

OHIO VALLEY ELECTRIC CORPORATION

Open Planning Meeting

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AEP East Transmission Planning

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Outline

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

Ohio Valley Electric Corporation (OVEC)

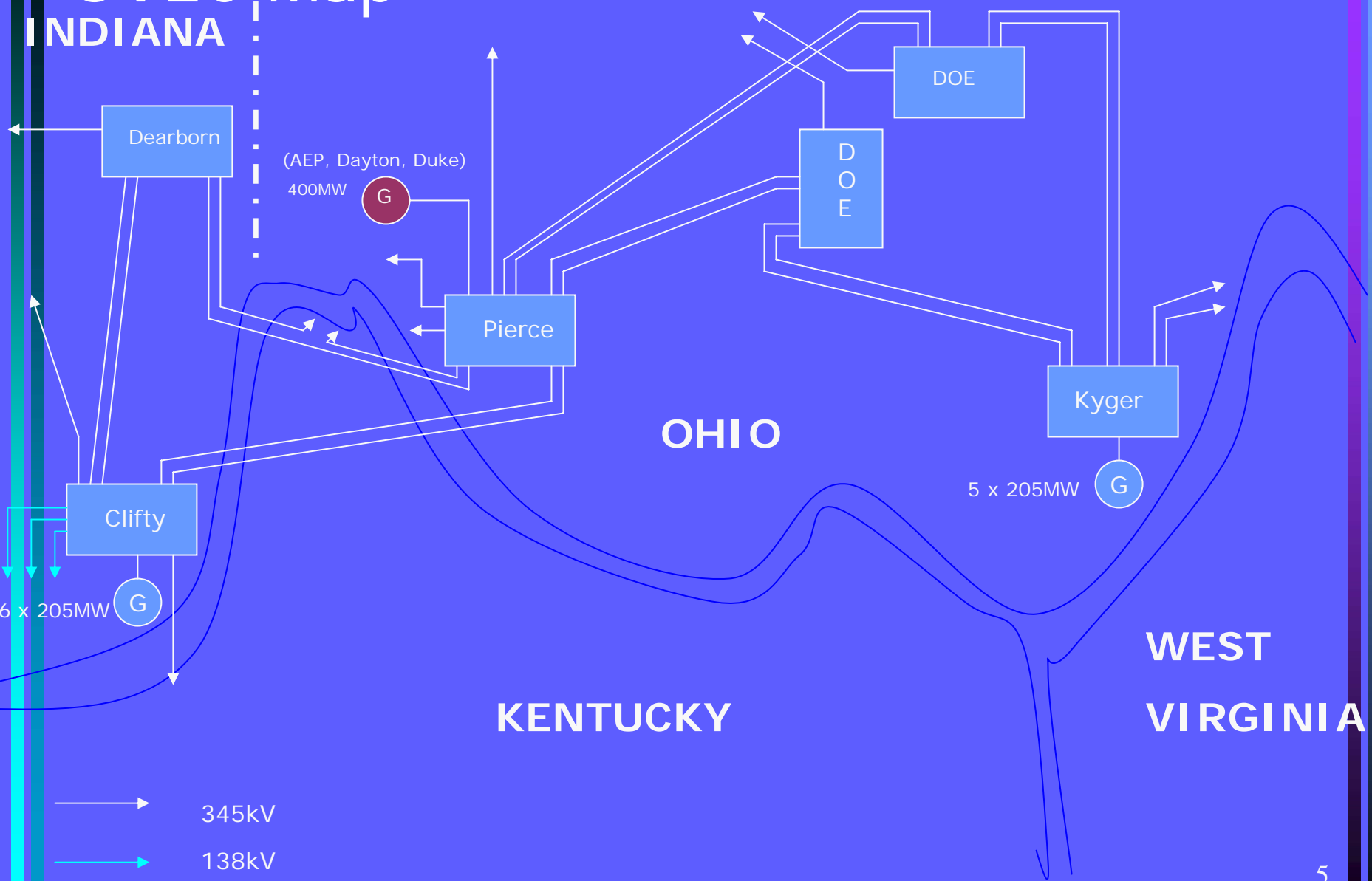
- OVEC was formed in the early 1950s by its neighboring utilities to supply the DOE's uranium enrichment facility in Southern Ohio
- Due to its critical function, OVEC's system was designed using stringent planning criteria with multiple interconnections
 - Load served was about 2,000 MW
 - Production at facility ceased in 2001
 - Contract terminated by DOE in 2003
 - Current load at facility – approximately 30-35 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

INDIANA



(AEP, Dayton, Duke)
400MW

DOE

DOE

Kyger

5 x 205MW

Clifty

6 x 205MW

Dearborn

Pierce

OHIO

KENTUCKY

WEST VIRGINIA

→ 345kV
→ 138kV

Anticipated as of summer 2008

This slide redacted due to CEII
Content

RECENT, ONGOING or UPCOMING CHANGES

Clifty Creek

- Previous 345/138 kV transformation
125 MVA || 150 MVA
- New 450 MVA T-100A
- 2% series reactor to keep similar impedance
- In service Fall 2006
- NERC required Relay upgrades in progress
- FGD

Dearborn – to come

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

RECENT, ONGOING or UPCOMING CHANGES

(continued)

Pierce

- Breaker and relay replacement program completed
(all CBs again Normally Closed)
- Pierce-Foster terminal equipment upgraded
- 345/138 kV Transformers A & B ownership – now DEM

