



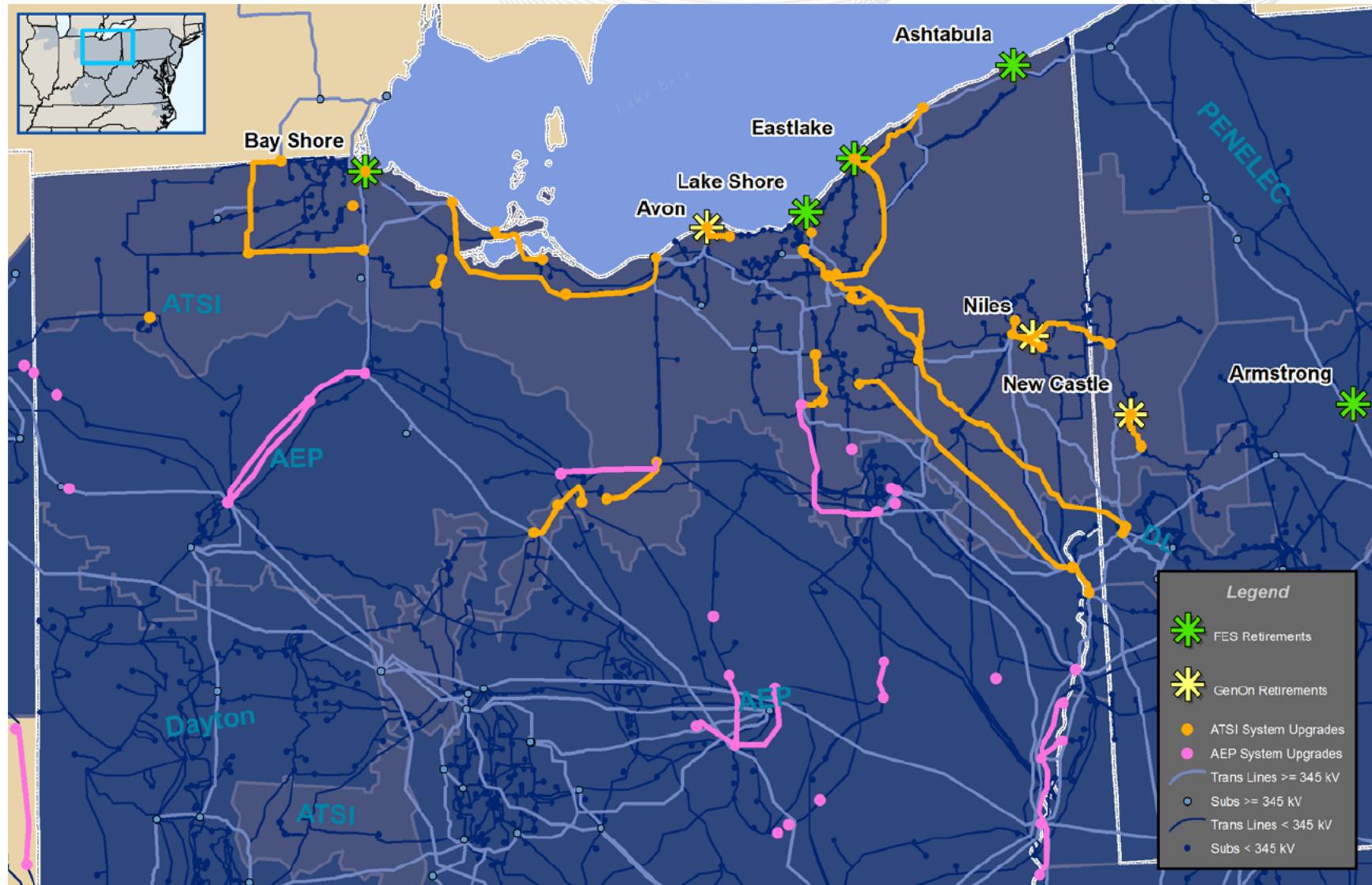
LDA Evaluation – Cleveland Area

PJM Planning Committee
7/12/2012



