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Errata to IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces

IEEE Standards Coordinating Committee 21

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Correction Sheet 4 June 2018

Replace Table 23 with the following (please note that a subtraction symbol now replaces an erroneous addition symbol in the operation for high-frequency conditions equation):

Operation for low-frequency conditions	Operation for high-frequency conditions
$p = \min_{f < 60 - db_{\text{UF}}} \left\{ p_{\text{pre}} + \frac{(60 - db_{\text{UF}}) - f}{60 \cdot k_{\text{UF}}}; p_{\text{avl}} \right\}$	$p = \max_{f > 60 + db_{\text{OF}}} \left\{ p_{\text{pre}} - \frac{f - (60 + db_{\text{OF}})}{60 \cdot k_{\text{OF}}}; p_{\text{min}} \right\}$

Change the following in the variable list that follows Table 23:

where

- *p* is the active power output,¹ in p.u. of the DER nameplate active power rating
- f is the disturbed system frequency in Hz
- p_{avl} is the *available active power*, in p.u. of the DER rating
- p_{pre} is the pre-disturbance active power output, defined by the active power output at the point of time the frequency exceeds the deadband, in p.u. of the DER rating
- p_{\min} is the minimum active power output due to DER prime mover constraints, in p.u. of the <u>DER active power</u> rating in kW
- *db*_{OF} is a single-sided deadband value for high-frequency and low frequency, respectively, in Hz
- $db_{\rm UF}$ is a single-sided deadband value for high frequency and low-frequency, respectively, in Hz
- $k_{\rm OF}$ is the per-unit frequency change corresponding to 1 per-unit power output change (frequency droop), unitless
- $k_{\rm UF}$ is the per-unit frequency change corresponding to 1 per-unit power output change (frequency droop), unitless

¹ Includes positive and negative active power for Energy Storage DER during low- and high-frequency conditions respectively. Use of alternate control means to meet this requirement is permitted.