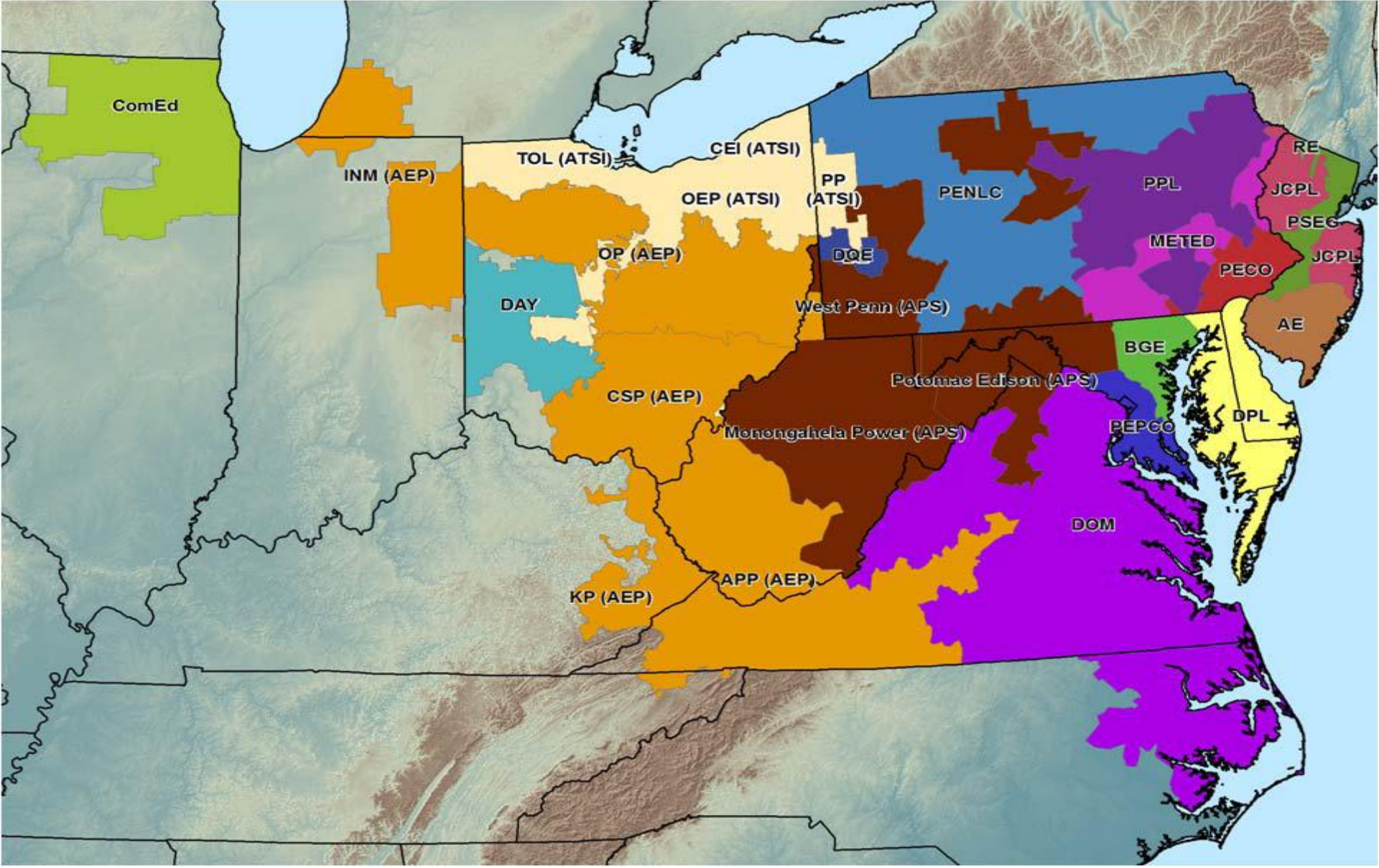
2010 RTEP Assumptions for DP&L Local Plans

