

SRRTEP Committee: Western EKPC Supplemental Projects

May 22, 2020

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

EKPC Transmission Zone M-3 Process Marion Co New Customer Load

Need Number: EKPC-2020-001

Process Stage: Solutions Meeting May 22, 2020 (2nd Review)

Previously Presented:

Needs Meeting 1/17/2020

Solution Meeting 2/21/2020

Supplemental Project Driver:

Customer Service

Specific Assumption References:

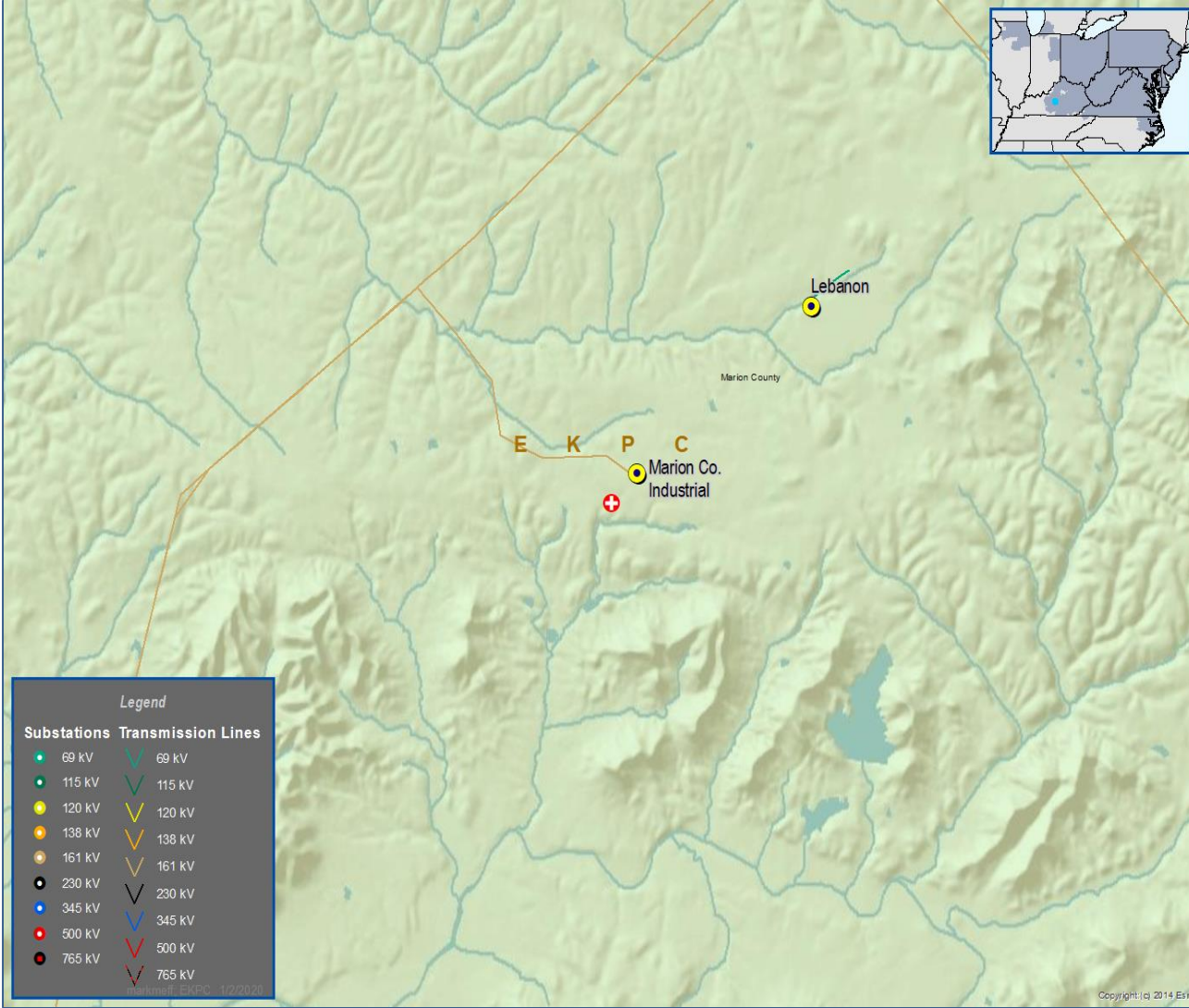
EKPC Assumptions Presentation Slide 11

Problem Statement:

A new industrial customer has requested a new delivery point for a peak demand of 36 MW by 10/1/2020. The new delivery point is located in Marion Co, KY approximately 0.3 miles from EKPC's 161 KV transmission near the existing EKPC owned 161/24.9 KV Marion County Industrial Park distribution substation. The existing distribution infrastructure is not capable of serving this request.

After additional DNH study by PJM, The Marion Co – Marion IP tap 161kV line is overloaded in the N-1-1 study (The line loading is still 110% of Normal Rating, 84MVA, after system adjustments after loss of Green Co – Summer Shade 161kV line). Currently the Marion Co-Marion Co Industrial Tap 161 KV line has a maximum operating temperature of 142F. This line is limited by a distribution line crossing.

