

# Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

February 21, 2020

# Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

# ATSI Transmission Zone M-3 Process Richland-East Leipsic 138kV Line- Need

**Need Number:** ATSI-2020-002  
**Process Stage:** Need Meeting 02/21/2020

**Supplemental Project Driver(s):**  
*Equipment Material Condition, Performance and Risk*

**Specific Assumption Reference(s)**

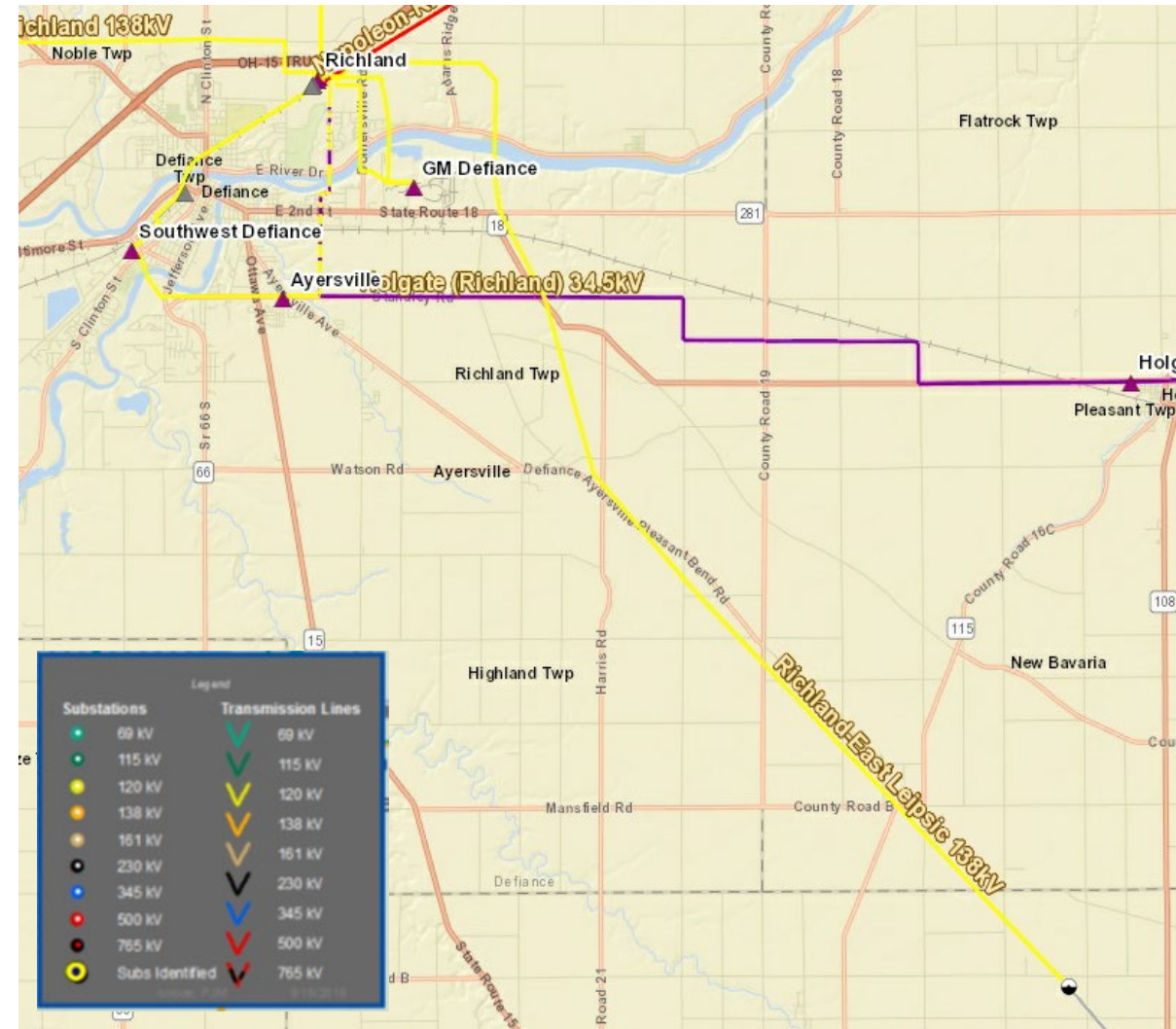
**Line Condition Rebuild / Replacement**

- Aged or deteriorated wood pole transmission line structures
- Negatively impact customer outage frequency and/or durations
- Demonstrate an increasing trend in maintenance findings and/or costs
- Transmission line ratings are limited by terminal equipment.

