

Darren Kahl Executive Vice-President Site C Clean Energy Project P.O. Box 49260 Vancouver, B.C. V7X 1V5

August 31, 2023

Re: Notice of Site C Construction Activities: October to December 2023

As part of our engagement with Indigenous Nations and communities, we provide regular updates and information on construction activities. In this letter, we describe the construction work planned from October 1 to December 31, 2023. The letter is posted on the Site C website.

This fall we're completing tunnel conversion, which restricts the amount of water passing through the tunnels currently diverting the Peace River. Restricting water flow is an important step that allows us to proceed with the next major project milestone, filling the reservoir. The timeline for reservoir filling depends on construction progress, meeting the operational requirements of the Peace River system, the continued compliance with environmental regulations, weather constraints, and obtaining all remaining regulatory approvals.

Once reservoir filling begins, it will widen the Peace River by an average of two to three times and there will be <u>new hazards on the water and the reservoir shoreline</u>. It will take up to four months for water levels to reach maximum depth: 52 metres deep close to the dam, 36 metres deep at Halfway River, and 18 metres deep near Hudson's Hope.

All boat launches will be closed during reservoir filling and will remain closed for at least one year while we monitor slope stability and erosion. We ask that the public stay off the reservoir during reservoir filling and exercise extreme caution around the reservoir until it has been deemed safe.

During reservoir filling, we'll continue to provide timely updates to keep communities informed of the status of reservoir filling and any related information.

# For the upcoming period, construction at Site C will focus on:

- Tunnel conversion
- The potential start of Site C reservoir filling
- Progression of earthworks at the dam site
- Construction of permanent access roads on the dam
- Construction of a drainage channel on the dam and on the left bank of the river
- Removal of the right bank cofferdam
- Commissioning of the spillway and intake gates and hoists
- Construction of the penstock flexible couplings for Units 1 to 6
- Construction of the powerhouse
- Construction of the generators and turbines

- Construction of the balance of plant (mechanical, electrical, architectural scopes)
- Construction of the approach channel
- Construction of the tailrace channel and spillway apron
- Construction of fish habitat
- Construction of the permanent fishway facility
- Hauling of riprap from West Pine Quarry to site via train and trucks through Chetwynd and Jackfish Lake Road
- Replacement of the expansion joints on the Halfway River bridge
- Highway 29 decommissioning at Cache Creek, Farrell Creek, and Lynx Creek
- Construction of an intersection on Highway 29 for the Halfway River boat launch
- Construction of recreational sites/boat launches at Hudson's Hope, Halfway River, and Lynx Creek
- Upgrading of D.A. Thomas Road in Hudson's Hope to a two-lane road to access the recreation site
- Reclamation of Portage Mountain Quarry
- Construction of a fish habitat channel on the south bank of the Peace River, east of the dam site
- On-call archaeological studies, as required

For all activities described in this letter, the <u>necessary approvals</u> will have been obtained before work begins. Geotechnical site investigations, air quality monitoring, heritage and other field studies are ongoing. We'll continue to provide <u>annual field study notices</u> of these activities.

For the safety of the public and workers, please do not hunt, shoot, or set traps in Site C project areas.

#### Dam site

### Access roads:

- Crews will continue to maintain dam site access roads and existing south bank resource roads, including petroleum development roads.
- Crews will continue to apply dust suppression, as needed, on project roads to reduce the potential for dust creation.

# Diversion Headpond:

- The Peace River was diverted in October 2020. During the river diversion phase, water accumulates behind the upstream cofferdam in what is called a headpond.
   The headpond begins at the dam site and could extend up to 15 kilometres upstream – or approximately up to Cache Creek.
- o This means water levels could rapidly rise in areas upstream of the dam site.
- The Peace River remains closed both immediately upstream and downstream of the dam site; use caution at the shoreline.

The debris boom on the Peace River was reinstalled in early April. The debris
management structures on the Moberly River capture floating debris and prevent it from
impacting construction and diversion tunnel operations.

# • Tunnel Conversion:

 Installation of four large constriction rings inside Diversion Tunnel 2 to support reservoir filling will continue.

# Main Civil Works:

- Excavation, hauling and stockpiling of aggregate within the dam site.
- Construction in the left bank drainage adit and right bank drainage tunnel.
- Rail and truck delivery of riprap to site and placement on the dam, tailrace, and approach channel.
- Tailrace filling.
- Removal of the right bank cofferdam.
- Decommissioning and capping of relocated excess surplus material areas.
- Drilling and grouting in the approach channel and dam abutments.
- Installation of the permanent debris booms and boom anchors.
- Permanent dam site road construction.
- Construction of drainage channels on the dam and on the left bank of the river.
- Haul road realignments on the dam site.
- o Reclamation and recontouring of completed areas of the dam site.
- Covering exposed potentially acid-generating (PAG) rock on the left bank, using crushed limestone from another area of site.

