BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

F2024 Third Quarter

October 1, 2023 to December 31, 2023

PUBLIC

Table of Contents

List of Figures

List of Tables

Appendices

1 Executive Summary

1.1 Overview and General Project Status

Site C will be the third dam and hydroelectric generating station on the Peace River in northeastern British Columbia (**B.C.**). Once complete, Site C will provide 1,100 megawatts of capacity, and produce about 5,100 gigawatt hours of energy per year – enough to power the equivalent of 450,000 homes or 1.7 million electric vehicles per year in B.C.

The Site C dam site (as seen in late November 2023).

Construction on Site C began on July 27, 2015.

Quarterly Progress Report No. 32 covers the period October 1 to December 31, 2023 (**the reporting period**).

As of December 31, 2023, the Site C Project (**the Project**) is approximately 84% complete. BC Hydro remains on track to complete the Project within the budget ($16 billion) and schedule (final unit in-service date of 2025), which were approved in 2021.

The overall Project health status remains “amber” as a number of potential risks remain, as outlined in this report.

BC Hydro continues to work collaboratively with the Project Assurance Board, special advisor Peter Milburn, Ernst & Young Canada, the Technical Advisory Board, and independent international dam experts to actively manage ongoing Project risks. The Technical Advisory Board and independent international dam experts continue to review and confirm that the Project designs are appropriate, safe and serviceable over the long operating life of Site C.

The following sections discuss highlights from the reporting period and some of the current risks facing the Project.

1.2 Construction Progress

With the completion of tunnel conversion in September 2023, there was a possibility that reservoir filling could start in late fall 2023, one year earlier than the approved schedule. However, as of early November 2023, there continued to be some critical work areas that still needed to be completed before reservoir filling could begin, including the approach channel, spillway gates and powerhouse intake gates. With winter weather and colder conditions setting in, the window to safely begin reservoir filling was coming to a close. In mid-November 2023, BC Hydro made the decision to stay on track with the approved Project schedule. Work on the Site C Project continues to advance on schedule with reservoir filling planned in fall 2024. As a result of the advancement of construction work through 2023, reservoir filling may be initiated in late-August 2024, depending on weather, environmental and system conditions.

Construction of the Project continued to advance during the reporting period. The Project made considerable progress on many dam site work fronts, including the approach channel, generating station, spillways, and tailrace.

The filling of the tailrace area with water downstream of the powerhouse and spillways began in October 2023. This process involved using pumps to move water from the Peace River into the tailrace area, to equalize the water level on both sides of the cofferdam, in advance of intentionally breaching the right bank cofferdam. Once the filling was completed, the cofferdam was removed and the work was completed in December 2023.

As of December 31, 2023, the capping of the earthfill dam and the construction of the dam crest road and the dam face road were complete. Approximately 55% of the duct banks for the road lighting were also complete.

In September 2023, when the earthfill dam was completed, the conveyor system that transported glacial till material used in the construction of the core of the earthfill dam ceased operations. The decommissioning of the conveyor system is in progress.

By concrete volume, the concrete placements for the generating station and spillways are essentially complete. There is a small amount of concrete still to be placed for the concrete slabs behind units 5 and 6 in locations used to access the lower flexible couplings, which is scheduled to be complete by late spring 2024. All of the concrete placements for the spillways were complete as of December 31, 2023.

The penstock flexible couplings (penstock sections that allow the penstocks to expand and contract) were redesigned to fully meet BC Hydro’s specifications. The installation of the redesigned flexible couplings is forecast to begin in February 2024. The coatings for the penstocks are forecast to be complete in summer 2024 to optimize the interfaces with the installation of the upper and lower flexible couplings.

Construction continued on the right bank foundation enhancements, which address the geotechnical issues that were identified in the bedrock foundation on the Project's right bank. As of December 31, 2023, enhancements to the approach channel were substantially complete, including the excavation and cleaning of the bedrock surface, the installation of waterproofing lining materials, grouting, and the placement of reinforced concrete and granular fill. Ongoing reviews by the Technical Advisory Board and the two independent, world-leading dam experts continue to confirm that the design of the foundation enhancements meets the highest safety standards and international best practices.

The main civil works contractor completed the injection grouting of all 539 holes for the slurry cut-off wall behind the approach channel. The remaining work on the slurry cut-off wall involves the construction of an earthfill protection berm. The contractor is currently waiting for warmer weather to place the material for the berm.

For the balance of plant work activities, the mechanical and electrical work progressed inside the powerhouse in the areas available to the contractors, which includes most sections of the upstream generator floor, the entire downstream generator floor, the operations building, the entire mechanical floor and the draft tube and dewatering levels in the powerhouse. Architectural work in the operations building is progressing and the heating, ventilation and air conditioning work continues. The installation of the fire protection system is also continuing. The permanent upstream fishway is on schedule to be complete in spring 2024.

During the reporting period, the turbines and generators contractor continued working on all six units. The majority of the components for unit 1 and unit 2 have been installed and the units will be ready for the start of wet commissioning when the penstocks can be filled with water after reservoir filling. The contractor is also in the process of modifying the lower couplings between the penstocks and turbine scroll cases to a half-welded design. Lower coupling 1 is complete and all six couplings are scheduled to be completed by mid-2024.

1.3 Permanent Naming of Site C Dam and Reservoir

Site C received its temporary name from scouting work conducted by surveyors tasked with exploring the hydroelectric potential of the Peace region in the 1950s. The scope of the survey was extensive and more than 200 potential dam sites in the Peace River basin and farther north in the Liard River basin were examined.

The preliminary investigations narrowed the field to 12 possible dam sites along the Peace River, including four sites downstream of Hudson's Hope (known as sites A, B, C and D).

BC Hydro has invited Indigenous Nations to participate in the permanent naming of Site C assets, specifically the dam and future reservoir. Participation in the naming of Site C provides the opportunity to acknowledge the presence of the Project on Indigenous traditional lands and contributes to reconciliation.

In the spring of 2023, BC Hydro initiated engagement on Site C dam and reservoir naming with the 13 Indigenous Nations identified in the Site C Environmental Assessment Certificate and Federal Decision Statement.

Five Nations participated in the first workshop in October 2023, which resulted in a shortlist of naming suggestions.

The final recommendations were selected from that shortlist as outcomes of a second workshop in November 2023, with participation from two Indigenous Nations. The shortlist of recommendations will be provided to BC Hydro and the provincial government for consideration.

1.4 Upholding Commitments to the Environment, Indigenous Nations and Local Communities

During the reporting period, BC Hydro continued to uphold its commitments to the environment, Indigenous Nations and local communities.

BC Hydro continued to engage, build relationships and find solutions together on topics that are most important to the Indigenous Nations affected by Site C.

BC Hydro continued to secure the appropriate permits, authorizations and leaves to commence construction required for the Project. As of December 31, 2023, 633 of the estimated 671 provincial and federal permits and authorizations have been received. This includes all required regulatory approvals to commence reservoir filling.

Work advanced in the areas of environmental monitoring and assessment, as well as in the Project's fish and wildlife habitat, vegetation management and heritage programs. During the reporting period, the temporary fish passage facility passed 876 fish upstream. Operation of the temporary fish passage facility for the 2023 season ended on October 31, 2023, after which the facility was winterized. During the 2023 operating season, the facility passed 12,727 fish from 15 different species.

Environmental compliance on the Project remains high. During the reporting period, 9,837 environmental compliance inspections were completed by BC Hydro, with a compliant and partial compliant result of 99% across all contractors and work areas.

Indigenous Engagement

BC Hydro continues to advance economic opportunities for First Nations through capacity building and procurement opportunities. Since the beginning of the Project, approximately $818 million in Site C procurement opportunities have been awarded to companies designated by Indigenous Nations, pursuant to BC Hydro's Indigenous Procurement Policy. Working on the Site C Project has helped businesses

designated by Indigenous Nations to build and grow their reputations, expand the scale of their operations, and develop new expertise to compete in the regional economy.

During the reporting period BC Hydro completed the delivery of a professional development training program for Indigenous cultural monitors working on Site C. Thirteen individuals from five Treaty 8 First Nations graduated from the 10-week program. Topics included aquatic wetlands, vegetation, wildlife, seed collection, and reclamation. The training sessions helped build knowledge and capacity to enhance their current roles as cultural monitors on the Project, and support future career opportunities. Upon completion of the professional development courses in 2023, the Site C cultural monitors are eligible for certificates from the Natural Resource Training Group and Northern Lights College Continuing Education, along with registration for an Applied Biologist Technician designation through the College of Applied Biologists.

BC Hydro continued to work with Indigenous Nations on the development of the future cultural centre. The cultural centre project is an important accommodation for the cultural impacts of Site C. The facility will showcase local Indigenous culture and history in the region, and store and display many of the artifacts uncovered during the construction of Site C. The participating Nations have agreed on a conceptual design for the facility. BC Hydro is currently evaluating cost estimates for different options to deliver on this conceptual design before proceeding to the development of the detailed design.

In December 2023, 197 Indigenous people were working on the Site C Project, which represents approximately 8% of the total workforce.

Local Communities

During the reporting period, BC Hydro continued to engage with local communities, elected officials and stakeholders. The Regional Community Liaison Committee,

comprised of local elected officials and local Indigenous communities, met on December 6, 2023. BC Hydro also continued to implement its construction communications program, which includes updating the Project website with current information, photos and videos of construction activities, as well as providing information to stakeholders.

During the reporting period, BC Hydro distributed more than $47,000 to five non-profit organizations in the Peace Region through the Generate Opportunities (**GO**) Fund and as of December 31, 2023, 94 projects had received $827,000 since the fund was launched.

1.5 Indigenous Burials

During the reporting period, consultations continued with impacted Indigenous Nations regarding site-specific plans for the management of two identified burial sites located within the Project area, which have been registered as heritage sites under the *Heritage Conservation Act*. These sites are outside of the future reservoir area but still at risk of erosion and/or slope instability during reservoir operations.

In October 2023, the single burial that was located within the reservoir area was relocated to its permanent final resting place. Indigenous elders and community members were present for the ceremony, and the work was done under the supervision of Indigenous monitors.

1.6 Property Acquisitions

Property acquisitions required for the Project remain on track. The land and rights required for reservoir filling have been acquired. During the reporting period, further acquisitions have been completed. Within the first year of reservoir operations, land rights will be required from a further four landholdings.

1.7 Inflationary Pressures

Over the past year, inflationary pressures have had impacts to the Project's costs in areas including contract related costs for higher labour and fuel costs in excess of the amounts to be borne by the contractors, and contract amendments and change orders subject to current market pricing. Going forward, inflation continues to be a risk for future contract change orders, procurements, and the Project's interest during construction costs. In addition, beyond inflationary cost impacts, supply chain challenges are a risk that could potentially cause schedule delays.

1.8 Project Status Dashboard for the Quarter

BC Hydro, with oversight from the Project Assurance Board, is focused on completing the Site C Project within the 2021 approved budget of $16 billion and the final unit in-service date in 2025, without compromising on safety, scope and quality. To report on Project status, BC Hydro uses a dashboard system where key Site C Project areas are classified as red (at risk), amber (moderate issues) or green (on target).

The Project Status Dashboard as of December 31, 2023, is provided in Table 1. The only change to the performance indicators from the previous quarter (as of September 30, 2023) was the Environment status changing from "amber" to "green."

Table 1 Project Status Dashboard

● On Target ● Moderate Issues ● At Risk

Status as of:		December 31, 2023
Overall Project Health	●	The overall Project health remains "amber." The Project is approximately 84% complete and work continues to advance, however, there are still potential risks remaining. BC Hydro continues to review, assess, mitigate, manage and monitor potential risks to the Project.
Safety	●	Safety status remains "amber." During the reporting period, the Project saw a decrease in workforce numbers as work fronts were completed. The majority of the remaining work continues to take place in and around the powerhouse. Compared to the same period in 2022, the Project safety performance metrics for lost time injury frequency and all injury frequency remained consistent. There was a slight improvement in the safety metric for serious incident frequency.
Scope	●	Scope status remains "amber." Provisions are included in the Project plans for potential scope adjustments for site conditions and interfaces. As construction progresses, there remains a risk of design changes due to unknown field conditions.
Schedule	●	Schedule status remains "amber." The Project is currently on schedule to achieve the approved 2025 final unit in-service date and is approximately 84% complete. With the completion of tunnel conversion in September 2023, there was a possibility that reservoir filling could start in late fall 2023, one year earlier than the approved schedule. However, as of early November 2023, there continued to be some critical work areas that still needed to be completed before reservoir filling could begin, including the approach channel, spillway gates and powerhouse intake gates. With winter weather and colder conditions setting in, the window to safely begin reservoir filling was coming to close. On November 14, 2023, BC Hydro made the decision to stay on track with the approved Project schedule. Work on the Site C Project continues to advance on schedule with reservoir filling planned in fall 2024. As a result of the advancement of construction work through 2023, reservoir filling may be initiated in late-August 2024, depending on weather, environmental and system conditions. There continues to be uncertainty related to achieving the contractual schedules, and there are potential risks that could adversely affect these schedules. The time available to complete the remaining scopes of work is expected to be sufficient for the Project to meet the approved schedule.
Cost	●	Cost status remains "amber." Potential cost risks remain, as detailed in this report. As of December 31, 2023, the life-to-date actual costs are $12.9 billion, which results in an estimated $3.1 billion of remaining costs based on the forecast of $16 billion.

Status as of:		December 31, 2023
Quality	●	The quality status for the Project remains "green," indicating that the work generally conforms to the requirements of the drawings and specifications. When a quality issue is identified during the course of construction, BC Hydro and its contractors work to rectify the issue to ensure that the quality of the completed work achieves the quality specifications. The Technical Advisory Board and independent international dam experts continued to review and confirm that the Project designs are appropriate, safe and serviceable over the long operating life of Site C.
Regulatory, Permits and Tenures	●	The regulatory, permits and tenures status remains "green." Overall, BC Hydro continued to be issued permits and authorizations in accordance with construction timelines. As of December 31, 2023, 633 of the estimated 671 provincial and federal permits and authorizations required for the Project have been received and are actively being managed. This includes all required regulatory approvals to commence reservoir filling.
Environment	●	The Project environment status changed to "green" from "amber" in the previous reporting period. During this quarter, as a follow up to the April 2022 potentially acid-generating rock Environmental Assessment Office order and subsequent warning letter received in September 2022, the Environmental Assessment Office determined that the revised Site C Construction Environmental Management Plan was acceptable. BC Hydro issued the Plan as final and posted it to the Project website on October 24, 2023. BC Hydro will continue to work with the Environmental Assessment Office on how to interpret the revised Plan and the order, and the order's status. The Environmental Assessment office has confirmed that enforcement against the order will not occur. BC Hydro continues to develop final treatment plans for potentially acid-generating sites that will not be addressed through dam construction or the creation of the reservoir.
Procurement	●	The procurement status remains "amber" due to a number of remaining procurements that still need to be negotiated. The majority of the Project's commercial agreements to deliver the right bank foundation enhancements are in place, with a few remaining commercial agreements for smaller scopes of work expected to be awarded by the spring 2024.
Indigenous Relations	●	The Indigenous Relations status remains "amber." BC Hydro has a mandate from the Government of British Columbia to reach Project or impact benefit agreements with the 10 Indigenous groups that are most impacted by Site C. Eight of 10 agreements are fully executed and in implementation. BC Hydro has a standing offer to negotiate with the remaining two First Nations that have not signed agreements related to the Site C Project. BC Hydro also maintains a working relationship with those Nations through ongoing consultations and engagement.

