Sub Regional RTEP Committee: Western DEOK Supplemental Projects

September 17, 2021

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



Need Number: DEOK 2021-010

Process Stage: Needs Meeting 09-17-2021

Project Driver: Equipment Condition, Performance and Risk

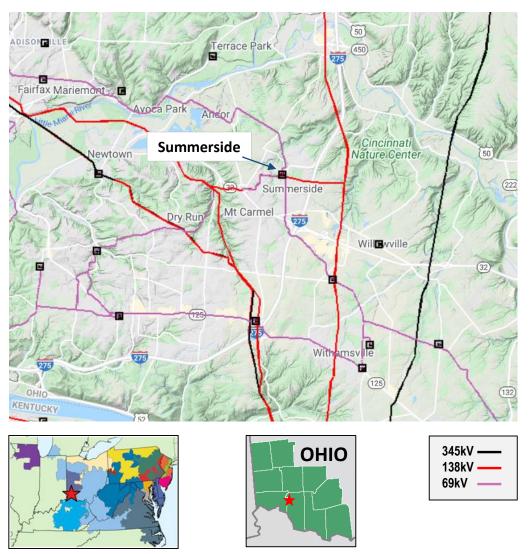
Specific Assumption Reference:

Duke Energy Ohio & Kentucky Local Planning Assumptions slides 5 & 6

Problem Statement:

The 69 kV section of Summerside substation is nearly 60 years old, utilizes cap and pin insulators, has buses constructed of strain bus and an obsolete fault bus protection system. The capacitor on this bus is fuse connected, over 30 years old and at the end of its useful life. 69/34 kV Transformer 4 is 58 years old and showing signs of arcing in oil and has an old LTC design that is a high maintenance item.

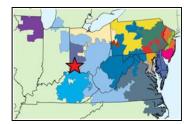
DEOK Transmission Zone M-3 Process Summerside





DEOK Transmission Zone M-3 Process Carlisle-Poasttown

Carlisle Twin Creek MetroPark Carli Poasttown Frank West Middletowr Middletown





| 345kV 138kV | |
|----------------|--|
| 69kV | |

Need Number: DEOK 2021-011

Process Stage: Needs Meeting 09-17-2021

Project Driver: Equipment Condition, Performance and Risk

Specific Assumption Reference:

Duke Energy Ohio & Kentucky Local Planning Assumptions slides 5 & 6

Problem Statement:

The six mile long 69 kV feeder from Carlisle to Poasttown serves one wholesale and 8,165 residential customers. It is an average 70 years old and constructed with wooden crossarms on 89 single wood poles. The structures have an 18% rejection rate. In the past five years there have been 11 sustained and 7 momentary outages averaging 94,972 CMI/outage.

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 slides10 days before Needs MeetingStakeholder comments10 days after Needs Meeting

| Activity | Timing |
|--|----------------------------------|
| TOs and Stakeholders Post Solutions Meeting slides | 10 days before Solutions Meeting |
| Stakeholder comments | 10 days after Solutions Meeting |

| of | Activity | Timing |
|-------|---|--|
| ital | Do No Harm (DNH) analysis for selected solution | Prior to posting selected solution |
| Local | 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 |

Submission of Supplemental Projects & Local Plan

Solutions

Revision History

9/8/2021 – V1 – Original version posted to pjm.com 9/17/2021 – V2 – Slide #4, Correct the Need #