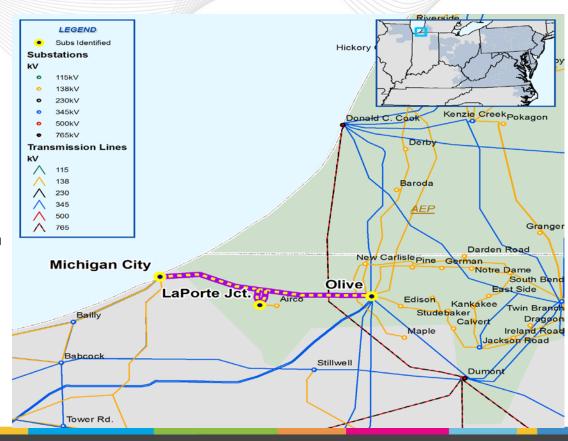


Reliability Updates

PJM SRRTEP – West 3/5/2015



- Project Scope Change: B1467.2
- Old Scope: Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area
- New Scope: Build a Bosserman 138KV station approximately 200 feet from the existing LaPorte Junction station. Connected both stations wth a 200 feet tie line. All 69 kV and 34.5 kV facilities will remain at LaPorte Junction station and 138kV facilities move to the new station. The New Carlisle – Trail Creek 138KV line loops into the new substation. (B1467)
- Old Estimated Cost: \$3 MNew Estimated Cost: \$13M
- Required IS Date: 6/1/2015



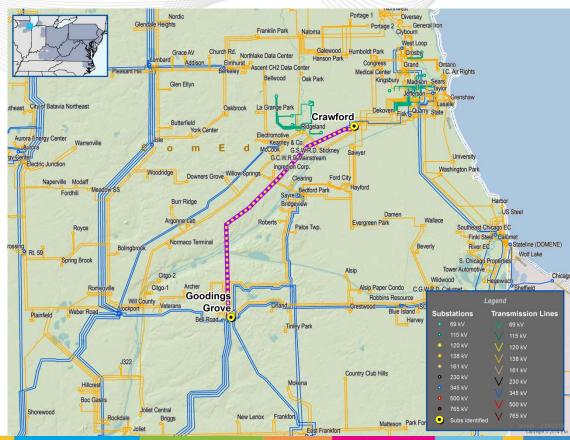


Supplemental Projects

PJM SRRTEP – West 3/5/2015

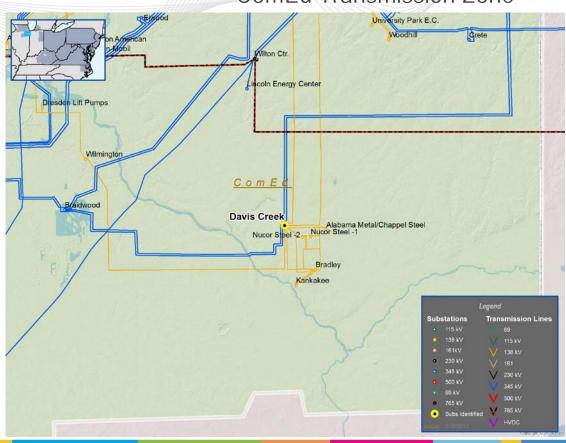


- Reconductor 9.5 miles of 345 kV line 1311 from Goodings Grove to Crawford. (S0880)
- Reason: NERC Alert
- Estimated Cost: \$14.6M
- Projected IS Date: 12/31/2015



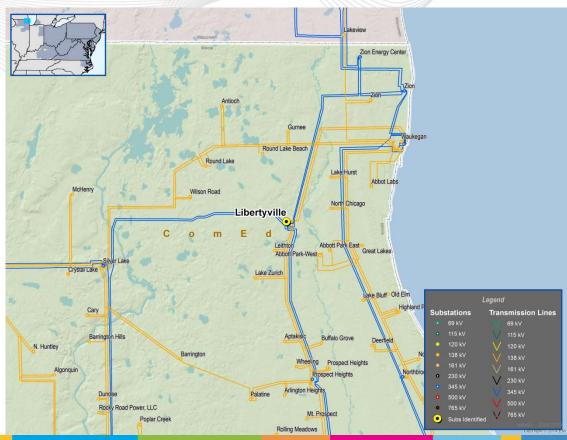


- Davis Creek Replace 345 kV bus tie
 1-2. (S0881)
- Reason: Material Condition
- Estimated Cost: \$2.2M
- Projected IS Date: 10/31/2015



