Functional Mapping

- Functional Mapping Defined
- Why is WECC doing it now
- Importance of Functional Mapping
- Current Situation
- New Reporting Capabilities
- Next Steps
- Questions
Functional Mapping
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Functional Model Diagram

- Standards Development
  - Standards Developer

- Compliance Enforcement
  - Compliance Enforcement Authority

- Reliability Assurance
  - Reliability Assurer

- Operating
  - Reliability Coordinator

- Transmission
  - Service Provider

- Planning
  - Reliability Coordinator

- Market Operations
  - Market Operator

- Interchange
  - Interchange Coordinator

- Balancing
  - Authority

- Transmission Ownership
  - Transmission Owner

- Generator Operations
  - Generator Operator

- Transmission Operations
  - Transmission Operator

- Transmission Planning
  - Transmission Planner

- Resource Planning
  - Resource Planner

- Generator Ownership
  - Generator Owner

- Load Serving
  - Load-Serving Entity

- Purchasing-Selling
  - Purchasing-Selling Entity

- Distribution
  - Distribution Provider
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Importance of Functional Mapping
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Rules of Procedure of the North American Electric Reliability Corporation

1.4.1 Ensure that all areas are under the oversight of one and only one Reliability Coordinator.

1.4.2 Ensure that all Balancing Authorities and Transmission Operator entities are under the responsibility of one and only one Reliability Coordinator.

1.4.3 Ensure that all transmission Facilities of the Bulk Power System are the responsibility and under the control of one and only one Transmission Planner, Planning Authority, and Transmission Operator.

1.4.4 Ensure that all Loads and generators are under the responsibility and control of one and only one Balancing Authority.
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All Registered Functions ➔ Reliability Coordinator (RC)
Functional Mapping

- Distribution Provider (DP)
- Underfrequency Load Shedding Only Distribution Provider (DPUF)
- Generator Owner (GO)

Balancing Authority (BA)
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Transmission Owner (TO)
Transmission Operator (TOP)
Transmission Planner (TP)
Transmission Service Provider (TSP)

Planning Authority (PA)
Transmission Operator (TOP)
Transmission Planner (TP)
Current Situation

• Original Functional Mapping Notice sent on January 22, 2016

• Extension announced on February 16, 2016
  – Deadline for Submission extended to April 1, 2016
  – Entities that must validate those relationships will have until May 1, 2016
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New Reporting Capabilities

The system now allows entities to generate a report to review mapped reliability connections. Fields available on the report include:

- Entity Name
- Entity Code
- NERC ID
- Mapped Function
- Mapped To Entity Information
- Date of Mapping

- PCC & AO Name
- PCC & AO Title
- PCC & AO Phone
- PCC & AO Email
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Next Steps

• No WECC action until May 1 deadline.
• After May 1, WECC will begin reaching out to confirm reported relationships, and investigate areas where no relationship is reported.
• Entities that report progress in making contractual arrangements to work with another party will be recorded and monitored for progress.
• Entities that fail to report a functional relationships with a PC will be referred to PC-GRT.
• Entities that fail to report a functional relationships with all other parties will be given time to seek resolution.
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• Does WECC have a list of the BES Transmission Facilities that do not currently have an assigned TP or TOP?

• Will this effort be coordinated with the effort of the PCC GRT?

• What will happen if two parties are unable to reach agreement on whom is responsible for specific reliability functions?

• If BES transmission facilities are under the control of a TP, PA, TOP – should a GO or DP require a TP or PA?

• Will WECC seek a particular kind of validation evidence in support of relationships?
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