

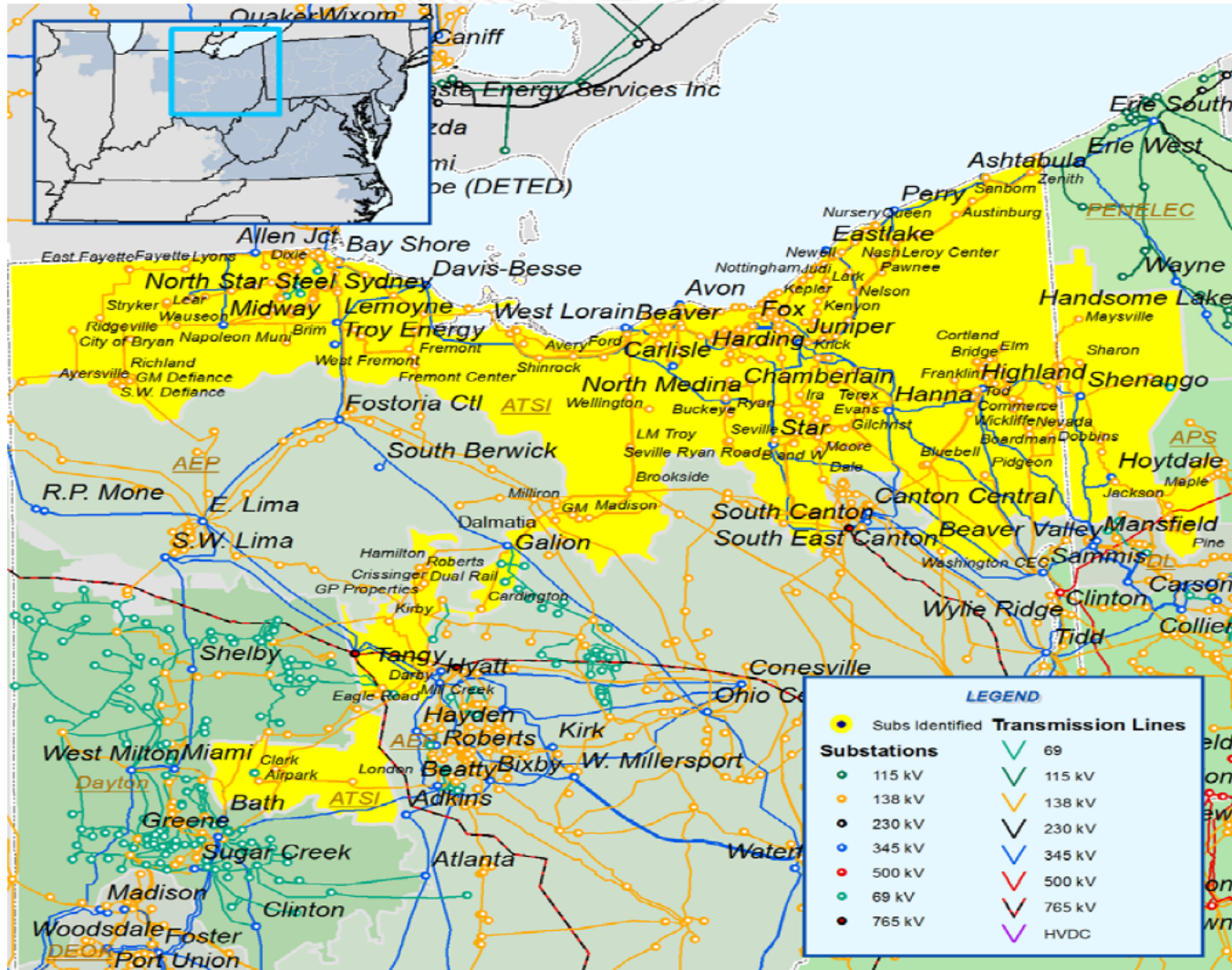


LDA Evaluation – Cleveland Area

