

# **OVEC/IKEC TRANSMISSION PLANNING MEETING**

**April 4, 2012  
Piketon, Ohio**

## **Attendees:**

David E. Jones, VP-Operations, OVEC  
Mark A. Peifer, VP and Assistant to the President, OVEC  
Robert J. Matthey, Superintendent of Electrical Operations, OVEC  
Scott R. Cunningham, System Operations Supervisor, OVEC  
George W. Brady, System Engineer-Operations, OVEC  
Gary W. Gillespie, Chief Transmission and Substation Engineer, OVEC  
Jonathan H. Riley, AEP East Transmission Planning (OVEC's Planning Engineer)

Randall S. Keefer, Acting Energy Scheduling Supervisor, OVEC  
Matthew W. Smith, Energy Scheduling Assistant, OVEC  
Chuck Harley, Restoration Services, (Representing the DOE)  
Matt Vick, Department Of Energy  
Tim Boss, Pro-2-Serve (Representing DOE)  
Charlie Freibert, LGE-KU, - by phone  
Wayne Van Liere, LGE-KU, - by phone  
Linn Oelker, LGE-KU, -by phone

## **Bob Matthey – Opening Remarks**

Attendees were introduced. The purpose of the meeting is to comply with the directives of FERC Order 890 to have an open transmission planning process by involving stakeholders and regulators in the process and seeking input from them. The preliminary plan will be presented following this spring meeting. The plan will be finalized at the upcoming fall meeting, taking into account stakeholder input. The other purpose of the meeting is to demonstrate compliance with the NERC Reliability Standards, especially the MOD and the TPL standards.

In accordance with Order 890, most of the information presented is publicly available to stakeholders. Any Confidential or Critical Electric Infrastructure Information (CEII) will be identified as such. Information should be submitted 30 days following the meeting. The draft plan is made available 30 days prior to the next meeting.

OVEC's planning is performed by American Electric Power East Transmission Planning, under the terms of an engineering support contract.

Mr. Matthey provided an update on OVEC's efforts to comply with FERC Order 1000, specifically OVEC's participation in a Regional Planning Process. PJM has rejected OVEC's efforts to become a part of their planning region. OVEC continues to work with LGE-KU on developing a plan. OVEC has also reached out to others, most recently MISO and TVA. Resolution of the issue is unclear at present, but the filing on the compliance plan needs to be made in October 2012.

## **Jon Riley – Presentation on OVEC Transmission Planning Process and Study Results**

(Mr. Riley's presentation and report are posted with these minutes.)

A history of OVEC and an overview of the OVEC system were provided. Changes which have been completed, are in progress, or are being planned on both the OVEC system and on neighboring systems to address issues identified in previous years studies were discussed.

Changes: Breaker and protection upgrades at Kyger Creek – projected completion in 2013

Dearborn: DA and DD removed and Clifty-Buffington circuit created

Removal of normally opened bus tie no. 2 to Tanners Creek

Announced unit retirements in PJM:

Beckjord coal fleet in two stages (6 units)

Sporn (4 units)

Tanners Creek (3 units)

Kanawha River (2 units)

Muskingum River (4 units)

All are 3 buses or less from OVEC

Other retirements announced are further away and not of immediate planning concern

LGE-KU retirement update provided by Mr. Freibert:

Cane Run – Replaced by a 700 MW gas facility

Green River

Tyrone

Totaling 800 MW

Purchasing Blue Grass gas plant to serve local load.

A description of OVEC's participation in the ReliabilityFirst (RFC) Regional Planning Process was provided. OVEC (through AEP) provides data for model development, participates in the Transmission Performance Subcommittee (TPS) and is involved in several study teams working under the direction of the TPS.

An overview of OVEC's planning process was presented. Since all of OVEC's generation is committed to its Sponsors and the transmission system was designed to deliver large amounts of power reliably to its sole customer, there are few internal drivers for change. Changes external to the OVEC system usually are more significant.

RFC studies for 2011 are completed and an abbreviated 2011/12 winter study is nearing completion.

OVEC generally relies on built RFC studies and adds sensitivity analysis based on generation levels at nearby plans, W-E, and S-N transfers. Other analyses performed as needed with known outages. Beginning in 2010, complete assessments are done to meet TPL-001 to TPL-004 compliance. RFC models are used as the basis when available. Categories A, B, C, and D are studied since RFC does not consider Categories C and D.

OVEC monitors generator interconnect queues in neighboring regions and participates in MISO ad hoc study groups formed in response to generation interconnection or transmission service requests and to the sub regional planning process, as directed by Order 890. OVEC is involved as a stakeholder in the Southeastern Inter-Regional Participation Process (SIRPP) to provide input for economic studies. OVEC is following the announcements of generation retirements.

