

Direct Transfer Trip (DTT) Specifications for DER Interconnections

(These specifications provide requirements for DTT installation for a DER Developer only. Refer to the latest revision of the PSEG Long Island's Small Generator Interconnection Technical Requirements for more information, guidance, and details.)

*Developer shall provide **Page 2** of this document to Verizon to order lease line communication for DER DTT.*

A DER DTT scheme shall be implemented using the RFL GARD 8000 relay with Voltage-Phase Comparison over a leased T1 communication line from the LIPA substation to the DER facility. The DER DTT scheme and all related auxiliary equipment must be represented on the relay functional one-line diagram and DC schematics. Model/part number of all DER DTT equipment must also be included on all required interconnect drawings.

RFL GARD 8000 Relay with Voltage-Phase Comparison

A single RFL GARD 8000 relay must be ordered by the DER Developer and be installed at the DER facility. This will serve as the DTT receiver relay. The DER Developer must order the GARD 8000 relay built to RFL drawing **CD67673**. The DER Developer shall select one of the three part numbers listed below dependent on the control power voltage available at the DER facility:

RF-GARD3U1133-125	(125VDC)
RF-GARD3U1133-48	(48VDC)
RF-GARD3U1133-24	(24VDC)

PSEG Long Island will specify and procure the appropriate GARD 8000 relay to be installed at the LIPA substation that will serve as the DTT transmitter relay.

DER Developer/Customer to provide below information to Verizon to order T1 line communication:

Developer of Distribution Energy Resource (DER) has to submit below information to Verizon when ordering a dedicated T1 communication circuit for the DER Direct Transfer Trip (DTT) scheme. T1 Order communication line shall be point-to-point from the DER facility to the applicable LIPA substation.

If Developer have a Dedicated Verizon Account Team, they would perform all the ordering– if not – order circuit from Local Verizon Business Office:

- Verizon Business Office
 - www.customercare6@verizon.com or 800-698-7431

Ordering T1 service Template for Verizon:

Please provide **Dedicated Point-to-Point T1 connection** as follows:

Order: A dedicated leased **digital T1** (preferably on fiber transport) point-to-point communication circuit (B8ZS line coding with ESF) and RJ-48C jack with a full (1.544 Mbps, un-channelized) between LIPA substation and DER facility is required.

If any part of the **T1 circuit is over metallic wires**, that part of the circuit must be **Type 4 with Class A SPO and no repeaters**.

Customer Name (Developer Name):

Address (Developer’s address):

Contact Person (Developer’s contact name):

Developer to provide **FROM** and **TO** information to Verizon for Point to Point T1 connection.

FROM:

(“A” location Name) – *Developer to provide name of DER*

Address - *Developer to provide location of DER*

TO:

(“B” location Name) - *Developer to provide LIPA Substation Name*

Address - *Developer to provide location of LIPA Substation.*