Status as of:		December 31, 2023
Stakeholder Engagement	●	The stakeholder engagement status remains "green." BC Hydro continues to work with the communities, regional district and stakeholder groups on the implementation of various community agreements.

1.9 Significant Project Updates for the Quarter

Significant Project updates that occurred between October 1 and December 31, 2023, include the following:

October 2023

- Of the three transmission towers that will be constructed on the dam intakes, one was completed.
- Work began to remove the cofferdam that was located downstream of the spillway. Filling of the tailrace with water began.

November 2023

- The final concrete placements for the spillways were completed.
- Work on the intersection of Highway 29 and the access road to the future Halfway River boat launch concluded for the year. Final paving of the intersection will resume in spring 2024.

December 2023

- Construction of the erosion protection slabs in the tailrace channel downstream of the powerhouse was completed.
- Removal of the right bank cofferdam was completed.
- The approach channel was substantially completed.

Refer to Appendix A for site construction photos from the reporting period and refer to Appendix B for a list of work completed since the Project commenced in 2015.

2 Safety and Security

During this reporting period, the Project saw a decrease in workforce numbers as work fronts were completed. The majority of the remaining work continues to take place in and around the powerhouse. Compared to the same period in 2022, the Project safety performance metrics for lost time injury frequency and all injury frequency remained consistent. There was a slight improvement in the safety metric for serious incident frequency.

2.1 Isolation and Lockout of Hazardous Energy

With the increased work activity related to commissioning, several safety near-misses have occurred related to energy isolation and lockout. BC Hydro and our contractors have prioritized managing these hazards through the following:

- BC Hydro has implemented an isolation permit process for its prime contractor areas;
- BC Hydro is requiring contractors to conduct comprehensive incident investigations for all isolation and lockout incidents. These investigations have resulted in contractors upgrading their lockout / tagout programs, as well as additional training for their crews;
- Targeted inspections of equipment isolation have been incorporated into the weekly contractor / BC Hydro safety walk-downs; and
- BC Hydro and our contractors are working to increase worker knowledge and understanding of isolation hazards and lockout procedures.

2.2 WorkSafeBC Decision on BC Hydro Administrative Penalty

WorkSafeBC imposed a penalty against BC Hydro on Site C related to WorkSafeBC orders the Project received in July 2022 for first aid and prime contractor responsibilities in the Site C powerhouse. At that time, WorkSafeBC found that BC Hydro failed to fulfill the prime contractor responsibility to ensure the contractor

had an effective ventilation system in place at all times, as well as to ensure contractor compliance with the WorkSafeBC requirements related to first aid procedures in the powerhouse. There were no injuries or safety incidents related to the orders or penalty.

BC Hydro takes health and safety responsibilities and orders from WorkSafeBC very seriously. Since July 2022, BC Hydro has worked to ensure compliance with the WorkSafeBC requirements related to prime contractor responsibilities and first aid and WorkSafeBC subsequently accepted BC Hydro was in compliance in June 2023.

In October 2023, BC Hydro filed a review of the orders and penalty with WorkSafeBC. A decision on the review is expected in summer 2024.

2.3 Summary of Safety Performance Metrics

From July 2015 through December 2023, more than 58.8 million work hours have been completed across the Project, with no fatalities and one permanent partial disabling injury in August 2017.[1]

During the reporting period, there were no lost time injuries reported. There were eight serious safety incidents (any injury or near miss with a potential for a fatality or serious injury). Five of these incidents were near misses with the potential for a serious injury, and three resulted in minor worker injuries (not all of these injuries required medical attention treatment).

In addition, there were 106 non-serious incidents recorded during this period. Of these, 34 incidents were classified as near misses, with the potential for causing

[1] In August 2017, a Site C worker injured their arm in a lost time injury incident related to a 7.5-foot fall from the back of a flatbed truck. In June 2018, the worker received a permanent partial disability award from WorkSafeBC. BC Hydro reclassified this incident as a permanent disabling injury after receiving the update on the WorkSafeBC award in June 2018. The incident is identified as a serious injury in the BC Hydro Incident Management System.

harm. Of the remaining 72 incidents, 64 involved injuries that required first aid and eight that required medical attention.

A near miss is defined as an incident that could have resulted in an injury but did not because of effective hazard barriers or the person was out of harm's way/missed. BC Hydro considers near miss reporting as indicative of an effective and transparent safety culture and strongly encourages all contractors and employees to report near misses.

Table 2 reflects the safety performance results for the Project, including all contractors and all sub-projects.

Table 2 Summary of Site C Safety Metrics

	Reported October 1, 2023 to December 31, 2023[2]	Reported Since Inception (July 27, 2015 to December 31, 2023)[2]
Fatality[3]	0	0
Permanently Disabling Injury[4]	0	1
Serious Incidents[5]	8	208
Lost Time Injuries[6]	0	49
All-Injury Incidents[7] (Lost Time Injuries[6] and Medical Attention Requiring Treatment[8])	10	377

2 Numbers are subject to change due to timing of when data is retrieved and when the injury is categorized.

3 Excludes any non-occupational incidents.

4 A permanently disabling injury is one in which someone suffers a probable permanent disability.

5 Serious incidents are any injury or near miss with a potential for a fatality or serious injury.

6 Lost time injuries are those where a worker (employee or contractor) misses their next shift (or any subsequent shift) due to a work-related injury/illness. If a worker only misses work on the day of the injury, it is not considered a lost time injury.

7 All-injury incidents include all work-related medical attention requiring treatment, lost time injuries, and fatalities.

8 Medical attention requiring treatment is where a medical practitioner has rendered services beyond the level defined as "diagnostic or first aid" and the worker (employee or contractor) was not absent from work after the day of the injury. Services beyond diagnostic/first aid include (but are not limited to) receiving stitches, a prescription, or any treatment plan such as physiotherapy or chiropractic.

2.4 Safety Performance Frequency Metrics

To assess safety performance over time, the Project considers key safety metrics in the context of the total amount of hours worked (frequency), which corrects for the volume of work.

Table 3 summarizes these key safety metrics by quarter, for a rolling 12-month average.

Table 3 Summary of Safety Performance Frequency Metrics (2022 vs 2023)

	January – December 2022 (Rolling 12-Month Average)				January – December 2023 (Rolling 12-Month Average)			
	Q1 Jan-Mar	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec	Q1 Jan-Mar	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec
Serious Incident Frequency	0.70	0.82	1.07	1.17	1.24	1.13	1.01	0.97
Lost Time Injury Frequency	0.11	0.09	0.11	0.11	0.17	0.16	0.12	0.12
All Injury Frequency	1.27	1.17	1.18	1.22	1.18	1.11	1.18	1.21

The serious incident frequency (adjusted for work hours) for this reporting period was 0.97, compared to 1.17 for the same period in 2022. The recent serious incidents in this quarter relate to working at heights, near machinery/equipment with moving parts, near energized equipment, near heavy equipment, and objects falling from height. BC Hydro routinely shares safety performance results with Project contractors to help identify where corrective actions are required.

All serious safety incidents were investigated by the responsible employers. BC Hydro and contractor senior management participated in reviews of contractor's incident investigations. Mitigations and other corrective actions have been implemented to minimize the recurrence of similar incidents.

For this reporting period, all-injury frequency remained consistent when compared to the same period in 2022. The majority of these injuries were lacerations and strains requiring medical treatment.

Refer to Appendix C, Figure C-1 for a graphic summary of Site C safety performance metrics, including both BC Hydro employees and Project contractors.

2.5 Regulatory Inspections and Orders

WorkSafeBC, under the authority of the *Worker's Compensation Act*, is the primary regulator with jurisdiction over safety for the Project. WorkSafeBC oversees worker safety (employee and contractor) for the Project, both on and off the dam site. The Ministry of Energy, Mines and Low Carbon Innovation is the regulatory authority for worker safety on any work fronts subject to the *Mines Act*, including West Pine Quarry, Portage Mountain Quarry, and Area E.

As shown in Table 4, from October to December 2023, WorkSafeBC issued seven regulatory inspection reports and eight regulatory orders to the Project. Of the seven WorkSafeBC inspection reports, three were 'clean sheets' with no orders. There was one regulatory inspection and one regulatory order issued from the Ministry of Energy, Mines and Low Carbon Innovation during this reporting period.

Table 4 Safety Regulatory Inspections and Orders (WorkSafeBC and Ministry of Energy, Mines and Low Carbon Innovation combined)

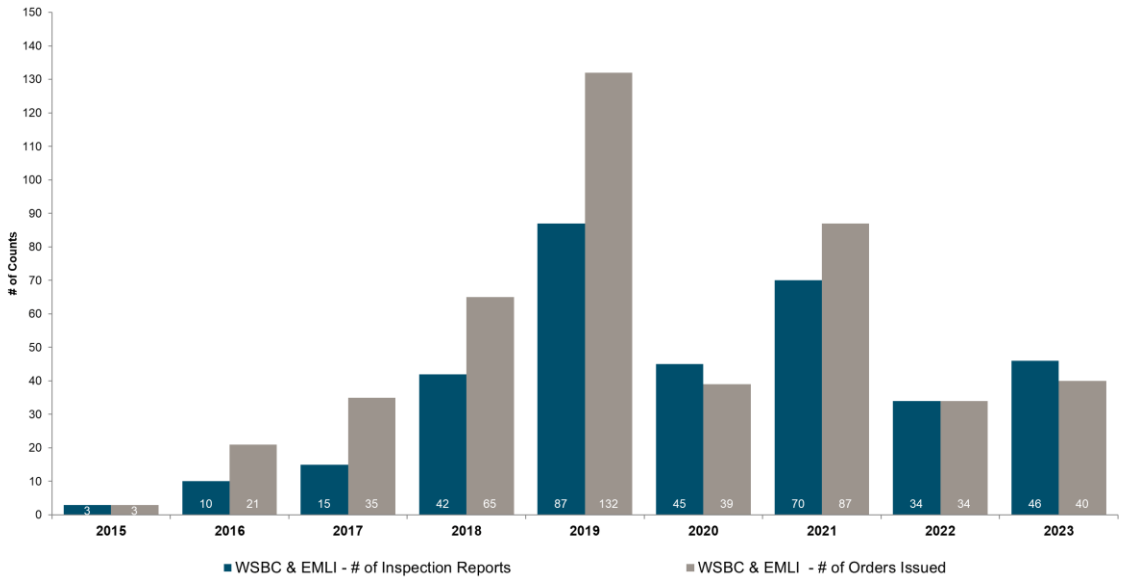
	Reported October 1 to December 31, 2023[9]	Reported Since Inception (July 27, 2015 to December 31, 2023)[9]
Regulatory Inspections	8	352
Regulatory Orders	9	456

Figure 1 shows the number of regulatory inspections and orders issued for the Project since 2015.

[9] Numbers are subject to change due to timing of when data is retrieved and when the injury is categorized.

Refer to Appendix C, Table C-1 Safety Regulatory Inspections and Orders for a summarized listing of the regulatory inspection reports.

Figure 1 WorkSafeBC and Ministry of Energy, Mines and Low Carbon Innovation Regulatory Inspections and Orders, July 2015 to December 2023



3 Construction, Engineering, Quality Management, and Assets In Service

3.1 Construction

Work on the Site C Project continues to advance consistent with the approved schedule, with reservoir filling planned in fall 2024, and with the first generating unit coming into service shortly thereafter. As a result of the advancement of construction work through 2023, reservoir filling may be initiated in late-August 2024, depending on weather, environmental and system conditions.

There continues to be uncertainty related to achieving the contractual schedules, and there are identified risks that could adversely affect these schedules.

The time available to complete the remaining scopes of work is expected to be sufficient for the Project to meet the Project's approved schedule.

3.1.1 Reservoir Filling

With the completion of tunnel conversion in September 2023, there was a possibility that reservoir filling could start in late fall 2023, one year earlier than the approved schedule. However, as of early November 2023, there continued to be some critical work areas that still needed to be completed before reservoir filling could begin, including the approach channel, spillway gates and powerhouse intake gates. With winter weather and colder conditions setting in, the window to safely begin reservoir filling was coming to close. As a result, on November 14, 2023, BC Hydro made the decision to stay on track with the approved Project schedule. Work on the Site C Project continues to advance on schedule with reservoir filling planned in fall 2024. As a result of the advancement of construction work through 2023, reservoir filling may be initiated in late-August 2024, depending on weather, environmental and system conditions.

Before BC Hydro is able to proceed with reservoir filling, all regulatory requirements must be met and each of the following key construction activities must be sufficiently complete:

Dam Site

- The earthfill dam, approach channel and spillways (including some gates);
- Right bank foundation enhancements;
- Modifications to the right bank cofferdam; and
- Tunnel conversion.

Off Dam Site

- Clearing of the Site C reservoir;
- Realignment of Highway 29; and

- The Hudson's Hope shoreline protection berm.

Further information on the progress related to each of these construction activities is provided in the following sections.

3.1.2 Main Civil Works

During the reporting period, construction activities took place in the approach channel and on the right bank and earthfill dam as described below.

Approach Channel

As of December 31, 2023, the approach channel waterproofing (including bedrock surface excavations and cleaning, installation of waterproofing lining materials, grouting, and reinforced concrete and granular fill placements) was substantially complete. This work area is now complete and ready for reservoir filling.

Right Bank Drainage Tunnel and Left Bank Drainage Adit

The main civil works contractor continues to progress the work in the right bank drainage tunnel and left bank drainage adit. During the reporting period, the contractor completed the repair and installation of numerous drains and additional instrumentation.

Earthfill Dam

As of December 31, 2023, the capping of the earthfill dam and the construction of the dam crest road and the dam face road were complete. Approximately 55% of the duct banks for road lighting were also complete.

Conveyor Belt System

In September 2023, when the earthfill dam was completed, the conveyor system that transported glacial till material used in the construction of the core of the earthfill dam ceased operations. The decommissioning of the conveyor system is in progress.

Area E

Planning for the physical reclamation of the Area E pit is in progress and is expected to begin in summer 2024.

Slurry Cut-off Wall

The main civil works contractor has completed the injection grouting of all 539 holes for the slurry cut-off wall behind the approach channel. The remaining work on the slurry cut-off wall involves the construction of an earthfill protection berm. The contractor is currently waiting for warmer weather to place the material for the berm.

