

NPRR208 – Grey-Boxed Language

(Disclaimer - this version is being provided to aid in review of current Protocol language and is not a substitute for the official TAC Report)**

NPRR Number	208	NPRR Title	Registration and Settlement of Distributed Generation (DG) Less Than One MW
Nodal Protocol Sections Grey-Boxed		11.4.4.2, Load Reduction for Excess PhotoVoltaic Distributed Renewable Generation 11.4.4.3, Load Reduction for Excess Non-PhotoVoltaic Distributed Generation	

Current Grey-Boxed Protocol Language

11.4.4.2 Load Reduction for Excess PhotoVoltaic Distributed Renewable Generation

Adjusted Metered Load (AML) for ESI IDs with PhotoVoltaic (PV) generation shall be adjusted as follows:

- (a) For ESI IDs with non-IDRs installed, AML shall be reduced for excess generation from ESI IDs with PV generation equal to or lower than the Distributed Generation (DG) registration threshold behind the meter where there is a meter that measures excess energy flow into the ERCOT System in a separate register. Only ESI IDs that have been assigned a PV profile segment as specified in Load Profiling Guide Appendix D, Profile Decision Tree, shall be eligible for this reduction.

Intervals beginning 1100 and ending 1500 Central Prevailing Time (CPT) (spanning (16) 15-minute intervals) shall be reduced by the following amount:

$$\text{PV_adjust}_i = \text{kWh_gen} / (\text{read_days} * 16)$$

The above variables are defined as follows:

Variable	Unit	Description
PV_adjust _i	kWh	Reduction for PV excess generation for interval <i>i</i> .
kWh_gen	kWh	Actual (measured) kWh flowing into the Distribution System (out-flow from the Premise).
read_days	days	Number of days in meter read period.

- (b) The PV reduction adjustment for ESI IDs, which have PV generation of equal to or lower than the DG registration threshold, as described in Section 16.5, Registration of a Resource Entity, behind the meter and that have an Advanced Metering System (AMS) integrated meter that measures the excess energy flow into the ERCOT System in 15-minute intervals, shall be determined using the actual 15-minute interval data, if available.

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11.4.4.3 Load Reduction for Excess Non-PhotoVoltaic Distributed Generation

AML for ESI IDs with non-PV DG shall be adjusted as follows:

- (a) For ESI IDs with non-IDRs installed, AML shall be reduced for excess generation from ESI IDs with non-PV generation of equal to or lower than the DG registration threshold behind the meter where there is a meter that measures excess energy flow into the ERCOT System in a separate register. Only ESI IDs that have been assigned a DG profile segment as specified in Load Profiling Guide Appendix D, Profile Decision Tree, shall be eligible for this reduction.

All intervals in the meter read period shall be reduced by the following amount:

$$DG_adjust_i = kWh_gen / read_ints$$

The above variables are defined as follows:

Variable	Unit	Description
DG_adjust _i	kWh	Reduction for excess DG for interval <i>i</i> .
kWh_gen	kWh	Actual (measured) kWh flowing into the Distribution System (out-flow from the Premise).
read_ints	Intervals	Number of 15-minute intervals in the meter read period.

- (b) The energy reduction adjustment for ESI IDs, which have DG equal to or lower than the DG registration threshold behind the meter and have an AMS integrated meter that measures the excess energy flow into the ERCOT System in 15-minute intervals, shall be determined using the actual 15-minute interval data, if available.

[NPRR208: Replace Sections 11.4.4.2 and 11.4.4.3 above with the following upon system implementation.]

11.4.4.2 Load Reduction for Excess PhotoVoltaic and Wind Distributed Renewable Generation

- (1) Adjusted Metered Load (AML) for ESI IDs with PhotoVoltaic (PV) generation shall be adjusted as follows:

For ESI IDs with non-IDRs installed, AML shall be reduced for excess generation from ESI IDs with PV generation equal to or lower than the Distributed Generation (DG) registration threshold behind the meter where there is a meter that measures excess energy flow into the ERCOT System in a separate register. Only ESI IDs that have been assigned a PV profile segment as specified in Load Profiling Guide Appendix D, Profile Decision Tree, shall be eligible for this reduction.

Intervals beginning 1100 and ending 1500 Central Prevailing Time (CPT) (spanning (16) 15-

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minute intervals) shall be reduced by the following amount:

$$PV_adjust_i = kWh_gen / (read_days * 16)$$

The above variables are defined as follows:

Variable	Unit	Description
PV_adjust _i	kWh	Reduction for PV excess generation for interval <i>i</i> .
kWh_gen	kWh	Actual (measured) kWh flowing into the Distribution System (out-flow from the Premise).
read_days	days	Number of days in meter read period.

- (2) AML for ESI IDs with wind generation shall be adjusted as follows:

For ESI IDs with non-IDRs installed, AML shall be reduced for excess generation from ESI IDs with wind generation equal to or lower than the DG registration threshold behind the meter where there is a meter that measures excess energy flow into the ERCOT System in a separate register. Only ESI IDs that have been assigned a wind profile segment as specified in the Load Profiling Guide Appendix D, Profile Decision Tree, shall be eligible for this reduction.

Intervals beginning 0800 and ending 2000 CPT (spanning (48) 15-minute intervals) shall be reduced by the following amount:

$$Wind_adjust = kWh_gen * .65 / (read_days * 48)$$

All other intervals in the day (the remaining 48 intervals) shall be reduced by the following amount:

$$Wind_adjust = kWh_gen * .35 / (read_days * 48)$$

For days affected by day-light savings time adjustments, 48 in the above equation should be reduced to 44 or increased to 52, as appropriate.

Where:

Variable	Unit	Description
wind_adjust _i	kWh	Reduction for wind excess generation for interval <i>i</i>
kWh_gen	kWh	Actual (measured) kWh flowing into the Distribution System (out-flow from the Premise)
read_days	days	Number of days in meter read period.

- (3) The excess generation adjustments for ESI IDs, which have PV or wind generation of equal to or lower than the DG registration threshold, as described in Section 16.5, Registration of a Resource Entity, behind the meter and that have an Advanced Metering System (AMS) integrated meter that measures the excess energy flow into the ERCOT System in 15-minute

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intervals, shall be determined using the actual 15-minute interval data, if available.

11.4.4.3 Load Reduction for Excess from Other Distributed Generation

- (1) AML for ESI IDs with DG that is neither PV nor wind shall be adjusted as follows:

For ESI IDs with non-IDRs installed, AML shall be reduced for excess generation from ESI IDs with DG generation of equal to or lower than the DG registration threshold behind the meter where there is a meter that measures excess energy flow into the ERCOT System in a separate register. Only ESI IDs that have been assigned a DG profile segment as specified in Load Profiling Guide Appendix D, Profile Decision Tree, shall be eligible for this reduction.

All intervals in the meter read period shall be reduced by the following amount:

$$DG_adjust_i = kWh_gen / read_ints$$

The above variables are defined as follows:

Variable	Unit	Description
DG_adjust _i	kWh	Reduction for excess DG for interval <i>i</i> .
kWh_gen	kWh	Actual (measured) kWh flowing into the Distribution System (out-flow from the Premise).
read_ints	Intervals	Number of 15-minute intervals in the meter read period.

- (2) The energy reduction adjustment for ESI IDs, which have DG equal to or lower than the DG registration threshold behind the meter and have an AMS integrated meter that measures the excess energy flow into the ERCOT System in 15-minute intervals, shall be determined using the actual 15-minute interval data, if available.