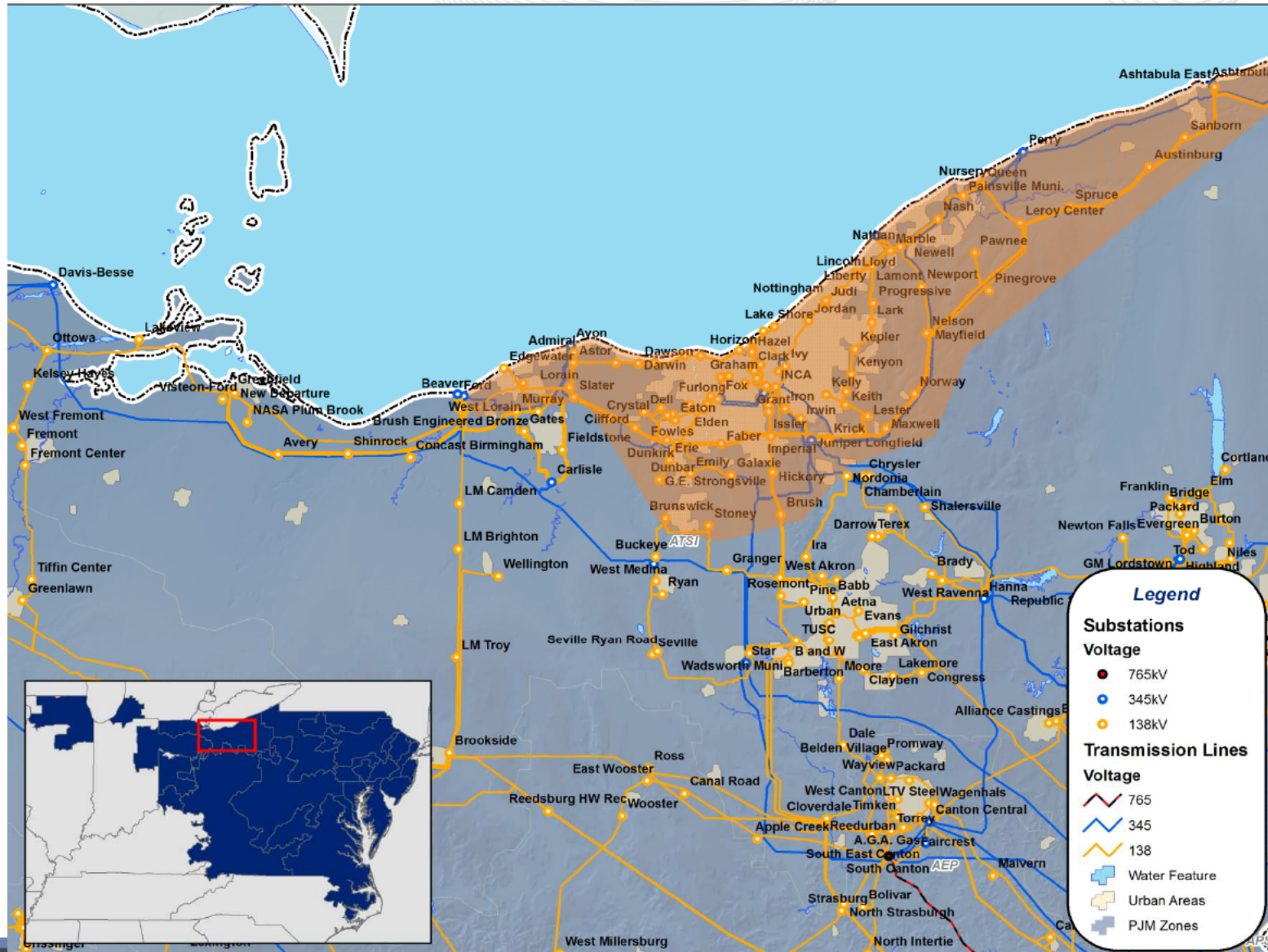
PJM Planning Committee
Mark Sims
1/12/2012

