

TRANSMISSION

Stage 3 of the Site C Clean Energy Project (Site C) is the environmental and regulatory review phase. As part of an environmental assessment of Site C, BC Hydro will identify and assess potential project effects — environmental, economic, social, heritage and health — and opportunities to provide lasting benefits for the region and First Nations. Where effects cannot be avoided, BC Hydro will identify and evaluate options for mitigation.

This study update provides an overview of work completed to date and currently underway and is current as of fall 2011. Studies may be changed or revised in scope or timing on the basis of input from regulators, government agencies, First Nations, stakeholders and the public as part of the pre-application stage of the environmental assessment process.

The Site C project requires environmental certification and other regulatory permits and approvals before it can proceed to construction. In addition, the Crown has a duty to consult and, where appropriate, accommodate Aboriginal groups.

DEFINITION

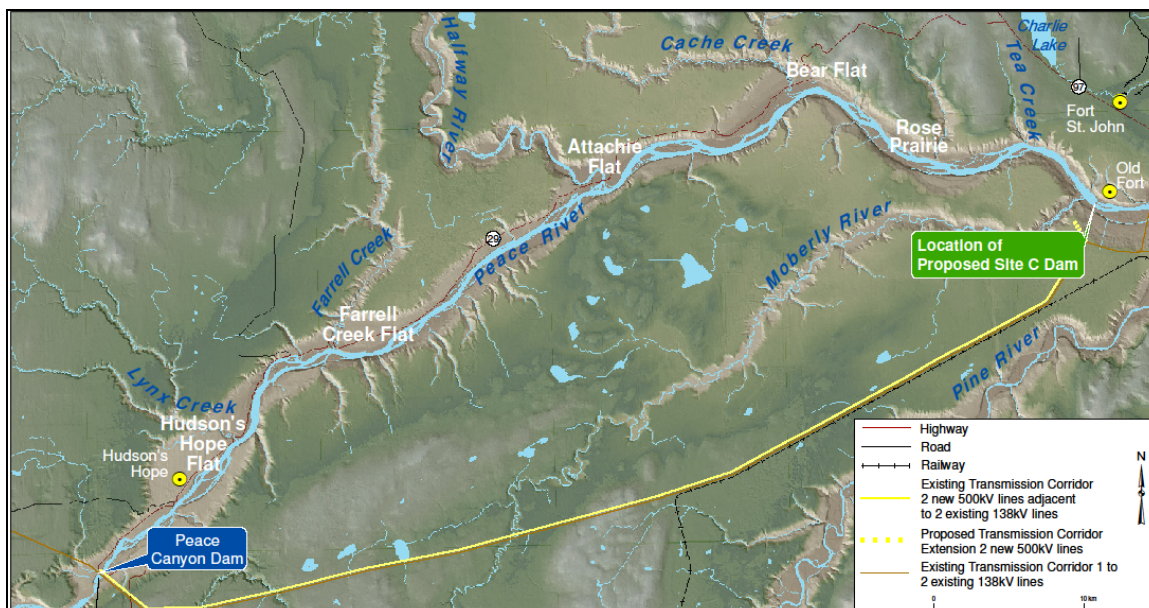
The proposed Site C Clean Energy Project will require transmission infrastructure to connect the Site C switchyard to the bulk BC Hydro transmission system.

STUDY PURPOSE

BC Hydro is undertaking studies and technical work to develop transmission options for Site C.

