

Shall trip function	Required settings in MA		Comparison to IEEE Std 1547-2018 default settings and ranges of allowable settings for Category II		
	Voltage (p.u. of nominal voltage)	Clearing time (s)	Voltage	Clearing time	Within ranges of allowable settings?
OV2	1.20	0.16	Identical	Identical	Yes
OV1	1.10	2.0 ⁽¹⁾	Identical	Identical	Yes
UV1	0.88	2.0	Higher (default is 0.70)	Much shorter (default is 10 s)	Yes
UV2	0.50	1.1	Slightly higher (default is 0.45 p.u.)	Much longer (default is 0.16 s)	Yes

(1) Clearing time reduced from 2.1 seconds to 2.0 seconds to agree with revised 1547

Shall trip function	Required settings in MA		Comparison to IEEE Std 1547-2018 default settings and ranges of allowable settings for Category I, Category II, and Category III		
	Frequency (Hz)	Clearing time (s)	Frequency	Clearing time	Within ranges of allowable settings?
OF2	62.0	0.16	Identical	Identical	Yes
OF1	61.2 ⁽²⁾	300.0	Identical	Identical	Yes
UF1	58.5	300.0	Identical	Identical	Yes
UF2	56.5	0.16	Identical	Identical	Yes

(2) Frequency increased from 60.6 to 61.2 to agree with revised 1547

Table III: Inverters' voltage ride through capability

Voltage range (p.u.)	Operating Mode / Response	Minimum ride-through time (s) (design criteria)	Maximum response time (s) (design criteria)	Comparison to IEEE Std 1547-2018 for Category II
$V > 1.20$	Cease to Energize ^a	N/A	0.16	Identical
$1.175 < V \leq 1.20$	Permissive Operation	0.2	N/A	Identical
$1.15 < V \leq 1.175$	Permissive Operation	0.5	N/A	Identical
$1.10 < V \leq 1.15$	Permissive Operation	1	N/A	Identical
$0.88 \leq V \leq 1.10$	Continuous Operation	infinite	N/A	Identical
$0.65 \leq V < 0.88$	Mandatory Operation	Linear slope of 8.7 s/1 p.u. voltage starting at 3 s @ 0.65 p.u.: $T_{VRT} = 3 s + \frac{8.7 s}{1 p.u.} (V - 0.65 p.u.)$	N/A	Identical
$0.45 \leq V < 0.65$	Permissive Operation ^a	0.32	N/A	See footnote a)
$0.30 \leq V < 0.45$	Permissive Operation ^a	0.16	N/A	See footnote a)
$V < 0.30$	Cease to Energize	N/A	0.16	Identical

^a The following additional operational requirements shall apply for all inverters:

- ^a In the Permissive Operation region above 0.5 p.u., inverters shall ride-through in Mandatory Operation mode, and
- ^b In the Permissive Operation region below 0.5 p.u., inverters shall ride-through in Momentary Cessation mode.

Table IV: Inverters' frequency ride through capability

$f > 62.0$	N/A	N/A
$61.2 \leq f < 62.0^{(3)}$	Mandatory Operation	299
$58.5 < f < 61.2^{(3)}$	Continuous Operation	Infinite
$57.0 < f \leq 58.5$	Mandatory Operation	299
$f \leq 57.0^{(4)}$	N/A	N/A

(3) Frequency increased from 60.6 to 61.2 to agree with revised 1547

(4) Frequency increased from 56.5 to 57.0 to agree with revised 1547