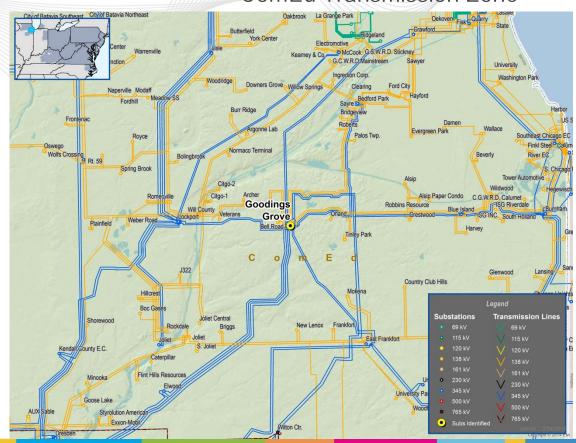


- Libertyville Replace 345 kV bus tie 8-9. (\$0883)
- Reason: Material Condition
- Estimated Cost: \$3.1M
- Projected IS Date: 11/30/2015





- Goodings Grove Balance Station Load (swap bus positions for 345 kV lines 1312 & 11620 and 345 kV lines 11604 & 11622) and replace 138 kV bus tie 2-3. (S0884)
- Reason: Potential Generator Retirement
- Estimated Cost: \$5.4M
- Projected IS Date: 1/31/2016

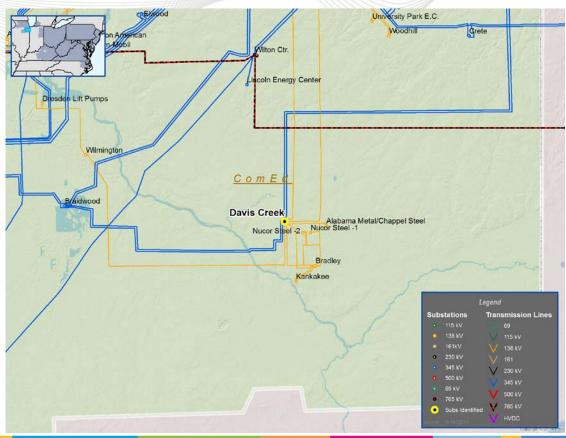




Supplemental Project

- Rebuild 138 kV line 0902 for 19 miles from Davis Creek to the Davis Creek tap. (S0885)
- Reason: Material Condition
- Estimated Cost: \$23.1M
- Projected IS Date: 12/18/2015

ComEd Transmission Zone





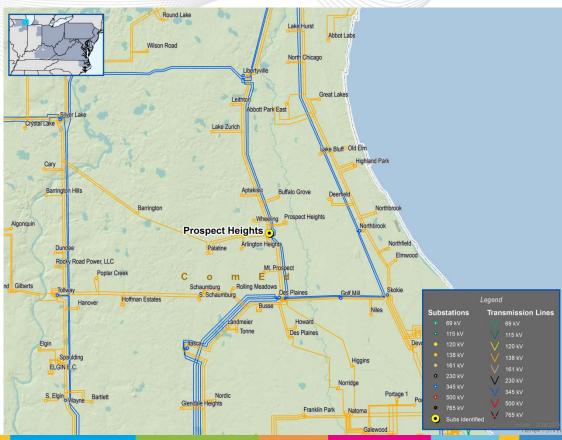
Supplemental Project

Prospect Heights – Replace 345/138KV
 Transformer 81 and move the cap bank
 from the Transformer 81 tertiary winding to 138 kV bus 1. (S0886)

Reason: Material Condition

Estimated Cost: \$10.8M

Projected IS Date: 12/31/2015

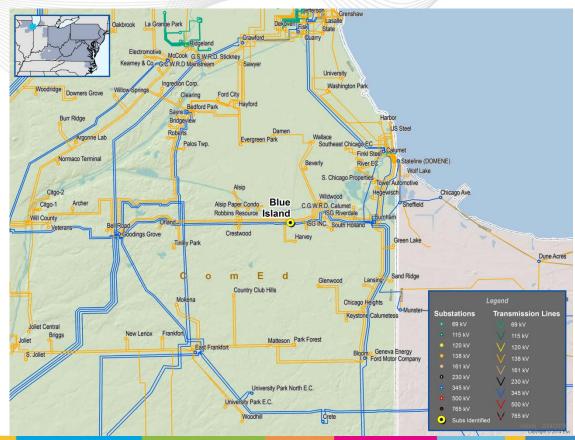




Supplemental Project

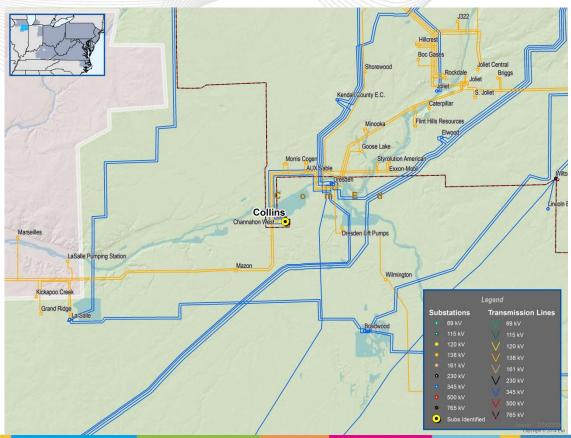
- Blue Island Replace 345/138kV
 Transformer 83, install high-side CB.
 (S0887)
- Reason: Material Condition
- Estimated Cost: \$9.5M
- Projected IS Date: 12/31/2015

