DESCRIPTION OF PROPOSED FACILITIES

1.0 PROPOSED FACILITIES

Hydro One proposes to increase the transmission capacity from the Bruce area in order to reliably transmit all of the committed and forecast generation located in the area. A map indicating the geographic location and schematic diagrams of the proposed facilities are provided in Exhibit B, Tab 2, Schedule 2 and Exhibit B, Tab 2, Schedules 4/5/6/7, respectively. Illustrations of the proposed new transmission towers are provided in Exhibit B, Tab 2, Schedule 3.

The proposed facilities will meet the requirements set out by the OPA in its letter dated March 23, 2007 (see Exhibit B, Tab 6, Schedule 5, Appendix 4). The proposed facilities will be owned and operated by Hydro One, and include the following:

- A 3 km 500 kV single-circuit line from the Bruce A TS to Bruce Junction along the existing multi-line corridor within the Bruce Power Complex.
- A 3 km 500 kV single-circuit line from the Bruce B SS to Bruce Junction along the existing multi-line corridor within the Bruce Power Complex.
- A 173 km 500 kV double-circuit line from the Bruce Junction to Milton SS within a widened existing transmission corridor.
- Modifications at Milton SS, Bruce A TS and Bruce B SS to accommodate the new transmission line.

2.0 DETAILS OF THE PROPOSED FACILITIES

The proposed transmission project will require the construction of a new 500 kV double-circuit line, as well as appropriate line termination and switching facilities.

2.1 Overhead Transmission Line Structures

The total route length of the proposed transmission line within the Bruce Power Complex is 6 km: 3 km of 500 kV single-circuit line from Bruce A TS and 3 km of 500 kV single-circuit line from Bruce B SS, both converging at Bruce Junction.

The total route length of the proposed double circuit transmission line from Bruce Junction to Milton SS is 173 km. The route passes through four counties and one regional municipality (Bruce, Grey, Wellington, Dufferin, and Halton, respectively) and eleven townships (Kincardine, Brockton, Hanover, West Grey, Southgate, Wellington North, Erin, East Luther Grand Valley, East Garafraxa, Halton Hills and Milton). A map of the project location and the existing transmission facilities is provided in Exhibit B, Tab 1, Schedule 2.

The proposed line will run adjacent to the existing 500 kV transmission corridor from the Bruce Power Complex to Milton SS. This line will use steel lattice towers and will require the acquisition of land rights to widen the existing transmission corridor (refer to Exhibit B, Tab 6, Schedule 9). To the extent possible, the location of the new towers will be aligned with those of existing towers in order to mitigate visual impact.

2.2 Milton SS Line Termination and Switching Facilities

Milton SS will require new and modified structures within the station property to accommodate the termination of the two new 500 kV circuits. This proposal will also require modifications to telecommunications facilities at Milton SS to provide status information and control capability to Hydro One's Ontario Grid Control Centre (OGCC) and status information to the IESO. Modifications and additions to protection and control, SCADA, metering, and AC/DC station service at Milton SS, are required to provide protection, control and status of the new and re-terminated facilities. Since Milton SS is designated as an "NPCC-impactive" station, modifications will have to satisfy the pertinent NPCC requirements for such designation. A schematic diagram showing the proposed configuration at Milton SS is provided at Exhibit B, Tab 2, Schedule 7.

2.3 Bruce A TS and Bruce B SS Line Terminations and Switching Facilities

Bruce A TS and Bruce B SS will require new and modified structures to accommodate the termination of the new 500 kV circuits. This proposal will also require modifications to telecommunications facilities at Bruce A TS and Bruce B SS to provide status information and control capability to Hydro One's OGCC and status information to the IESO. Modifications and additions to protection and control, SCADA, metering, and AC/DC station service at Bruce A TS and Bruce B SS, are required to provide protection, control and status of the new facilities. Since Bruce A TS and Bruce B SS are designated as "NPCC-impactive" stations, modifications will have to satisfy the pertinent NPCC requirements for such designation. A schematic diagram showing the proposed configuration is provided at Exhibit B, Tab 2, Schedule 5 (Bruce A TS) and Exhibit B, Tab 2, Schedule 6 (Bruce B SS).