3.1.3 Generating Station and Spillways

During the reporting period, construction progressed on the generating station and spillways civil works, cranes and hydromechanical equipment as described in the following sections.

Generating Station and Spillways Civil Works

The generating station and spillways civil works contract includes the delivery of civil works associated with the powerhouse, intakes, penstocks and spillways.

By concrete volume, the concrete placements for the generating station and spillways are essentially complete.

Powerhouse

For the powerhouse, there is a small amount of concrete still to be placed for the concrete slabs behind units 5 and 6 in locations used to access the lower flexible couplings, which is scheduled to be complete by late spring 2024.

Penstocks

The penstock flexible couplings (penstock sections that allow the penstocks to expand and contract) were redesigned to fully meet BC Hydro’s specifications. The installation of the redesigned flexible couplings is forecast to begin in February 2024.

The conventional design, and the quality of fabrication to date, mitigate the performance risk of unacceptable leakage. Any final seal adjustments will be made if required during the wet-testing process.

The coatings for the penstocks are forecast to be complete in summer 2024 to optimize the interfaces with the installation of the upper and lower flexible couplings.

Spillways

All of the concrete placements for the spillways were complete as of December 31, 2023.

Hydromechanical Equipment

The installation of all six intake operating gates and the commissioning of the gates' hydraulic systems were completed in the fall of 2023 on temporary power and controls. Final commissioning of all six intake gates on permanent power and controls is scheduled to be complete in mid-2024.

All three spillway operating gates were connected to their respective hoists and the first gate movements were achieved in fall 2023. Work continues on the seals and heating systems. The commissioning for all three gates is scheduled to start in spring of 2024.

The commissioning of the hydraulic systems for the low-level operating gates 1 to 4 was completed on temporary power in the fall of 2023; commissioning of the hydraulic systems for gates 5 and 6 is scheduled to start in spring 2024. Final commissioning of all six gates on permanent power and controls is scheduled to start in summer 2024.

The assembly of an extra set of draft tube maintenance gates will begin in January 2024, followed by dry fitting and installation at the powerhouse.

3.1.4 Right Bank Foundation Enhancements

As of December 31, 2023, ongoing reviews by the Technical Advisory Board and the two independent, world-leading dam experts continued to confirm that the design of the foundation enhancements, located on the Project's right bank, meet the highest safety standards and international best practices.

During the reporting period, construction continued on the right bank foundation enhancements, which address the geotechnical issues that were identified in the bedrock foundation on the Project's right bank. Construction of the right bank foundation enhancements commenced in 2021 and the work completed to December 31, 2023, includes:

- The installation of 48 large diameter concrete-filled vertical steel piles located within the spillways;
- The installation of 48 large diameter concrete-filled vertical steel piles located downstream of the powerhouse;
- The installation of the enhancements to the erosion protection downstream of the large diameter piles;
- The removal of the right bank cofferdam and the placement of riprap in the tailrace channel; and
- The enhancements to the approach channel including the bedrock surface excavations and cleaning, the installation of waterproofing lining materials, grouting, and the reinforced concrete and granular fill placements.

3.1.5 Tailrace Filling

With the completion of the right bank foundation work downstream of the powerhouse, BC Hydro was able to initiate tailrace filling in October 2023. This process involved using pumps to move water from the Peace River into the tailrace area, to equalize the water level on both sides of the right bank cofferdam. Once the

filling was completed, the right bank cofferdam was removed; this work was completed in December 2023.

3.1.6 Balance of Plant

The balance of plant contracts are split between three contractors and include the following scopes of work: (1) mechanical; (2) electrical (includes architectural, heating, ventilation, and air conditioning, and fire detection and protection work); and (3) permanent upstream fishway and other out structures.

The mechanical and electrical work progressed inside the powerhouse in the areas available to the contractors, which includes most sections of the upstream generator floor, the entire downstream generator floor, the operations building, the entire mechanical floor and the draft tube and dewatering levels in the powerhouse.

Subsequent to the reporting period, the mechanical portion of the dewatering system (used to dewater the draft tubes) was commissioned in January 2024.

The electrical contractor continued installation of the electrical station service in the powerhouse, intakes, and spillways. In addition, the contractor has completed the isolated phase bus and transformers that will connect the unit 1 and unit 2 generators to the BC Hydro electrical system. The contractor is currently constructing the interior isolated bus for unit 3 and unit 4, and will start on the transformer assembly and outdoor isolated phase bus in the spring 2024. This work is forecast to be complete by summer 2024, and will connect unit 3 and unit 4 generators to the BC Hydro electrical system.

Architectural work in the operations building is progressing and the heating, ventilation and air conditioning work continues. The installation of the fire protection is also continuing.

The permanent upstream fishway and other out structures contractor has completed the building envelope on the fishway and pump building. The permanent upstream fishway is on schedule to be complete in spring 2024.

3.1.7 Turbines and Generators

The scope of work for turbines and generators includes the complete design, supply, installation, testing and commissioning of six turbines, generators, governors and exciters.

During the reporting period, the contractor continued working on all six units. The majority of the components for unit 1 and unit 2 have been installed and the units will be ready for the start of wet commissioning when the penstocks can be filled with water after reservoir filling.

The contractor is in the process of modifying the lower couplings between the penstocks and turbine scroll cases to a half-welded design. Lower coupling 1 is complete and all six couplings are scheduled to be complete by mid-2024.

The turbines and generators for units 3, 4, 5 and 6 were delayed due to a now-resolved quality issue related to nonconforming concrete placements, but are still expected to meet the approved schedule. Unit 3 is also expected to be ready for wet commissioning when the penstocks can be filled with water after reservoir filling. Unit 4 and unit 5 are likely to be ready for wet commissioning by the end of 2024 and unit 6 by early in 2025.

3.1.8 Transmission

The assembly of the transmission towers continued for the three one-kilometre-long, 500 kilovolt transmission lines that will connect the Site C substation to the Site C powerhouse. In October 2023, one transmission tower was installed on top of the intake structures, and the remaining two towers are expected to be installed in spring 2024.

The installation of the first transmission line between the Site C substation and the powerhouse is scheduled to be complete in summer 2024, with the remaining two lines expected to be completed in late 2024.

3.1.9 Highway 29 and Hudson's Hope Shoreline Protection Berm

The highways sub-project includes the construction of approximately 30 kilometres of highway and five new bridges along Highway 29; construction of a shoreline protection berm within the District of Hudson's Hope to protect against bank erosion due to reservoir wind waves and water table rise; the development and operation of the Portage Mountain Quarry, which supplied riprap and filter materials for highway and berm construction; and the construction of recreational facilities at Halfway River, Lynx Creek, and Hudson's Hope.

During the reporting period all of the old Highway 29 decommissioning work was completed by the contractor.

At Halfway River, the bridge expansion joints were replaced and the first layer of asphalt for the boat launch intersection was completed.

Portage Mountain Quarry

Reclamation of the Portage Mountain Quarry started in August and the first phase of reclamation was completed in December 2023. Phase two of the reclamation is expected to be completed in summer 2024.

Hudson's Hope Shoreline Protection Berm

The shoreline protection berm was completed in November 2022. Construction on the D.A. Thomas recreation area was started during the reporting period and is expected to be complete in late summer 2024. The recreation area will include a day use area, floating jetty (to be installed after reservoir filling), and a paved access road.

Halfway River East Boat Launch

Work on the Halfway River boat launch continued during the reporting period and was completed in December 2023. The remaining work is the completion of the intersection paving, planned for spring 2024, and the finishing work and gangway installation, which will occur after reservoir filling.

3.1.10 Reservoir

The following reflects progress to December 31, 2023:

Middle Reservoir, Halfway River Drainage and Western Reservoir

Clearing activities are complete. Minor road deactivation activities are scheduled for summer 2024.

Other Reservoir Work

The scope of other reservoir work includes infrastructure relocations as well as environmental offset works. The majority of this work is now complete.

Construction on the final fish habitat site situated at Wilder Creek began in late summer 2023 and was complete as of December 2023.

3.1.11 Site Operations and Infrastructure

The site operations and infrastructure section of this report includes updates for the reporting period on the construction and operations of the worker accommodation and debris management structures.

Worker Accommodation

During the reporting period, the total capacity of the worker accommodation facility was reduced to 1,764 (from 2,350) to account for the reduced workforce at site as the construction activities progress to completion. Room utilization averaged about 50% for the quarter and the expansion dorms were permanently closed (the overflow space is no longer required).

BC Hydro continues to explore options to decommission the worker accommodation camp facilities once they are no longer required for the Project.

In fall 2023, BC Hydro engaged a third party to conduct a market sounding regarding the ATCO camp assets to ensure interested parties were aware of the potential opportunity to acquire some or all of the camp assets.

Additionally, the Project contacted provincial government agencies and Crown corporations regarding the opportunity to acquire the camp assets, including the Ministry of Health, the Health Authorities, the First Nations Health Authority, and the Ministry of Post Secondary Education and Future Skills.

The First Nations Health Authority was the only organization that subsequently expressed interest in potentially acquiring any portion of the camp assets (the health clinic). BC Hydro is following up with the First Nations Health Authority with regards to their potential interest in the health clinic portion of the camp assets.

For the remainder of the camp, the Project is in discussions with potential buyers to align with work completions.

Debris Management

There are three debris management structures on the Moberly and Peace Rivers to capture and prevent debris from entering the diversion tunnels.

During the reporting period, all three structures operated normally. The current debris management contract has been extended into 2024 and a new contract procurement is underway for future years, including the transition to reservoir and permanent operations.

Fish Habitat Creation on the Peace River

The construction of fish habitat areas, located adjacent to an island on the Peace River downstream of the dam site, was ongoing throughout the reporting period.

Activities in the main channel (known as P5/P6) concluded. Work in the area known as P3/P8 (main and remnant channel reestablishment, along with some past habitat works repair) is expected to be complete in January 2024. The planting of deciduous and coniferous species will be completed in 2024.

3.2 Engineering

The Site C engineering team is responsible for defining the Project's design requirements, preparing the Project designs and contract specifications, and ensuring the safety and quality of the assets. The team consists of in-house design specialists from BC Hydro and a range of external consultants from engineering firms who are responsible for the various design components.

3.2.1 Main Civil Works

Once the earthfill dam had reached the elevation required for reservoir filling, the contractor continued to work on appurtenant structures in preparation for reservoir filling. Support for the main civil works contract continued during the reporting period supporting excavations, foundation mapping, approach channel lining and grouting, and instrumentation reading and interpretation. Instrumentation monitoring in the reporting period has indicated positive results with respect to dam stability and has confirmed that the dam foundation is responding to dam fill placements as predicted.

Detailed geological mapping of the excavations in the approach channel continued and is nearing completion. This geological information will continue to be used to update the design parameters for the site geology and foundations.

3.2.2 Right Bank Foundation Enhancements

During the reporting period, value engineering activities continued associated with the optimization of the constructability of the right bank cofferdam removal. Changes included deferral of a portion of the tailrace bedrock excavation and riprap placements to support the right bank cofferdam removal.

BC Hydro continued to engage the independent international dam experts, Technical Advisory Board and other subject matter experts to provide oversight of activities associated with the design of the foundation enhancements and construction of the Project. Refer to section 3.2.7 for a summary of the Technical Advisory Board meetings.

3.2.3 Large Cranes, Hydromechanical, and Turbines and Generators

During the reporting period, the focus continued to be on supporting equipment installation activities at site, manufacturing activities offsite, vendor submittal reviews and integration design.

3.2.4 Generating Station and Spillways, Balance of Plant, and Equipment Supply

During the reporting period, work focused on the production of record drawings for the powerhouse and intakes, along with supporting construction with the review of submittals for the powerhouse, intakes, penstocks, and spillways.

The balance of plant scope of work continued with the preparation and issuance of the issued-for-construction drawings as needed to support integration design for contractor designed equipment for the balance of plant mechanical; electrical (includes architectural, heating, ventilation, and air conditioning, and fire detection and protection work); and the permanent upstream fishway and other out structures contract packages. The balance of plant team also continued to support the construction activities for these contracts, including the review of the technical submittals and contractor design drawings, and performing additional factory acceptance testing and factory visits for the diesel generator contract.

The fabrication of the BC Hydro-designed protection and controls and telecom systems has ramped down, and engineering support to construction and commissioning is ramping up as equipment is installed and energized. With issued-for-construction drawings now being provided by contractors for

contractor-designed, supplied, and installed equipment, a major focus for the engineering team is integration and interface design, and support during integrated testing for BC Hydro protection and control systems that interface with contractor-supplied equipment.

3.2.5 Transmission

During the reporting period, record drawings were completed for the two 75-kilometer transmission lines. Engineering continues to provide construction support to the transmission lines that will connect the Site C substation to the Site C powerhouse. Geotechnical engineering support is being provided to monitor the transmission line foundations on the slope above the substation in order to determine potential future maintenance requirements.

3.2.6 Highway 29

Engineering support continued to prepare record drawings and issue certificates of conformance for Cache Creek, Farrell Creek, Halfway River and Lynx Creek highway segments.

3.2.7 Technical Advisory Board and Independent International Dam Experts

Video conference meetings continued to be held with the Technical Advisory Board and the independent international dam experts during the reporting period. Future meetings with the Technical Advisory Board will be scheduled in 2024.

3.3 Quality Management

BC Hydro continues to implement the Site C Quality Management Plan in order to achieve the quality objectives of the Project. During the reporting period, the Project team continued its activities to support the Project quality plan, including:

- Ongoing meetings with the quality management teams of key manufacturers and the site contractors to address quality issues as they arise;

- Performing quality audits of the site contractors;
- Participating in witness points and hold points at manufacturer's facilities; and
- Continuing with monthly quality performance indicator assessments for each sub-project.

When a quality issue is identified during the course of construction, BC Hydro and its contractors continue to work to rectify the issue to ensure that the quality of the completed work achieves the quality specifications.

3.3.1 Quality Nonconformance Management

The identifying and reporting of nonconformances continues to be an important part of quality management on Site C.

Table 5 summarizes quality nonconformity instances during the reporting period.

Table 5 Quality Management Nonconformity Report (NCRs) Metrics Reporting Period – October 2023 to December 2023

Contract	NCRs Reported October 1 to December 31, 2023	NCRs Closed October 1 to December 31, 2023	NCRs Reported as of December 31, 2023	NCRs Closed as of December 31, 2023	NCRs Open as of December 31, 2023
Main Civil Works	9	15	2,079	2,067	12
Turbines and Generators (total = manufacturing + installation)	117 (=5+112)	78 (=12+66)	1,338 (=647+691)	1,172 (=642+530)	166 (=5+161)
Generating Station and Spillways Civil Works	65	101	1,790	1,750	40

For the main civil works sub-project, with the main dam construction complete, there were no significant quality issues to report during the reporting period.

For the generating station and spillways civil works sub-project, as the main structures have been substantially completed, the contractor focussed its efforts on dry finishing of the concrete surfaces and closing out of nonconformity reports.

