

Notes to accompany November 18, 2002 Excel Sheet from Losses Task Team

The attached file is one of two loss allocation methods that will be presented at RTO West is week...

Please review and comment to me if you see any problems.

"Flow Based Allocation of Losses"

Note that the Excel sheet now has (1) some simple macros (used to bring indifferent data sets for comparison), (2) uses circular equations, so cancel the warning message, (3) needs you to turn on the iteration counter

[Tools,Options,Calculations]

This is a flow based allocation of power flow estimated losses.

The first sheet is a simple two zone example of how the allocation works, note that (1) no losses are allocated with on flow, (2) losses are allocated differently if the flow is in different directions because the internal loss percentage and loads are different for each zone.

The second sheet is a four zone example, note that (1) the loss percentage and load for each zone is changeable for each zone in the example, (2) the loss factor is not used in the allocation of losses in this methodology, but is here for flexibility of testing the example, (3) the flow between zones is also changeable, (4) the flow for zone 1 is flow through, zone 2 is all export, zone 3 is a mixture of import and export, zone 4 is all import. A "simple" loss calculator has been added for SCs in the same zone without meter separation.

The third sheet still needs some work but is to show that this method does not distinguish between Scheduling Coordinators (SC) in the some zone, unless there is meter separation. The points here are that (1) if a SC does not like the association with other SCs in the zone, there is something that can be done to separate the two, (if separated by meters, one SCs allocation of losses is limited by it percentage of the internal losses of the zone and the percentage of the amount of external schedules to the zone.

The four sheet is a set of four WECC examples and a custom data set for testing. Note (1) loss allocations for zones and between zones is displayed. Also a "simple" loss calculator has been added.