**Problem Statement**

Richland-East Leipsic 138 kV (~15.8 miles) Transmission Line:

- The Richland-East Leipsic 138kV Transmission Line was built in the 1960s. The average age of the structures on this line are 54 years old. FirstEnergy has historically experienced an average age of reject for wood poles to be 48.7 years.
- Line was surveyed in 2018 and showed a structure reject rate of 100% (126/126). The primary reasons for reject were structure age, woodpecker holes, pole top decay, and phase raised structures.
- There has been a growing trend in unscheduled interruptions on this line. There have been 11 total outages since 2011 for lightning, equipment failures, and other issues.
- There has been an increase in unplanned maintenance on this line. A recent aerial patrol found 90 active maintenance conditions requiring repair for wood pole rot, broken static wire and attachment hardware, and bent braces.



# Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

**Need Number:** ATSI-2019-083  
**Process Stage:** Solutions Meeting – 02/21/2020  
**Previously Presented:** Need Meeting – 11/22/2019

**Supplemental Project Driver(s):**  
*Customer Service*

**Specific Assumption Reference(s)**

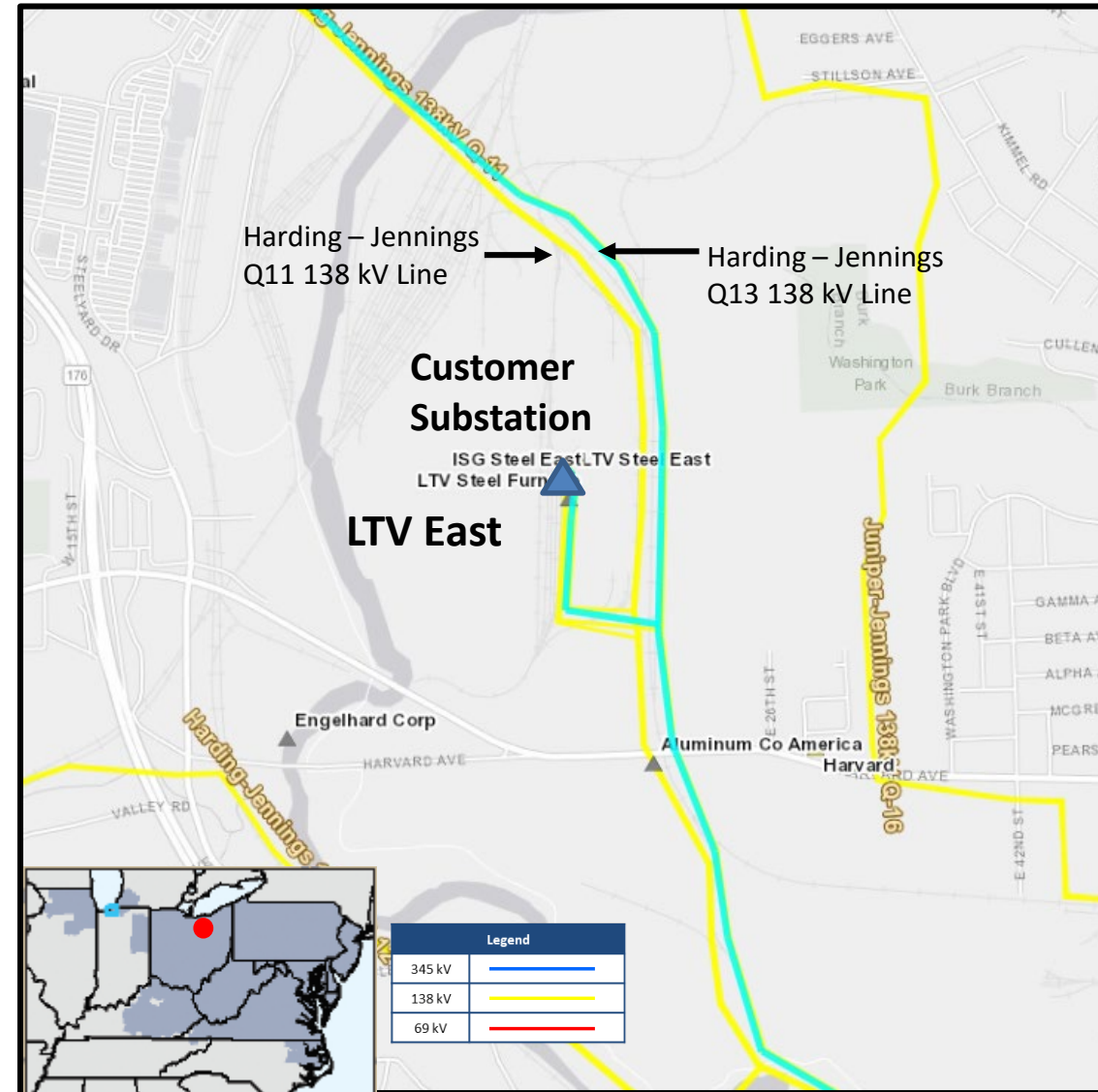
Modification of existing customer connection request evaluated per FirstEnergy’s “Requirements for Transmission Connected Facilities” document and “Transmission Planning Criteria” document.