ComEd Transmission Zone





- Collins Station Replace 765/345KV Transformer 92. (S0888)
- Reason: Material Condition
- Estimated Cost: \$18.8M
- Projected IS Date: 2/1/2016

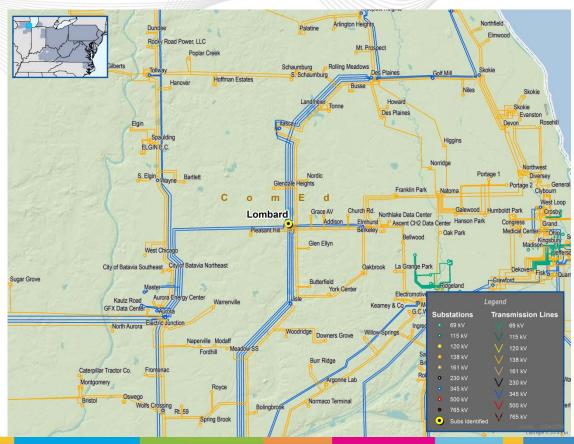




Supplemental Project

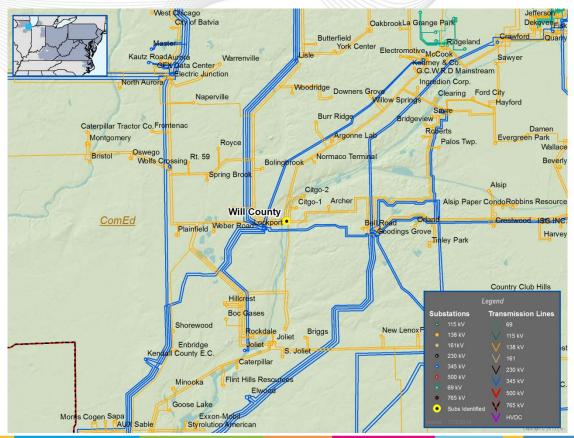
- Lombard Replace 345/138KV
 Transformer 82 138 kV CB and 138 kV
 bus tie 3-4. (S0889)
- Reason: Material Condition
- Estimated Cost: \$3.9M
- Projected IS Date: 12/31/2015

ComEd Transmission Zone





- Will County Replace 138 kV CB 1802 and 138 kV Bus Tie 2-3. (S0890)
- Reason: Potential Generation Retirement
- Estimated Cost: \$2.8M
- Projected IS Date: 7/1/2015

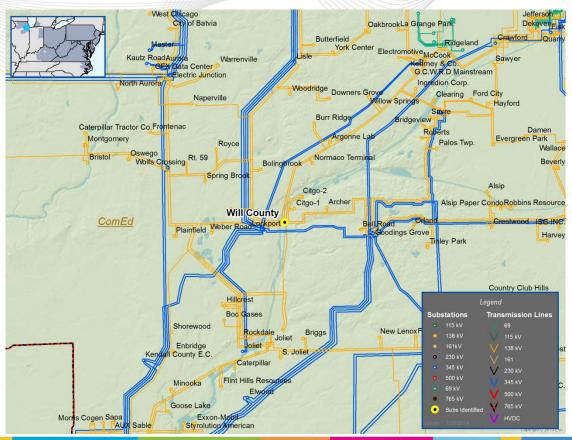




Supplemental Project

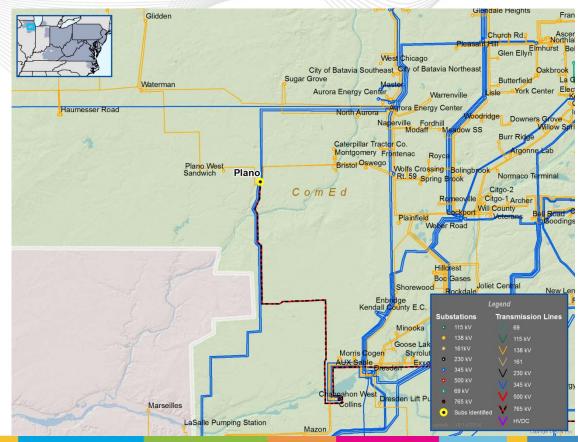
- Will County Replace 138 kV Transformer 20 138 kV CB. (S0891)
- Reason: Potential Generation Retirement
- Estimated Cost: \$1.5M
- Projected IS Date: 6/1/2016

