MAINTAINING GENERATION-LOAD INTERCHANGE-BALANCE WITHIN A BALANCING AUTHORITY AREA AND CONTRIBUTING TO INTERCONNECTION FREQUENCY

1. BALANCING SYSTEM RESOURCES AND DEMAND
   a) Operate and control generation, load and confirmed interchange within a Balancing Authority area.
   b) Review generation commitments, dispatch, and load forecasts.
   c) Operate the Balancing Authority area to help maintain an acceptable Interconnection frequency.
   d) Implement generator commitment and dispatch schedules from the Load-Serving Entities and Generator Operators.
   e) Take appropriate action(s) to ensure balance in real time.

CONCEPTS
   a) Effects of parameter limits, violations, and outages
   b) Generation, frequency, load and voltage and the interaction between them
   c) Knowledge of generation equipment
   d) Knowledge of Balancing Authority Area and neighboring BAs
   e) Power Flow
   f) Interchange and schedules

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3. MANAGING INTERCHANGE

a) Approve Interchange Schedules from ramping ability perspective.

b) Submit operational plans to the Reliability Coordinator for reliability evaluation and provide balancing information to the Reliability Coordinator.

c) Inform Reliability Coordinator and interchange operator of Arranged Interchange changes (e.g., due to generation or load interruptions) involving its Balancing Authority area.

d) Respond appropriately to curtailments of interchange transactions.

e) Validate accuracy of Implemented Interchange after the hour for “checkout”. [This task may vary depending on the entity.]

CONCEPTS

a) Effects of parameter limits, violations, and outages
b) Generation, frequency, load and voltage and the interaction between them
c) Knowledge of Balancing Authority Area and neighboring BAs
d) Interchange and schedules
e) ACE
f) Outage coordination and reporting
g) Congestion management
h) Reactive power control
i) Transmission Loading Relief

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4. MONITORING SYSTEM CONDITIONS

a) Monitor area control error within the reliability area.

b) Monitor regulation service as specified in regulation service agreements with Balancing Authorities for ACE calculation.

c) Monitor and evaluate resources to determine if actions are necessary to ensure balance in real time.

CONCEPTS

a) Effects of parameter limits, violations, and outages
b) ACE
c) Regulation service
d) System capabilities
5. MAINTAINING REAL-TIME RELIABILITY OF THE BALANCING AUTHORITY

a) Calculate area control error within the reliability area. (loss of computer??)
b) Comply with control performance standards (CPS 1 and 2)
c) Provide balancing and energy accounting, and implement inadvertent energy paybacks.
d) Deploy reliability-related services.
e) Receive and respond to reliability communications from the Reliability Coordinator.
f) Receive and respond to final approval or denial of a request for an Arranged Interchange from the interchange operator.
g) Respond to request for assistance from Load Serving Entities who are no longer able to provide reliability-related services.
h) Evaluate operational information with Generator Operators and respond accordingly.
i) Evaluate reliability alerts and communicate and coordinate with the Reliability Coordinator.
j) Comply with reliability-related requirements (e.g., reactive requirements, location of operating reserves) specified by Reliability Coordinator.

CONCEPTS

a) Effects of parameter limits, violations, and outages
b) ACE
c) Interchange and schedules
d) Reserves
e) Inadvertent
6. PLANNING FOR RELIABLE BALANCING AUTHORITY OPERATIONS

a) Formulate an operational plan (generation commitment, outages, etc.) for reliability.
b) Determine needs for reliability-related services.
c) Develop operational plans for the Reliability Coordinator for reliability evaluation and provide balancing information to the Reliability Coordinator.
d) Compile load forecasts from Load-Serving Entities.

CONCEPTS

a) Effects of parameter limits, violations, and outages
b) Load determinants
c) Load forecasting
d) Operational planning

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7. PREPARING FOR AND RESPONDING TO SYSTEM EMERGENCIES

a) Document any operating issues which prohibit compliance with control performance standards.

b) Coordinate emergency procedures with appropriate entities.

c) Direct Transmission Operator (or Distribution Provider) to reduce voltage or shed load if needed to ensure balance within its Balancing Authority area.

d) Implement corrective actions and emergency procedures as directed by the Reliability Coordinator.

e) Implement and coordinate system restoration plans with appropriate entities.

f) Comply with control performance standards (DCS).

g) Implement emergency procedures.

h) Respond to situations when BA cannot provide required regulation service as specified in regulation service agreements.

CONCEPTS

a) Regulation service
b) Load shed
c) Control performance standards
d) System restoration
e) Energy Emergency Alert

SUBTASKS (SUPPORT ALL JOB TASKS)

1. Three-part communication
2. General communication
3. Documentation
4. Tools and tool functionality
5. NERC Standards
6. SPP Criteria

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