MAP SHOWING LOCATION OF PROPOSED FACILITIES

Proposed Facilities Bruce to Milton Area

Exhibit B-2-2

MacGregor Point Provincial Park
Saugeen Shores
Arran-Elderslie
Chatsworth
Blue Mountains
Devils Glen Provincial Park
Clearview
Canadian Foces Base Borden
ALLISTON TS
Innisfil
Essa
Inverhuron Provincial Park
BRUCE HW PLANT D TS
DOUGLAS POINT TS
BRUCE B SS
BRUCE A TS
BRUCE HW PLANT B TS
GREY
Grey Highlands
DUFFERIN
SIMCOE
Kincardine
Mulmur
Bradford West Gwillimbury
Brockton
HANOVER TS
Hanover
West Grey
Melancthon
Adjala-Tosorontio
New Tecumseth
BRUCE
Southgate
Shelburne
Huron-Kinloss
South Bruce
Mono
Amaranth
King
ORANGEVILLE TS
Orangeville
East Luther Grand Valley
East Garafraxa
Minto
Wellington North
WINGHAM TS
Howick
Caledon
Vaughan
PALMERSTON TS
PEEL
GOREWAY TS
Ashfield-Colborne-Wawanosh
North Huron
Morris-Turnberry
Erin
Point Farms Provincial Park
Brampton
BRAMALEA TS
Mapleton
FERGUS TS
PLEASANT TS
CARDIFF TS
HURON
GODERICH TS
Goderich
North Perth
Centre Wellington
Halton Hills
Central Huron
Huron East
ELMIRA TS
MEADOWVALE TS
Guelph/Eramosa
Mississauga
MILTON SS
HALTON TS
PERTH
Woolwich
WELLINGTON
CAMPBELL TS
Guelph
HALTON R.M.
TRAFALGAR TS
CEDAR TS
HANLON TS
Milton
PALERMO TS
Oakville
Puslinch
HAMILTON - WENTWORTH R.M.
BRONTE TS
Burlington
Cambridge
Hamilton
PRESTON TS
Lake Huron

Transmission Stations: 500 kV, 230 kV, 115 kV
Transmission Lines: 500 kV, 230 kV, 115 kV
Major Roads
Proposed Route Bruce x Milton
Canadian Forces Base Borden
Conservation Area
Provincial Parks
Water Body
Municipal Boundary
Counties

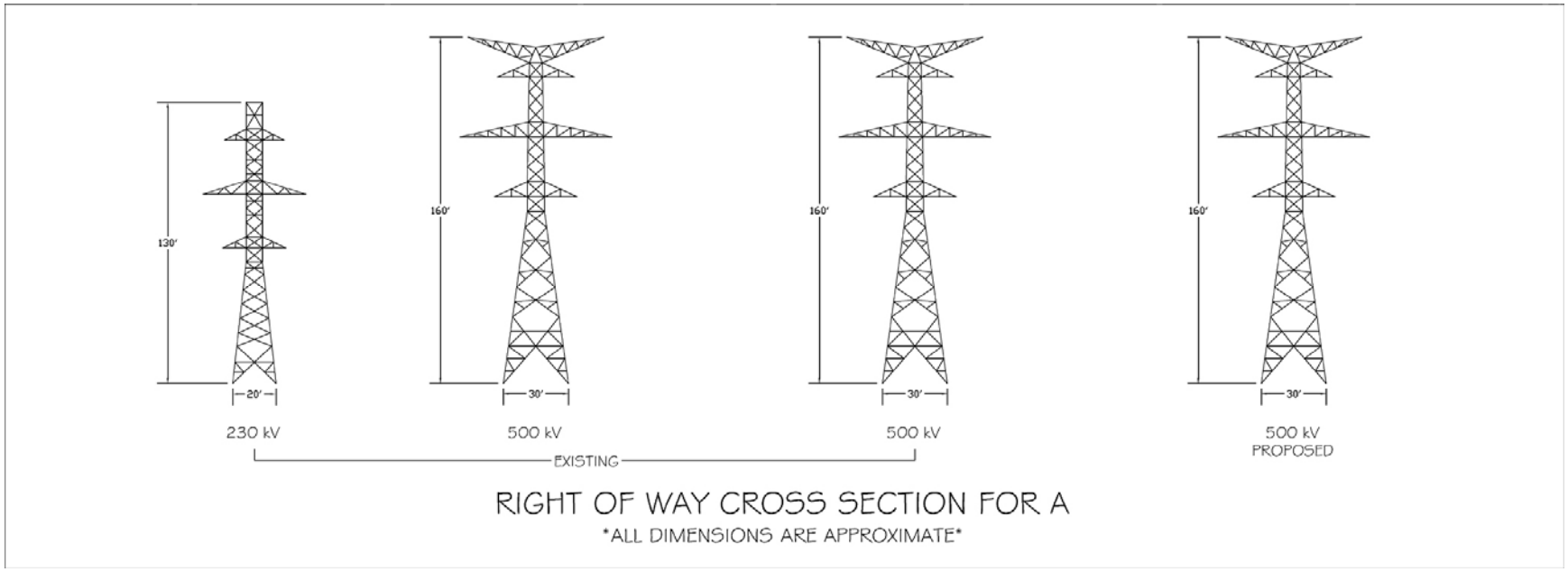
Letters A - G - Refer to Attached Cross Sections

