

WECC

Misoperation Impact Score

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Bill Middaugh, Chair

T123

<Public>

Misoperation Impact Factors

Misoperation Impact Factors		
Field	Value	Factor
Voltage Class	0-99 kV	0.4
	100-199 kV	0.5
	200-299 kV	0.65
	300-499 kV	0.85
	500-765 kV	1
Equipment Type	BES UFLS, BES UVLS	0.333
	Shunt Capacitor, Shunt Reactor/Inductor	0.5
	HVdc, Line, Series Capacitor, Series Reactor/Inductor, Transformer, Breaker	0.667
	Bus, Other	0.833
	Dynamic Var Systems, Generator	1
Cause	Equipment Errors (and Other)	0.5
	Human Errors	0.85
	Unknown	1
Category	Slow Trip – Other than Fault	0.167
	Unnecessary Trip – Other than Fault	0.333
	Failure to Trip – Other than Fault, Unnecessary Trip – During Fault	0.667
	Failure to Trip – During Fault, Slow Trip – During Fault	1



Misoperation Impact Score

 [Misoperation Impact Score] = [Voltage Class Factor] * 0.3 + [Equipment Type Factor] * 0.2 + [Cause Factor] * 0.1 + [Category Factor] * 0.4 <Public>

Background and Considerations

Background

- Severity Impact Score will be used in NERC's State of Reliability Report to be published late June.
- NERC MIDASUG did not officially vote to accept this index. Final decision was made by NERC staff.
- Weight of Equipment Type—Breakers was changed. This was due to feedback from the RWG as well as members of the MIDASUG.

Consideration

• Should the RWG include this in the 2022 Annual Report?



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