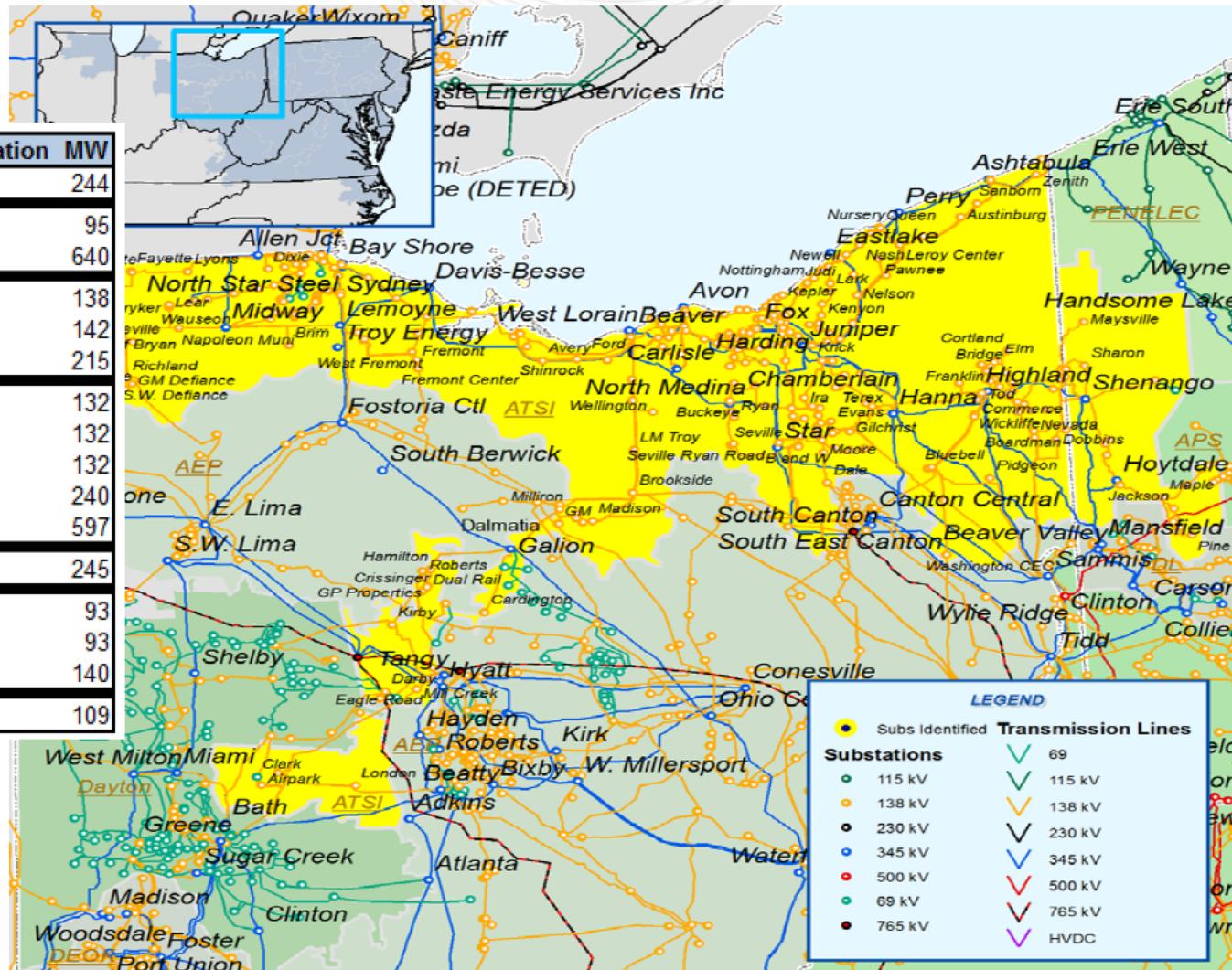
- Existing ATSI LDA
- Cleveland Reactive Operational Interface
- Greater Cleveland LDA
- South Canton LDA