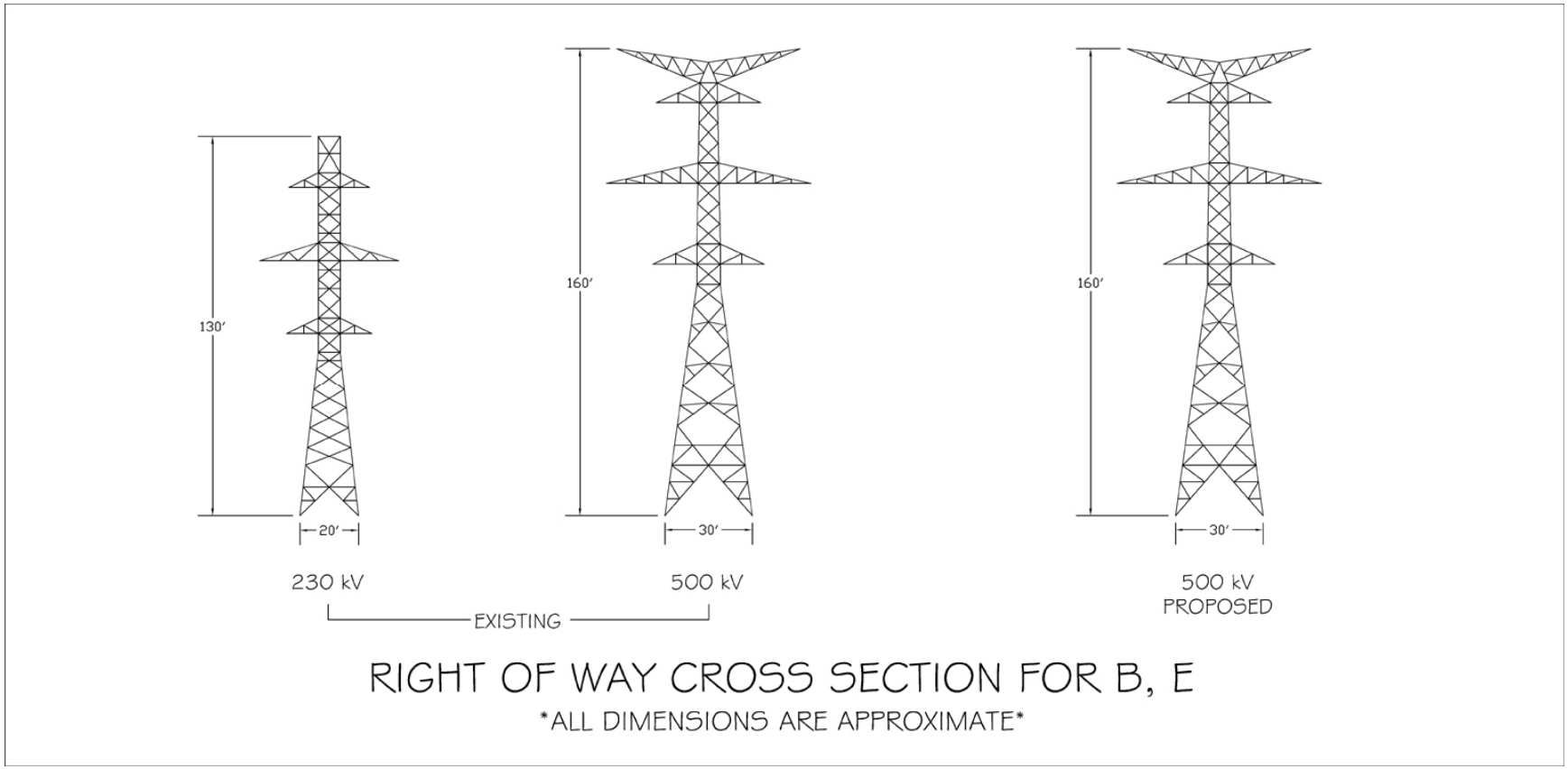
N
0 10 20 40
Kilometers

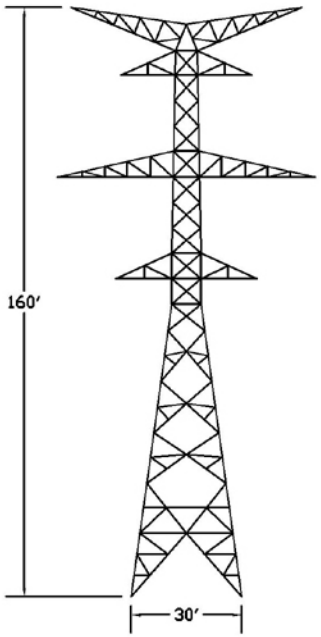
Produced by: Inergi LP
inergi GIS Services
Date: November 2006
Map06-183_Ex_B_2_2_v3

CROSS SECTIONS OF THE TOWER TYPES – EXISTING AND PROPOSED

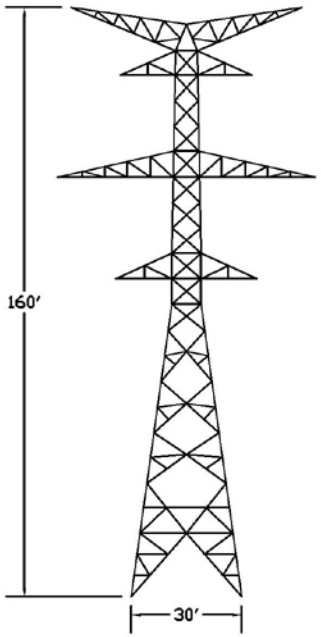
Refer to Exhibit B, Tab 2, Schedule 2 for location of the cross sections of the tower types.




130′
20′
160′
30′
160′
30′
230 kV
500 kV
500 kV
PROPOSED
EXISTING
RIGHT OF WAY CROSS SECTION FOR B, E
ALL DIMENSIONS ARE APPROXIMATE