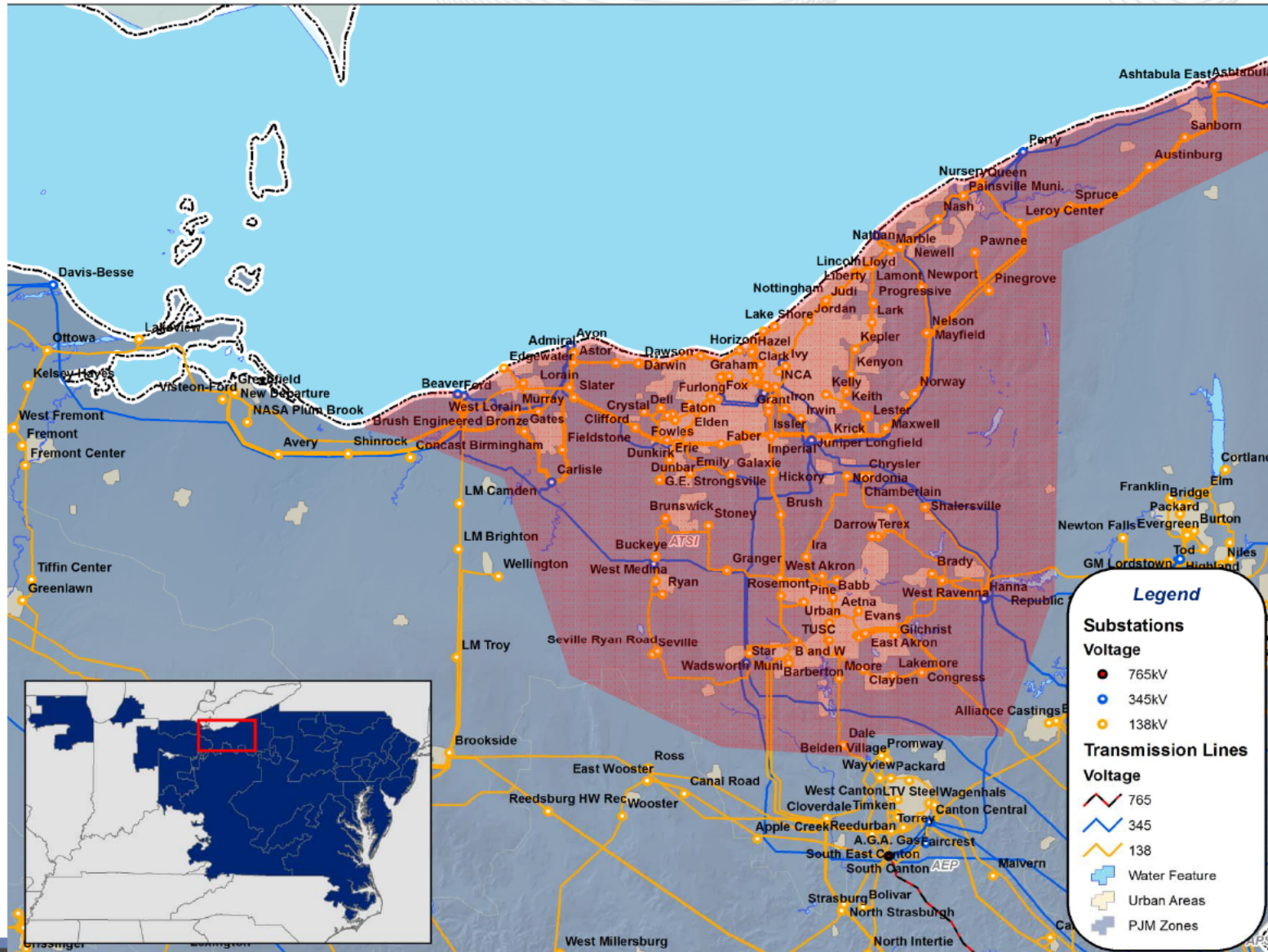
- Overview
- Simulation
 - Existing LDA
 - Potential LDAs
 - At-risk generation

