

Solar  Wind  Hydro  Diesel  Natural Gas  Fuel Oil  Other \_\_\_\_\_  
(state type)

Type of Generator:

Synchronous  Induction  Inverter (DC Generator or Solar)

Generator Manufacturer: SMA

Generator Model Name & Number: Sunny Central 500CP-US (2) and 750CP-US (2)

Generator Nameplate Rating: 2500 kW (Total if multiple units)

Generator Nameplate kVAR: N/A

Applicant or Customer-Site Load: < 2 kW (if none, so state)

Typical Reactive Load (if known) 0

Maximum Physical Export Capability Requested: 2500 kW

**Section 3. Generator Technical Information**

a. Induction or Synchronous Generators (for rotating machines)

Rated Power Factor Leading: \_\_\_\_\_

Rated Power Factor Lagging: \_\_\_\_\_

List of Adjustable Set points for the protective equipment or software: \_\_\_\_\_

Direct Axis Transient Reactance, X'd: \_\_\_\_\_ P.U.

Direct Axis Unsaturated Transient Reactance, X'di: \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance, X"d: \_\_\_\_\_ P.U.

Generator Saturation Constant (1.0): \_\_\_\_\_

Generation Saturation Constant (1.2): \_\_\_\_\_

Negative Sequence Reactance: \_\_\_\_\_ P.U.

Zero Sequence Reactance: \_\_\_\_\_ P.U.

kVA Base: \_\_\_\_\_

RPM Frequency: \_\_\_\_\_

\*Field Volts \_\_\_\_\_

\*Field Amperes \_\_\_\_\_

\*Motoring Power (kW) \_\_\_\_\_

\*Neutral Grounding Resistor (If Applicable) \_\_\_\_\_

\*I22t or K (Heating Time Constant) \_\_\_\_\_

\*Rotor Resistance \_\_\_\_\_

\*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) \_\_\_\_\_

\*Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

b. For Wind Turbines

Total Number of turbines to be interconnected pursuant to this application: \_\_\_\_\_

Height to blade tip : \_\_\_\_\_ Blade diameter \_\_\_\_\_

Quantity of Turbines \_\_\_\_\_ Size (KW) Each \_\_\_\_\_

c. For Solar or DC sources

Inverter Manufacturer, Model Name & Number : \_\_\_SMA Sunny Central, 500CP-US, 750CP-US

Quantity of Inverters \_\_\_4\_\_\_ Size KW Each \_\_\_500kW (2) and 750 kW (2)\_\_\_

Panel Manufacturer, Model Name & Number: \_\_\_Trina Solar, TSM315-PD14\_\_\_

Quantity of panels \_\_\_10,800\_\_\_ Size (Watts) Each \_\_\_315\_\_\_

Inverters are UL1741 listed  Yes  No

**Section 4. Interconnection Equipment Technical Data** (for generation over 20 KW)

Will a transformer (GSU) be used between the generator and the point of interconnection?

Yes  No

Will the transformer be provided by Interconnection Applicant?

Yes  No

Is the Transformer three phase?

Yes  No

Is the Transformer pad mounted or Pole mounted?

Pad  Pole

Transformer Size: \_\_\_1500 kVA & 1000 kVA Impedance: \_\_\_6.00\_\_\_ % on \_\_\_1000\_\_\_ kVA Base

*Interconnection Voltage (GSU Data)*

Transformer Primary: 13,800 Volts  Single Phase  Delta  Wye  Grounded Wye

Transformer Secondary: \_\_\_342\_\_\_ Volts  Single Phase  Delta  Wye  Grounded Wye

Other Transformer information \_\_\_2 transformers used: 1500 kVA & 1000 kVA\_\_\_

*Interconnecting Circuit Breaker (if applicable):*

Manufacturer: \_\_\_TBD by BED\_\_\_ Type: \_\_\_\_\_ Load Rating: \_\_\_\_\_ Interrupting Rating: \_\_\_\_\_

Trip Speed: \_\_\_\_\_

*Current Transformer (CT) Data (if applicable):*

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Ratio: \_\_\_\_\_

*Potential Transformer Data (if applicable):*

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Ratio: \_\_\_\_\_

**Section 5. General Site Information**

- a. Enclose copy of site electrical One-Line Diagrams showing the configuration of all generating facility equipment, current and potential circuits, and protection and control schemes.

[Note: This one-line diagram must be signed and stamped by a licensed Professional Engineer if the generating facility is larger than 150 kW.]

- b. Enclose copy of any site documentation that describes and details the operation of the protection and control schemes.
- c. Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
- d. Enclose copy of any site documentation that indicates the precise physical location of the proposed generating facility (e.g. USGS topographic map or other diagram).

**Section 6. Check List: Required Fee and Enclosures**

Is an application fee enclosed?  Yes  
Are One-Line Diagrams enclosed?  Yes  
Is site documentation enclosed?  Yes  
Are schematic drawings enclosed?  Yes  No  
Are site maps enclosed?  Yes

**Section 7. Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct.

Signature of Applicant: *Felix J. Von Turkovich* Date: *7/6/15*  
*FJ VON TURKOVICH, Managing Member,  
Juicelo Management Company, LLC, Manager.*