Manufacturing of the first replacement penstock flexible coupling was completed in Quebec and shipped to the contractor's facility in Fort St. John for assembly. For the remaining couplings under manufacture in Quebec, BC Hydro's quality inspector continues to perform surveillance and participation in witness and hold points in accordance with the manufacturing inspection and testing plan.

For the approach channel, the construction works were completed with no significant quality issues. Looking ahead to 2024, the focus of this sub-project will be to close-out open nonconformity reports and resolve outstanding deficiencies to facilitate handover to BC Hydro.

For the turbines and generators contract, the quality of the assembly and installation work at site continues to be good. For the turbine spiral case flexible couplings, the modified design (half-welded coupling) has been implemented on unit 1 and unit 2. A leakage test is anticipated for the unit 1 flexible coupling in spring of 2024 by filling the spiral casing with water from the tailrace. For the generator assembly, BC Hydro continues to have an independent specialist perform regular quality audits of the stator core stacking and stator winding activities. BC Hydro continues to meet with the turbines and generators contractor on a weekly basis to discuss upcoming inspections, quality issues and the overall quality assurance program.

For the electrical and mechanical balance of plant, there were no significant quality issues during the reporting period. In 2024, BC Hydro will be focussing on streamlining the process for quality documentation handover from the balance of plant contractors to facilitate the start of the equipment commissioning process.

3.4 Assets In Service

Before all major pieces of equipment and assets are placed into service on the Project, inspecting, testing, and commissioning activities are completed to ensure that all components are fit for service and safe to transition to operations.

The pre-commissioning testing includes offline testing of individual pieces of equipment. Once the offline testing is completed, BC Hydro prepares and signs a Commissioning Notice to Energize, which states that the asset is safe to connect to the BC Hydro transmission grid and the online testing can commence. At the conclusion of the online testing, the signing of a Commissioning Notice to Operate formalizes the handover of the asset from the Project team to BC Hydro Operations. The commissioning process undertaken for the earthfill dam and associated assets will form part of the comprehensive dam safety and reservoir filling plan.

Once assets are placed in service, BC Hydro Operations is responsible for the long-term operations and maintenance of the equipment and assets.

As of December 31, 2023, the following permanent assets have been placed into operational service on the Project:

- Site C substation;
- 500 kV gas-insulated switchgear expansion at the Peace Canyon substation; and
- Two new 500 kV transmission lines that connect the Site C substation to the Peace Canyon substation.

4 Project Schedule

4.1 Project In-Service Dates

BC Hydro is currently on track to achieve the approved final unit in-service date in 2025.

Table 6 shows the status of key Project milestones in relation to the approved final unit in-service date in 2025.

Table 6 In-Service Dates

Description	In-Service Dates based on Approved Budget and Schedule (June 2021)[10]	Status
5L5 500 kV Transmission Line	October 2020	Complete
Site C Substation	October 2020	Complete
5L6 500 kV Transmission Line	July 2023	Complete
Unit 1 (first power)	December 2024	On Track
Unit 2	February 2025	On Track
Unit 3	May 2025	On Track
Unit 4	July 2025	On Track
Unit 5	September 2025	On Track
Unit 6	November 2025	On Track

[10] In-service dates based on Treasury Board's approval of the revised budget and schedule in June 2021.

5 Project Governance, Costs and Financing, and Risk

5.1 Project Governance

During the reporting period, activities supporting Project governance included:

- The BC Hydro Board of Directors continued to meet on a monthly basis to provide governance, financial approvals of committed contracts over $75 million (and their related changes), and received updates on Project progress and key remaining risks;
- The Project Assurance Board continued to meet monthly to provide independent due diligence and oversight of the Site C Project to enable the Project to be fit for purpose and to be completed safely, on time and on budget;
- The commercial sub-committee of the Project Assurance Board continued to meet monthly to provide oversight on claims management, commercial strategy and contractual negotiations;
- The Technical Advisory Board continued to provide technical expertise and guidance to the Project Assurance Board and support to the Project team;
- Ernst & Young Canada continued to provide independent oversight for the Project, specifically with risk management, which included reviewing Project risks and the analysis for the schedule and costs for the Project, and the evaluation of commercial management;
- BC Hydro and Ernst & Young Canada worked closely and collaboratively to initiate a cost risk analysis and schedule risk analysis with a January 1, 2024, data date;
- Special advisor Peter Milburn continues to work with the Project to ensure that his recommendations, which have all been implemented, continue to be sustained. Mr. Milburn also worked closely with BC Hydro in advance of undertaking a cost risk analysis and schedule risk analysis in early January 2024.

5.2 Project Budget Summary

As of December 31, 2023, the life-to-date actual costs are $12.9 billion, which results in an estimated $3.1 billion of remaining costs based on the forecast of $16 billion. The Project remains on track to be completed within the 2021 approved $16 billion budget. BC Hydro, with oversight from the Project Assurance Board, continues to actively manage the Project budget and potential Project risks for the remaining work.

5.3 Project Expenditure Summary

Table 7 includes a breakdown of the $16 billion Project budget, approved in June 2021, by key work area, life-to-date actual expenditures to December 31, 2023, and the remaining budget.

Table 7 Project Budget by Key Work Area ($ million)

Description	Project Budget[11]	Actuals, Life-to-Date (as of December 31, 2023)	Remaining Budget (as of December 31, 2023)
Dam, Power Facilities and Associated Structures and Transmission[12]	8,258	7,522	736
Off Dam Site Works, Direct Construction Supervision and Site Services[13]	2,895	2,330	565
Total Direct Construction Cost	**11,153**	**9,852**	**1,301**
Indirect Costs[14]	2,082	1,512	570
Total Construction and Indirect Costs	**13,235**	**11,364**	**1,871**
Interest During Construction and Contingency	2,765	1,529	1,236
Total	**16,000**	**12,893**	**3,107**

Table 8 provides a summary of the approved total Project budget, the current forecasts, and related variances. The table also presents the cumulative plan and actual costs to December 31, 2023, and the related variances. The plan amount reflects the Project budget of $16 billion approved in June 2021 and the related preliminary forecasted annual spend at that time.

11 The total Project budget was approved in June 2021 by Treasury Board.

12 Key items included are river diversion infrastructure, earthfill dam and related works, spillways, powerhouse, generation equipment and transmission and substation work.

13 Key items included are highway re-alignment and reservoir related work, direct construction supervision, and site services such as worker accommodation.

14 Key items included are mitigation and compensation programs, development and regulatory costs, project management, engineering and other support services such as Project controls, contracts management, environmental, and Indigenous relations.

Table 8 Total Project Budget Compared to Forecast to Completion and Life-to-Date Plan Compared to Actuals to December 31, 2023 ($ million)

	Total Project			Life-to-Date (LTD) to December 31, 2023		
Description	**Budget**	**Forecast to Completion**	**Variance**	**Plan**	**Actual**	**Variance**
Total Construction & Indirect Costs	13,235	13,235	0	11,954	11,364	590
Interest During Construction and contingency	2,765	2,765	0	1,899	1,529	370
Total	**16,000**	**16,000**	**0**	**13,853**	**12,893**	**960**

Details of the variances between life to date actual and plan are in Appendix H.

Table 9 provides a Fiscal 2024 summary, for the plan, actual cost and related variance based on the 2023/24 to 2025/26 Service Plan.

Table 9 2023/24 to 2025/26 Service Plan Fiscal 2024 Plan Compared to Actuals ($ million)

Description	2023/24 to 2025/26 Service Plan, Fiscal 2024	Actuals, Fiscal 2024	Variance
Total Project	1,778	1,873	(95)

Details of the variances between actual and plan are in Appendix H.

5.4 Site C Project Financing

Most of BC Hydro's capital projects, including the Site C Project, are debt financed. The Site C Project costs are included as part of BC Hydro's overall borrowing and included in the Government of B.C.'s budget and fiscal plan. The debt and related interest costs are managed corporately by BC Hydro.

5.5 Material Project Risks and Opportunities

Material project risks and opportunities are identified and reviewed by BC Hydro management and the Project Assurance Board on an ongoing basis. Project risks are uncertain events that, if they occur, could result in a negative impact or loss to a

project. Similarly, opportunities are uncertain events that, if they occur, could result in a positive impact, or benefit, to a project.

As the Project progresses through implementation phase, the Project risks and opportunities will continue to evolve.

The criteria for selecting which risks and opportunities to include in internal and external reporting include both objective and subjective measures; these criteria have been utilized to select the risks and opportunities included in this report.[15]

Refer to Table 10 and Table 11 for a list of the material Project risks and opportunities as of December 31, 2023.

Table 10 Material Project Risks

Risk Description	Impact and Response Plan Summary
Safety incident resulting in a fatality or disabling injury	**Impact:** Serious worker injury or fatality; Project delays and associated costs. **Response**: Continue to monitor safety performance through BC Hydro's field-based Safe Work Observations program and ongoing safety management and analytics; support continuous improvements to the Safe Work Observations program to reinforce safety behaviours in the field; continue to share safety learnings; work with Project contractors on more collaborative safety incident investigations and track/follow-up on corrective actions; work with WorkSafeBC and contractors on safety equipment and process audits and programs focused on high hazard work activities at site; conduct joint safety planning workshops for upcoming work scopes; and continue to include safety in BC Hydro and contractor onboarding orientations to promote and encourage a strong safety culture across the Project.
Adits or right bank drainage tunnel may need additional structural support post reservoir filling	**Impact:** Requirement for additional structural support, resulting in additional costs. **Response**: Design additional support as required and implement measures to address as-found conditions.

[15] The risks and opportunities included in Table 10 and Table 11 are grouped thematically. The lists do not include risks and opportunities that are subject to confidentiality obligations or solicitor-client privilege, or that disclose commercially sensitive information relating to matters that are currently outstanding, including procurements and negotiations that are in progress at the time of this report, the disclosure of which would be harmful to BC Hydro's commercial interests.

Risk Description	Impact and Response Plan Summary
Penstock flexible couplings do not perform as expected	**Impact:** Schedule delays and/or additional costs. **Response**: Ongoing modification and on-site testing of the couplers. Implement alternative design and supply as needed.
Additional effort required to comply with mandatory reliability standards	**Impact:** Mandatory reliability standards require the implementation of cyber security and physical security measures in the Site C powerhouse. Additional reliability standards may result in additional work and costs. **Response**: A Site C mandatory reliability standards Steering Committee meets regularly to review requirements. A project manager has been assigned to implement measures as required.
First unit commissioning delay	**Impact**: Delay to unit 1 in-service and potential additional costs. **Response:** A commissioning plan has been developed. The plan is being implemented with commissioning activities starting as early as possible.
Generating station and spillways hydromechanical equipment supply specification is different from that of installer	**Impact:** Schedule delay, rework, equipment damage, claims from sub-contractor. **Response:** BC Hydro will facilitate integration between the original equipment manufacturer and the installation contractor to resolve any differences.
Lack of access to work area impacts onsite transmission towers schedule	**Impact:** Delay to schedule and increased costs. **Response:** Coordinate scheduling with contractor construction management teams to obtain access into intake deck.
Project contractors cannot attract and retain sufficient skilled craft workers	**Impact:** Contractors may not be able to adequately source, supply, attract, and retain sufficient Project labour including leaders in the hourly craft workforce such as forepersons, lead hands and senior journeypersons due to workforce demographics, increased competition for labour from other major projects, and the requirement for specialized workers. This may result in potential impacts to schedule, safety, productivity, and cost. **Response**: Contractors provide labour sourcing and supply plans, provide advance notice of foreign workers, and participate in local job fairs. BC Hydro encourages and facilitates capacity-building initiatives and monitors employee turnover rates and labour conditions on other projects.
Risk of contractor claims	**Impact**: Increased construction management and contract management effort required to respond to and investigate claims; settlement of claims may result in increased costs. **Response**: Ensure sufficient commercial management resources in place, proactively resolve claims as received, and ensure commercial management procedures are in place and are being followed.

Risk Description	Impact and Response Plan Summary
Project pays higher contractors' craft labour market increases	**Impact:** Increased labour market pressures could result in industry benchmarks exceeding the contracted baseline, resulting in Project cost increases. **Response**: Follow the contractual provisions related to labour escalation rates.
Additional coordination effort required between Balance of Plant (permanent upstream fishways and other out structures) and other contractors	**Impact:** Additional interface works identified during wrap-up resulting in additional cost impacts. **Response:** Define, negotiate and track performance of the additional wrap-up work.
Higher interest during construction on Project than planned due to increases in weighted average cost of debt rates	**Impact**: Although BC Hydro hedges debt based on BC Hydro's approved hedging strategy, risk remains for fluctuations in short-term interest rates which are not hedged and due to the regulatory accounting for realized gains / losses on hedges during the current Revenue Requirement Application period. These could result in higher interest during construction for the Project than budgeted. **Response**: BC Hydro is implementing its approved hedging strategy and closely manages the annual expenditures and the schedule for first power in-service, which is when the majority of the interest during construction will cease on the Project.
Increasing regulatory requirements relating to management of potentially acid-generating rock	**Impact**: Potential cost implications and schedule impacts. **Response**: Clarify any new regulatory requirements and/or non-compliances and ensure all potentially acid-generating rock locations have a suitable environmental prescription that mitigates the risk of acidic water.
Increasing scope for the Indigenous cultural centre design work	**Impact:** Redesign or additional design work results in higher cost estimates for the construction of the cultural centre. **Response:** Continue to engage with Indigenous Nations to obtain their input into the conceptual design. Prepare and evaluate cost estimates prior to construction.
BC Hydro estimate for tunnel backfill may be below current market	**Impact:** Estimates to be revised following a change in contractor, with potential cost increases due to changes in requirements, construction methodology and inflation. **Response:** Prepare a revised estimate based on current market conditions and proactively negotiate pricing with potential contractor.

Table 11 Material Project Opportunities

Opportunity Description	Impact and Response Plan Summary
Lower interest during construction due to timing of Project expenditures	**Impact**: Lower Project interest costs than the amount budgeted. **Response:** Monitor Project expenditure timing and manage expenditures effectively.

6 Key Procurement and Contract Developments

6.1 Key Procurements

The vast majority of the major Site C contracts have been awarded. The remaining procurements on the Project are summarized in Table 12.

Table 12 Remaining Major Project Procurements and Delivery Models

Component	Contract	Procurement Model	Anticipated Timing
Reclamation Program	Multiple seeding supply contracts and reclamation contracts to be awarded over three to four years	Design-Bid-Build	2024 season: • Four planting packages identified; three packages awarded. One package was deferred to 2025 but was brought back to be awarded in spring 2024. • Two reclamation packages identified; one package awarded. Second package is expected to be awarded in spring 2024. 2025 season: • Two planting packages identified; procurement will start in 2024. • Two reclamation packages identified; procurement will start in 2024. 2026 season: • Six planting packages identified; procurement will start in 2025.