ComEd Transmission Zone



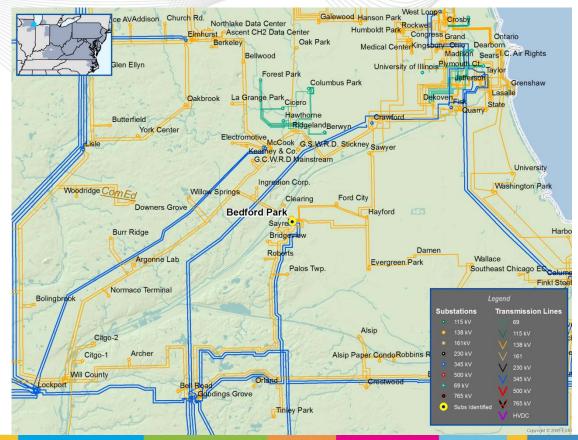


- Plano Replace 345 kV Bus Tie 8-9. (S0892)
- Reason: Material Condition
- Estimated Cost: \$2.2M
- Projected IS Date: 6/1/2016



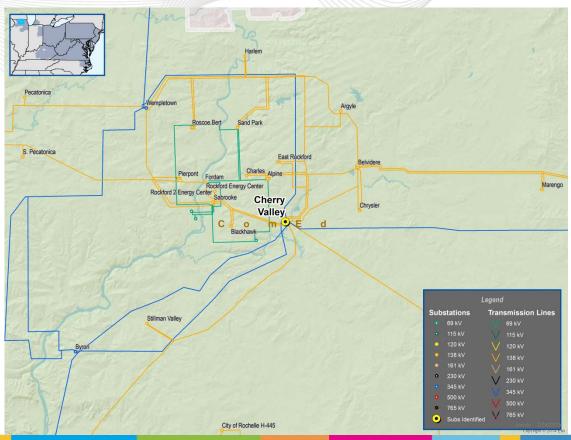


- Bedford Park Replace 138 kV CB's 11521, 11523, 1324. (S0893)
- Reason: Reliability Improvement
- Estimated Cost: \$4.3M
- Projected IS Date: 12/31/2016



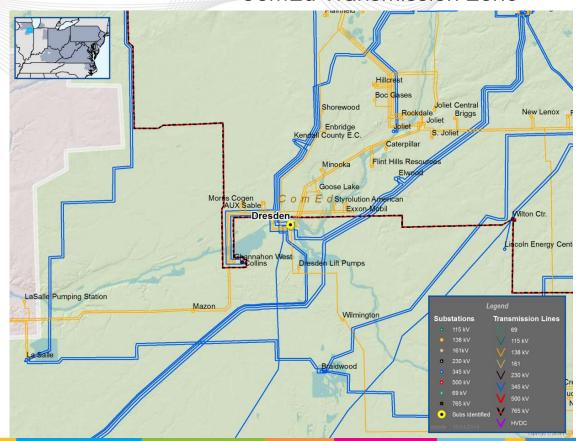


- Cherry Valley Install three 345 kV
 CB's and expand 345 kV ring. (S0894)
- Reason: Operating Flexibility
- Estimated Cost: \$16.3M
- Projected IS Date: 12/31/2016



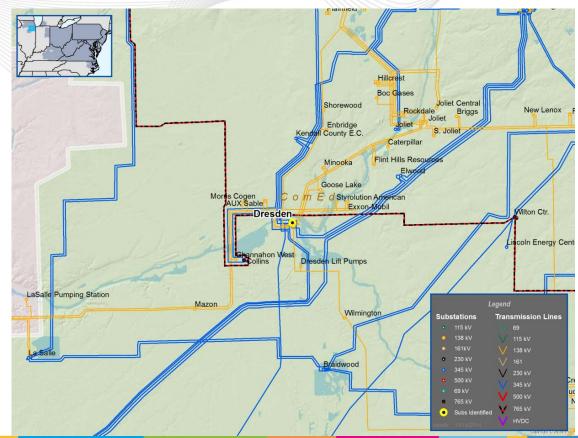


- Dresden Replace 345/138KV
 Transformer 81 high side MOD with a circuit switcher. (S0895)
- Reason: Reliability Improvement
- Estimated Cost: \$1M
- Projected IS Date: 12/31/2015





- Dresden Replace 345/138KV
 Transformer 83, install high side 345kV
 CB, replace 138 kV CB's 1205, 1206, 0903, 0904. (S0896)
- Reason: Material Condition
- Estimated Cost: \$18.3M
- Projected IS Date: 12/31/2016

