



Eastern Interconnection Planning Collaborative

Review of Load Flow Model Data for the 3 Scenarios

TOTF Meeting

January 10-11, 2012

Power Flow Model Basics

A Power Flow model is a representation of an electric transmission system that consists of transmission lines, transformers, loads, generators, etc.

Power Flow Model Basics

A Power Flow model must satisfy the basic equation:

$$\text{Generation} = \text{Load} + \text{Losses} + \text{Interchange}$$

Needed Components for Model

1. Transmission Topology
2. Generation
3. Load
4. Losses
5. Interchange

Transmission Topology

EIPC will start with transmission topology represented within the Stakeholder Specified Infrastructure (“SSI”) model.

Reminder: the NEEM model assumed “copper plate” within NEEM regions – this may create needs not anticipated thus far

Generation

CRA's NEEM model will provide the following information for each NEEM Region:

- Installed MW capacity
 - By technology type
- Energy produced
 - By technology type

Load

Stan Hadley has provided the MW demand the CRA NEEM Model utilized for each NEEM Region by block

These MW demand blocks are “generator bus-bar” demands and include system losses.

Losses

EIPC will assume the same system losses for each area modeled in the SSI model

This will be a one-time assumption and not iterative.

Interchange

CRA's NEEM Model will provide the interchange modeled between the NEEM Regions for each block

Questions

