

# Submission of Supplemental Projects for Inclusion in the Local Plan

# DLC Transmission Zone M-3 Process Cheswick 138 kV Breaker Replacements

**Need Number:** DUQ-2020-002

**Process Stage:** Needs Meeting (9/11/2020)

**Previously Presented:**

Sub-Regional RTEP Meeting (10/16/2020)

**Project Driver:**

Equipment Material Condition, Performance, and Risk

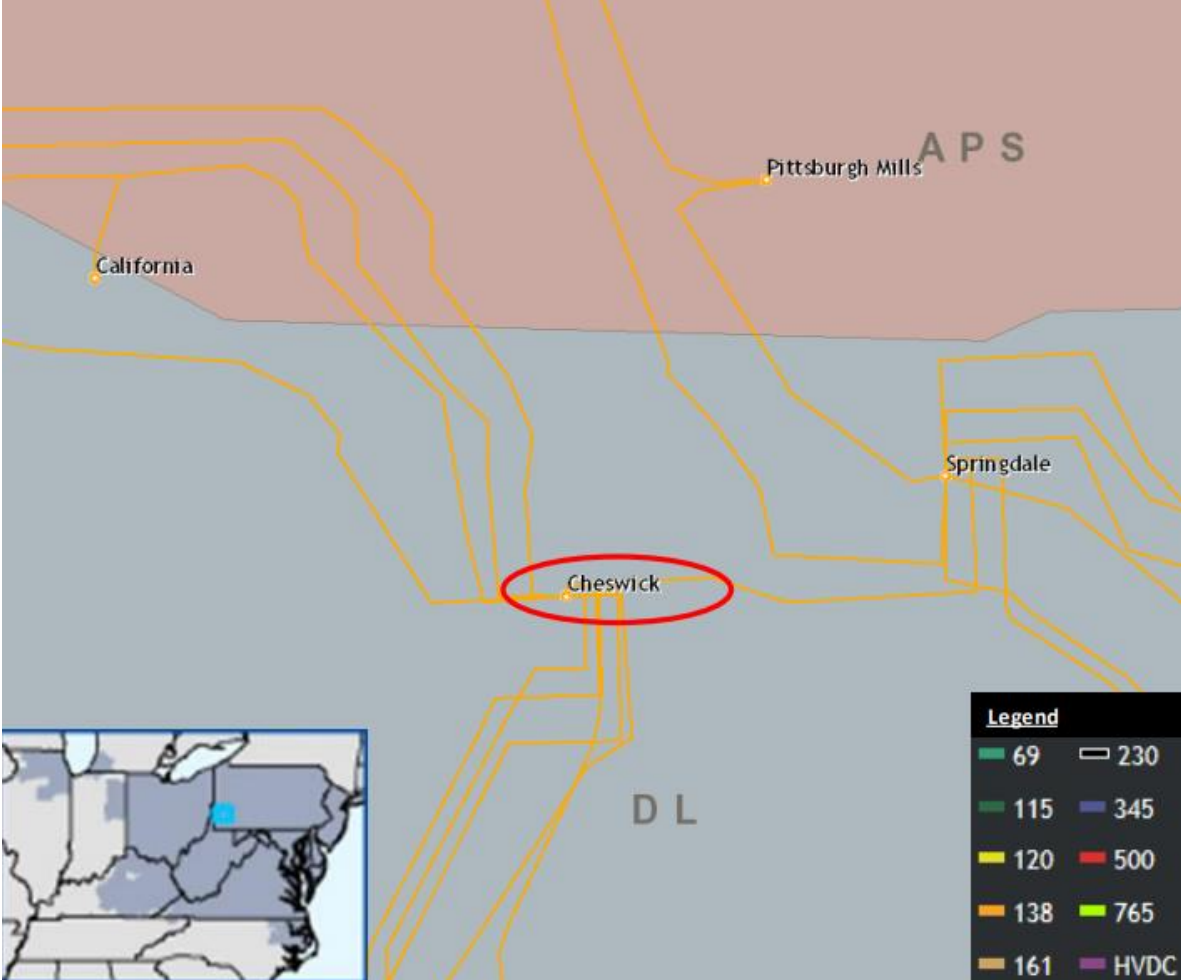
**Specific Assumption Reference:**

Transmission infrastructure replacements that are consistent with efficient asset management decisions

**Problem Statement:**

The existing #2-4 138 kV bus tie and Z-56 Bus #2 breakers at Cheswick SS are ITE type 138KM breakers that were manufactured in 1968. ABB (who now owns the right to ITE breakers) does not support this model breaker, which creates maintenance difficulties due to the lack of available spare parts.