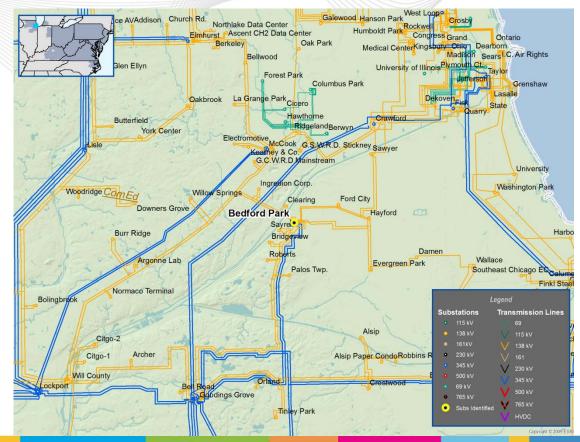




Supplemental Project

- Bedford Park Replace 345/138KV
 Transformer 82, move cap bank from tertiary to 138KV bus 3, replace
 Transformer 84 high side 345KV MOD with a CB. (S0897)
- Reason: Material Condition
- Estimated Cost: \$21.2M
- Projected IS Date: 12/31/2015

ComEd Transmission Zone





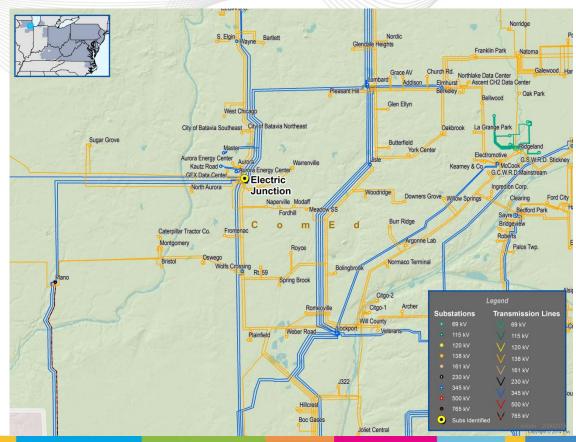
Supplemental Project

Electric Junction – Replace 345/138KV
 Transformer 81, install 345KV high side
 CB, move cap bank from tertiary to
 138KV bus 1, install Transformer 82 &
 84 high side 345KV CBs, replace 345
 kV 11126 CB. (S0898)

Reason: Material Condition

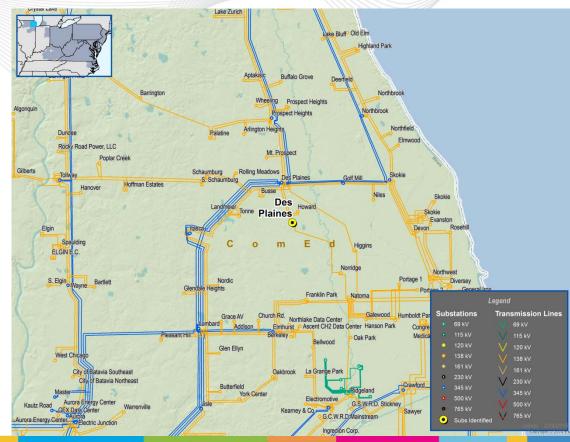
Estimated Cost: \$28.7M

Projected IS Date: 12/31/2016



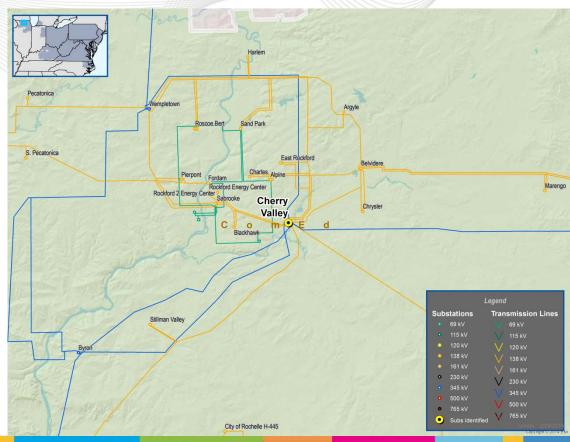


- Des Plaines Install 4 Transformer high side 345KV CBs for transformer 81, 82, 83, &84, replace 138 kV Bus Tie 2-3. (S0899)
- Reason: Operating Flexibility
- Estimated Cost: \$12.7M
- Projected IS Date: 12/31/2016



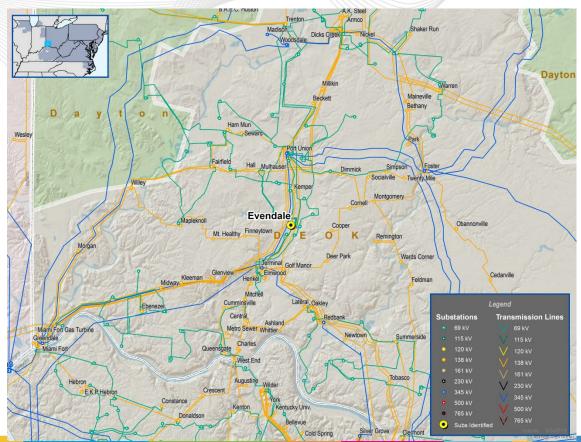


- Cherry Valley Replace 345/138kV
 Transformer 81, install high side 345kV
 circuit switcher, move cap bank from tertiary to 138 kV bus 1. (S0900)
- Reason: Material Condition
- Estimated Cost: \$21.5M
- Projected IS Date: 12/31/2015