6.2 Major Construction Contracts Exceeding $50 Million

Since inception of the Project, 14 major construction contracts have been awarded that exceed $50 million in value, as shown in Table 13. The contract values reflect the current value including executed approved changes to the end of the reporting period.

All construction contracts have been procured and awarded in accordance with BC Hydro procurement policies.

Table 13 Major Project Construction Contracts Awarded

Contract	Contract Value at December 31, 2023[16] ($ million)	Contract Execution Date
Site Preparation: North Bank	60	July 2015
Worker Accommodation	695	September 2015
Main Civil Works[17]	3,296	December 2015
Turbines and Generators	536	March 2016
Transmission and Clearing	92	October 2016
Quarry and Clearing	161	February 2017
Generating Station and Spillways Civil Works[18]	2,971	March 2018
Hydromechanical Equipment	78	April 2018
Transmission Line Construction	139	May 2018
Clearing and Aggregates	73	December 2018
Highway 29	379	October 2019
Balance of Plant Mechanical	87	July 2021
Balance of Plant Electrical (includes balance of plant architectural; heating, ventilation, and air conditioning; and fire detection and protection work)	261	September 2021
Balance of Plant Permanent Upstream Fishway and Other Out Structures	97	January 2022

16 Contract value reflects the current value including executed change orders to the end of the reporting period. Contract values are rounded to the nearest million.

17 Includes some of the scope of work for the right bank foundation enhancements.

18 Includes some of the scope of work for the right bank foundation enhancements.

6.3 Contracts Exceeding $10 Million

For open contracts procured and awarded in excess of $10 million, refer to Appendix F.

6.4 Contract Management

6.4.1 Material Changes to the Major Contracts

The main civil works contract is a unit price contract and as such variations in quantities and design are expected over the term of the contract. Since contract award in December 2015, the main civil works contract value has increased by $1.55 billion to reflect approved changes to December 31, 2023. These approved changes include work for the right bank foundation enhancements.

The generating station and spillways contract is also a unit price contract and, as such, variations in quantities and design are expected over the term of the contract. Since contract award in March 2018, the generating station and spillways contract value has increased by $1.37 billion to reflect approved changes to December 31, 2023. These approved changes include work for the right bank foundation enhancements.

7 Indigenous Engagement

Pursuant to the Environmental Assessment Certificate and Federal Decision Statement, BC Hydro is required to engage with 13 Indigenous Nations with respect to the construction stage of the Project. This consultation includes the provision of information on construction activities, support for the permit review process, and review and implementation of mitigation, monitoring and management plans, and permit conditions.

During the reporting period, BC Hydro continued to engage with Indigenous Nations on Project activities and milestones. Indigenous Nations were consulted on impacts related to the timing of reservoir filling. Some Indigenous Nations expressed concern

about the impacts to bears and other denning animals should reservoir filling begin in late fall 2023. BC Hydro worked with those Nations on mitigation plans before it was ultimately decided to initiate reservoir filling in 2024, in accordance with the approved Project schedule.

In October 2023, the single burial that was located within the reservoir area was relocated to its permanent final resting place. Indigenous elders and community members were present for the ceremony, and the work was done under the supervision of Indigenous monitors.

7.1.1 Indigenous Procurement, Training and Employment

BC Hydro continues to advance economic opportunities for Indigenous Nations through capacity building and procurement opportunities. Approximately $818 million in Site C procurement opportunities have been awarded to companies designated by Indigenous Nations since the beginning of the Project, pursuant to BC Hydro's Indigenous Procurement Policy. Working on the Site C Project has helped businesses designated by Indigenous Nations to build and grow their reputations, expand the scale of their operations, and develop new expertise to compete in the regional economy.

During the reporting period BC Hydro completed the delivery of a professional development training program for Indigenous cultural monitors working on Site C. The program included five two-week training sessions. Topics included aquatic wetlands, vegetation, wildlife, seed collection, and reclamation. The training sessions helped build knowledge and capacity to enhance their current roles as cultural monitors on the Project, and support future career opportunities. Upon completion of the professional development courses in 2023, the Site C cultural monitors are eligible for certificates from the Natural Resource Training Group and Northern Lights College Continuing Education, along with registration for an Applied Biologist Technician designation through the College of Applied Biologists. Thirteen individuals from five Treaty 8 First Nations graduated from the program.

In December 2023, 197 Indigenous people were working on the Site C Project, which represents approximately 8% of the total workforce.

7.1.2 Cultural Centre

BC Hydro continued to work with Indigenous Nations on the development of the future cultural centre. The cultural centre project is an important accommodation for the cultural impacts of Site C. The facility will showcase local Indigenous culture and history in the region, and store and display many of the artifacts uncovered during the construction of Site C. The participating Nations have agreed on a conceptual design for the facility. BC Hydro is currently evaluating cost estimates for different options to deliver on this conceptual design before proceeding to the development of the detailed design.

7.1.3 Permanent Naming of Site C Dam and Reservoir

BC Hydro has invited Indigenous Nations to participate in the permanent naming of Site C assets, specifically the dam and future reservoir. Participation in the naming of Site C provides the opportunity to acknowledge the presence of the Project on Indigenous traditional lands and contributes to reconciliation.

In the spring of 2023, BC Hydro initiated engagement on Site C dam and reservoir naming with the 13 Indigenous Nations identified in the Site C Environmental Assessment Certificate and Federal Decision Statement.

Five Nations participated in the first workshop in October 2023, which resulted in a shortlist of naming suggestions.

The final recommendations were selected from that shortlist as outcomes of a second workshop in November 2023, with participation from two Indigenous Nations. The shortlist of recommendations will be provided to BC Hydro and the provincial government for consideration.

8 Litigation

The details of open proceedings as of December 31, 2023, are summarized in Table 14.

Table 14 Litigation Status Summary

Description		Date
B.C. Supreme Court: Treaty Infringement Claims		
West Moberly First Nations	Civil claim filed.	January 15, 2018
	Settlement of claims related to Site C.	June 24, 2022
B.C. Supreme Court: Civil Claims		
Building and Construction Trades Council	Civil claim filed. No steps have been taken in litigation that require a response from BC Hydro.	March 2, 2015
Michael Acko, etal (Residents of Old Fort community)	Civil claim filed.	January 18, 2021
	Response to claim filed.	September 8, 2021
Allianz Global Risks US Insurance Company, etal	Civil claims filed. Claims were filed by BC Hydro to preserve BC Hydro's rights to claim under Site C property insurance for losses related to left bank tension crack events and the rockfall event near a diversion tunnel inlet portal.	February 5, 2021 July 13, 2021
Vezer Industrial Professionals Canada Ltd.	Civil claim served. No steps have been taken in litigation that require a response from BC Hydro.	March 29, 2022
Armitage	Civil claim filed. Response to claim filed.	October 24, 2022 January 5, 2023
B.C. Supreme Court: Civil Claims – *Expropriation Act*		
Property owners	Of 18 notices of claims filed to keep open each plaintiffs' rights to claim further compensation under the *Expropriation Act,* six have been resolved during this period and 12 remain active. No requirement for BC Hydro to file responses as of this reporting period.	July 2019 to December 2023

9 Permits and Government Agency Approvals

9.1 Background

BC Hydro continues to be issued permits and authorizations in accordance with its construction timelines. As of December 31, 2023, 633 of the estimated 671 provincial and federal permits and authorizations required throughout the life of the Project had been obtained and are actively being managed. This includes all required regulatory approvals to commence reservoir filling.

Multiple conditions are attached to each permit or authorization, which cover subjects such as air quality, water quality, fish and aquatics, wildlife, heritage, health and safety, construction environmental management and Indigenous Nations consultation. As of December 31, 2023, all required conditions and submissions have been met in accordance with the schedule and requirements of the conditions.

9.2 Federal Authorizations

Site C requires federal authorizations under the *Fisheries Act* (issued by Fisheries and Oceans Canada) and the *Canadian Navigable Waters Act* (formerly *Navigation Protection Act*) (issued by Transport Canada). All major federal authorizations for the construction and operation of the Site C dam and reservoir were received in July 2016. One amendment to the federal *Fisheries Act* Authorization, regarding the temporary placement of fill downstream of the earthfill dam, was issued in July 2022.

Additional *Canadian Navigable Waters Act* approvals and notifications for discrete works in the reservoir (e.g., shoreline works, debris booms and Highway 29 bridges) have been issued at the regional level. As of December 31, 2023, a total of 138 federal approvals and notifications have been issued and are actively being managed. Six future approvals are planned.

9.3 Provincial Permits

Site C requires provincial permits primarily under the *Land Act*, *Water Sustainability Act*, *Forest Act*, *Wildlife Act*, *Heritage Conservation Act*, and *Mines Act*. These permits include investigative permits, licences to occupy land, water licence approvals, leaves to commence construction and leaves to construct, and licences to cut vegetation, among others.

As of December 31, 2023, 488 of the estimated 522 provincial permits and approvals that are required throughout the life of the Project had been obtained and are actively being managed. These include permits for the dam site area, worker accommodation, Highway 29 realignment and decommissioning of the existing highway sections that are being realigned, transmission line and eastern, middle, and western reservoir, fish habitat enhancement sites, and reservoir filling. Future provincial permits are being planned for the operation of the generating station and the permanent upstream fishway.

9.4 Environmental Assessment Certificate

Compliance with the Project conditions in the Environmental Assessment Certificate is regularly monitored, and evidence is collected by various federal and provincial regulatory agencies, the Independent Environmental Monitor, BC Hydro and contractors.

As with any large construction project, refinements to the design are expected. As of December 31, 2023, BC Hydro has requested and received from the Environmental Assessment Office, 11 amendments to the Project's Environmental Assessment Certificate to reflect changes in the Project design. The amendments have not resulted in any material impacts to the cost of the Project.

BC Hydro is currently complying with all requirements of the Environmental Assessment Certificate amendments.

All amendments and amendment requests are posted on the Environmental Assessment Office website.

10 Environment

10.1 Mitigation, Monitoring and Management Plans

The Environmental Assessment Certificate and Federal Decision Statement conditions require the development of environmental management, mitigation and monitoring plans, as well as the submission of annual reports on some of these plans.

10.2 Project Environmental Compliance

Environmental compliance on the Project remains high. During the reporting period, 9,837 environmental compliance inspections were completed by BC Hydro, with a compliant and partial compliant result of 99% across all contractors and work areas.

Between June 2017 and the end of December 2023, a total of 269,063 compliance inspections were completed by BC Hydro and recorded in the Project's inspection tracking system, with a total overall compliant and partial compliant result of 98%.

During the reporting period, the Environmental Assessment Office completed one site inspection in December. This inspection was followed by an additional information request. No inspection reports were issued in the period.

With the considerable construction progress that has been achieved across the dam site as described in section 3.1 above, and the diminishing number of remaining active work fronts on the Project, BC Hydro will be changing the inspection management system going forward to one that will focus on the remaining work activities. As a result, beginning in January 2024, BC Hydro will no longer be reporting the total number of environmental compliance inspections for the Project, and will provide similar information focussed on the remaining work activities.

10.3 Potentially Acid-Generating Rock Management

The Project's Construction Environmental Management Plan has a well established potentially acid-generating rock management plan that employs a variety of recognized techniques to identify, test, monitor and treat, if necessary, any potentially acid-generating rock during construction. Any potentially acid-generating rock sites located within the reservoir will be rendered inert once the reservoir is filled. Any potentially acid-generating rock sites remaining outside the reservoir post construction will be addressed through location specific prescriptions provided by qualified environmental professionals.

The April 2022 Environmental Assessment Office order related to potentially acid-generating rock exposures has necessitated revisions to the Construction Environmental Management Plan. The revision process began in October 2022, and included a consultation period, which was initiated in April 2023.

BC Hydro summarized the comments, responses, and any additional feedback received from Environment Canada, Natural Resources Canada and Indigenous groups, and submitted the summary to the Environmental Assessment Office in August 2023. In September 2023, the Environmental Assessment Office responded with their own set of clarifying questions and feedback.

On October 5, 2023, BC Hydro responded to the Environmental Assessment Office questions and feedback. After reviewing those submissions, the Environmental Assessment Office confirmed that no further revisions were required, and that the plan could be considered final. Later in October 2023, BC Hydro published the revised plan on the Project website, and notified Regulators that the revised plan would be followed from that date forward.

In parallel with these revisions, this order has accelerated the need to consider potential mitigation options for potentially acid-generating rock exposures on the dam site that will not be covered by the reservoir. For this, the Project is seeking

engineered design options and cost estimates for a subset of the potentially acid-generating rock exposures across the Project that will not be covered by the reservoir or that have been identified in past Environmental Assessment Office inspection reports. The engineered mitigation for one of these exposures went into construction during the reporting period and is expected to be mostly complete by spring 2024. To avoid interference with the haul road, a small component of this engineered mitigation cannot be competed until after the temporary debris boom handling apparatus is removed, which is expected sometime in summer 2024. Results of this effort and the other work to mitigate the remaining potentially acid-generating rock exposures will be summarized in future progress reports.

The Environmental Assessment Office continues to assure BC Hydro that it will not pursue enforcement against the April 2022 order.

10.4 Heritage

In the reporting period, the heritage program provided guidance on the identified Indigenous sites of importance, planned and commenced pre-construction archaeological impact assessment field work, and provided ongoing heritage support for Project construction. The scope of the heritage program is significantly smaller than in previous years since there are few new work areas requiring archaeological assessment.

During the reporting period, two new *Heritage Conservation Act* permits or amendments were received, and one *Heritage Conservation Act* permit amendment was submitted. One *Heritage Conservation Act* archaeological report was submitted to the B.C. Archaeology Branch and First Nations. One palaeontological heritage chance find was identified and reported by contractors during the reporting period.

10.5 Temporary Fish Passage Facility

During the reporting period, the temporary fish passage facility passed 876 fish upstream. Operation of the temporary fish passage facility for the 2023 season ended on October 31, 2023, after which the facility was winterized. During the 2023 operating season, the facility passed 12,727 fish from 15 different species, compared to 3,770 fish from 15 different species during the same period in 2022.

10.6 Wetland Compensation Plan

At the beginning of the reporting period, BC Hydro completed the rebuilding of aging water control infrastructure at a historically constructed wetland called Scott Lake, preserving approximately 20 hectares of wetland habitat. This recently completed wetland, plus four wetlands that were re-built or constructed as new in prior years, provide a total of 245 hectares of wetlands that BC Hydro is able to credit against the overall Site C wetland compensation requirements. Two more wetland re-builds are scheduled for construction by 2025.

10.7 Greenhouse Gas Monitoring

In October 2022, BC Hydro began collecting data to support a pre-reservoir fill greenhouse gas (**GHG**) emission study. Three locations upstream of the dam site were selected for terrestrial flux-chamber measurements, and soil organic carbon and vegetation sampling. Monitoring at these three locations continued through 2024.