Cheswick SS also contains two (2) 138 kV capacitor banks. Substation with 138 kV capacitor banks experience higher frequency current during faults, due to the contribution of the capacitors. Oil breakers are susceptible to damage from these higher frequency currents



# DLC Transmission Zone M-3 Process Cheswick 138 kV Breaker Replacements

**Need Number:** DUQ-2020-002

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan (2/16/2021).

**Selected Solution:**

Replace the two (2) existing 138 kV breakers with GE type DT-1, 145 kV, 63 kA Int., SF6 Breakers (**\$2400**)

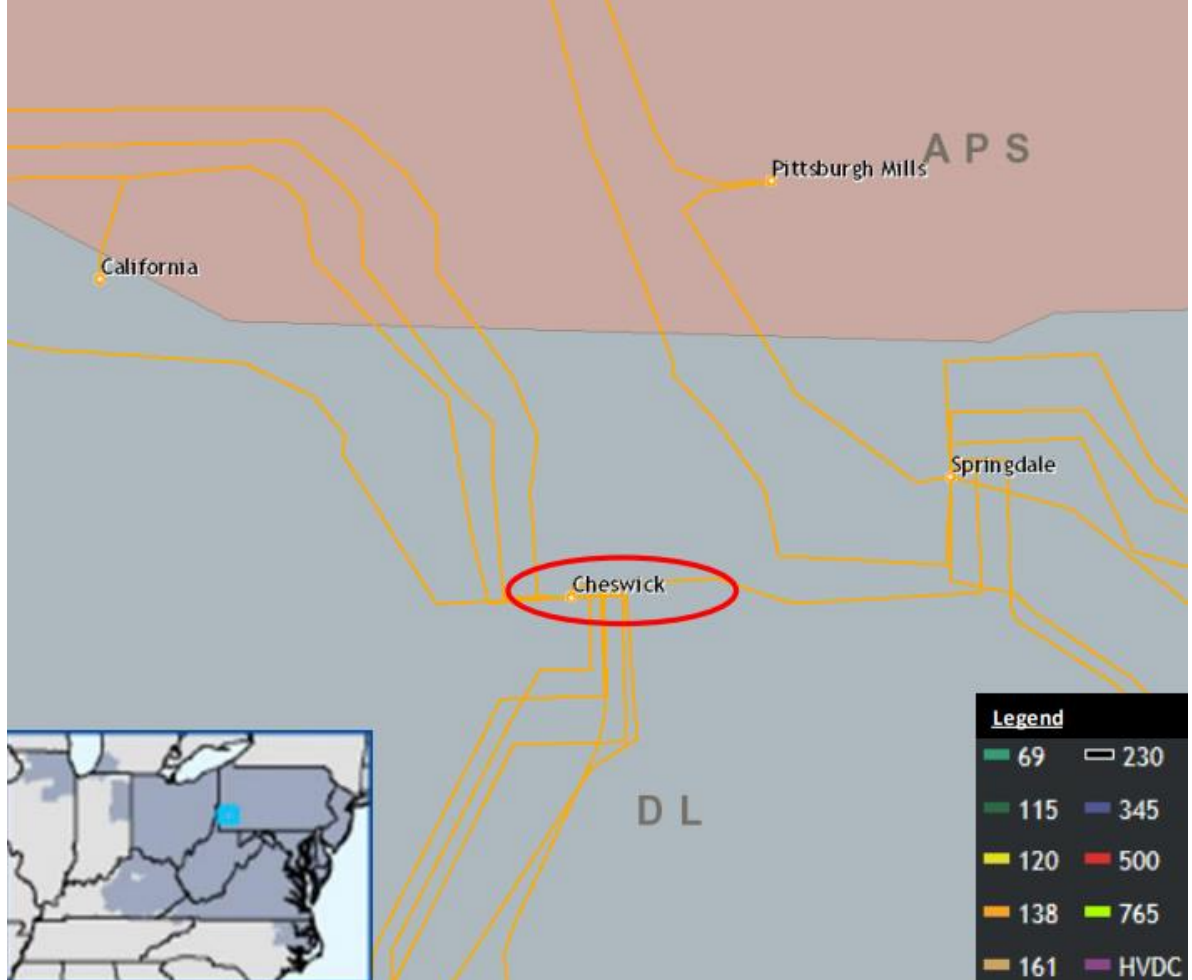
**Estimated Cost:** \$400,000 per breaker

**Projected In-Service:** In-Service

**Supplemental Project ID:** S2400

**Project Status:** Completed

**Model:** N/A



# Revision History

2/26/2020 – V1 – Added S2400