

Site C Clean Energy Project

Quarterly Progress Report No. 37

F2025 Fourth Quarter

January 1, 2025 to March 31, 2025

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1 1 Executive Summary

2 **1.1** Overview and General Project Status

- ³ Site C is the third dam and hydroelectric generating station on the Peace River in
- 4 northeastern British Columbia (**B.C.**). Once complete, Site C will produce about
- 5 5,100 gigawatt hours of energy per year enough to power the equivalent of
- 6 450,000 homes or 1.7 million electric vehicles per year in B.C.



- 9 Construction on Site C began on July 27, 2015.
- 10 Quarterly Progress Report No. 37 covers the period January 1 to March 31, 2025
- 11 (the reporting period).
- As of March 31, 2025, the Site C Project (**the Project**) is more than 90% complete.
- BC Hydro remains on track to complete the Project within the budget (\$16 billion)
- and schedule (final unit in-service date of November 2025), which were approved
- 15 in 2021.

- 1 The overall Project health status remains "green" due to several large Project
- ² milestones that were achieved during the reporting period. However, a number of
- ³ potential risks remain, as outlined in this report.
- ⁴ BC Hydro continues to work collaboratively with the Project Assurance Board, Ernst
- 5 & Young Canada, the Technical Advisory Board, special advisor Peter Milburn, and
- 6 the independent international dam experts to actively manage ongoing Project risks.
- 7 The Technical Advisory Board and independent international dam experts continue
- 8 to review and confirm that the Project designs are appropriate, safe, and serviceable
- ⁹ over the long operating life of Site C.
- 10 The Project Team continues to closely monitor the tariff situation between the United
- 11 States and Canada. At this time, the impacts on the Project from tariffs are expected
- to be minimal based on the amount of work already completed at site.
- The following sections discuss highlights from the reporting period and some of the
 current risks facing the Project.
- **15 1.2 Key Milestones Achieved During Reporting Period**
- ¹⁶ The Project reached two key milestones during the reporting period. On
- ¹⁷ February 22, 2025, the third generating unit went into service, over two months
- ahead of the approved schedule. On March 31, 2025, the fourth generating unit went
- ¹⁹ into service, more than three months ahead of the approved schedule.
- ²⁰ Prior to the reporting period, on October 27, 2024, the first generating unit (first
- 21 power) was placed into service approximately six weeks ahead of the approved
- schedule. The second unit went into service on December 14, 2024, approximately
- two months ahead of the approved schedule. All of the in-service generating
- units were safely brought into operation following the successful completion of the
- required testing and commissioning processes.

- 1 The Site C Project remains on track to have all six generating units in-service by the
- ² approved final unit in-service date in November 2025. The construction and
- ³ commissioning activities for the fifth and sixth generating units are underway.
- ⁴ Since the reservoir reached its normal operational level of 460 metres
- 5 to 461.8 metres elevation above sea level in November 2024, the s tructural
- ⁶ performance of the damsite water-retaining structures, including the earthfill dam,
- 7 the roller-compacted concrete buttresses, the approach channel and the dam
- ⁸ abutments continue to perform as expected.
- 9 1.3 Construction Progress

Work on the Site C Project continues to advance consistent with the approved
 schedule. The Project remains on-track to have all six generating units in-service by
 the approved final unit in-service date of November 2025.

During the reporting period, construction continued with the installation of the generating equipment and the electrical and mechanical balance of plant equipment. Generating units 3 and 4 were also both successfully placed into service, ahead of the approved schedule. Work to complete the installation and commissioning of the two remaining generating units continues to progress as planned.

- 18 The mechanical and electrical work continues to progress in the powerhouse. The
- ¹⁹ mechanical contractor has completed the final work on the unit 1 to unit 6 common
- 20 mechanical systems and is in the process of transferring the completed work,
- including the required documentation, over to BC Hydro. The main focus of the
- remaining work for the mechanical contractor is completing deficiencies and the
- hydronic heat system which is scheduled to be completed over the summer.
- ²⁴ The electrical contractor has completed the heavy electrical scopes of work,
- ²⁵ including all the station service and the isolated phase bus that connects the