March 5, 2010


ComEd
INM (AEP)
TOL (ATSI)
CEI (ATSI)
OEP (ATSI)
PP (ATSI)
PENLC
PPL
RE
JCPL
PSEG
METED
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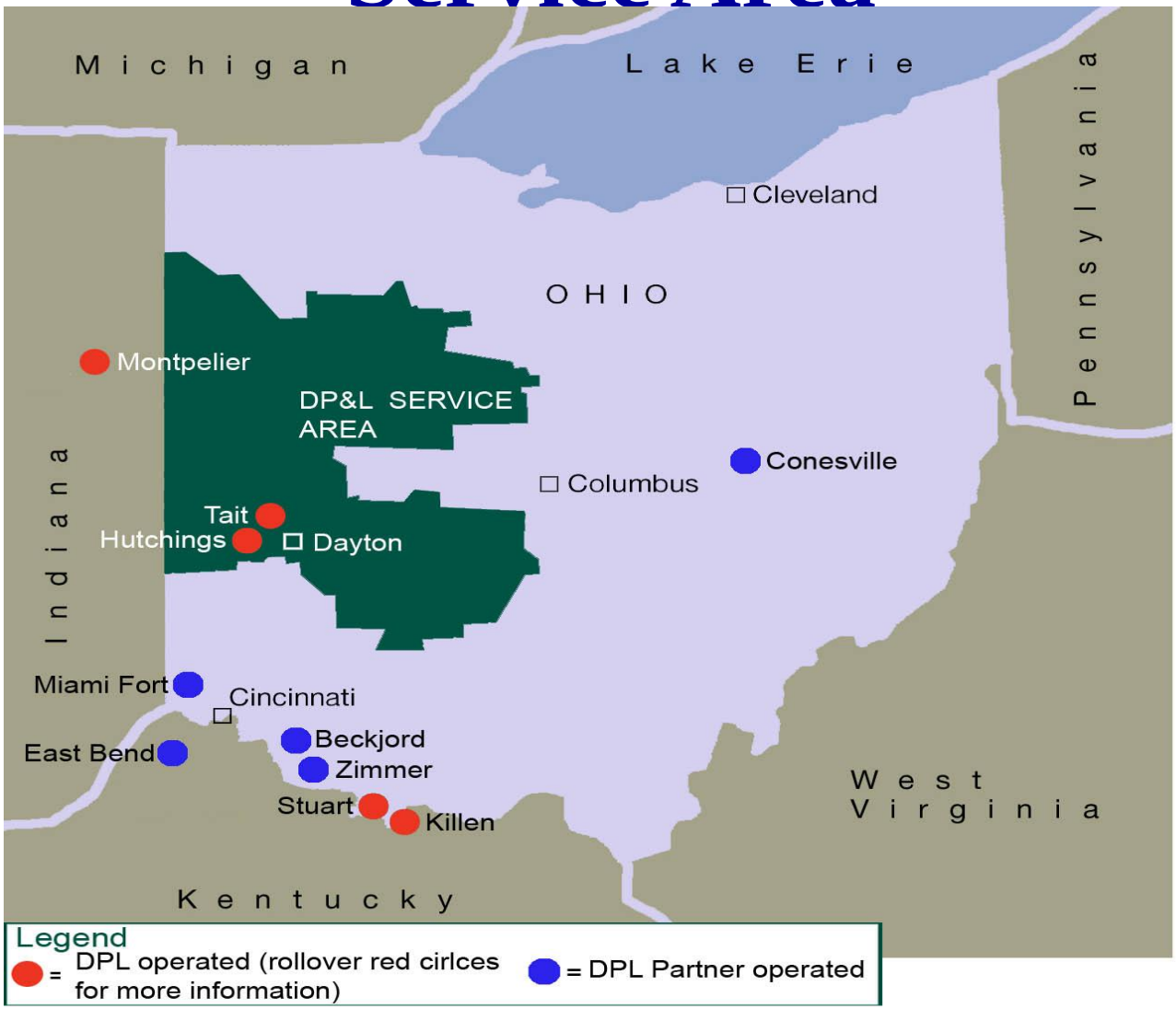
PECO
OP (AEP)
DQE
DAY
West Penn (APS)
AE
BGE
Potomac Edison (APS)
CSP (AEP)
DPL
PEPCO
Monongahela Power (APS)
DOM
APP (AEP)
KP (AEP)

