



# An Overview of Generator Interconnections to the Distribution System



Kearney, Nebraska  
November 10, 2010



**Nebraska Public Power District**  
*"Always there when you need us"*



# Generator Interconnections must be reviewed to assure the electrical system can accommodate the Generator

- Interconnection to the Transmission System (115 kv and above) are the jurisdiction of the Southwest Power Pool (SPP)
- Interconnections to the Distribution System (Below 115 kv) are reviewed by the Local Utility and NPPD



# Interconnection to the Transmission System

(115 kv and above)

- Are the jurisdiction of the Southwest Power Pool (SPP)
- These interconnections follow the SPP process
  - Complete application
  - Provide deposits
- Interconnection studies conducted by SPP are
  - Select Study
  - Provide Study Deposits





# Interconnection to the Distribution Systems



- The Local utility with the assistance of NPPD will study the impact of the interconnection on the Distribution system
- Determine upgrades required to the Distribution System
- Determine if the interconnection impacts the Transmission System
  - If the interconnection to the Distribution System impacts the Transmission System, then SPP is notified as an impacted system.
  - Any project above 20 MW is assumed to impact the Transmission System



# Interconnection Customer's Cost Responsibility

- The Generator Interconnection Customer will be responsible for costs associated with:
  - All studies required to review the interconnect of the generator to the Distribution System
  - All upgrades to the Distribution System to accommodate the Generator interconnection
- If Transmission System is impacted the Generator Interconnection Customer will be responsible for costs associated with:
  - SPP studies required to review the Generators impact to the Transmission System
  - Allocated share of upgrades to the Transmission System to accommodate the Generator interconnection

# Interconnection Process Summary



- The Transmission System (115kv and above) uses the SPP process
- The Distribution System (below 115 kv), uses local utility and NPPD's process
- Interconnections must be studied to assure the system can accommodate the interconnection
- Interconnection customer responsible for all study costs and all system upgrades to accommodate the interconnection
- To initiate the process contact your Local Utility and NPPD



# Questions?

**James R. Hotovy, PE**  
**Transmission Services**  
**Consultant**

**(402) 563-5674**

**[jrhotov@nppd.com](mailto:jrhotov@nppd.com)**



**Nebraska Public Power District**

*"Always there when you need us"*