

OHIO VALLEY ELECTRIC CORPORATION

Open Planning Meeting

October 28, 2010

Presentation by Jonathan (Jon) Riley
AEP East Transmission Planning

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Outline

- History
- Changes affecting the OVEC transmission system
- Participation in the Reliability *First* Process
- Monitoring PJM, MISO and LGEE Developments
- OVEC Planning Study Process
- Review of Recent Studies
- Input from Stakeholders
 - Assumptions
 - Draft report
- Next Steps
- Questions

Ohio Valley Electric Corporation (OVEC)

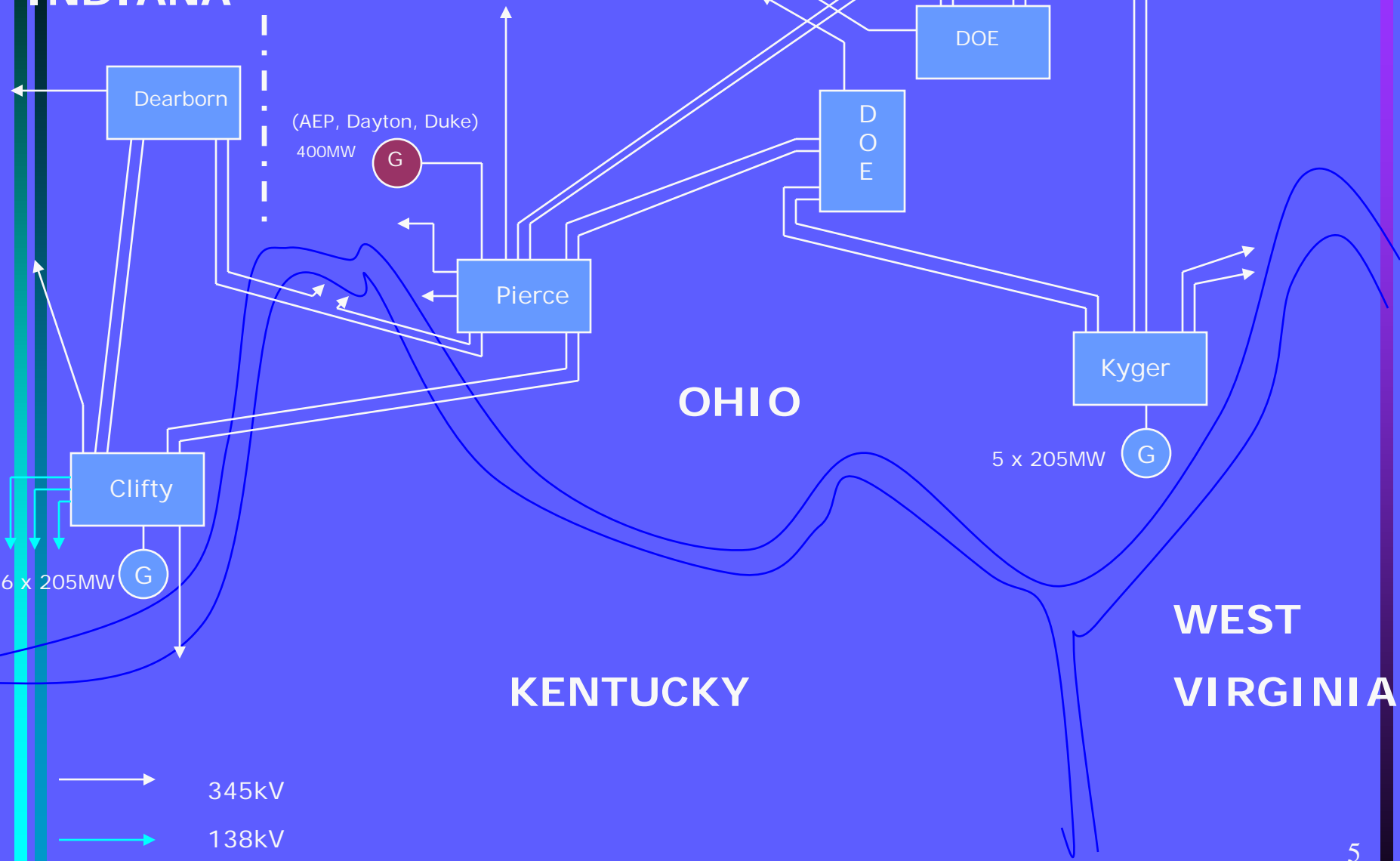
- OVEC was formed in the early 1950s by its neighboring utilities to supply the DOE's uranium enrichment facility in Southern Ohio
- Due to its critical function, OVEC's system was designed using stringent planning criteria with multiple interconnections
 - Load served was about 2,000 MW
 - Current load at facility – approximately 35 MW