Service Area

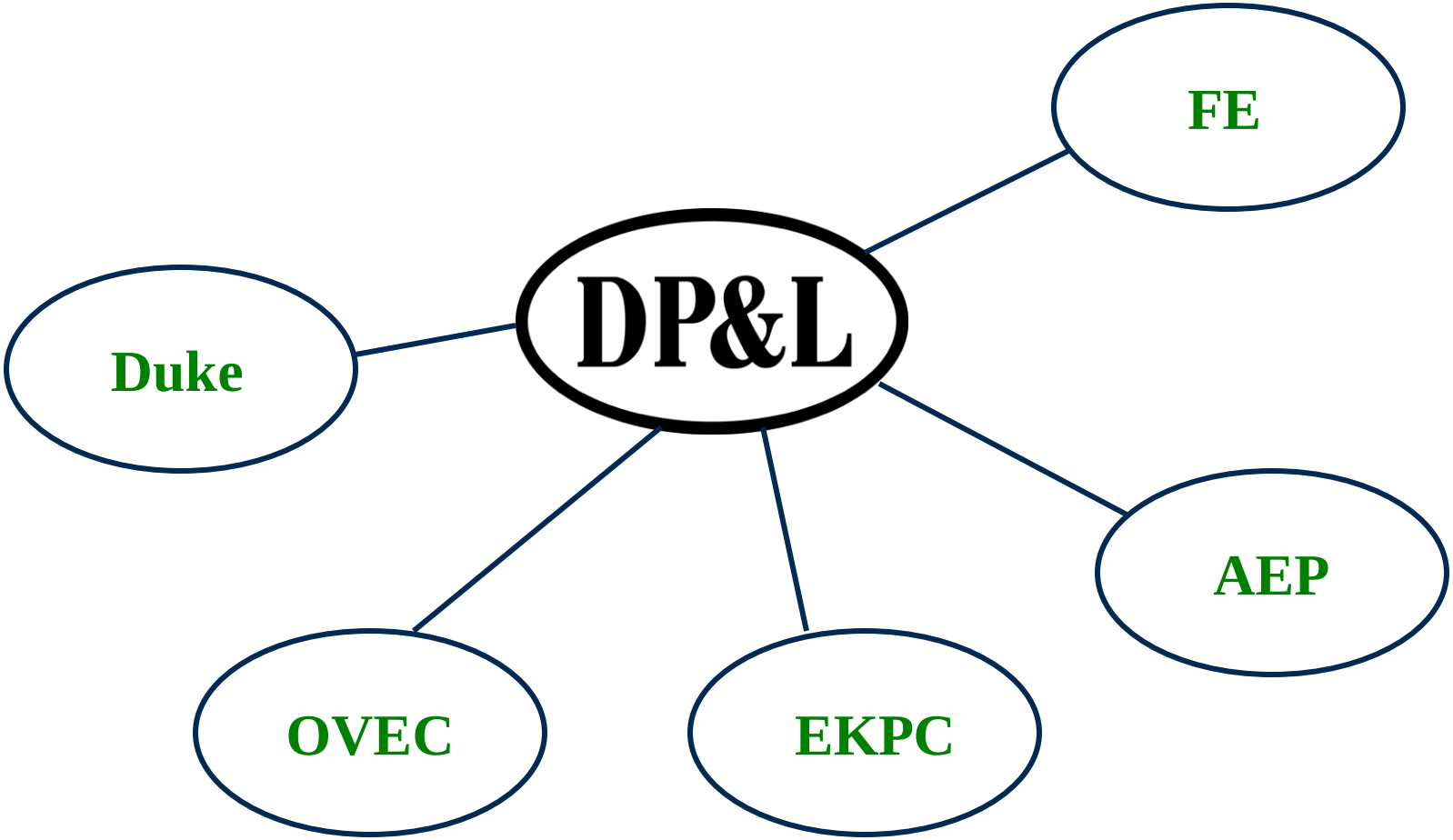


- **6,000 square miles in West Central Ohio**

Transmission

- **345 kV and 138 kV BES facilities**
  - ***~ 884 miles of commonly-owned 345 kV with AEP and Duke (~ 307 miles DP&L share)***
  - ***~ 127 miles wholly-owned 345 kV***
  - ***~ 380 miles 138 kV***
- **69 kV sub-transmission**
- **12 kV distribution**
- **Can import over 90% of control area load**

First Tier Interconnections



Peak Load

- **All-time peaks were set in summer 2007**
- **3,270 MW native**
- **3,727 MW zone**
- **Zonal load includes rural electric cooperative, and municipal loads**

Generation

- **~ 3,750 MW total**

- **~ 1,040 MW located in service area**

- **Mix**
  - ***Coal: ~ 2,850 MW***
  - ***Gas/Oil: ~ 900 MW***

Load Flow Base Cases

- **MMWG cases with detailed model of DP&L**
- **DP&L detailed model < 250 busses**
- **PJM RTEP case with DP&L updates**

Loads

- **Updated bus load profile, based on recent customer usage, losses, and known additions**

- **2009 actuals:**
  - **3,327 MW non-coincident**
  - **3,310 MW weather-normalized**

- **2010 PJM Load Forecast Report projections for 2015:**
  - **3,779 MW non-coincident**
  - **3,584 MW coincident**

- **DP&L projection for 2015:**
  - **3,696 MW non-coincident**
  - **222 MW DSM**

2014 Baseline Projects

- **Greene-Alpha 138 kV reconductoring**
  - **N-1-1 thermal violation due to loss of Greene 345/138 kV #1 & #2**
- **Bath-Trebein 138 kV rerate**
  - **N-1-1 thermal violation due to loss of Bath-Miami 345 kV & Bath 345/138 kV**
- **Shelby 345/138 kV #2**
  - **N-1-1 voltage violation due to loss of Shelby 345/138 kV #1 & Miami-Eldean 138 kV**
- **Remaining projects were generally triggered by violations resulting from N-1-1 conditions involving non-BES facilities; will be reevaluated in 2015 RTEP**

Assessment Criteria

- **Outlined in DP&L FERC 715 filing, available at:**

  www.pjm.com/planning/planning-criteria.aspx

- **System Normal:**
  - **thermal loadings < normal ratings**
  - **voltages ≥ 95%**

- **N-1 Internal Generation Outages:**
  - **thermal loadings < normal ratings**
  - **voltage drops < 5% to 10%, depending on location**

- **N-1 Transmission Outages:**
  - **thermal loadings < emergency ratings**
  - **voltage drops < 5% to 10%, depending on location**

- **PJM criteria for interconnection requests**

Assessment Process

- **Coordinate with PJM to validate any potential violations identified through independent DP&L and PJM analyses**

- **Any potential violations/solutions will be presented at a subsequent Subregional RTEP meeting**

- **DP&L load flow cases will be made available through PJM, subject to its CEII guidelines**