- generators for unit 1 to unit 6 to the main step-up transformers. The electrical
- ² contractor has now shifted to completing the remaining deficiencies.
- ³ The architectural work in the operations building is nearing completion and the
- 4 heating, ventilation and air conditioning work continues. The installation of the fire
- 5 protection is also continuing, and the piping portion of the fire protection is nearing
- 6 completion. The completion of the commissioning of these scopes of work is
- 7 scheduled for June, except for the heat recovery systems.
- 8 The wet commissioning of the permanent upstream fishway continues. The fishway
- 9 has started to be used to capture and transport fish.
- 10 The emergency response building, which is located in the powerhouse yard adjacent
- to the penstock for generating unit 1, is complete except for minor deficiencies.
- The penstock upper flexible couplings (penstock sections that allow the penstocks to 12 expand and contract) were redesigned to fully meet BC Hydro's specifications. The 13 installation was completed in October 2024, and minimal leakage was detected in 14 the flexible couplers for the four penstocks (penstocks 1, 2, 3 and 4) that have been 15 filled with water. This minimal leakage was anticipated and is a result of the heating 16 and cooling associated with the transitioning through winter weather. Adjustments 17 will be made to the seals in the flexible couplers following the onset of warmer 18 weather to address any ongoing minor leakage. 19
- The final commissioning is progressing for the six intake gates on permanent power and permanent controls, consistent with the approved schedule. Commissioning of intake gates 1 and 2 was completed in advance of the commencement of reservoir filling in late August, the commissioning of intake gate 3 was completed in November 2024, and the commissioning of intake gate 4 was completed in February 2025. The remaining intake gates are scheduled to be commissioned in 2025 in advance of wet testing of their associated generating units.

1 The final commissioning is progressing for the three spillway operating gates on

² permanent power and permanent controls, consistent with the approved schedule.

3 The gates will continue to be operated on construction power with temporary

4 controls through the spring of 2025, while the commissioning of the permanent

5 systems progresses.

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6 Commissioning is progressing for the remaining low-level operating gates on

7 permanent power and permanent controls but there is a risk of not completing all the

⁸ outstanding work this summer, as the maintenance gate was frozen in place until

⁹ late-May. This delayed the start of remediation work on low-level operating gate 6

10 operating cylinder.

11 All the planned work for stabilizing the bedrock foundations for the dam, powerhouse

and spillways was complete as of the end of March 2024, except for a couple of

13 minor deficiencies including riprap placements on the embankment of the tailrace

above the water line that were not required to be completed prior to reservoir fill.

¹⁵ Construction of the remaining work is scheduled for completion in summer 2025.

Since the diversion tunnels are not required for the ongoing operation of the facility, they are in the process of being decommissioned. The decommissioning scopes of work include backfilling the tunnels with granular material, construction of a concrete plug within each tunnel located slightly upstream of the tunnel's mid-point, and the placement of granular fill overtop of the downstream portal.

In support of reservoir filling, the diversion tunnel intake gates were permanently
closed in September 2024. In November 2024, construction of the outlet channel
cofferdam was completed allowing both diversion tunnels to be dewatered and
inspected. Upon inspection, limited seepage was observed flowing through the
tunnel's intake structures and the concrete lining within both tunnels was observed
to be in good condition.

- 1 In January, the installation of temporary electrical and ventilation systems
- 2 commenced. These systems are required to allow for the commencement of the
- ³ hauling and placement of granular material which is scheduled to commence
- 4 in spring 2025.

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- The first of three transmission lines between the powerhouse and the Site C
 substation was completed and energized in August 2024. The second transmission
 line was energized on January 17, 2025. The third and final transmission line is
 scheduled to be energized in late May.
- The operations and maintenance of the right bank drainage tunnel and left bank drainage adit continued during the reporting period. The remaining work required in the right bank drainage tunnel and left bank drainage adit includes structural enhancements to the shotcrete and rock bolt linings of the tunnels, and the installation of the permanent portal structures and electrical and mechanical systems.
- Road maintenance continued throughout the reporting period. Project planning for
 the Site C final road construction, including paving, is ongoing, with procurement
 packages planned to be released in May 2025 and September 2025.
- ¹⁸ The first phase of the reclamation with respect to Potentially Acid Generating (**PAG**)
- rock was completed on Upper Blind Corner during the reporting period. Reclamation
- 20 contracts were also established for several sites during the reporting period,
- including the earth works in Area A (May 2025), and the planting of vegetation in
- 22 Portage Mountain Quarry, a portion of the Conveyor Corridor, and the P3/P8 areas
- 23 (all May 2025).

1 1.4 Look Ahead – April 2025 to December 2025

From April to December 2025, the primary focus on the Project is the safe
completion of the remaining major Project milestones. In 2024, the focus was safely
filling the reservoir and achieving first power. Now that those milestones have both
been achieved, the focus is shifting to placing the remaining generating units into
service, turning over assets to operations, project documentation, contract
closeouts, deficiency management, and site reclamation and facility completion.
Work continues to advance on the Project consistent with the approved schedule.
The time available to complete the remaining scopes of work is expected to be

⁹ The time available to complete the remaining scopes of work is expected to be

¹⁰ sufficient for the Project to meet the Project's approved schedule.