### Permanent Fishway Facility:

Construction of the permanent fishway will continue.

# Generating Station and Spillways & Right Bank Foundation Enhancements:

- Commissioning of the spillway and intake gates and hoists.
- Construction of the powerhouse.
- Starting to replace the penstock flexible coupling for Units 1 to 6.

### Turbines and Generators:

- Installation of the turbine and generator components in the powerhouse will continue.
- Assembly of generator components will continue inside the powerhouse main service bay and at the contractor's on-site shop.

### • Balance of Plant:

- Electrical and mechanical equipment components will continue to be safely delivered to and installed at site.
- Installation of electrical and mechanical equipment inside the powerhouse, intakes and spillways will continue.

 Construction of control rooms and office space within the powerhouse will continue.

## • Transmission Lines:

 Construction of three 500-kilovolt transmission lines between the Site C substation and the Site C generating station will continue.

# **Public roads and highways**

# Highway 29

- Halfway River: Replacement of the expansion joints on the bridge and the construction of an intersection for the Halfway River boat launch will occur.
- Lynx Creek: The Lynx Creek boat launch breakwater and riprap channel will be completed.
- Decommissioning: Completion of decommissioning of existing highway alignments at Cache Creek, Farrell Creek, and Lynx Creek will take place.

### Reclamation

- Reclamation, which helps restore areas to their pre-construction states, will continue.
- Planting of Peace View Island is expected to start in mid-September.
- Portage Mountain Quarry reclamation has started and will continue until the end of the year.
- Physical reclamation work on Highway 29 will be complete by the end of September.

### Peace River/reservoir

- **River closure:** A short section of the Peace River is permanently closed at the dam site as construction is underway on the earthfill dam.
- In-river debris management systems: Debris management structures are in place on the Peace and Moberly rivers.
- Reservoir fish habitat construction: Access road preparation and fish habitat construction work are in progress at Wilder Creek.
- Archaeology: On-call archaeological studies, as required, anywhere on the project.
- Reservoir clearing: Final clearing will take place at Watson Slough.
- **Removals:** Environmental clean-up of found contamination will take place. Acquired residences and structures located within impact lines will be removed or relocated. Fences on acquired properties will be removed.
- Surveys and site investigations: Will occur within the footprint of the reservoir area.

### **Boat launches**

- Upgrading of D.A. Thomas Road in Hudson's Hope, including the construction of a retaining wall, will occur. Construction of the recreational site will continue.
- Construction of the new Halfway River and Lynx Creek boat launches will continue.
- The existing boat launches at Lynx Creek and D.A. Thomas are closed for public use.
- The existing boat launch at Halfway River will remain open through the summer season until September 23, 2023.

### **Transmission works**

• Access road maintenance and tower site stabilization: Road maintenance on access roads will occur, to ensure environmental compliance along the transmission line.

# **Production and transport of materials**

- **85th Avenue Industrial Lands and conveyor belt system**: Till materials are not being transported, and the conveyor system is no longer being used.
- Howe Pit: Materials will be excavated and used to develop a laydown area at Howe Pit.

### **Environmental Assessment Certificate**

Environmental Assessment Certificate #E14-02 for the project consists of Schedule A, the project description, and Schedule B, the conditions under which the project must be built and operated. If we wish to make a change to either Schedule A or Schedule B of the Environmental Assessment Certificate, we are required to submit a written request to the Environmental Assessment Office (EAO). The EAO consults with regulatory agencies, Indigenous Nations and/or the public on the request and issues a written decision on the request.

To date, we have requested and been granted 11 amendments to the Environmental Assessment Certificate. These are:

- Amendment 1 regarding design changes to the generating station and spillways.
- Amendment 2 regarding design changes to the Halfway River Bridge within the Halfway River Highway 29 realignment.
- Amendment 3 regarding the use of West Pine Quarry, in addition to the already approved Portage Mountain Quarry, as a source of quarry and excavated material for the construction of the Highway 29 realignment, Hudson's Hope shoreline protection, and areas along the reservoir requiring protection during reservoir filling.
- Amendment 4 regarding the selective use of mechanical clearing in riparian zones during reservoir clearing when it is unsafe to undertake manual clearing.
- Amendment 5 regarding a change in the alignment of Highway 29 at Cache Creek.
- Amendment 6 regarding the expansion of the worker accommodations camp within the dam site area.
- Amendment 7 regarding changes to the designs of Highway 29 crossings at Farrell, Dry and Lynx Creeks.
- Amendment 8 regarding the use of a borrow source located east of the Halfway River for the construction of reservoir clearing access roads.
- Amendment 9 regarding the relocation of a boat launch from Cache Creek to a location east of Halfway River.