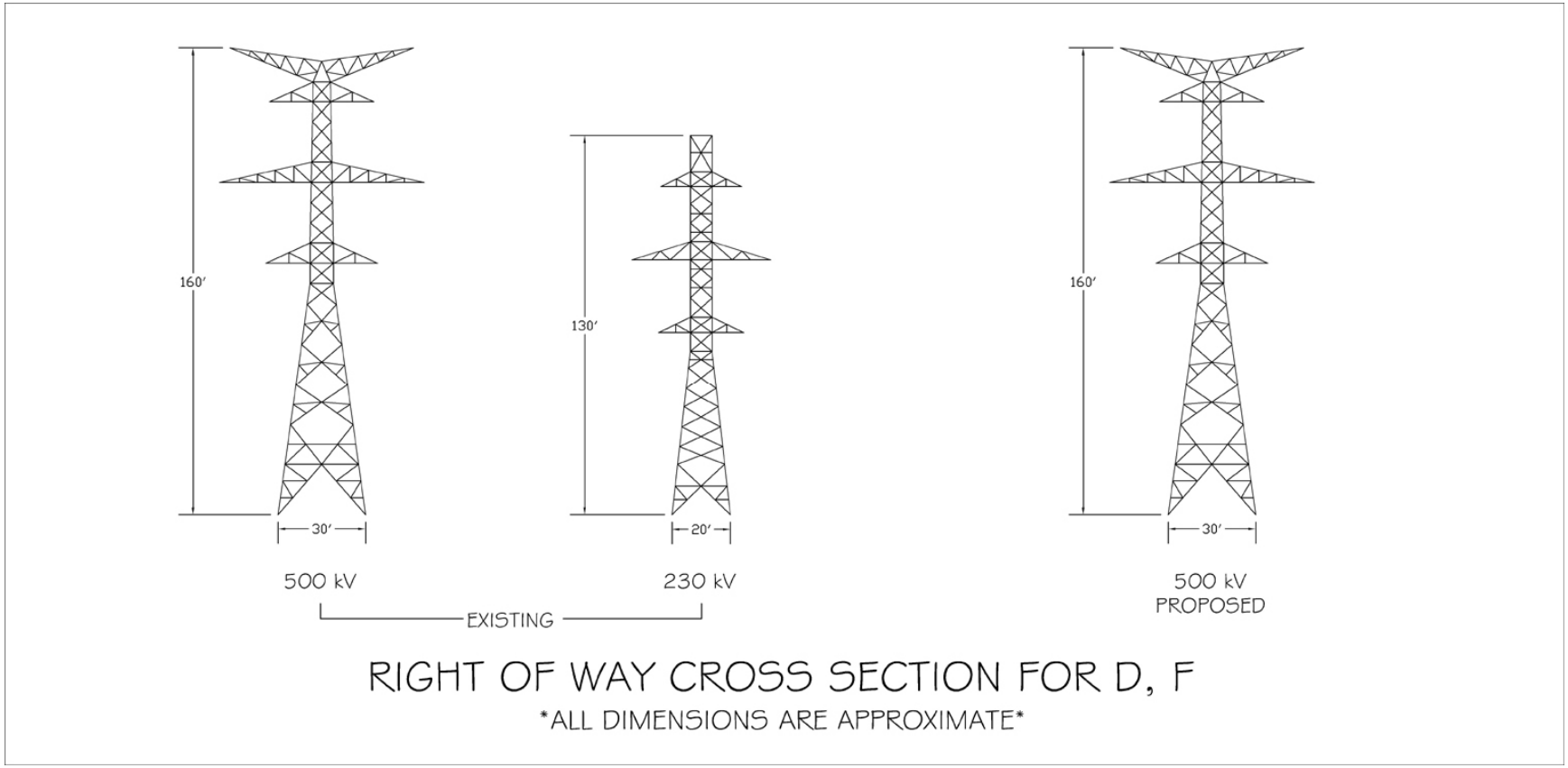
500 kV
EXISTING



500 kV
PROPOSED

RIGHT OF WAY CROSS SECTION FOR C, G

ALL DIMENSIONS ARE APPROXIMATE

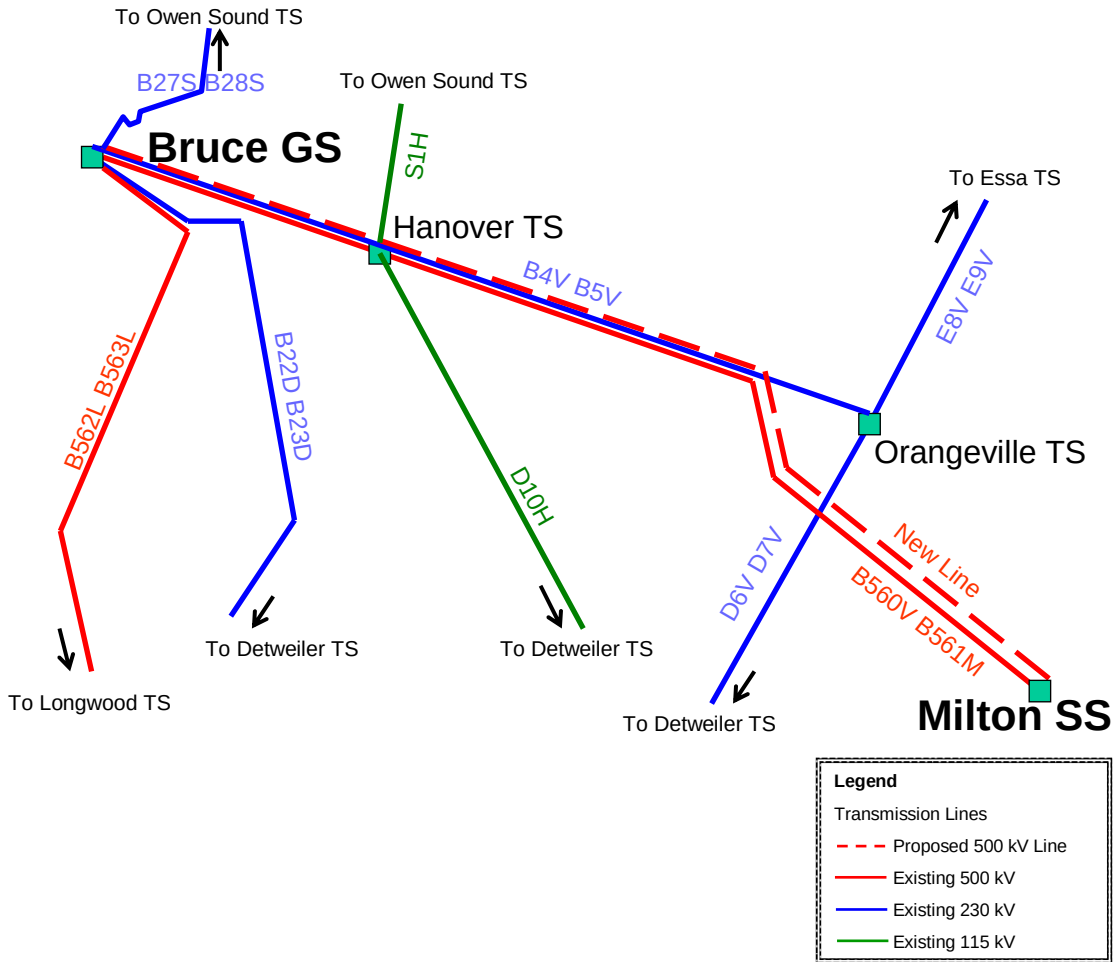


RIGHT OF WAY CROSS SECTION FOR D, F

