

1 Q. In reference to the response to PUB 116 NLH, please provide a detailed list
2 of all transmission facilities associated with generation and functionalized as
3 such. Please include the generation source linked to the transmission
4 facilities as well as the starting and ending point of the generation related
5 transmission facilities.

6
7

8 A. A detailed list of all transmission facilities associated with generation and
9 functionalized as such follows. The transmission facilities are grouped by
10 generation source. Please note that foundations, structural supports, control
11 cables, control and relay panels, grounding and conductors are associated
12 with each piece of major equipment listed below.

13

14 Bay D'Espoir Generating Station

15 • Transmission Lines

16 ○ None

17 • Terminal Station Equipment

18 ○ Bay D'Espoir Terminal Station

19 ■ Six 13.8/230 kV, 64/85 MVA power transformers

20 complete with high voltage surge arresters

21 ■ One 13.8/230 kV, 129/172 MVA power transformer

22 complete with high voltage surge arresters

23 ■ Fifteen 230 kV circuit breakers

24 ■ Thirty two 230 kV disconnect switches

25 ■ Six 230 kV ground switches

26 ■ Thirty nine 230 kV current transformers

27 ■ Eighteen 230 kV potential transformers

28 ■ Compressed air system

1 Cat Arm Generating Station

2 • Transmission Lines

3 ○ TL247 from Cat Arm Terminal Station to Deer Lake Terminal
4 Station

5 ○ TL248 from Deer Lake Terminal Station to Massey Drive
6 Terminal Station

7 • Terminal Station Equipment

8 ○ Cat Arm Terminal Station

9 ▪ Two 13.8/230 kV, 60.80 MVA power transformers

10 ▪ Two 13.8 kV/600 V, 1 MVA power transformers

11 ▪ 230 kV, SF₆ switchgear

12 ▪ Three 230 kV surge arresters

13 ▪ Two 230 kV capacitive voltage transformers

14 ▪ Two 230 kV wave traps

15 ○ Coney Arm Terminal Station

16 ▪ One 25/69 kV, 2.5/3.3/4.0 MVA power transformer

17 ▪ One 69 kV disconnect switch complete with ground
18 switch

19 ▪ Three single phase 14.4 kV, 288 kVA voltage regulators

20 ▪ 14.4 kV/120 V, 10 kVA station service transformer

21 ▪ Three voltage regulator bypass switches

22 ▪ Three 69 kV power fuses

23 ▪ Two 25 kV reclosers

24 ▪ Two 25 kV fused recloser by pass switches

25 ▪ One 25 kV fused cutout

26 ▪ Three 69 kV lightning arresters

27 ▪ Six low voltage lightning arresters

28 ▪ 25 kV Metering tank

29 ○ Deer Lake Terminal Station

30 ▪ Two 230 kV circuit breakers

- Transmission Lines
 - TL263 from Granite Canal Terminal Station to Upper Salmon Terminal Station
- Terminal Station Equipment
 - Granite Canal Terminal Station
 - One 13.8/230 kV, 30/40/50 MVA power transformer complete with high and low voltage station class surge arresters
 - Single phase, 230 kV high speed ground switch
 - One 230 kV motorized disconnect switch
 - One 230 kV ground switch
 - Three 230 kV potential transformers
 - Upper Salmon Terminal Station
 - One 230 kV circuit breaker complete with current transformers
 - Two 230 kV motorized disconnect switches
 - One 230 kV ground switch
 - One 230 kV potential transformer

1 Hardwoods Gas Turbine

- 2 • Transmission Lines
- 3 ○ None
- 4 • Terminal Station Equipment
- 5 ○ Hardwoods Terminal Station
- 6 ▪ One 13.8/66 kV, 40/60/75 MVA power transformer
- 7 complete with high voltage surge arresters
- 8 ▪ One 66 kV circuit breaker
- 9 ▪ One 66 kV disconnect switch

10

11 Hinds Lake Generating Station

- 12 • Transmission Lines
- 13 ○ TL243 from Hinds Lake Terminal Station to Howley Terminal
- 14 Station
- 15 • Terminal Station Equipment
- 16 ○ Hinds Lake Terminal Station
- 17 ▪ Two 13.8/138 kV, 41.5/55.3/69.2 MVA power
- 18 transformers complete with high and low voltage surge
- 19 arresters
- 20 ▪ One single phase 138 kV high speed ground switch
- 21 ▪ One 138 kV motorized disconnect switch
- 22 ▪ One 138 kV ground switch
- 23 ▪ One 138 kV potential transformer
- 24 ▪ One 138 kV current transformer
- 25 ○ Howley Terminal Station
- 26 ▪ One 138 kV circuit breaker
- 27 ▪ Three 138 kV current transformers
- 28 ▪ Two 138 kV disconnect switches
- 29 ▪ One 138 kV ground switch
- 30 ▪ Two 138 kV potential transformers