- Reconfigure Evendale 69kV substation. (S0882)
- Reason: Reliability Improvement
- Estimated Cost: \$0.29M
- Projected IS Date: 6/1/2016

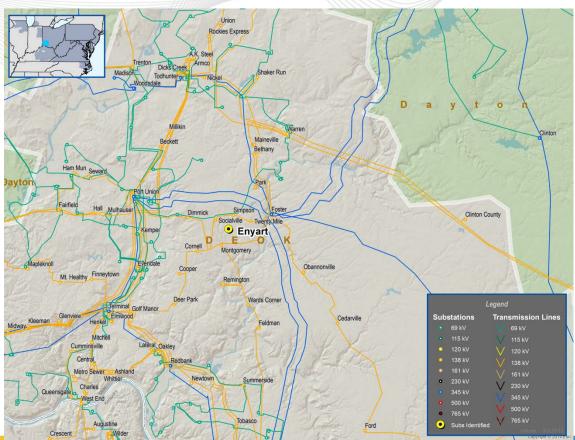




Supplemental Project

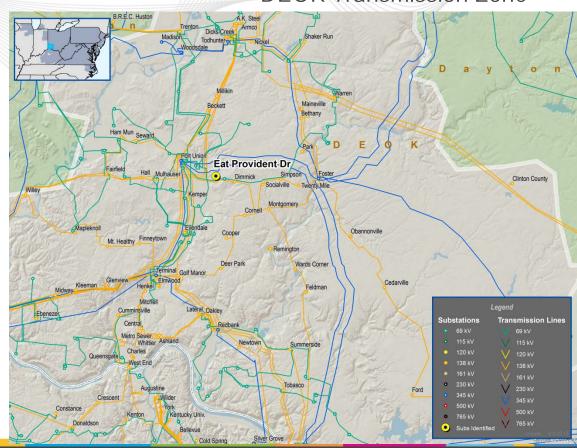
- Build a new 22.4MVA 138/12kV substation at Enyart. (S0904)
- Reason: Load Growth
- Estimated Cost: \$3.38M
- Projected IS Date: 12/31/2015

DEOK Transmission Zone





- Build a New 22.4MVA 138/12kV substation at E. Provident Dr. (S0905)
- Reason: Load Growth
- Estimated Cost: \$3.72M
- Projected IS Date: 12/1/2015

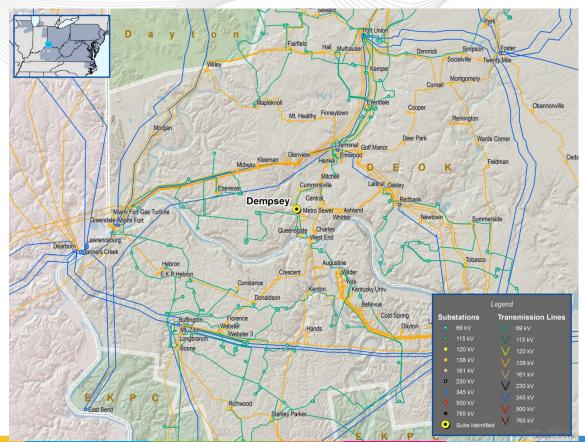




Supplemental Project

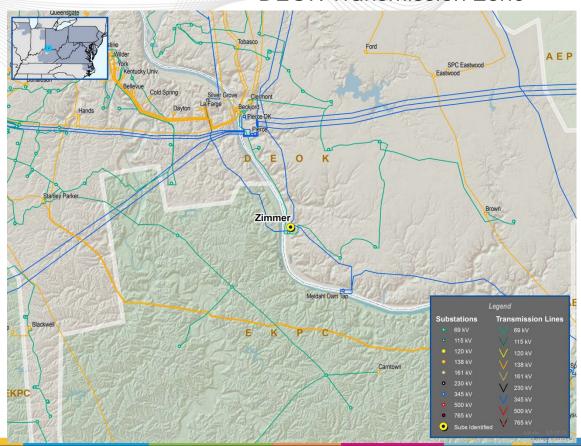
- Build a new 22.4MVA 138/12kV substation at Dempsey. (S0906)
- Reason: Load Growth
- Estimated Cost: \$4.57M
- Projected IS Date: 6/1/2017