10.8 Agricultural Mitigation and Compensation Plan

The BC Hydro Peace Agricultural Compensation Fund winter 2023 grant intake closed on September 15, 2023, with the application review process taking place on November 16, 2023. During this reporting period, BC Hydro distributed approximately $107,155 in grant funding to six projects to support agricultural production and related economic activity in the Peace Region. As of December 31, 2023, the fund has distributed more than $2.8 million to 88 projects.

11 Employment and Training Initiatives and Building Capacity Initiatives

11.1 Labour

Since the beginning of the Project, unions that have participated in the construction of Site C are listed in Table 15.

Table 15 Participating Unions

Union
Construction Maintenance and Allied Workers (**CMAW**)
Christian Labour Association of Canada (**CLAC**), Local 68
Canada West Construction Union (**CWU**)
Construction and Specialized Workers Union (**CSWU**), Local 1611
International Union of Operating Engineers (**IUOE**), Local 115
Millwrights Union, Local 2736
Ironworkers, Local 97
International Brotherhood of Electrical Workers (**IBEW**)
MoveUP, Local 378
Pile Drivers Union, Local 2404
Boilermakers, Lodge 359
United Association of Journeymen & Apprentices of the Plumbing & Pipefitting Industry of the U.S. & Canada, Local 170
Teamsters, Local 213

In addition, ten unions affiliated with the B.C. Building Trades are signatory to the special project needs agreement for the installation of the turbines and generators.

The Site C balance of plant contractors are signatory to a special project needs agreement between the Construction Labour Relations Association and the Bargaining Council of B.C. Building Trades Unions.

11.2 Employment

Contractors submit monthly workforce data electronically to BC Hydro. Table 16 presents the monthly number of construction contractors, non-construction contractors, engineers, and Project team workers for this period.

As with any construction project, the number of workers – and the proportion from any particular location – will vary month-to-month and also reflects the seasonal nature of construction work.

Table 16 Site C Jobs Snapshot Reporting Period – October 2023 to December 2023

Month	Number of B.C. Primary Residents[19]	Total Number of Workers[20]
October 2023	3,296	4,903
November 2023	2,987	4,302
December 2023	2,373	3,153

Data is subject to change based on revisions received from the contractors.

In December 2023, there were 3,153 total workers on the Site C Project. Residents of British Columbia made up 75% of the workforce (2,373), while 27% of the workforce (638 workers) lived in the Peace River Regional District. The onsite contractor workforce number also includes 14% women (342 workers) and 8% Indigenous (197 workers). There were 162 apprentices working on the Project, which is 18% of the apprenticeable trades within the construction and non-construction workforce. These workers were working for various contractors as apprentice carpenters, electricians, millwrights, ironworkers, mechanics, boilermakers and plumbers. Refer to Appendix D for an overview of the current Site C workforce that includes the following information: the Site C jobs snapshot from October 2023 to December 2023 (Table D-1), the Site C apprentices snapshot from October 2023 to December 2023 (Table D-2), the current Site C job classification groupings (Table D-3), and the Indigenous inclusion snapshot from October 2023 to December 2023 (Table D-4).

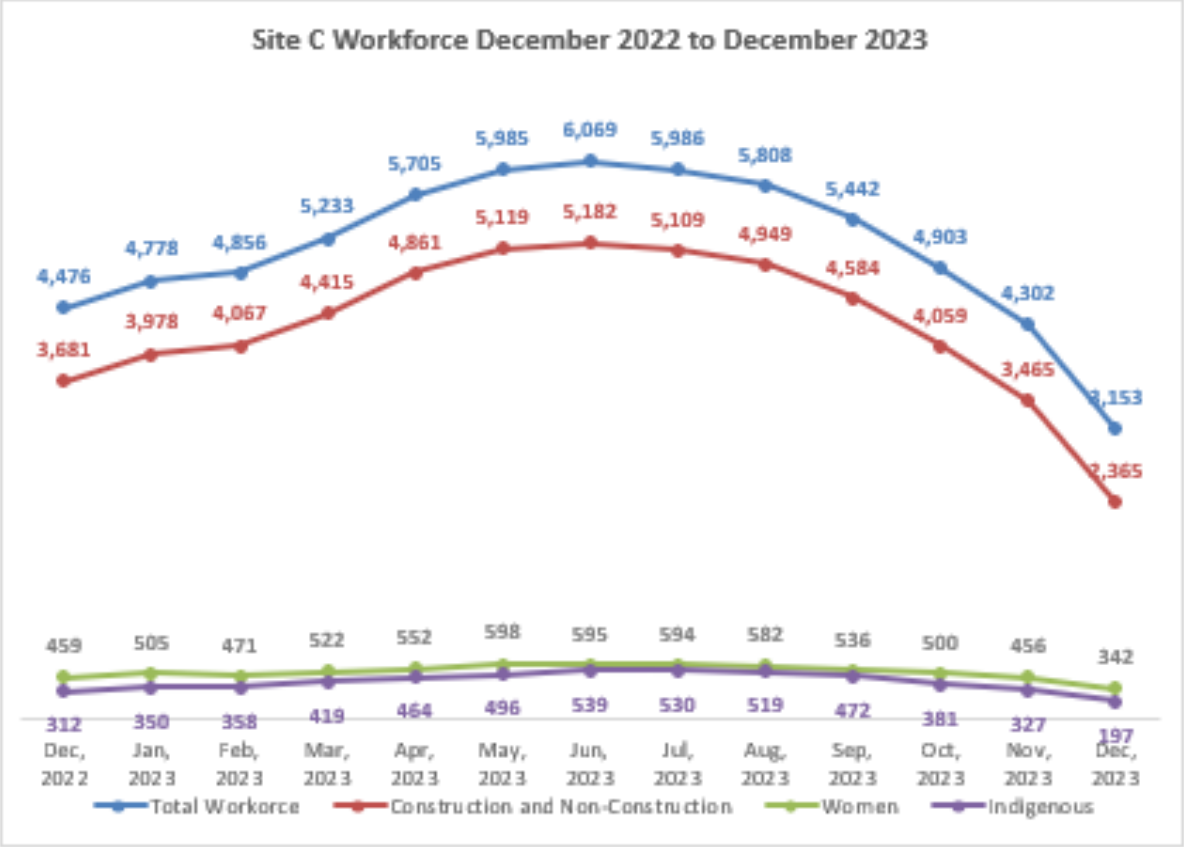
[19] Employment numbers provided by Site C contractors and consultants are subject to revision. Data not received by the Project deadline may not be included in the above numbers. Employment numbers are direct only and do not capture indirect or induced employment.

[20] Total workers include:

- Construction and non-construction contractors performing work on the Site C dam site, transmission corridor, reservoir clearing area, public roadwork, worker accommodation and services; and
- The Project team, which includes Engineers and BC Hydro construction management and other onsite and offsite personnel. An estimate is provided where possible if primary residence is not given.

Figure 2 shows the monthly Site C workforce over the period from December 1, 2022, to December 31, 2023.

Figure 2 Site C Workforce December 2022 to December 2023[21]



11.3 Training and Capacity-Building Initiatives

BC Hydro has included apprentice targets in the generating station and spillways civil works contract, the transmission lines and the substation contracts, the balance of plant contracts and the Highway 29 work procured by BC Hydro, as appropriate.

Northern Lights College Foundation continues to distribute the BC Hydro Trades and Skilled Training Bursary Awards, established in 2013. As of December 31, 2023, a

[21] The Indigenous workers and women workers numbers are a subset of the construction and non-construction contractors workforce number.

total of 293 students had received bursaries, including 136 Indigenous students who have benefitted from the bursary in programs such as electrical, welding, millwright, cooking, social work, and many others.

Joint BC Hydro and Contractor Site Training

BC Hydro continued to implement the Builders Code. The Builders Code is a standard code of conduct for workers on construction sites in B.C. that defines an acceptable worksite as one that is safe and productive, where all workers work without the stress or distraction caused by discrimination, bullying, hazing, or harassment.

12 Community Engagement and Communication

12.1 Local Government and Community Engagement Activities

BC Hydro continues to advance commitments within four community agreements: the District of Chetwynd (2013), the District of Taylor (2014), the City of Fort St. John (2016), and the District of Hudson's Hope (2017). A community agreement between BC Hydro and the Peace River Regional District has yet to be finalized.

The Regional Community Liaison Committee, which is comprised of local elected officials and local First Nations communities, most recently met for its regularly scheduled quarterly meeting on December 6, 2023. Eight local governments and four local First Nations communities (McLeod Lake Indian Band, Doig River First Nation, Saulteau First Nations, and Blueberry River First Nations) as well as the two MLAs for Peace River North and Peace River South, are invited to participate as committee members. Representatives from the Project's major contractors may also attend the meetings as invited guests.

12.1.1 District of Hudson's Hope Well Water System

Under the Partnering Relationship Agreement signed with the District of Hudson's Hope in 2017, BC Hydro committed to mitigating the effects of the dam and reservoir by reconstructing or relocating affected components of the District's municipal water supply system.

As plans for the water intake replacement and pump house were being discussed, the District of Hudson's Hope decided to change from a surface water source to a well water system.

BC Hydro entered into a Water Agreement with the District of Hudson's Hope in September 2019 and provided the District of Hudson's Hope with close to $5 million to fund engineering and water experts, studies, design, construction and administration of the works. The District of Hudson's Hope was also responsible for all operations, performance, and warranty costs.

The District of Hudson's Hope new water treatment plant became operational on March 5, 2021.

After the well water facility became operational, BC Hydro was advised by the District of Hudson's Hope that it was not functioning as expected and the District of Hudson's Hope incurred additional operating costs for the supply of potable water to its residents.

The District of Hudson's Hope water treatment plant failed on July 20, 2022, and again on December 28, 2022.

In fall 2022, the District initiated a three-phase plan to switch its raw water source from the well water system to the Peace River. BC Hydro and the District of Hudson's Hope finalized an agreement that will provide funding to support the initial two phases of this plan. The District has installed a surface water intake along with upgrades to the treatment facility and is providing the community with potable water.

12.1.2 Generate Opportunities Fund

In 2016, BC Hydro launched the Generate Opportunities Fund (**GO Fund**) to support Peace Region non-profit organizations. The GO Fund is being distributed to organizations that provide services to vulnerable populations including children, families and seniors.

The GO Fund is administered by Northern Development Initiative Trust on behalf of BC Hydro. During this reporting period, BC Hydro distributed more than $47,000 to five non-profit organizations in the Peace Region and as of December 31, 2023, 94 projects had received approximately $827,000 since the fund was launched.

12.1.3 Community Relations and Construction Communications

BC Hydro continued to implement its construction communications program throughout the reporting period. The program includes updating and maintaining the Project website (www.sitecproject.com) with current information, photos and videos of construction activities, as well as providing information to local and regional stakeholders as required.

Community Engagement

Site C Community Relations continued to respond to media and public inquiries about reservoir fill timing through October and early November. Once BC Hydro had made the decision to stay on track with its approved Project schedule and fill the reservoir in 2024, Community Relations notified local governments, including the Regional Community Liaison Committee and the communities on the Peace River in B.C., Alberta, and on the Mackenzie system in the Northwest Territories.

Construction Bulletins

Bi-weekly construction bulletins are posted on the Project website and sent by email to a web-subscriber list. There were six construction bulletins issued this reporting period.

Public Enquiries

In total, BC Hydro received 118 public enquiries between October 1 to December 31, 2023. Table 17 shows the breakdown of some of the most common enquiry types.

In total, BC Hydro has received more than 14,500 enquiries since August 2015.

Business Liaison and Outreach

No procurement notifications were sent out during the reporting period.

Table 17 Public Enquiries Breakdown by Topic

Enquiry Type[22]	October 1 to December 31, 2023
Employment Opportunities	52
Business Opportunities	12
General Information	15
Construction Impacts[23]	4
Other[24]	35

12.2 Labour and Training Plan

In accordance with an Environmental Assessment Certificate condition, a Labour and Training Plan was developed and submitted to the Environmental Assessment Office on June 5, 2015. This plan, as well as Environmental Assessment Certificate Condition 45, include annual reporting requirements to support educational institutions in planning their training programs to support potential workers in obtaining Project jobs in the future. This report has been issued to the appropriate training institutions in the northeast region annually since 2016. The most recent report was issued in July 2023.

22 This table is a sample of enquiry types and does not include all enquiry types received. Some enquiries that were received cover more than one topic.

23 The nature of the construction impact enquiries are primarily related to air quality and dust, traffic and road conditions, and safety.

24 "Other" accounts for enquiries related to a variety of other topics, such as wildlife and beavers, river closure, and tour requests.

12.3 Human Health

12.3.1 Health Care Services Plan and Emergency Service Plan

The on-site health clinic provides workers with access to primary and preventative health care and work-related injury evaluation and treatment services and is currently open seven days a week, 24 hours a day. Since opening the health clinic, there has been more than 50,000 patient interactions. During the reporting period, there were 1,555 patient interactions, of which 187 were occupational and 1,368 non-occupational. Several preventive health themes were provided to workers during the reporting period, including information on stress awareness, diabetes and influenza.

During the reporting period, the health clinic operated a walk-in clinic providing the latest COVID-19 booster and seasonal influenza vaccines to any worker interested in receiving them.

12.4 Property Acquisitions

Property acquisitions required for the Project remain on track. The land and rights required for reservoir filling have been acquired. During the reporting period, further acquisitions have been completed. Within the first year of reservoir operations, land rights will be required from a further four landholdings.

In cases where BC Hydro acquired or expropriated land or rights for the Project under the *Expropriation Act*, notices of claim have been filed by the owners to keep open their rights to claim further compensation under the *Expropriation Act* as noted in section 8 of this report.

12.5 Plans During Next Six Months

Table 18 shows the key milestones for activities planned during the next six months, from January to June 2024.

As noted in Table 18, some of the required key milestones are at risk or late. In particular, many of the plan dates included in the table supported the possibility that reservoir filling could start in late fall 2023, one year earlier than the approved schedule. With the decision in November 2023 to stay on track with the approved Project schedule with reservoir filling in fall 2024, the forecast dates in Table 18 are shown as late.

The Project team is in the process of updating the plan dates included in Table 18. This information will be included in future reports.

BC Hydro remains on track to achieve the approved final unit in-service date of 2025.