Model: N/A



EKPC Transmission Zone M-3 Process Marion Co New Customer Load Update

Need Number: EKPC-2020-001

Process Stage: Solutions Meeting May 22, 2020

Problem Statement:

New Proposed Solution:

Build a new dual transformer 161/13.8 KV 50 MVA distribution station (South Marion County Industrial) and associated 0.25 mile 161 KV line tapping the existing Marion County Industrial 161 KV tap line.

Distribution cooperative will lower distribution line to allow adequate clearance for the Marion Co-Marion Co Industrial Tap 161 KV line to achieve a maximum operating temperature of 167F to match the rest of the line section.

Current summer ratings: SN/SE = 84/131 MVA

New summer ratings: SN/SE = 186/210 MVA

Transmission Cost: None

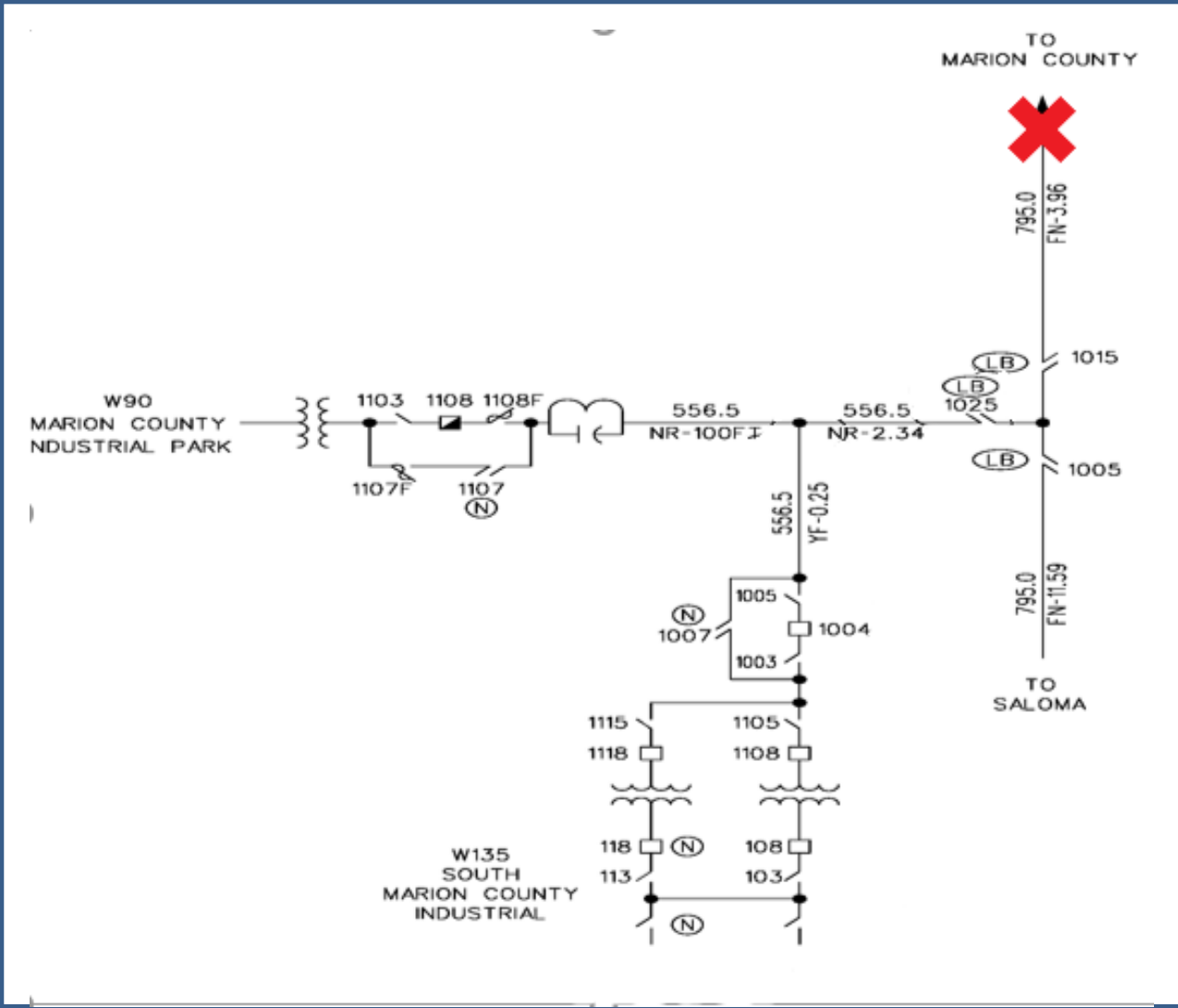
Distribution Cost: \$6.01M

Alternatives Considered:

No feasible alternatives

Projected In-Service: 6/1/2021

Project Status: Engineering



Appendix

High Level M-3 Meeting Schedule

Assumptions	Activity	Timing
	Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
	Stakeholder comments	10 days after Assumptions Meeting
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
	Stakeholder comments	10 days after Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
	Stakeholder comments	10 days after Solutions Meeting
Submission of Supplemental Projects & Local Plan	Activity	Timing
	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
	Post selected solution(s)	Following completion of DNH analysis
	Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
	Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

Revision History

5/12/2020 – V1 – Original version posted to pjm.com