

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

June 1, 2023

Re: Notice of Site C Construction Activities: July - September 2023

As part of our engagement with Indigenous Nations, we provide regular updates and information on construction activities.

In the coming months, our work will focus on preparing to fill the Site C reservoir, which could begin as early as this fall.

Prior to reservoir filling, the Peace River diversion tunnels must be converted. This involves closing Diversion Tunnel 2 and installing four large rings (orifices).

Once reservoir filling begins, it will widen the Peace River by an average of two to three times. Water levels will rise over four months, increasing by between 30 centimetres and two metres every day.

Members of the public should use extreme caution and obey all safety signage during reservoir filling. We are discouraging use of the reservoir. BC Hydro boat launches will be closed for at least one year while BC Hydro monitors for erosion and slope stability.

More information about tunnel conversion and reservoir filling can be found on this webpage.

This letter describes work planned from July 1 to September 30, 2023 and is posted on the <u>Site</u> C website.

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

- Preparation for reservoir filling, which is targeted for fall 2023.
- Progression of earthworks at the dam site.
- Construction of the powerhouse and spillways.
- Construction of the spillway and intake gates and hoists.
- Construction of the penstock flexible couplings for Units 1 to 6.
- Construction of the generators and turbines.
- Construction of the balance of plant (mechanical, electrical, architectural scopes).
- Construction of the approach channel.
- Initiate diversion tunnel conversion.
- Initiate right bank cofferdam removal and tailrace flooding.
- Construction of the tailrace channel and spillway apron.

- Construction of fish habitat, including vegetation and tree clearing.
- Construction of the permanent fishway facility.
- Highway 29 construction at Cache Creek, Farrell Creek, and Lynx Creek.
- Highway 29 decommissioning at Cache Creek, Halfway River, Farrell Creek, and Lynx Creek.
- Removal of decommissioned utility poles and waste soil along the existing highway.
- Construction of recreational sites/boat launches at Hudson's Hope, Halfway River, and Lynx Creek.
- Upgrading of D.A. Thomas Road to a two-lane road to access the Hudson's Hope recreational site.
- Reclamation of Portage Mountain Quarry.
- On-call archaeological studies, as required.
- Excavation, hauling and road maintenance activities to access aggregate sources (Howe Pit, Area E and Area 24).
- Vegetation clearing for the construction of access roads on the south bank of the Peace River, east of the dam site, to support the creation of fish habitat, including some in-river excavation.

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 use caution when hunting, shooting, or setting 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.

Headpond:

- The Peace River was diverted in September 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 as far back as 15 kilometres – or approximately up to Cache Creek.
- 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; caution should be exercised at the shoreline.
- The debris boom on the Peace River has been reinstalled. The debris
 management structures on the Moberly River capture floating debris and prevent
 it from impacting construction and diversion tunnel operations.
- Main Civil Works: Construction activities include:

- Construction of the earthfill dam.
- Relocation of excavated material to disposal areas on the north and south banks of the river at the dam site area.
- Excavation, hauling and stockpiling of aggregate within the dam site.
- Construction in the left bank drainage adit and right bank drainage tunnel.
- Rail delivery of riprap to site and placement on the dam, tailrace, and approach channel.
- Removal of the right bank and upstream cofferdams.
- Removal of the Moberly River construction bridge.
- Decommissioning and capping of relocated excess surplus material areas.
- Drilling and grouting in the approach channel on the dam and dam abutments.
- Installation of the permanent debris booms and boom anchors.
- o Permanent dam site road construction.
- o Haul road realignments.
- o Reclamation and recontouring of completed areas of the dam site.

Permanent Fishway Facility

o Construction of the permanent fishway will continue.

Generating Station and Spillways & Right Bank Foundation Enhancements:

- o Approach channel foundation preparation, mud slabs, lining, and backfilling.
- o Concrete works in the approach channel.
- Construction of the tailrace channel and spillway apron erosion protection.
- Construction of the spillway and intake gates and hoists.
- Construction of the powerhouse.
- Construction of the spillway stilling basin.
- Concrete placements in the transition block and spillway headworks.
- Starting to replace the penstock flexible coupling for Units 1 to 6.