DEOK Transmission Zone



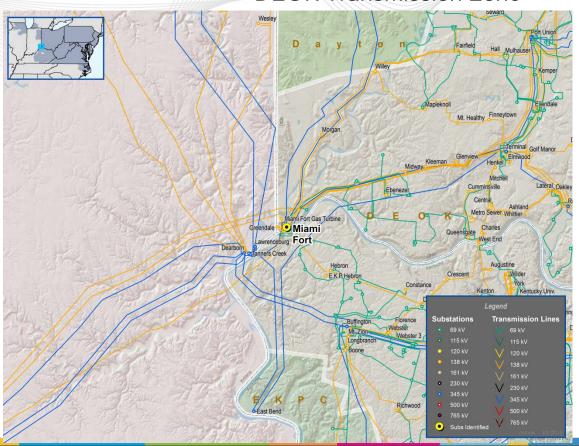


- Install a new 345kV synchronizing circuit breaker at Zimmer. (S0907)
- Reason: Generation Separation
- Estimated Cost: \$1.7M
- Projected IS Date: 12/31/2016



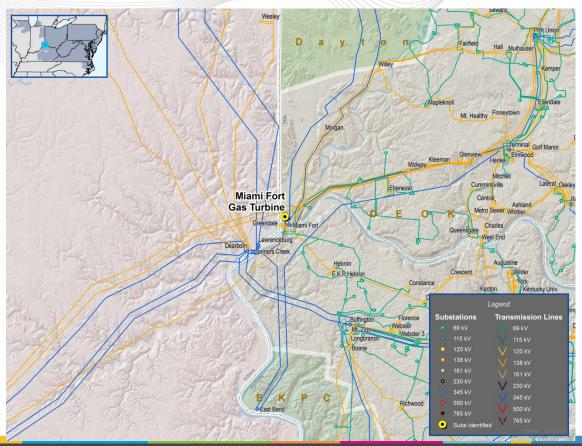


- Install 2 new 345kV synchronizing circuit breakers at Miami Fort (S0908)
- Reason: Generation Separation
- Estimated Cost: \$6.33M
- Projected IS Date: 6/1/2017



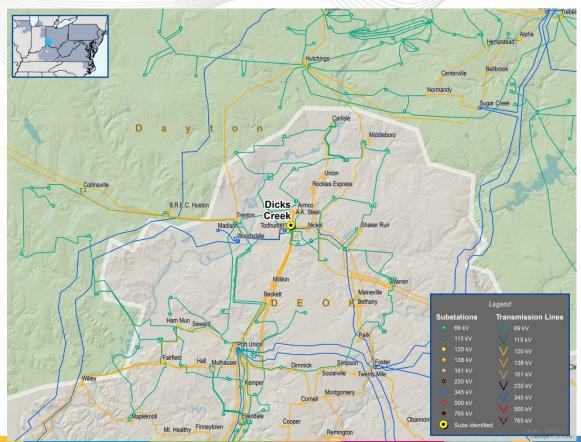


- Install (3) 138kV circuit breakers Miami Fort GT (S0909)
- Reason: Generation Separation
- Estimated Cost: \$2.64M
- Projected IS Date: 6/1/2017



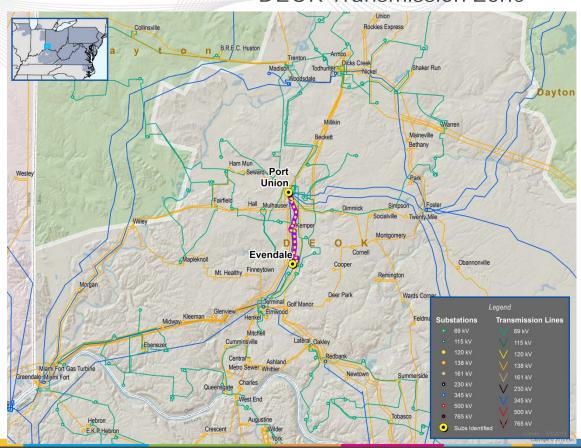


- Install (2) new 138kV circuit breakers at Dicks Creek (S0910)
- Reason: Generation Separation
- Estimated Cost: \$3.0M
- Projected IS Date: 6/1/2016



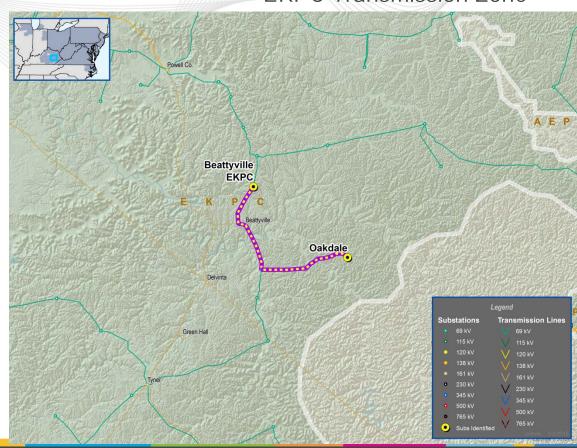


- Extend the Port Union Evendale 69kV Feeder 3861 to enable loop feed to existing General Mills substation location (S0911)
- Reason: Reliability Improvement
- Estimated Cost: \$0.88M
- Projected IS Date: 6/1/2016