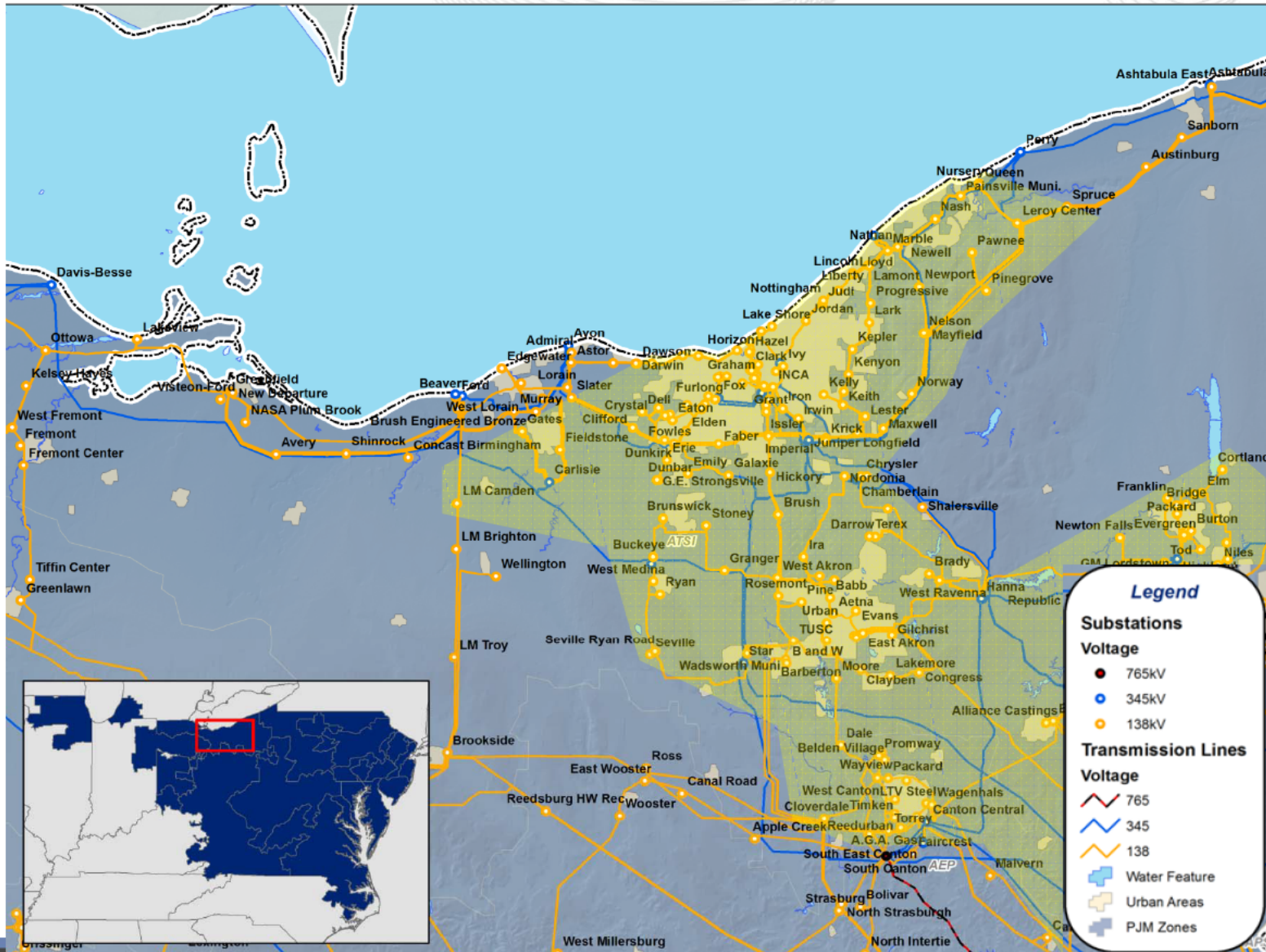
- Existing ATSI LDA
- Cleveland Reactive Operational Interface
- Greater Cleveland LDA
- South Canton LDA



Approximate Cleveland Reactive Operational Interface







LDA	CETO	CETL (as a % of the CETO)
Existing ATSI LDA	4360	100% < CETL < 115%
PJM Operations IROL Interface	2600	CETL > 115%
Greater Cleveland LDA	5080	CETL > 115%
South Canton DFAX LDA	7010	CETL > 115%

- At-risk generation not considered
- Existing ATSI LDA experiences voltage collapse
- Existing ATSI LDA produces most severe results

LDA	At Risk	CETL (Voltage)
Existing ATSI LDA	Unit A	100% < CETL < 115%
	Unit B	< 100%
	Unit A + Unit B	< 100%

- Voltage test (not thermal) is the most limiting condition
- At-risk generation considered are existing units in the ATSI LDA that have several at-risk indications
- Existing ATSI LDA experiences voltage collapse below the CETO
- Existing ATSI LDA produces most severe results

- The Existing ATSI LDA produces a more severe result than the other evaluated potential LDAs
- The Existing ATSI LDA shows the expected constraints in the at-risk analysis
- New LDA considerations
 - Reliability
 - RPM