ALL DIMENSIONS ARE APPROXIMATE

PROPOSED FACILITIES:

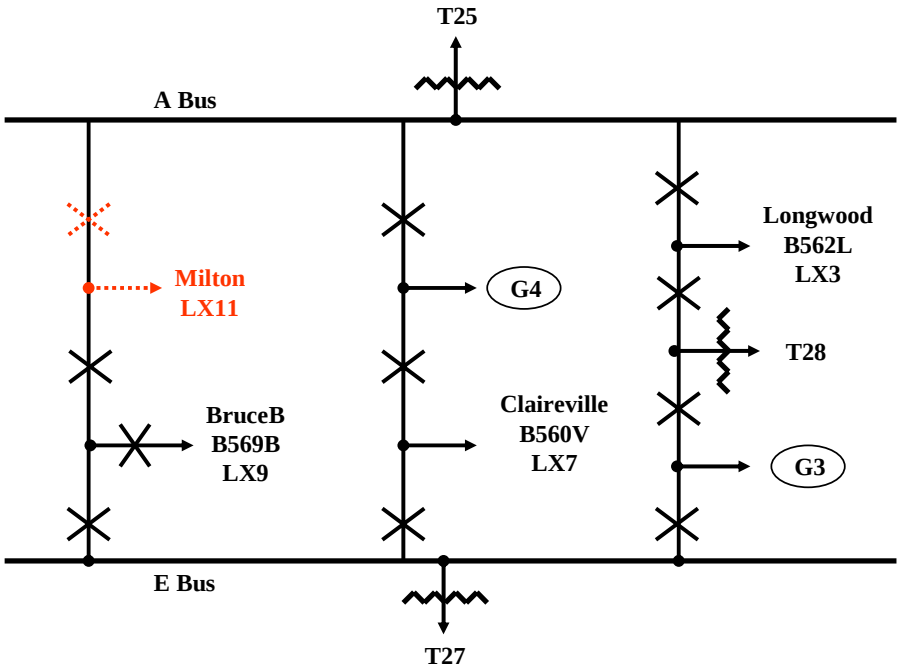
BRUCE X MILTON SCHEMATIC DIAGRAM



PROPOSED FACILITIES:

500 kV BRUCE A TS SCHEMATIC DIAGRAM

(dotted lines represent the proposed facilities)



