



Eastern Interconnection Planning Collaborative

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# **Review of Load Flow Model Data for the 3 Scenarios**

TOTF Meeting

January 10-11, 2012

# Power Flow Model Basics

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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

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A Power Flow model must satisfy the basic equation:

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

# Needed Components for Model

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

# Transmission Topology

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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

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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

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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

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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

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

# Questions

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