Kyger Creek

- Breaker & Relay upgrades
- FGD

RECENT, ONGOING or UPCOMING CHANGES

(continued)

- AEP
- Marquis 345/138 kV (In progress)
- replaces Sargents transformer as source to AEP loads in S. Ohio

- Duke Energy
- additional 345/138 kV transformation in the CGE area
- Buffington, M Ft
- Pierce (In progress)

Participation in Reliability *First* Process

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

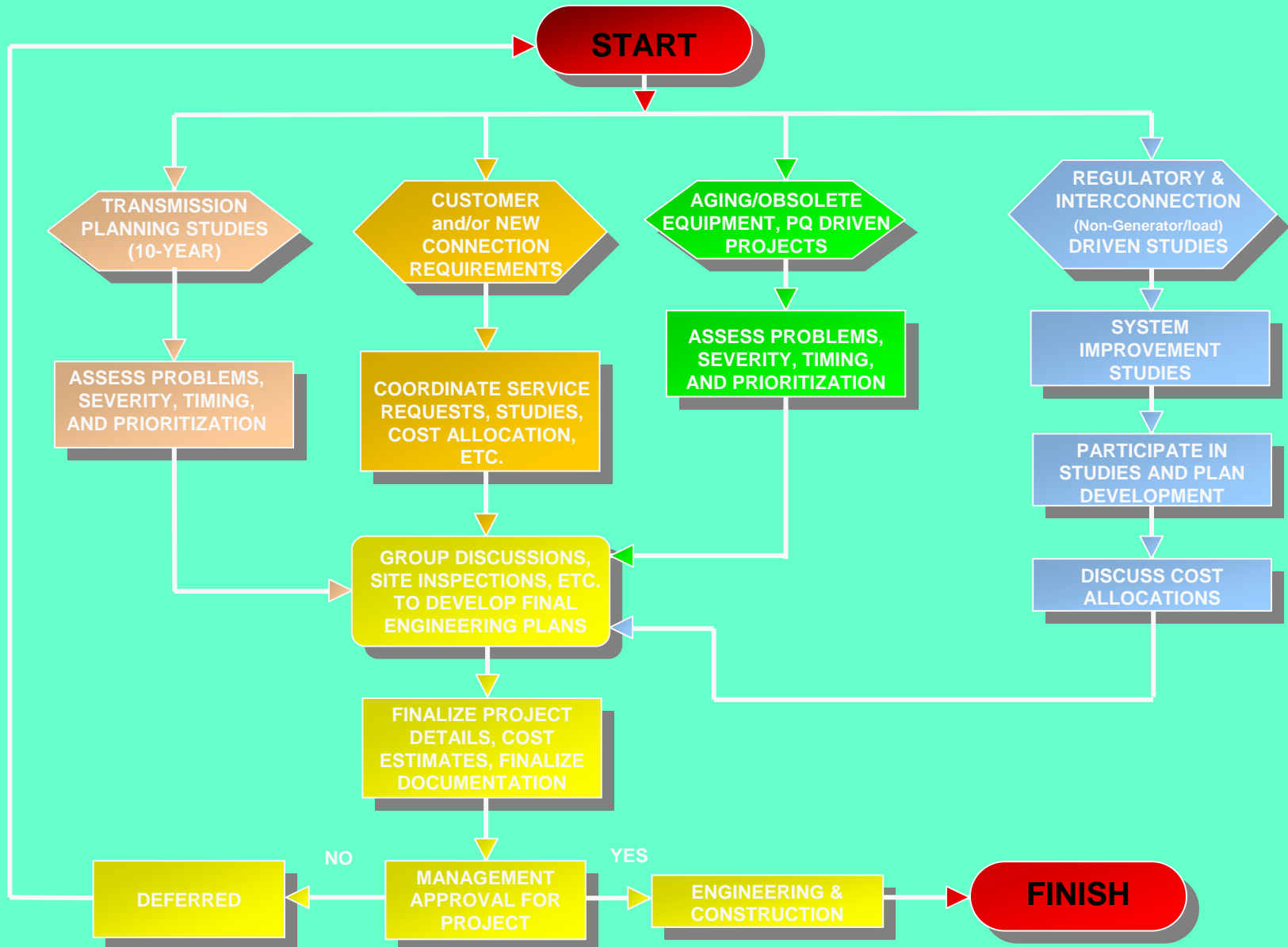
Monitor PJM, MISO & LGEE Developments

- Monitor Generator Interconnection Queues
 - MISO, PJM & LGEE
- Participate in MTEP studies
- Participate in MISO ad hoc study groups
 - Generator Interconnections
 - Transmission Service
 - Subregional Planning
- Participate in MISO/PJM/SPP/TVA Joint Coordinated System Plan Studies
- Other SERC Studies???

OVEC Planning Process

- Few internal drivers
 - Generation committed through 2026
 - Unique Load situation – single customer
- Added more detail to information in 2008 response to FERC Form 715 part 5

OVEC PLANNING PROCESS MAP



Recent Studies

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

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

Results

- OVEC facilities now planned and approved meet NERC TPL-001 thru -004
- Most concerns previously identified on interfaces with Duke and AEP addressed by projects now in progress
- Limited margin on interface with E.On

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

- Review results of RFC studies (at least 2011)
- Incorporate Stakeholder input into RFC models
- Build additional models – other years, sensitivities, etc.
- Conduct analysis
- Interact with Committee based on results
- Next meeting, conference call?

QUESTIONS?