

2012 NITS FACILITY STUDY SUMMARY

In response to Open-Access Same-Time Information System (OASIS) Transmission Service Request (TSR) #77321076, BC Hydro performed a series of transmission system studies and assessments to identify major transmission reinforcements required for the next 20 years. The study results are reported in the “2012 Network Integration Transmission Service (NITS) System Impact Study (SIS) Report for base resource plan (BRP)” ([Report No. T&S Planning 2013-043](#)) published on January 8, 2014.

This Facility Study summary provides the list of projects with planned in-service dates and cost estimates where available for the Facilities identified in 2012 NITS SIS report for the Base Resource Plan (BRP). The accuracy of the cost estimates vary depending on the project status. First cut conceptual level cost estimates (+100%/-35% accuracy) are provided for projects not yet in the implementation phase. See Table 1.

Table 1: 2012 NITS (BRP) Transmission System Reinforcement Projects
(F2014 to F2023)

Region	Project Description	In-Service Date & Project Status	Cost (\$ K)
BULK			
SOUTH INTERIOR	SEYMOUR ARM SERIES CAPACITOR STATION (SASC) 50% series compensation on 5L71 & 5L72	Nov. 2013 (In-service)	48,000
LOWER MAINLAND	INTERIOR TO LOWER MAINLAND PROJECT (ILM) Build 5L83 from NIC to MDN with 50% series compensation	Jan. 2015 (Implementation)	725,000
SOUTH INTERIOR	NICOLA 500 KV STATION RECONFIGURATION Bus-conductor replacement, line termination adjustment and 3 500kV circuit breakers additions	Oct. 2014 (Implementation)	11,000
NORTH COAST	PRINCE GEORGE TERRACE CAPACITY UPGRADE (PGTC) 65% series compensation on 5L61/62/63, addition of Mechanically Switched Capacitor Banks at GLN	Oct. 2018 (Definition)	112,000
NORTHERN DIVISION	PEACE REGION TO KELLY LAKE 500KV TRANSMISSION REINFORCEMENT 65% series compensation at KDY and MLS capacitor stations, thermal upgrade of lines 5L1/2/3/7, addition of a +250/-125Mvar Static VAR Compensator at WSN	Oct. 2022 (Identification)	268,000

Region	Project Description	In-Service Date & Project Status	Cost (\$ K)
SOUTH INTERIOR	NICOLA-VASEUX LAKE COMPENSATION (NVLC) Adding 50% series compensation on 5L98, 250MVA mechanically switched shunt capacitor at NIC	Oct. 2018 (Identification)	48,000
LOWER MAINLAND	LOWER MAINLAND PUMPED STORAGE STATION INTEGRATION	Apr. 2029 (Study)	Not Available

REGIONAL			
PEACE REGION	DAWSON CREEK/CHETWYND AREA TRANSMISSION (DCAT)	Jun. 2015 (Implementation)	296,000
PEACE REGION	PEACE REGION ELECTRIC SUPPLY (PRES)	Dec. 2018 (Identification)	124,000
METRO VANCOUVER	METRO NORTH TRANSMISSION	Oct. 2018 (Identification)	185,000
PEACE REGION	PEACE REGION SYSTEM REINFORCEMENT AFTER SITE C INTERCONNECTION	Oct. 2022 (Study stage)	Not Available

All of the projects listed in Table 1 above are considered System Plan Network Upgrades as defined in Attachment O of the OATT and therefore no portion of their costs is considered to be Direct Assignment costs or Network Upgrade costs.