Table 18 Key Milestones for Activities Planned During the Next Six Months (January 2024 to June 2024)

Milestone	Performance Measurement Baseline (June 2021)	Plan Date (Control Date[25])	Forecast[26]	Status[27] (Measured by Month)
Balance of Plant				
Powerhouse Drainage & Dewatering for Tailrace Fill Units 1-3 Complete	January 2023	January 2024	January 2024	On Track
All Work in Powerhouse Bay 1 is Complete (Electrical)	n/a	December 2023	January 2024	Late
Permanent Fish Facility Complete (generating station and spillways contractor)	n/a	November 2023	February 2024	Late
All Work in Powerhouse Bay 1 is Complete (Mechanical)	March 2023	April 2024	April 2024	On Track
All Work in Powerhouse Bay 2 is Complete (Mechanical)	June 2023	April 2024	April 2024	On Track
All Work in Powerhouse Bay 2 is Complete (Electrical)	n/a	January 2024	April 2024	Late
Spillway and Intake AC Station Service Complete	n/a	January 2024	June 2024	Late
Generating Station and Spillways				
Intake Operating Gate and High-Pressure Unit Assembly and Installation Complete - Intake Unit 1	January 2022	June 2023	January 2024	Late
Intake Operating Gate and High-Pressure Unit Assembly and Installation Complete - Intake Unit 3	April 2022	June 2023	February 2024	Late
Intake Operating Gate and High-Pressure Unit Assembly and Installation Complete - Intake Unit 2	July 2022	June 2023	February 2024	Late
Gate and Wire Rope Hoist Assembly and Installation Complete – Spillway Operating Gate 3 (generating station and spillways contractor)	June 2023	August 2023	February 2024	Late
Spillway Operating Gates 1-3 Wire Rope Hoists Installed (generating station and spillways contractor)	June 2023	August 2023	March 2024	Late
Intake Operating Gate and High-Pressure Unit Assembly and Installation Complete - Intake Unit 4	April 2023	July 2023	March 2024	Late
Low Level Outlet Gates 4 to 6 – High Pressure Unit Installation Complete	April 2023	August 2023	June 2024	Late
Turbines and Generators				
Unit 1 – Ready to Turn	May 2023	June 2023	February 2024	Late
Unit 2 – Ready to Turn	August 2023	October 2023	March 2024	Late

[25] As of December 31, 2023, control date reflects plan, adjusted for approved contract changes to milestone dates.

[26] As of December 31, 2023.

[27] As of December 31, 2023.

Milestone	Performance Measurement Baseline (June 2021)	Plan Date (Control Date[25])	Forecast[26]	Status[27] (Measured by Month)
Unit 3 – Ready to Turn	October 2023	February 2024	June 2024	At Risk
Transmission				
5L15 In-Service Date	July 2023	July 2023	June 2024	Late

13 Impacts on Other BC Hydro Operations

During the reporting period, the operation of system storage at Williston Reservoir (including G.M. Shrum and Peace Canyon generating stations) was planned to meet flow releases necessary for Site C construction, and this operation continues. Water releases from the Peace Canyon generating station were maintained at or below the levels necessary for Project construction. BC Hydro maintained adequate vacant storage in Williston Reservoir to protect Site C construction works from flows that could otherwise exceed the capacity of the diversion works.

The Site C Project team continues to work closely with BC Hydro Operations on the integrated planning required in advance of filling the Site C reservoir.

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix A

Site Photographs

Figure A-1 **The permanent upstream fishway facility. In the future, fish travelling upstream to spawn will be attracted to the fast water of the tailrace where they will enter the permanent upstream fishway | October 2023**

Figure A-2 **Riprap placement in the tailrace area is complete | October 2023**

Figure A-3 **Spillway construction is completed. Installation of spillway gates continues | November 2023**

Figure A-4 **The first of three transmission towers on top of one of the penstock units | November 2023**

Figure A-5 **Riprap placement is substantially completed in the upstream part of the dam, reservoir area, and approach channel | November 2023**

Figure A-6 **With the right bank cofferdam removed, the water from the Peace River fills the tailrace area | November 2023**

Figure A-7 **The approach channel is completed. Water will flow down the channel and enter the intakes, where trash racks have been installed to capture any debris. The auxiliary spillway channel is seen in the foreground | November 2023**

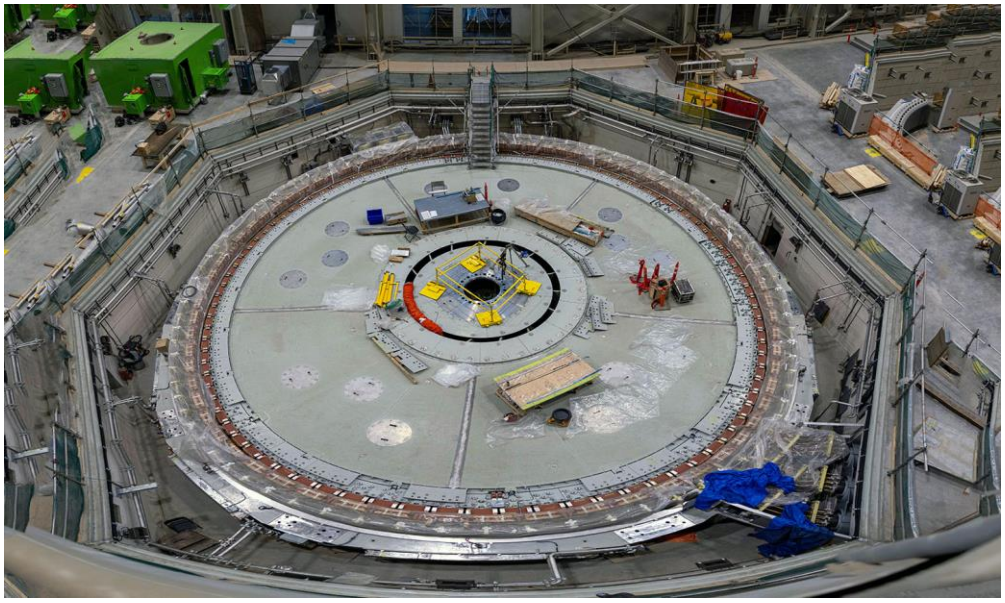
Figure A-8 **Workers dismantle the five-kilometre-long till conveyor | November 2023**

Figure A-9 **Concrete placements are complete for the six penstocks. Workers are in the process of installing the flexible couplings, which will join the lower and upper sections of the penstocks together to allow for movement between the lower and upper penstock sections | November 2023**

Figure A-10 **The tailrace gantry crane is on rail tracks to enable it to move along the tailrace deck to access all of the draft tube maintenance gates. There are a total of 12 gates, each weighing about 40 tonnes | December 2023**

Figure A-11 **The generator floor of the powerhouse with units 1 through 6. Unit 6 is in the foreground (bottom) of the picture | December 2023**

Figure A-12 **The stator and rotor have been installed for the unit 3 generator | December 2023**



BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix B

Work Completed Since Project Commencement in 2015

Construction began on July 27, 2015, and is ongoing. Since the commencement of construction, the following work has been completed:

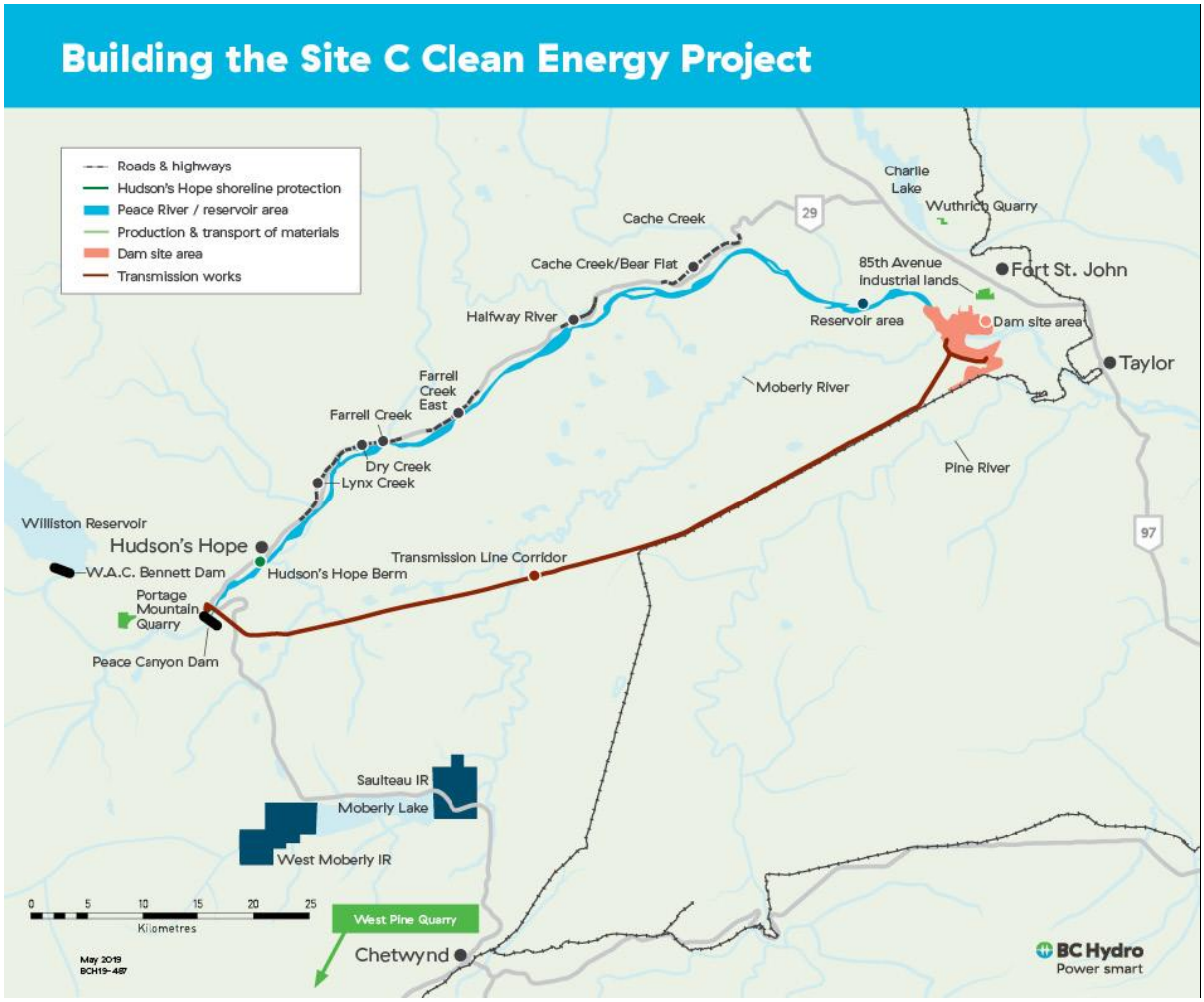
- Site preparation, including onsite access roads;
- Clearing of the left and right banks at the dam site and clearing of the lower reservoir area;
- Construction of the worker accommodation lodge and Peace River construction bridge;
- Powerhouse excavation, and the placement of 650,000 cubic metres of roller-compacted concrete in the powerhouse buttress;
- Spillways excavation, and the placement of 600,000 cubic metres of roller-compacted concrete in the spillways buttress;
- Construction of dam site access public roads;
- Construction of the Site C viewpoint;
- Construction of 50 affordable housing units in Fort St. John;
- Fish habitat enhancements downstream of the dam site;
- Excavation of the diversion tunnel inlet (upstream) and outlet (downstream) portals, allowing for the commencement of diversion tunnel excavations;
- Excavation of the right bank drainage tunnel, which will be used to monitor and drain the water from within the foundation under the powerhouse, spillways and dam buttresses and will eventually be connected to services within the powerhouse;
- Completion of two river diversion tunnels, which are used to reroute a short section of the Peace River to allow for the construction of the main earthfill dam;

- Completion of the upstream and downstream cofferdams;
- Construction and commissioning of the temporary fish passage facility;
- Diversion of the Peace River around the Site C construction site;
- Completion of the Peace Canyon 500 kV gas-insulated switchgear expansion to enable connection of Site C to the BC Hydro electrical system;
- Completion of the Site C substation and the first of two new 500 kV transmission lines that connect Site C to the Peace Canyon generating station;
- Completion of the finishing concrete work inside the 454-metre-long left bank drainage adit;
- Earthfill dam excavation, and the placement of 450,000 cubic metres of roller-compacted concrete in the dam and core buttress, marking the completion of the Project's overall roller-compacted concrete placement program. In total, nearly 1.7 million cubic metres of roller-compacted concrete was placed since 2017;
- Completion of the steel super-structure for the powerhouse;
- Completion of the second of two new 500 kV transmission lines that connect Site C to the Peace Canyon generating station;
- Completion of the bridges at Dry Creek, Lynx Creek, Farrell Creek, Halfway River, and Cache Creek as part of the Highway 29 realignment;
- Completion of the shoreline protection berm at Hudson's Hope;
- Completion of the Maurice Creek spawning shoals;
- Completion of the headworks gantry crane;
- Completion of concrete work for the intakes;

- Completion of the 96 steel piles in the spillway and downstream of the powerhouse, as part of the right bank foundation enhancements;
- Completion of the concrete pile caps in the powerhouse tailrace excavation;
- Completion of the Highway 29 realignment;
- Decommissioning of the old sections of Highway 29 that were realigned;
- Completion of the earthfill dam to the elevation required to enable reservoir filling;
- Completion of the tunnel conversion process, which involved installing four large rings inside one of the two tunnels that are currently diverting the Peace River around the dam site, to restrict the flow of water through the tunnel.
- The removal of the right bank cofferdam and placement of riprap in the tailrace channel; and
- The enhancements to the approach channel were substantially completed in late fall 2023, including bedrock surface excavations and cleaning, installation of waterproofing lining materials, grouting, and reinforced concrete and granular fill placements.

Figure B-1 shows the location of the key Site C components that are being constructed.

1 **Figure B-1 Site C Project Components**



BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix C

Safety

Safety Incidents

The following safety incidents occurred from October 1 to December 31, 2023:

Serious Safety Incidents (includes any injury or near miss with a potential for a fatality or serious injury.)

1. A worker energized an air handling unit while other cleaning staff were working on the unit. No injuries were reported.
2. During the installation of a handrail section between penstocks 4 and 5, the chain that was holding the handrail became unhooked from the anchor sling, and the handrail fell approximately 100-feet below. No injuries were reported.
3. A worker was ascending a ladder to secure a loose sock on a ventilation fan in the scroll case of unit 3, when the ladder slid. The worker fell and fractured their arm.
4. A contractor was assigned to repair a valve that was in operation. The valve was locked out with a station lock and “Do Not Operate” tags. The contractor removed the stem assembly while the equipment was in operation. No injuries were reported.
5. While hoisting a 40,000-pound crane counterweight from the crane deck to the ground, the main load line cable failed and the load to drop approximately three-foot onto dunnage. No injuries were reported.
6. While dismantling scaffolding inside the penstock, a worker dropped a 2x6 plank from 20-feet, contacting another worker’s shoulder.
7. During the operation of an angle grinder equipped with a 5-inch cutting disc, a worker experienced a kickback, and the tool contacted their knee resulting in a laceration that required stitches.
8. While a light-duty vehicle was exiting a maintenance shop and attempting to turn left across a haul road, it was struck by an oncoming 745 rock truck. No injuries were reported.