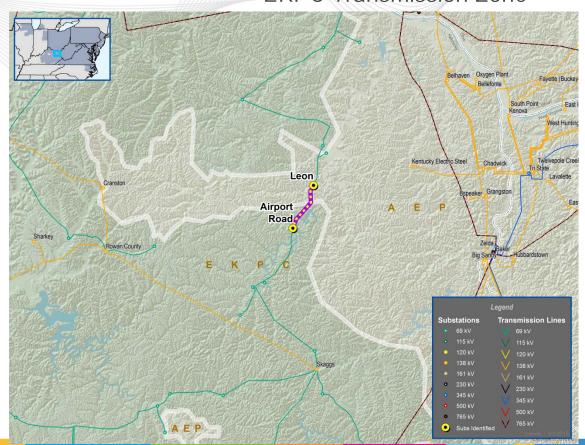


- Construct a new 69 KV line from Beattyville Distribution-Oakdale using 556 ACSR. Operate this new line normally closed and operate the existing Oakdale Jct.-Oakdale line normally open. (S0914)
- Reason: Reliability Improvement
- Estimated Cost: \$8.5M
- Projected IS Date: 12/1/2017



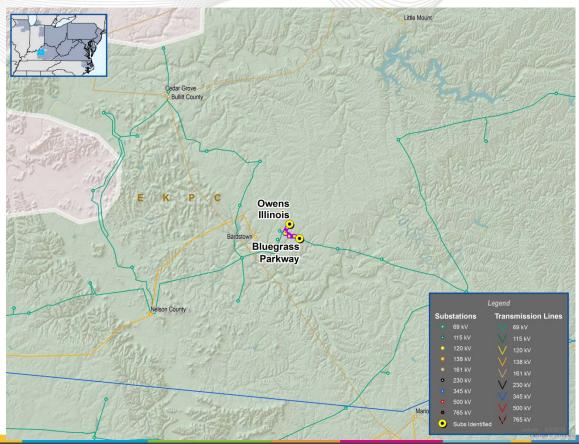


- Re-conductor the Leon-Airport Road 69 kV line section (5.72 miles) using 556.5 MCM ACTW conductor. (S0912)
- Reason: Voltage Improvement
- Estimated Cost: \$1.15M
- Projected IS Date: 12/1/2019



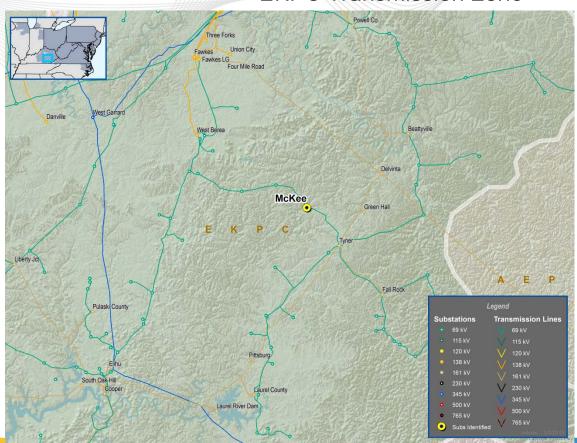


- Increase the MOT of the Owens Illinios Bluegrass Parkway Tap 69 KV line section to 212°F. (S0913)
- Reason: Reliability Improvement
- Estimated Cost: \$0.08M
- Projected IS Date: 6/1/2016



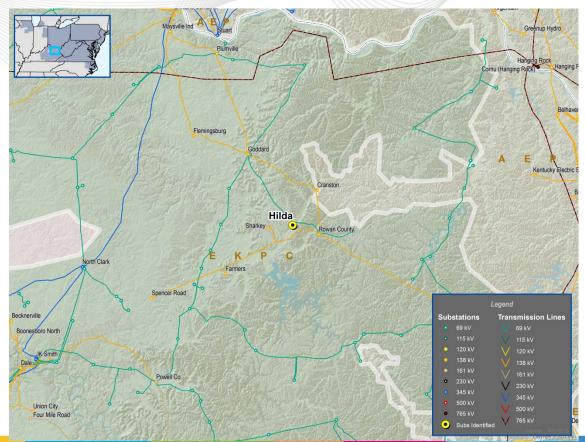


- Retire the Mckee 69KV10.7 MVAR capacitor bank. (S0915)
- Reason: Construction Constraint
- Estimated Cost: \$0.03M
- Projected IS Date: 12/1/2015





- Retire the Hilda 69kV 18.37 MVAR capacitor bank and move to Big Woods 69kV. (S0916)
- Reason: Reliability Improvement
- Estimated Cost: \$0.35M
- Projected IS Date: 12/1/2016





Questions?

Email: RTEP@pjm.com

PJM SRRTEP – West 3/5/2015



Revision History:

3/9/2015: Add reason for the supplemental projects

PJM SRRTEP – West 3/5/2015