All six of Site C's generating units are on track to be in-service by November 2025.

12 The two remaining generating units are scheduled to be brought into service

13 sequentially and within the following approved schedule: unit 5 (September 2025),

and unit 6 (November 2025).

15 **1.5**

Safety Performance

During the reporting period, the Project workforce continued to decrease as more work fronts reached completion and units 3 and 4 went into service. Although construction activities remain primarily focused on the powerhouse, new scopes of work have begun outside the powerhouse, such as preparing for diversion tunnel backfill and the decommissioning of the temporary fishway.

21 Compared to the same period in 2024, there were improvements in the safety

22 performance metrics for all-injury frequency and serious incident frequency, while

there was a slight increase in the safety metric for lost time injury frequency.

24 Between January and March 2025, WorkSafeBC conducted three regulatory

inspections related to the Generating Station and Spillways (**GSS**) contractor's work

in the Right Bank Drainage Tunnel and the Left Bank Drainage Adit. No orders were

- issued to the Project as a result of these inspections. The inspection reports
- 2 addressed topics concerning the ongoing care and maintenance of the tunnel and
- adit, specifically discussing work methods, ventilation, duct air testing, air monitoring,
- ⁴ and maintaining the underground record.
- 51.6Upholding Commitments to the Environment, Indigenous6Nations and Local Communities

BC Hydro continued to secure the appropriate permits, authorizations and leaves to 7 commence construction required for the Project. As of March 31, 2025, almost all 8 permits (approximately 97%) for the construction of the Project have been issued. 9 The remaining approvals for the construction are related to the permanent upstream 10 fishway (Leave to Commence Operation, anticipated in spring 2025), the future 11 Peace River Construction Bridge decommissioning, minor works on Highway 29 12 (e.g., turnarounds) and the construction of the future Cultural Centre. All construction 13 permits continued to be managed and renewed, as needed, for demobilization and 14 reclamation works. 15

All key permits and approvals for the operation of Site C have been issued, including
 the Fisheries Act Authorization, the Canadian Navigable Waters Act approval, and
 the Conditional Water licences for diversion and use of water, as well as the storage
 of water.

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.

- 23 During the reporting period, BC Hydro continued to commission the permanent fish
- 24 passage facility and implement repairs. BC Hydro has almost completed the
- decommissioning of the temporary fish passage facility including the crushing of
- ²⁶ most of the facility's concrete foundations that protrude above elevation 415 metres.

- 1 Environmental compliance on the Project remains high.
- 2 During the reporting period the Environmental Assessment Office (EAO) conducted
- a single remote inspection/information request on the Project on March 20, 2025.
- 4 This inspection was triggered by a public complaint and focused on compliance with
- ⁵ our drinking water well monitoring program required by Environmental Assessment
- 6 Certificate Condition 56. BC Hydro responded to this information request on
- 7 March 26, but as of April 24, 2025, an inspection report has not been issued by the
- 8 EAO.

9 Indigenous Engagement

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During the reporting period, BC Hydro continued to engage with Indigenous Nations
 on Project activities and milestones through regular Project update meetings and
 other venues.

- BC Hydro held a meeting with the Environmental Forum on March 5, 2025, with
- 14 participation from 10 Indigenous Nations. The agenda included updates and
- discussion on various topics including reservoir slope stability and monitoring,
- wildlife monitoring, ice formation, and the reclamation of the construction areas.
- 17 Various Site C updates were also issued on topics including slope stability and
- ¹⁸ monitoring, reclamation, the Rustic Recreation Site Fund, wildlife, and ice
- 19 monitoring.

20 Local Communities

- BC Hydro continues to advance commitments within five community agreements:
- the District of Chetwynd (2013), the District of Taylor (2014), the City of
- Fort St. John (2016), the District of Hudson's Hope (2017), and the Peace River
- 24 Regional District (2024).

- In 2016, BC Hydro launched the Generate Opportunities Fund (**GO Fund**) to support
- ² Peace Region non-profit organizations. The GO Fund is being distributed to
- 3 organizations that provide services to vulnerable populations including children,
- 4 families, and seniors.
- 5 The GO Fund, administered by Northern Development Initiative Trust on behalf of
- ⁶ BC Hydro, has now concluded. The GO Fund Committee met for the final time on
- 7 March 13, 2025. During this final reporting period, BC Hydro distributed
- 8 approximately \$80,000 to nine non-profit organizations in the Peace Region. As of
- March 31, 2025, a total of 118 projects had received over \$1,000,000 since the fund
 was launched.
- On February 24, BC Hydro announced publicly the third generating unit had come
 into service. On March 26, a public advisory was issued about construction resuming
 in the spring at the D.A. Thomas recreation site in Hudson's Hope.