**Problem Statement**

- Existing Customer Connection – Service Modification
- The existing customer requested modification to their current 138 kV transmission service.
  - The request is to move some of their existing load from the Harding – Jennings Q13 138 kV line to the Harding – Jennings Q11 138 kV line.

This request is not for a load increase but will result in a system topology change.

**Requested In-Service Date:** 02/01/2020





# ATSI Transmission Zone M-3 Process LTV East Steel Customer- Solution

**Need Number:** ATSI-2019-083  
**Process Stage:** Solution Meeting – 02/21/2020  
**Previously Presented:** Need Meeting – 11/22/2019

**Proposed Solution:**

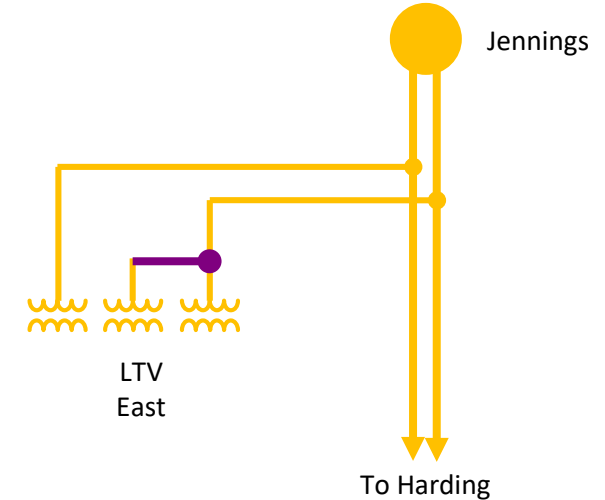
- Disconnect transformer #2 from the Harding – Jennings Q13 138 kV line.
- Reconnect transformer #2 to the Harding – Jennings Q11 138 kV line.

**Estimated Project Cost:** \$0

**Alternatives Considered:**

- None (obligation to serve)

**Projected In-Service:** 03/15/2020  
**Status:** Engineering  
**Model:** 2018 Series 2023 Summer RTEP 50/50



Legend	
500 kV	
345 kV	
138 kV	
69 kV	
34.5 kV	
23 kV	
New	