Ohio Valley Electric Corporation (OVEC)

- OVEC owns 2 generating stations, with approx. 2,250 MW of nameplate capacity
- OVEC has a network of approx. 776 circuit miles of 345 kV lines in Indiana, Kentucky and Ohio

OVEC Map Prior to 11/2008

INDIANA



(AEP, Dayton, Duke)
400MW
G

DOE

D
O
E

Kyger

5 x 205MW
G

Clifty

6 x 205MW
G

Dearborn

Pierce

OHIO

KENTUCKY

WEST VIRGINIA

- 345kV
- 138kV

Prior to 11/2008

RECENT, ONGOING or UPCOMING CHANGES

Kyger Creek

- Breaker replacements and relay upgrades (in progress)
- Post-X533 re-termination of outlets to Marquis and Pierce

Dearborn – to come

- Retire Breakers DA & DD (creates Clifty-Buffington ckt.)

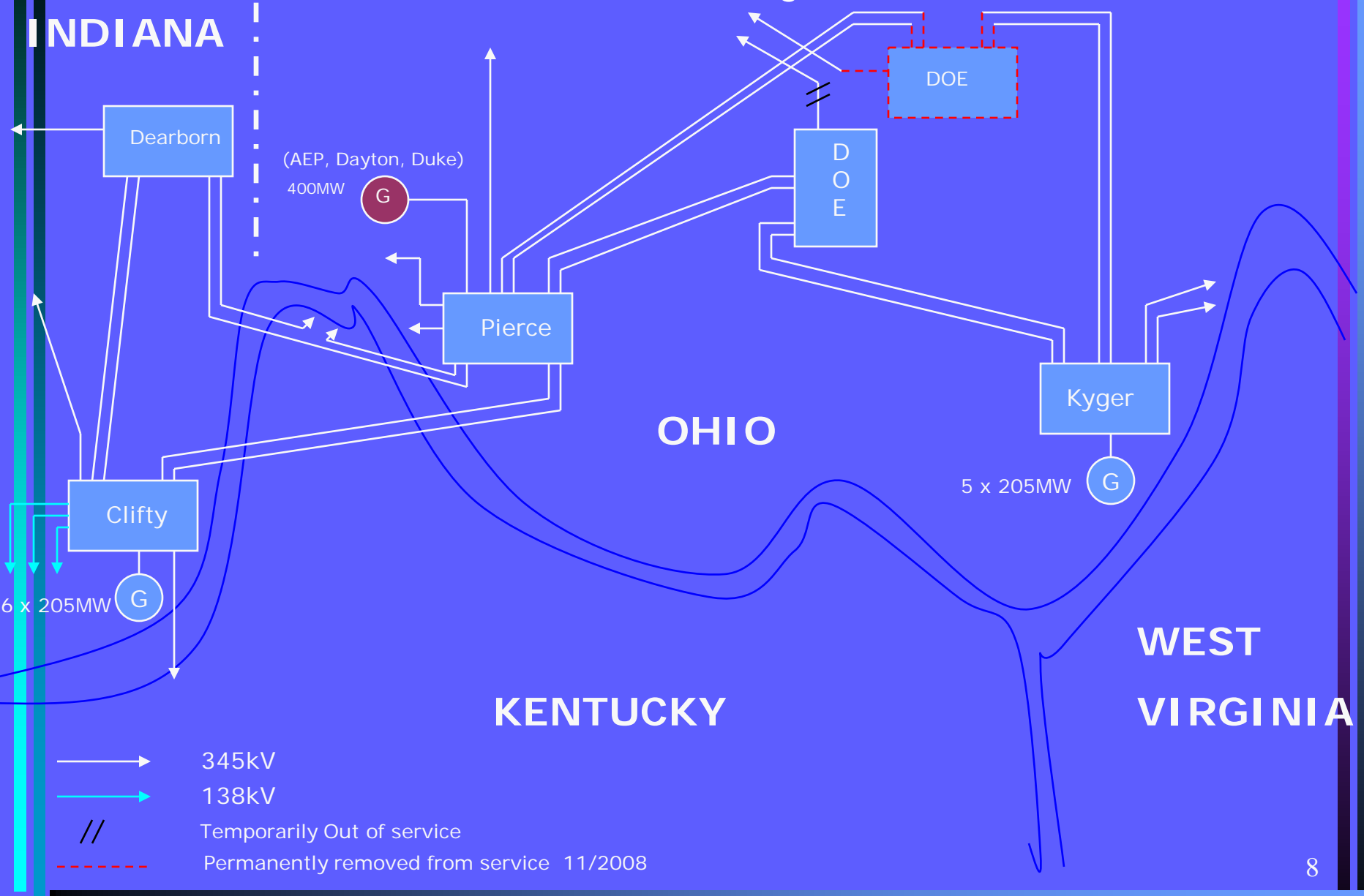
RECENT, ONGOING or UPCOMING CHANGES

(continued)

- AEP
 - Marquis add 2nd 345/138 kV transformer
 - Marquis add 2nd 138 kV DCT outlet
- Duke Energy
 - Pierce T-A and -B replaced with single unit
- DOE
 - Removed X533 station
- e.on
 - Added Trimble County #2 and created additional 345 kV outlets by looping in Ghent-Speed 345 kV line

