Portland General Electric 230-kV Near Term Transmission Projects

Murrayhill – Sherwood ------ Completed

- Convert Sherwood substation to a breaker and one-half breaker configuration
- Construction of an additional 230-kV transmission line between Sherwood and Murrayhill substations
- Construct a ring bus configuration at PGE's Murrayhill substation
- Will prevent any "cascading event" due to a PGE disturbance at Sherwood substation
- Eliminate overload for existing 230-kV transmission line between Sherwood and Murrayhill substations

St Marys, Trojan, Keeler ------ Deferred

- Remove St Marys-Keeler and St Marys- Trojan 230-kV from common structures to separate structures
- Eliminates two transmission lines (N-2) from being out of service for a single structure failure
- Eliminates 115-kV transmission line overloads
- Eliminates the need for PGE to "drop" customers for a single structure failure

Willamette Valley Conversion

- Installation of a new 230/115-kV transformer at PGE's Carver substation
- Conversion of one 57-kV substation to 115-kV (Wilsonville)
- Construction of a new 115-kV transmission line between Sherwood and McLoughlin substations
- Construction of a new 115-kV transmission line between Carver and Gresham substations
- Eliminate overload for PGE's McLoughlin VWR5 transformer

Carver - McLoughlin

- Install a 230-kV bus sectionalizing breaker at McLoughlin substation
- Construction of an additional 230-kV transmission line between McLoughlin and Carver substations
- Will prevent the loss of both 230/115-kV bulk power transformers at McLoughlin substation
- Eliminate overload for existing 230-kV transmission line between McLoughlin and Carver substations
- Eliminate overload for PGE's Sherwood VWR1 transformer

New Project Added Since Last Network Operating Committee Meeting

Marquam Substation

- Energize a new substation at 115-kV to serve Portland's "core area"
- Construction of a new 115-kV transmission line between Sellwood and Marquam substations
- Will improve reliability in PGE's "core area"
- Eliminate overloads at PGE's existing 115-kV substations