

**MONTANA-DAKOTA UTILITIES CO.  
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION  
1ST SET OF DATA REQUESTS  
ISSUED APRIL 4, 2019  
DOCKET NO. EL19-009**

**Question 2-2**

**According to previous staff interpretation, modification is defined as “requiring a change or alteration which introduces new elements into the facility but leave the general purpose and effect of the lines intact.” Please explain how the portions of the associated transmission lines for the Bowdle East Transmission Substation will be modified in this project.**

**Response:**

The existing substation is located west and across the highway from the new substation. The transmission lines must be extended or re-routed to connect to the new substation. The Bowdle East Transmission Substation will include a larger power transformer with a load tap changer (LTC), 75 MVA. The existing Bowdle substation was limited in its ability to carry all customer load from other substations due to the small size of the existing power transformer and voltage regulator, 20 MVA. This created restrictions on our ability to operate our system for equipment outages or storm damages. The new substation allows greater flexibility of the existing transmission lines and allows us to modify how we operate those transmission lines. The Bowdle East Transmission Substation has also been designed and built to allow a new 115 kV transmission line to connect to the Leola Transmission Substation.

A map is attached to show the Bowdle transmission line modifications.