DOE X533 Retirement – Interim Configuration 11/2008 - 2010

INDIANA



(AEP, Dayton, Duke)
400MW
G

DOE

DOE

Pierce

Kyger

5 x 205MW
G

Clifty

6 x 205MW
G

Dearborn

OHIO

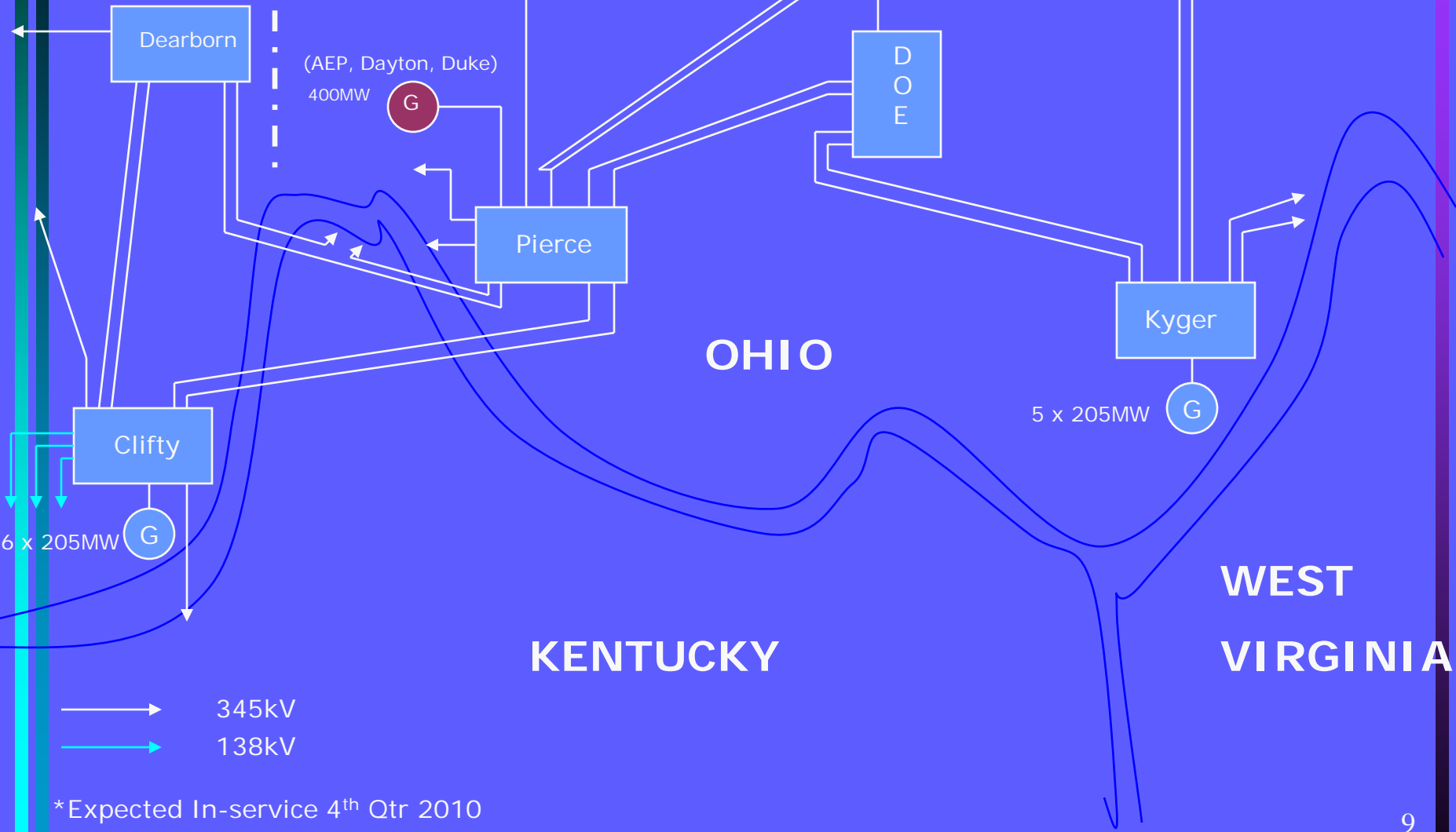
KENTUCKY

WEST VIRGINIA

- 345kV
- 138kV
- Temporarily Out of service
- Permanently removed from service 11/2008

DOE X533 Retirement – Final Configuration*

INDIANA



*Expected In-service 4th Qtr 2010

Participation in Reliability *First* Process

- Model development
- Transmission Performance Subcommittee (TPS)
- TPS Study Teams:
 - Seasonal
 - Near-term
 - Long-term

Monitor Developments in Neighboring Areas

- Generator Interconnection Queues
- MISO ad hoc study groups
- Stakeholder in Southeastern Inter-Regional Participation Process (SIRPP)

Recent Studies **update**

Reliability *First* Corporation studies

(NERC Category A, B, C - partial)

Seasonal: Summer, Winter

Near Term: 2011(2006), 2008(2007),
2011(2008)

Long Term: 2015(2006), 2013(2007), under
discussion(2008)

OVEC studies

- Prior to 2010, built on RFC studies and models
- Added sensitivity analyses:
 - Generation levels at nearby plants
 - Transfers: W-E, S-N
 - Transmission Facility Status
- Added analyses of other contingency categories as needed for compliance

OVEC studies

- Beginning in 2010, perform complete assessment to meet TPL-001 – TPL-004 requirements
- RFC study results may still be used in demonstrating compliance, but as supplemental evidence

OVEC 2010 Planning Studies

- Draft report posted 10/05:
 - Highlights, pp. 6-9, App. D
 - Any additional comments or changes?

Results

- OVEC facilities now planned and approved meet NERC TPL-001 thru -004
- Continue to monitor limited margin on interface with LG&E

Input From Stakeholders

- New information about load or generation?
- Transmission changes not already represented in MMWG/RFC models?
- Economically beneficial transmission improvements to study?

NEXT STEPS

- Incorporate additional Stakeholder input
 - Conduct analysis
 - Interact with Committee based on results
- Document additional results
- Conference call or email exchange, or meeting to finalize report

QUESTIONS?