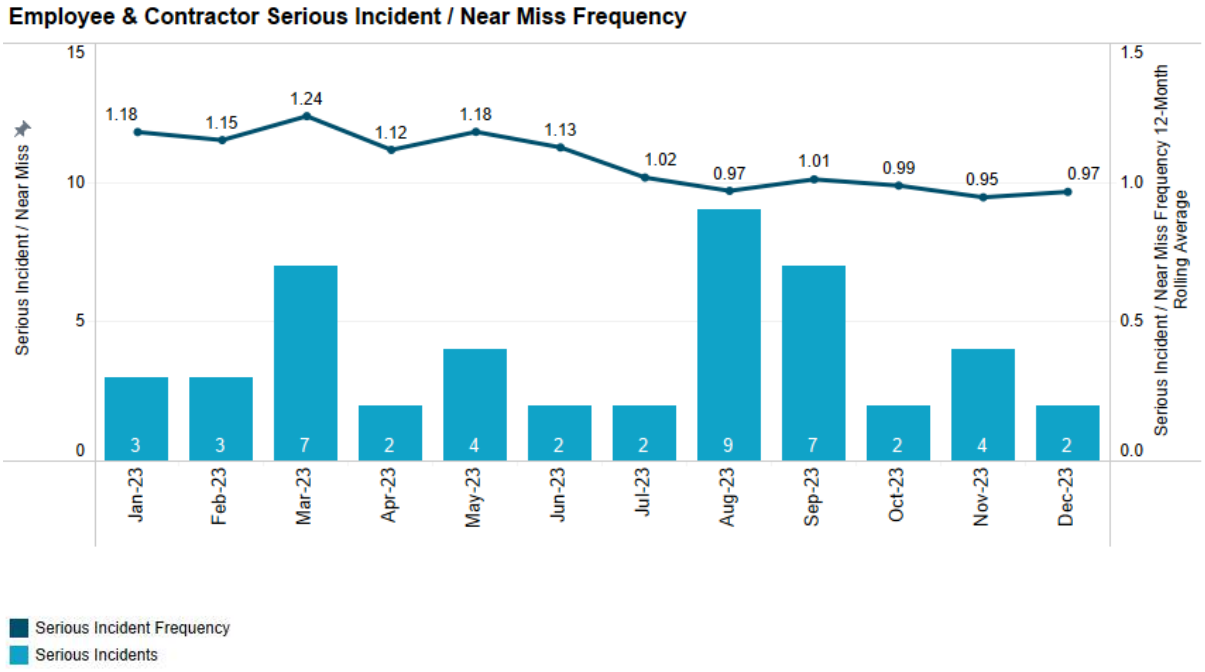
All Injury Incidents (includes all work-related medical attention requiring treatment incidents, lost time injuries, and fatalities)

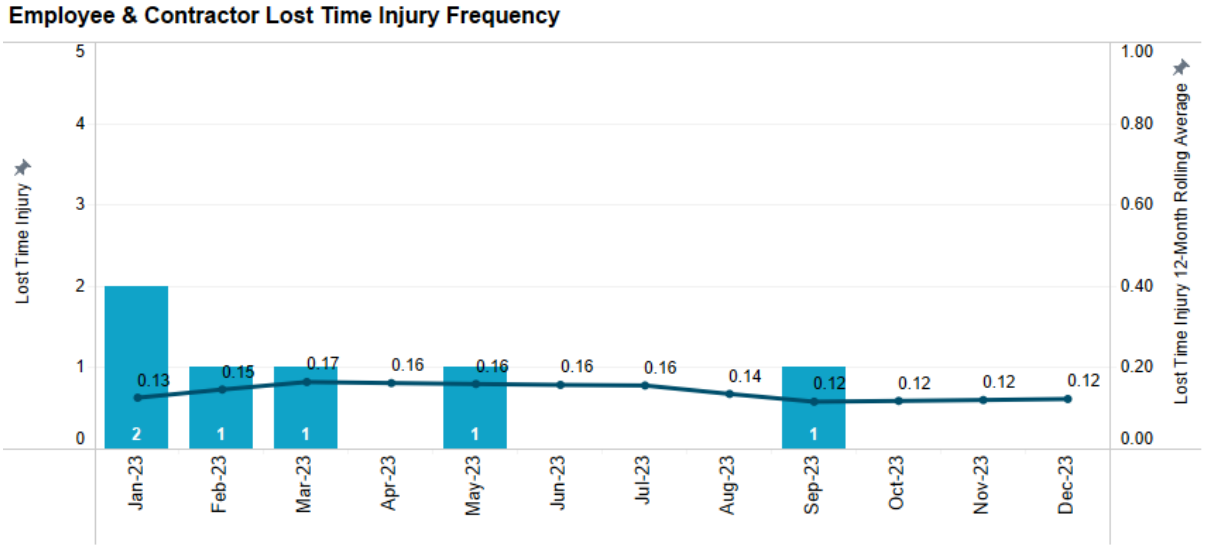
1. A worker sustained a laceration to their hand while cutting open a box.
2. A worker's hand got pinched between a large piece of concrete and a bin with sand and chipped concrete waste and sustained a laceration to their hand.
3. A worker slipped while erecting a tower, caught themselves on a piece of steel to prevent a fall, and sustained a shoulder injury.
4. A worker sustained a laceration to their hand while changing a loader bucket blades without gloves.
5. A worker sustained a laceration to their hand while installing a glass tube of resin into the concrete when the glass shattered.
6. A worker was ascending a ladder to secure a loose sock on a ventilation fan in the scroll case of unit 3, when the ladder slid. The worker fell and fractured their arm.
7. A worker climbed over a guardrail with their foot tangled in the lanyard and dislocated their knee.
8. A worker was tightening bolts on stair connections while standing on a wooden step placed on a stair landing. The worker lost their balance when the wrench slipped, slid down the stairs, and fractured their ribs.
9. During the operation of an angle grinder equipped with a 5-inch cutting disc, a worker experienced a kickback, and the tool contacted their knee resulting in a laceration that required stitches.
10. A worker hit their mouth with a hammer and sustained a laceration and three chipped teeth.

Safety Performance Frequency Metrics

The following graphs provide information on employee and contractor serious incidents/near miss frequency, lost time injury frequency and all-injury frequency from January 2023 to December 2023.

Figure C-1 Employee and Contractor Serious Incident/Near Miss Frequency, Lost Time Injury Frequency and All-injury Frequency

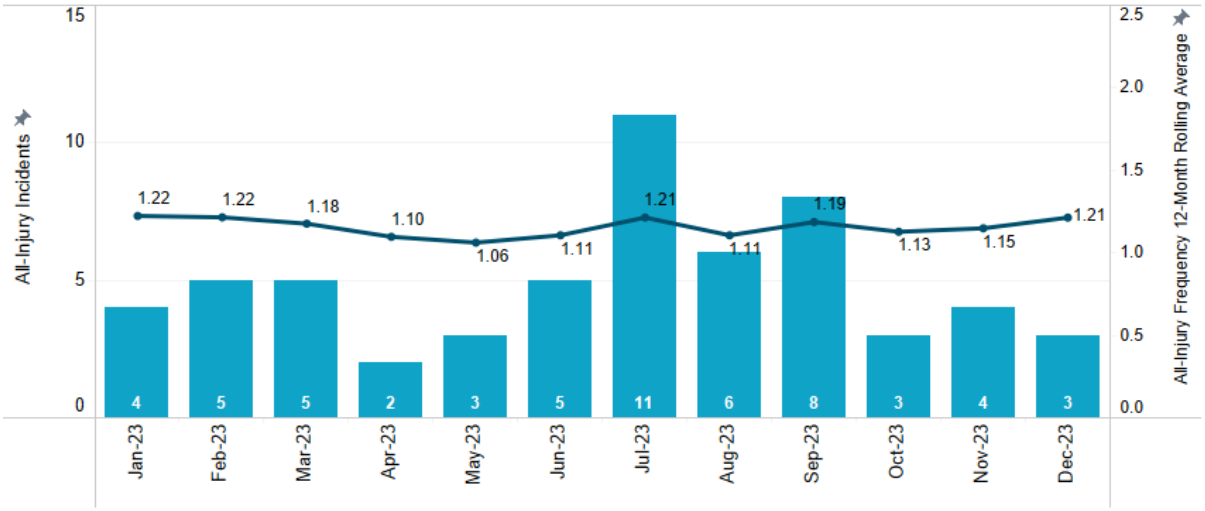




Lost Time Injury Frequency
Lost Time Injury Incidents

1

Employee & Contractor All-Injury Frequency



All-Injury Frequency
All-Injury Incidents

Regulatory Inspections and Orders

Table C-1 lists the safety regulatory inspections and orders received from WorkSafeBC and the Ministry of Energy, Mines and Low Carbon Innovation from October 1 to December 31, 2023.

Table C-1 Safety Regulatory Inspections and Orders

#	Date of Inspections	Regulatory Agency	PPM Subproject	Inspection Report Number Title	Inspection Report Type	Inspection Report Status	Number of Orders Issued	Subject of Order	Regulation Order / Reference
1	November 10, 2023	WorkSafeBC	GSS	202317876079A	Incident Investigation - Access/Egress	Closed	1	Access to work areas	Order: OHS4.32 References: WCA69(1), WCA71(2)(c), WCA72(2)(b), OHS4.1, OHS4.59(1), OHS4.59(4), OHS20.6(1)(a), OHS20.9(1)(a)
2	November 13, 2023	WorkSafeBC	GSS	202317876080A	Incident Investigation; Order to stop use unsafe equipment	Closed	3	Stop use order; Certification required for misadventure; Safe machinery and equipment	Orders: WCA89(1), OHS14.16.1(2), OHS4.3(2)(a) References: WCA89(4), WCA69(1), WCA71(1), WCA72(1), OHS14.12(2), OHS14.38(2), OHS14.71(2), WCA88(1), WCA88(2),
3	November 13, 2023	WorkSafeBC	GSS	202317876086A	Incident Investigation; Order to stop use unsafe equipment	Closed	2	Stop use order; Special Inspections	Orders: WCA89(1), OHS3.7 References: WCA89(4), WCA88(1), WCA88(2),
4	December 6, 2023	WorkSafeBC	Turbine Generator	202317876090A	Non-occupational Incident	Closed	0		References: WCA69(1), WCA72(2)(b)
5	December 6, 2023	WorkSafeBC	Turbine Generator	202317876091A	Non-occupational Incident	Closed	0		References: WCA69(1), WCA72(2)(b)
6	December 14, 2023	WorkSafeBC	Main Civil Works	202318310026A	Incident Investigation; Order to stop use unsafe equipment	In Progress	2	Stop use order; Special Inspections	Orders: WCA89(1), OHS3.7 References: WCA89(4), WCA88(1), WCA88(2)
7	December 14, 2023	WorkSafeBC	Main Civil Works	202318310027A	Incident Investigation	Closed	0		References: WCA69(1), WCA72(2)(b), OHS3.7, OHS16.3(1), OHS16.27(1), OHS4.5
8	December 19, 2023	Ministry of Energy, Mines and Low Carbon Innovation	Main Civil Works	218773	Electrical Inspection	Closed	1	Guarding	Orders: HSRC-22 Rule 4.4.2 Advisory: HSRC-22 Rule - 4.1.1(3b), Canadian Electrical Code - C22.1-21: 12-3024

Total **9**

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix D

Workforce Overview

Table D-1 Current Site C Jobs Snapshot (October 2023 to December 2023)[28]

	Number of B.C. Workers and Total Workers	Construction and Non-Construction Contractors[29] (Including Some Subcontractors). Excludes Work Performed Outside of B.C. (e.g., Manufacturing)	Engineers and Project Team[30]	Total
October 2023	B.C. Workers	2,515	781	3,296
	Total Workers	4,059	844	4,903
November 2023	B.C. Workers	2,203	784	2,987
	Total Workers	3,465	837	4,302
December 2023	B.C. Workers	1,640	733	2,373
	Total Workers	2,365	788	3,153

Data is subject to change based on revisions received from the contractors.

Employment numbers are provided by Site C contractors and are subject to revision. Data not received by the Project deadline may not be included.

BC Hydro has contracted companies for major contracts, such as main civil works, who have substantial global expertise. During the month of December 2023, there were no workers in specialized positions working for a Site C construction or non-construction contractor, who were subject to the Labour Market Impact Assessment process under the Federal Temporary Foreign Worker Program. Additionally, there were 22 management and professionals working for Site C construction and non-construction contractors through the Federal International Mobility Program.

28 Employment numbers are direct only and do not capture indirect or induced employment.

29 Construction and non-construction contractors total workforce employment numbers include work performed on the Site C dam site, transmission corridor, reservoir clearing areas, public roadwork, worker accommodation and services.

30 Engineers and Project team are comprised of both onsite and offsite workers. The Project team includes BC Hydro construction management and other offsite personnel. An estimate is provided where possible if primary residence is not given.

Table D-2 Site C Apprentices Snapshot (October 2023 to December 2023)

Month	Number of Apprentices
October 2023	280
November 2023	246
December 2023	162

Data is subject to change based on revisions received from the contractors.

Table D-3 Current Site C Job Classification Groupings

Biologists and Laboratory	Carpenters	Inspectors	Construction managers/ supervisors	Crane Operators	Electricians	Engineers
Foresters	Health Care Workers	Heavy Equipment Operators	Housing Staff	Heating, Ventilation, and Air Conditioning	Kitchen Staff	Labourers
Mechanics	Millwrights	Office Staff	Pipefitters	Plumbers	Sheet Metal Workers	Truck Drivers
Underground Mining	Welders	Surveyors	Security Guards	Boilermakers	Cement Masons	Crane Operators
Ironworkers						

Data is subject to change based on revisions received from the contractors.

Table D-4 Indigenous Inclusion Snapshot (October 2023 to December 2023)

Month	Number of Indigenous Workers
October 2023	381
November 2023	327
December 2023	197

Data is subject to change based on revisions received from the contractors.

The information shown has been provided by BC Hydro's construction and non-construction contractors and their subcontractors that have a contractual requirement to report on Indigenous inclusion in their workforce.

Employees voluntarily self-declare their Indigenous status to their employer and there may be Indigenous employees that have chosen not to do so; therefore, the number of Indigenous employees may be higher than shown in Table D-4.

As with any construction project, the number of workers, and the proportion from any location will vary month-to-month and reflects the seasonal nature of construction work. The number of workers will also vary as a contract's scope of work is completed by the contractor.

Women

In December 2023, there were 342 women working for Site C construction and non-construction contractors. The number of women was provided by on-site construction and non-construction contractors and engineers that have a contractual requirement to report on the number of women in their workforce.

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix E

Technical Advisory Board Report and/or Independent International Dam Experts Report

There were no reports issued by the Technical Advisory Board or the independent international dam experts during the reporting period**.**

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix F

Summary of Individual Contracts Exceeding $10 Million

PUBLIC

CONFIDENTIAL ATTACHMENT

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix G

Project Progression

PUBLIC

CONFIDENTIAL

ATTACHMENT

BC Hydro
Power smart

Site C Clean Energy Project

Quarterly Progress Report No. 32

Appendix H

Detailed Project Expenditure

PUBLIC

CONFIDENTIAL ATTACHMENT

1