

IEEE WGOT
12/9/08
Training Exercise for Loss of EMS
Handout # 2

Facilitator Discussion Questions during the Table Top Exercise.

1. Which of your resources can you depend on for a DCS recovery?
Answer: Your hydro first, CTs second, Combined Cycle third, drum units next, and super-critical last. You need to have enough responsive units loaded to recover from the loss of your largest unit (800MW). At the first of the exercise you have too many reserves in your drum unit. You need to load the drum unit and keep your reserves in the combined cycle unit. You need to also man the CTs and maybe bring them at minimum to have additional reserves on ready. They should also note that you have a reserve sharing agreement that can be implemented over 10 minutes.
2. When they lose a unit, ask them if it is a DCS event
Answer: It will be. Ask them how long they have to make up their reserves after recovering from the DCS. 90 minutes.
3. When they lose a tie line they should ask if there are any transmission constraints. They may phrase this by asking if the ATC is reduced.
Answer: Tell them no to both questions. In this case the power has simply redistributed itself on the remaining tie lines and there is absolutely no affect.
4. At the end, ask them if they have a process in place to manually operate their BA. If so, ask them how they train on this. If not, ask them if the needed information is available.
 - a. How do they/would they come up with their total actual generation?
 - b. Same thing for their reserves
 - c. Same thing for ties, schedules, etc.
5. Discuss the challenges if the load is decreasing instead of increasing. Discuss the challenges of a winter ramp vs. a summer ramp.
6. Give them bad data and expect them to correct you and ask for the right info.
7. Ask them how they would respond to an NNL reduction.
8. How would they activate a reserve sharing agreement?
9. What would you do different for a heavy ramp, a peak load, a shoulder load, a decreasing load, a bottoming out condition.
10. Ask them where their alternate frequency source is and how would they get that info?
11. How would they manage their VAR reserves?
12. Standards of Conduct issues?
13. Don't forget your demand side options, if needed.