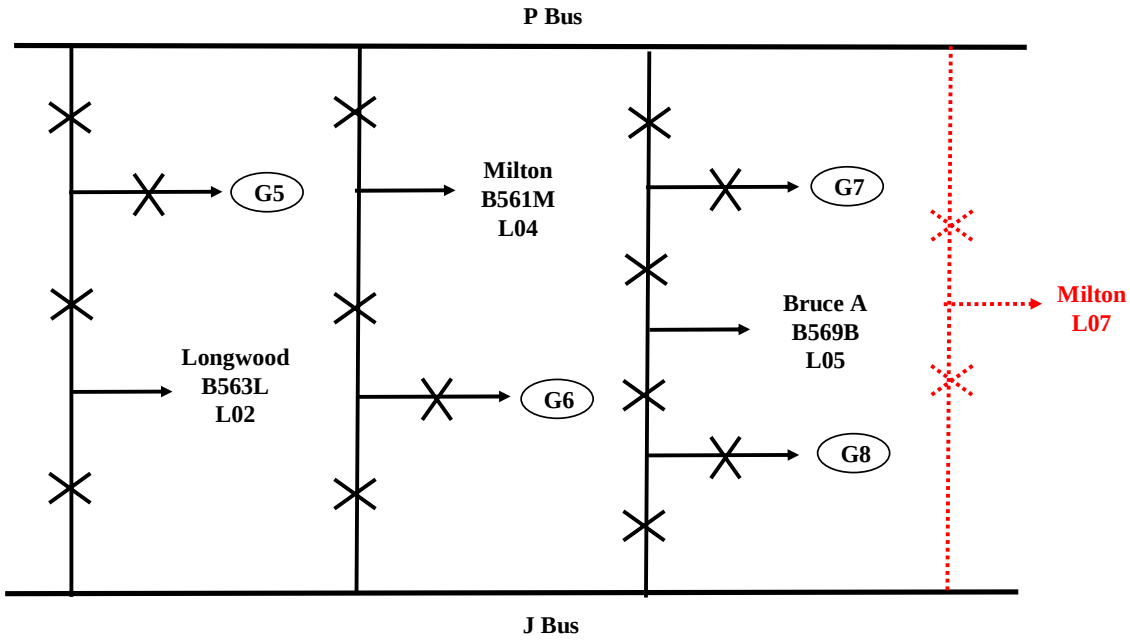
Legend:

- G — Generator
- 500 kV Circuit Breaker
- 500 kV Circuit Termination
- 500 kV Transformer Termination

PROPOSED FACILITIES:

500 kV BRUCE B SS SCHEMATIC DIAGRAM

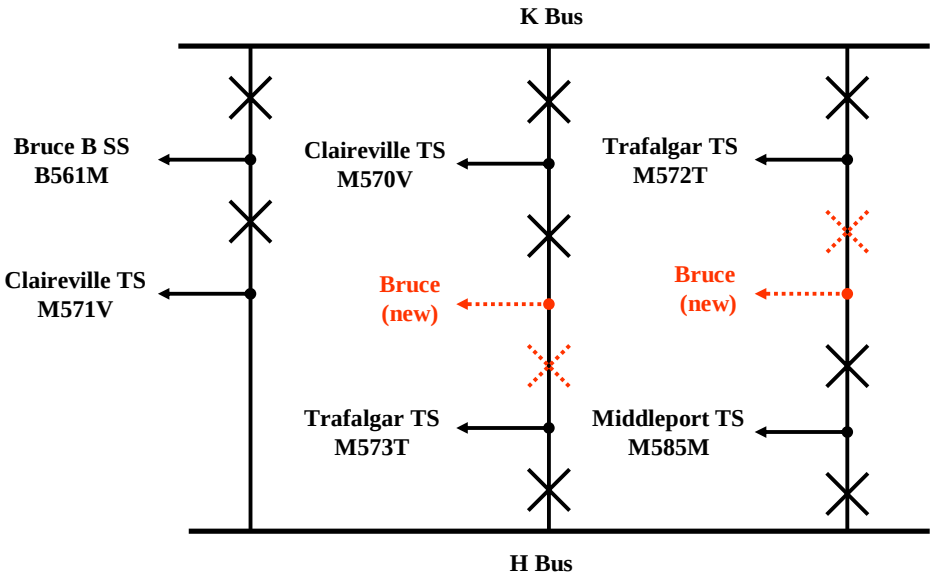
(dotted lines represent the proposed facilities)



PROPOSED FACILITIES:

500 kV MILTON SS SCHEMATIC DIAGRAM

(dotted lines represent the proposed facilities)



Legend:

G Generator

500 kV Circuit Breaker

500 kV Circuit Termination