Turbines and Generators:

- The first unit is expected to be substantially complete.
- Turbine and generator components will continue to be delivered safely to site.
 Installation of the turbine and generator components in the powerhouse will continue.
- Assembly of generator components will continue inside the powerhouse main service bay.

Diversion Tunnel Conversion:

 Installation of four orifice plates in the diversion tunnels to support reservoir filling.

Balance of Plant:

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

- Cache Creek: Highway construction will continue, including completion of drainage and paving.
- Farrell Creek: Some excavation work will occur to replace riprap around the bridge piers and to construct an erosion protection berm.
- Halfway River: The bridge is now open. Construction of an intersection for the Halfway River boat launch will occur.
- Lynx Creek: Construction of the highway realignment will continue to complete the highway segment, including paving.
- Decommissioning: Decommissioning of existing highway alignments at Cache Creek, Halfway River, Farrell Creek, and Lynx Creek will take place.
- Decommissioning of existing distribution lines: Decommissioning and removal of remaining portions of distribution and Telus lines along the existing highway segments in Lynx Creek and Cache Creek, including removal and disposal of waste soil.

Reclamation

- Reclamation, which helps restore areas to their pre-construction states, will continue.
- Activities include roughening of soils, placement of coarse woody debris, and planting of seedlings or seeding.

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 Moberly River. The boom on the Peace River has been re-installed, effective April 1, 2023
- Reservoir fish habitat construction: Access road maintenance and fish habitat construction work will occur near the Wilder Creek area.
- Old Fort fish habitat area: Removal and restoration of construction access.
- **Channel contouring**: Peace River channel contouring for the construction of fish habitat will occur, including some in-river excavation and hauling of aggregates to the dam site.

- Archaeology: On-call archaeological studies, as required, anywhere on the project.
- **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.

Hudson's Hope shoreline protection

- The Hudson's Hope shoreline protection berm is complete.
- Upgrading of D.A. Thomas Road, including the construction of a retaining wall, will occur
- Construction of a recreational site, including small craft launch, will continue.

Boat launches at Lynx Creek and Halfway River

- 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 with gravel road access.

Transmission works

 Access road maintenance and tower site stabilization: Road maintenance on access roads will occur, to ensure environmental compliance along the transmission line. Work will occur at two transmission tower sites to stabilize embankments adjacent to the towers.

Production and transport of materials

- **85th Avenue Industrial Lands**: Till materials for the dam may continue to be quarried and stockpiled for transport.
- **Conveyor belt system**: The conveyor system will be in operation.
- Howe Pit: Materials will be excavated and used to develop a laydown area at Howe Pit.
- Area E: Materials will be excavated and hauled to the dam site.

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, which then consults with regulatory agencies, Indigenous groups and/or the public on the request and issues a written decision.

To date, we have requested and been granted nine 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.

We are currently seeking an EAC amendment that would allow us to retain some temporary concrete, rip rap, steel and gravel structures within the reservoir in the event that removing the structures would result in greater harm to fish and fish habitat. These structures are consistent with the types of fish habitat structures constructed as part of our fish habitat enhancement program.

BC Hydro will not inundate any structures that may result in an adverse effect on the environment. The temporary structures are consistent with the primary materials used to build infrastructure in waterways across the province, as they are inert building materials. Leaving these materials in place is common construction practice. The Site C project's earthfill dam, powerhouse and spillways are made up of these materials. Any structures potentially retained in the reservoir via our EAC amendment request will be assessed by a Qualified Environmental Professional to confirm the structure won't pose a risk to the environment.

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.
- 1.5 km Dry Creek section and bridge (open).
- 3.0 km Farrell Creek east section (open).
- 8.6 km Lynx Creek section and bridge (open).
- 6.0 km Cache Creek section and bridge (open).
- 2.0 km Farrell Creek section and bridge (open).
- 3.0 km Halfway River section and bridge (open).
- 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.

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 now that construction is underway on the earthfill dam. 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 works 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 B.C. Air Quality Monitoring Data. 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