1 Holyrood Generating Station

2 • Transmission Lines

3 ○ None

4 • Terminal Station Equipment

5 ○ Holyrood Terminal Station

- 6 ▪ Four 16/230 kV power transformers (105/140/180 MVA –
- 7 unit 1, 115/152/190 MVA – unit 2, 170 MVA – unit 3 &
- 8 170 MVA – spare)
- 9 ▪ Nine 230 kV circuit breakers
- 10 ▪ Nineteen 230 kV motorized disconnect switches
- 11 ▪ Five 230 kV motorized disconnect switches complete
- 12 with ground switch
- 13 ▪ One 230 kV manual disconnect switch
- 14 ▪ One 230 kV ground switch
- 15 ▪ Thirty 230 kV current transformers
- 16 ▪ Eleven 230 kV potential transformers
- 17 ▪ Two 4.16/69 kV, 10.5/14 MVA station service
- 18 transformers
- 19 ▪ Three 4.16/16 kV, 10 MVA unit service transformers
- 20 ▪ One 4.16/69 kV, 1.5 MVA outside services substation
- 21 ▪ One 69 kV circuit breaker
- 22 ▪ Two 69 kV disconnect switches (one with ground switch)

1 Paradise River Generating Station

2 • Transmission Lines

- 3 ○ TL258 from Paradise River Terminal Station to Monkstown
4 Terminal Station

5 • Terminal Station Equipment

6 ○ Paradise River Terminal Station

- 7 ■ One 4.16/25 kV, 6/8/10 MVA power transformer
8 complete with high and low voltage surge arresters
9 ■ One 25 kV recloser
10 ■ Two 25 kV disconnect switches
11 ■ One 25 kV capacitive voltage transformer
12 ■ One 25 kV wave trap
13 ■ Three 14.4kV/600 V, 75 kVA station service
14 transformers
15 ■ Two 14.4kV/600 V, 50 kVA station service transformers

16 ○ Monkstown Terminal Station

- 17 ■ One 25 kV potential transformer
18 ■ Cost for changeout of Monkstown power transformer to
19 accommodate Paradise River
20

21 Star Lake – Non Utility Generator

22 • Terminal Station Equipment

23 ○ Buchans Terminal Station

- 24 ■ One 69 kV circuit breaker
25 ■ Two 69 kV disconnect switches
26 ■ One 69 kV ground switch
27 ■ One 69 kV potential transformer
28 ■ One 69 kV wave trap

1 Stephenville Gas Turbine

- 2 • Transmission Lines
- 3 ○ None
- 4 • Terminal Station Equipment
- 5 ○ Stephenville Terminal Station
- 6 ▪ One 13.8/66 kV, 45/60/75 MVA power transformer
- 7 complete with high voltage surge arresters
- 8 ▪ One 66 kV disconnect switches

9

10 Upper Salmon Generating Station

- 11 • Transmission Lines
- 12 ○ TL234 from Upper Salmon Terminal Station to Bay D'Espoir
- 13 Terminal Station
- 14 • Terminal Station Equipment
- 15 ○ Upper Salmon Terminal Station
- 16 ▪ One 13.8/230 kV, 53.2/70.6/88.4 MVA power
- 17 transformer complete with high and low voltage surge
- 18 arresters
- 19 ▪ One 230 kV circuit breaker
- 20 ▪ Two 230 kV motorized disconnect switches
- 21 ▪ One 230 kV ground switch
- 22 ▪ Three 230 kV capacitive voltage transformers
- 23 ▪ Three 230 kV current transformers
- 24 ▪ One 230 kV wave trap
- 25 ○ Bay D'Espoir Terminal Station
- 26 ▪ Two 230 kV circuit breakers
- 27 ▪ Four 230 kV motorized disconnect switches
- 28 ▪ One 230 kV ground switch
- 29 ▪ Nine 230 kV current transformers
- 30 ▪ Three potential transformers