Short circuit assessments indicate low margins at Kyger Creek. Replacement of the Kyger breakers is in progress, with the targeted completion by 2013. Breakers in OVEC stations but owned by others are not included in OVEC compliance. The decision to replace breakers is made when duties approach 100% or other issues, such as age and environmental concerns arise.

The 2011 draft report was posted in early November 2011. The results for 2016 and 2020 summer periods were highlighted. Adequate margins were identified. OVEC facilities meet requirements of NERC TPL Planning Standards. Contingencies are added as needed for N-1, N-1-1, and N-2. No problems were found in the initial screening. OVEC facilities should meet NERC planning criteria. OVEC will continue to monitor the limited margins on the LGE-KU interfaces with OVEC. The final report was posted 11/30/11.

Prior to 2010, OVEC assessments were based on RFC studies, with sensitivity analysis added. Since then, OVEC performs complete assessments to meet the TPL-001 to -004 requirements. RFC models are used as the starting point and as supplemental evidence for compliance.

In 2012 summer studies, OVEC is looking at DC screening for TPL-001, -002, and -003. This includes the recently announced retirements at Beckjord. Mr. Freibert asked about the margins on the LGE-KU interfaces. We do not analyze Available Transfer Capability, but look at First Contingency Incremental Transfer Capability as a reliability function. If margin approaches the generating capability, this raises concerns, given the potential transfers across regions. It can be viewed as a seams issue. OVEC is the only non-RTO transmission entity within RFC and is a substantial portion of the transmission capability of the region. A plan to add a 345 kV line from Speed to Paddy's Run West should help to alleviate the concerns. Mr. Peifer asked if OVEC was correcting the margin concern or managing it and if OVEC could be financially liable. In real time, the margins are managed through the Transmission Loading Relief process. The planning process is used to examine specific criteria and scenarios that may not be encountered in real time. The "liability" is with the entity owning the facilities, but it is not necessarily a single element or facility. It can be limited by generation dispatch, loads, transfers, etc. A proposal to add an additional tie between LGE-KU and Duke to the west of Louisville should address the limitations, and should be in service this year. Delays in the project should not be an issue. Mr. Matthey added that going forward it is unclear as to who should be paying for such improvements and that this needs to be monitored as part of the transmission planning process associated with Order 1000.

The 2017 and 2022 summer studies will look at DC screening and AC analysis to follow for compliance TPL-001 through -004. There have been some delays in developing the RFC models. This may require several iterations based on unit retirements and identified transmission reinforcements necessary to address them.

The results of 2012 studies will require a re-run in light of announced generation retirements. The models must be updated. The assumption is that the retired generation will be replaced within the respective markets. May require the assumption that queued generation will be available and sensitivity analysis will have to look at alternative dispatch scenarios using high wind output and increased gas utilization, due to unusually low gas prices. The generation will be in different locations relative to loads. Different wind capacity factors are used in different markets.

In summary, OVEC needs to continue to monitor unit retirements in light of recent environmental regulations, participate in SIRPP, and monitor the MISO and PJM transmission expansion plans.

## **Input from Stakeholders**

Input was requested from the stakeholders in attendance regarding:

- Information on the addition or retirements of generation
- Load changes
- Transmission changes not in the models
- Economic improvements – constraints to market operations or beneficial transmission improvements, if any.

Mr. Vick noted that the DOE is considering some solar projects behind the meter, up to 5 MW to reduce purchased demand. This will likely be considered a load adjustment, as long as no sales of the capacity are being considered.

Mr. Freibert asked if a line between Rockport and TVA is being considered. Mr. Riley was not aware of the current status, but noted that a parallel path would alleviate concerns on the Trimble Co. to Clifty path, assuming no other generation changes that could impact this facility.

Mr. Matthey asked if there was an increase noted in generation queues. Mr. Riley had not noted a significant increase at this time.

Mr. Harley mentioned that the retirement of 3000 MW of generation so close to OVEC has to impact OVEC. Mr. Riley noted that the generation in PJM will be replaced internally, but not necessarily in the same location. It is not anticipated that the generation will be replaced by external imports. Mr. Freibert also mentioned that Demand Side Management was also an option.

## **Next Steps**

The input received within 30 days from the date of this meeting from stakeholders will be incorporated into new RFC models, in parallel with the results of current studies. The results will be analyzed and discussed as necessary with stakeholders, either via e-mail, conference call, or a supplemental meeting. A draft report will be available by mid to late summer. Following the fall meeting, a finalized report will be reviewed and posted.

## **Concluding remarks**

Mr. Freibert noted that there is usually a review of transmission system utilization. Mr. Matthey noted that there was no additional usage by third parties.

The meeting was adjourned at 11:25.