- Amendment 10 –allowing, with conditions, contingency hauling from 85<sup>th</sup> Avenue Industrial Lands to the dam site in the event the conveyor breaks down for unforeseen reasons.
- Amendment 11 allowing certain temporary structures to permanently remain in the reservoir and become submerged if retaining the structures will not have an adverse effect on fish or fish habitat

## Water Licences and Leaves to Commence Construction/Diversion

We hold Water Licences for the diversion and use of water, the storage of water, and for the temporary and permanent fish passage facilities. During construction, we will apply for a series of Leaves to Commence Construction under the Water Licences to construct project works or components of project works. Construction-related activities under the Leaves to Commence Construction are also independently reviewed by the Independent Engineer and the Independent Environmental Monitor as required by the Water Licences.

To date, we have obtained Leaves to Commence Construction for:

- Initial works
- Relocated surplus excavation material storage areas
- North and south bank excavations
- South bank stage 1 cofferdam
- Clearing of the eastern reservoir
- North bank cofferdams and diversion tunnel works
- Roller-compacted concrete buttress foundation preparation and roller-compacted concrete placement
- Geotechnical investigations for the Hudson's Hope shoreline protection
- Earthfill dam excavation, foundation preparation, fill placement and approach channel foundation preparation and placement
- Generating station civil works and spillways civil works
- Construction of the temporary and permanent fish passage facility
- Stage 2 cofferdams and river diversion, including debris boom facilities on the Peace and Moberly rivers
- Middle reservoir clearing
- Western reservoir clearing
- Hudson's Hope berm construction
- Turbines and generators installation
- Balance of plant
- Hydromechanical works and gantry cranes
- Right bank foundation enhancements

 Final reservoir filling preparations, including removal of the Moberly River Bridge and right bank cofferdam, decommissioning of the upstream cofferdam, and installation of the permanent debris boom

On May 19, 2023, the Water Sustainability Act Engineer issued a third Leave to Commence Diversion under the Water Licences. This Leave authorizes tunnel conversion, reservoir filling, wet testing and commissioning of the generating units and hydromechanical gates, and decommissioning of the diversion tunnels.

# **Notice of completed activities**

The following work, described in previous notifications, is complete or is anticipated to be complete by the date of issuance of this letter:

- Improvements to public roads in the vicinity of the dam site area
- Worker accommodation lodge
- Site C public viewpoint
- 50 affordable housing units in Fort St. John
- River diversion
- Site C substation
- Two transmission lines connecting Site C to Peace Canyon, and Peace Canyon switchgear upgrades
- Temporary fish passage facility
- Placement of 1.7 million cubic metres of roller-compacted concrete in the powerhouse, spillways, and dam and core buttresses
- Concrete buttresses for the dam core
- 2.6 km shoreline protection berm along Hudson's Hope
- Installation and welding of penstock segments on all units
- Highway 29 realignment of 30 kilometres of highway
- Delivery of all six turbine runners to site
- Installation of three turbine runners and one rotor
- Reservoir vegetation clearing
- Installation of 96 steel piles in the spillway and downstream of the powerhouse
- Earthfill dam
- Transfer of materials from Area E to the dam site

# What to expect

During this period, the following can be expected:

• <u>Permanent navigation restrictions:</u> Boaters no longer have access to the Moberly River and the Peace River, near the dam site. Public safety signs and beacons have been installed on both banks of the Peace River, and on both sides of the dam site, to mark the active construction area.

- There will be project-related traffic on public roads leading to the dam site, transmission line corridor, reservoir, and Highway 29, as we continue to haul materials, equipment, rock, and timber. This will include increased industrial traffic on resource roads and public roads from Chetwynd leading to the site on the south bank. Dust suppression techniques will be applied, as needed.
- Day, night, and weekend shifts are anticipated for the duration of the project.
- Traffic control will be intermittently in place for construction and investigation activities along Highway 29. This may cause minor traffic delays. Visit <u>drivebc.ca</u> for the latest traffic updates.
- Noise will occur near construction areas.
- Noise and vibration will result from work in the quarries. Hauling may occur at night.
- There will be construction occurring around the Peace River at the dam site.
- We are monitoring air quality in the Site C project area. This data is being added to the Ministry of Environment's <u>B.C. Air Quality Monitoring Data</u>. The Ministry uses this data to report on air quality trends. In the event of poor air quality, the Ministry will release air quality advisories through a notification list. This notification list currently includes the regional media, various public and private sector offices, as well as members of the public. If you're interested in being part of this notification list, please email sitec@bchydro.com.

Kindest regards,

Darren Kahl

Executive Vice-President, Site C Clean Energy Project