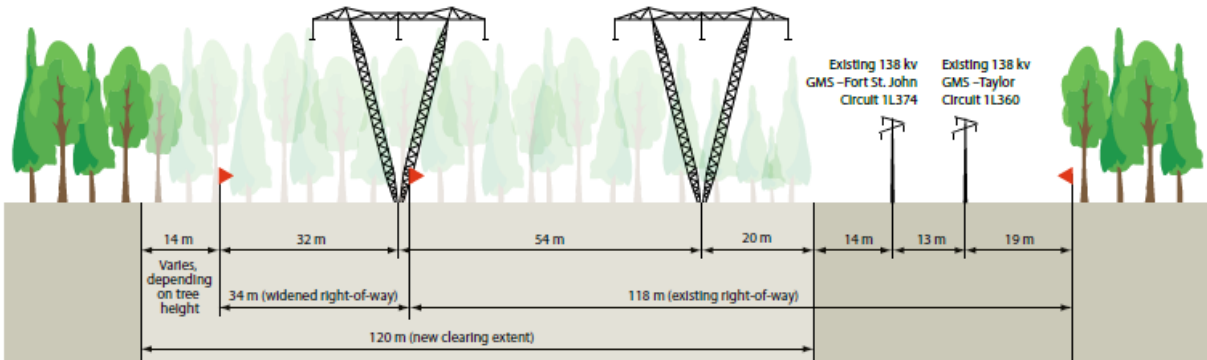
STATUS OF STUDIES

As currently designed, two new 500 kilovolt (kV) Alternating Current (AC) transmission lines would be built to connect Site C to BC Hydro’s bulk transmission system at the Peace Canyon substation along an existing transmission right-of-way over a distance of approximately 77 kilometres.



New 500kV AC Transmission Lines from Proposed Site C Dam to Peace Canyon Generation Station

The transmission lines connecting Site C to the BC Hydro transmission system at Peace Canyon would be situated on the south bank of the Peace River along an existing right-of-way that is currently occupied by two 138kV transmission lines. A widening on the north side of the existing right-of-way by approximately 34 metres would be required, bringing the total width of the expanded right-of-way to approximately 135 metres.



Transmission Corridor – Proposed 500kV Towers

The proposed 500kV AC transmission lines would become part of the overall BC Hydro transmission system and would undergo the same type of operation and maintenance activities as other transmission lines throughout the province.

BC Hydro is currently assessing an option whereby the local communities of Fort St. John and Taylor would be served from the Site C switchyard. This option would potentially decrease the width of the transmission corridor required. In this option, BC Hydro would remove the two existing 138kV transmission lines that occupy a portion of the transmission right-of-way between the proposed Site C project and Peace Canyon and that currently supply power to Fort St. John and Taylor.

In this scenario, the first 500kV line would be constructed along the north side of the widened right-of-way from the Site C switchyard to Peace Canyon alongside the existing 138kV lines. When Site C begins to generate electricity, the 138kV lines would be removed and the second 500kV line would be constructed. The location and timing of the second 500kV line is currently being studied, including the option of constructing it in the portion of the right-of-way previously occupied by the 138kV lines.

Stage 3 Work

Further technical work to define transmission requirements for Site C includes developing access options for the transmission corridor. Field work includes vegetation, wildlife and fisheries studies to determine potential effects and options for mitigation.

If the Site C project proceeds to construction, installation of the new 500kV transmission lines and the creation of an expanded right-of-way would involve:

- Surveying and siting for towers
- Right-of-way clearing and preparation
- Construction access roads
- Tower installation
- Stringing conductors and ground wires
- Temporary construction facilities (such as laydown areas)
- Worker housing requirements

Stage 3 Consultation

The Site C project requires environmental certification and other regulatory permits and approvals before it can proceed to construction. The Stage 3 environmental and regulatory review process will include opportunities for consultation and input by the public, Aboriginal groups, communities, property owners and stakeholders.

In addition to the consultation opportunities led by the environmental regulatory agencies within the environmental assessment process, BC Hydro will lead several streams of public and stakeholder consultation during Stage 3:

- Regional and Local Government Liaison
- Property Owner Liaison
- Local Area Consultation
- Preliminary Design Consultation

BC Hydro and Aboriginal groups are also engaged in a thorough consultation process that will continue through all stages of the project.

How Input Will Be Used

A Consultation Summary Report will be prepared and released on the project website following each consultation period and Consideration Memos will be prepared, indicating how input has been considered, along with technical and financial information, for use in project designs or plans, including engineering and environmental mitigation plans.

FURTHER INFORMATION

Further information is available on the Site C website: www.bchydro.com/sitec. The following are available in the Site C Reports section of the website.

1. Project Description Report. May 2011. (page 31).
2. Stage 2 Report: Consultation and Technical Review. 2009. (pg. 74).
3. Project Definition Consultation Discussion Guide and Feedback Form Round 2. October/November 2008. (page 27).
4. Site C Feasibility Review: Stage 1 Completion Report. 2007. (pages 16, 30).

INQUIRIES

Updates on field studies are available at www.bchydro.com/sitec and in the Community Consultation offices in Fort St. John and Hudson's Hope.

For further information, please contact:

Site C Clean Energy Project

Community Consultation Office

Fort St. John

Office: 250-785-3415 Cell: 250-793-5416

Toll free: 1 877 217 0777

Email: sitec@bchydro.com