Deactivation Notifications & Associated Reinforcements



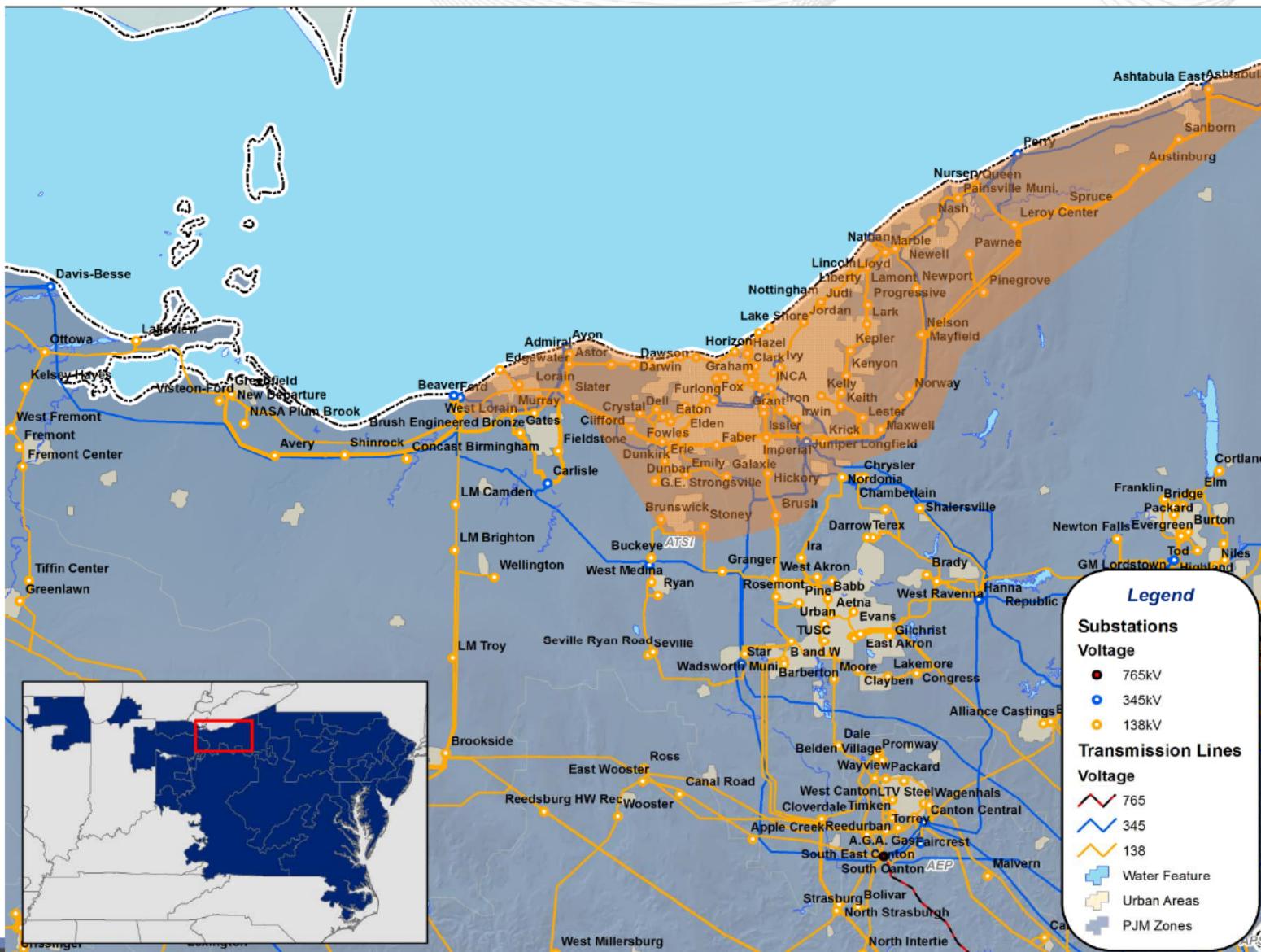
Existing ASTI LDA

Deactivation Notification	MW
Ashtabula 5	244
Avon Lake 7	95
Avon Lake 9	640
Bay Shore 2	138
Bay Shore 3	142
Bay Shore 4	215
Eastlake 1	132
Eastlake 2	132
Eastlake 3	132
Eastlake 4	240
Eastlake 5	597
Lake Shore 18	245
New Castle 3	93
New Castle 4	93
New Castle 5	140
Niles 1	109

