

SWAT Short Circuit Working Group Charter

Approved by the SWAT SCWG members on January 26, 2006

The Short Circuit Working Group will annually update a SWAT short circuit operating case which is detailed enough for each utility to use for determining correct fault currents for relay operation, correct fault currents for breaker duty evaluations, correct fault currents for safety grounds, and other uses each utility will have for accurate transmission and subtransmission fault currents.

Distribution generation and distribution motor loads which can affect these fault currents significantly will be modeled at the distribution level to obtain correct X/R ratios as well as determine AC decrements. In addition to maintaining an Annual Operating Short Circuit case which will be distributed in a common data format, the group will also determine common methodologies to be applied to breaker duty studies. Additionally, the group will develop common methodologies for safety grounding studies, TRV studies, capacitive switching studies, breaker failure studies, and other studies related to faults in jointly owned facilities.

This group will annually review IEEE, NEMA, NESC, and other standards which can affect these studies to determine if changes are needed in the study methodologies or equipment specifications. This group will also create task forces to develop fault cases for future joint planning studies which will need accurate fault calculations. This group will work with the utilities and loads on the boundaries of the stakeholder systems to develop accurate equivalents and representations to include in the Annual Short Circuit Operating case. This study group will provide updates to the SWAT Oversight Committee of the group's activities.