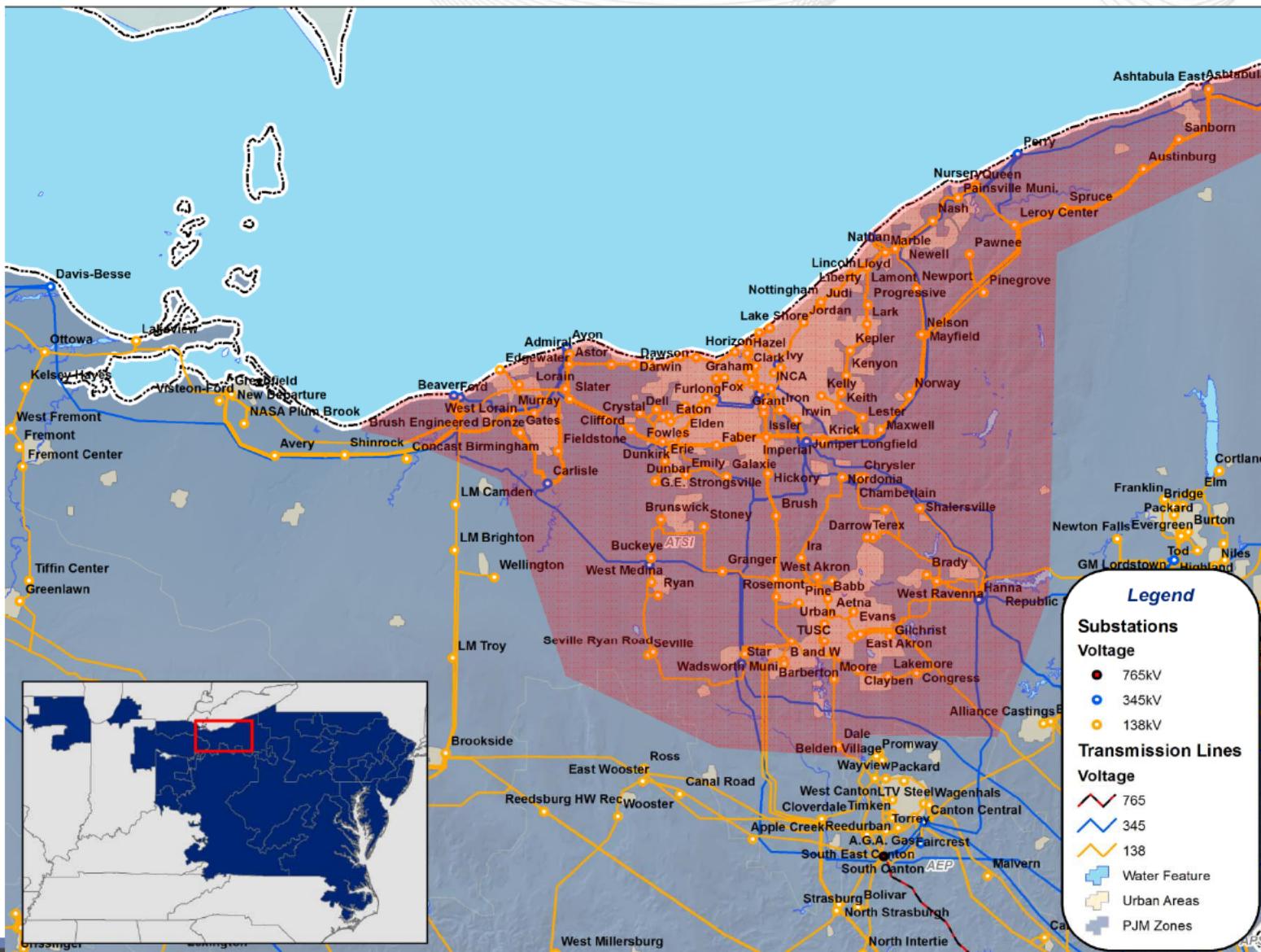




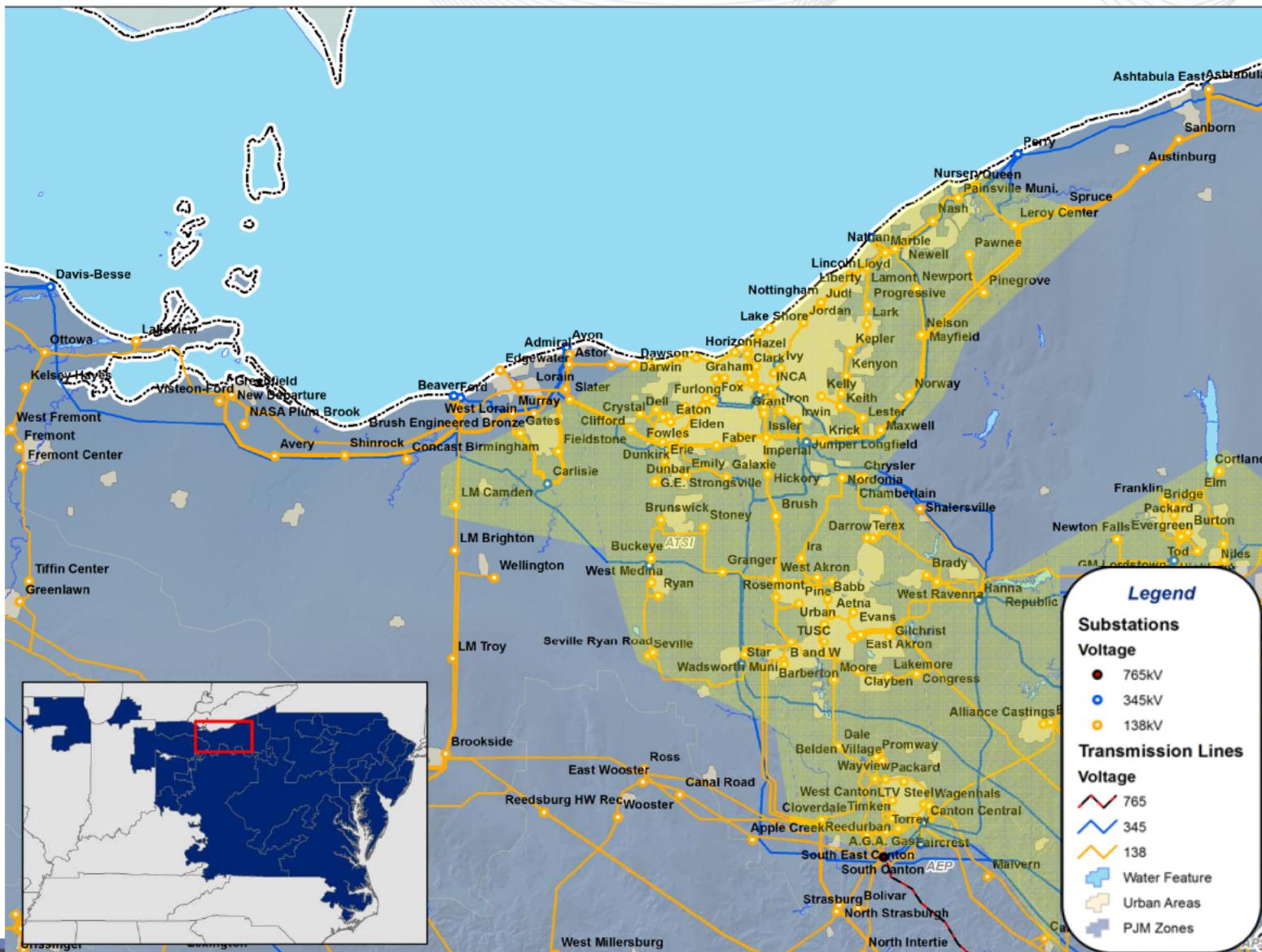
Approximate Cleveland Reactive Operational Interface



Greater Cleveland LDA



South Canton DFAx LDA



- B1913 – Convert Eastlake 1, 2, 3, 4 and 5 to synchronous condensers
- B1914 – Convert Lakeshore 18 to a synchronous condenser
- +1385 MVAR due to synchronous condenser conversions

- New 345 kV transmission
- New 138 kV transmission
- New 345/138 kV stations
- New 345/138 kV transformation at existing stations

- Previous 2011 RTEP Assumptions (4Q 2011)
 - 2016 90/10 load forecast (2011 Load Report): 15,067MW
 - CETO = 4,360MW
 - DR: 381 MW
 - EE: 3 MW
- ATSI Zone Retirements: 3387MW
- Current 2012 RTEP Assumptions
 - 2017 90/10 load forecast (2012 load report): 14,529 MW
 - CETO = 5,460MW
 - DR: 1764 MW
 - EE: 45 MW

- Preliminary 2017 Load deliverability test for ATSI LDA
- CETL > 115% CETO
 - Assumes known generation retirements and related network upgrades
- Voltage dispatch – no unit outage (Perry is too big to lose)

- Previous analysis prior to deactivation notifications demonstrated that the existing ATSI LDA produced a more severe result than the other evaluated potential LDAs
- Several recent changes to generation resource and network topology assumptions
- Re-evaluate the additional Cleveland area LDAs with the 2012 RTEP assumptions