14 **1.7 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 November 2025, without compromising 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 March 31, 2025, is provided in <u>Table 1</u>. The status of the performance indicators for overall project health, scope, schedule, and cost remains "green" due to the substantial construction and commissioning progress made during the reporting period that enabled several large Project milestones to be achieved.



	able 1 Project Status Dashboard
	n Target Moderate Issues At Risk
Status as of:	March 31, 2025
Overall Project Health	 The overall Project health status remains "green." On October 27, 2024, the first generating unit (first power) was placed into service approximately six weeks ahead of schedule and began providing electricity to BC Hydro customers. The second unit went into service on December 14, 2024, approximately two months ahead of schedule. Unit three was placed into service on February 22, 2025, more than two months ahead of schedule, followed by unit four on March 31, 2025, more than three months ahead of the approved schedule. In addition to achieving the in-servi of units 1, 2, 3, and 4, BC Hydro completed the filling of the Site C reservoir on November 7, 2024. The reservoir is now being operated within its normal operating range of 460 metres to 461.8 metres elevation above sea level. The Project is more than 90% 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	 The Safety status has been changed from "amber" to "green." During the reporting period, the Project saw a further reduction in the workforce as more work fronts reached completion, with most of the ongoing activities now concentrated around the powerhouse. Compared to the same period in 2024, there were improvements in the safety performance metrics for all-injury frequency and serious incident frequency, while there was a slight increase in the safety metric for lost time injury frequency. Between January and March 2025, WorkSafeBC conducted three regulatory inspections all of which resulted in no orders issued related to the Project.
Scope	 The Scope status remains "green." All major scopes of work for the Project have now been defined, and the Project is more than 90% complete. The Project team continues to work to define the relatively small remaining scopes of work on the Project.
Schedule	 The Schedule status remains "green." The Project remains on schedule to have all six generating units in-service by November 2025 and achieve the approved Project schedule. The Project is more than 90% complete. Reservoir filling was completed on November 7, 2024. Unit 1 in-service date: October 27, 2024 Unit 2 in-service date: December 14, 2024 Unit 3 in-service date: February 22, 2025 Unit 4 in-service date: March 31, 2025 There continues to be uncertainty related to achieving the contractual schedules, and there are potential risks that could adversely affect these schedules.



Status as of:		March 31, 2025	
Cost		The Cost status remains "green."	
		The Project remains on target to be completed within the budget of \$16 billion, which was approved in 2021. However, a number of cost risks remain, as described in this report.	
		As of March 31, 2025, the life-to-date actual costs are \$14.4 billion, which results in an estimated \$1.6 billion of remaining costs based on the forecast of \$16 billion.	
Quality	•	The quality status for the Project remains "green," indicating that the work generally conforms to the requirements of the drawings and specifications. During the reporting period, the performance of the main dam, the approach channel, the structures and the hydromechanical equipment during the filling of the reservoir and early operations phase has continued to be good and is evidence of the good quality of work during the manufacturing and construction phases of the Project.	
		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.	
Regulatory,	٠	The regulatory, permits and tenures status remains "green."	
Permits and Tenures		As of March 31, 2025, almost all permits (approximately 97%) for the construction of th Project have been issued. The remaining approvals for construction are related to the permanent upstream fishway (Leave to Commence Operation, anticipated in spring 2025), the future Peace River Construction Bridge decommissioning, minor works on Highway 29 (e.g., turnarounds) and the construction of the future Cultural Centre. All construction permits continued to be managed and renewed as needed for demobiliza and reclamation works.	
		All key permits and approvals for the operation of Site C have been issued, including the <i>Fisheries Act</i> Authorization, the <i>Canadian Navigable Waters Act</i> approval, and the Conditional Water licenses for diversion and use of water, as well as the storage of water.	
Environment	Environment The environment status remains "green."		
	Environmental compliance on the Project remains high.		
Procurement	•	The procurement status remains "green."	
		The majority of the Project's commercial agreements are in place; however, there are a few remaining commercial agreements that still need to be prepared for Project completion scopes of work such as roads and site reclamation.	
Indigenous	•	The Indigenous Relations status remains "amber."	
Relations		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.	
Stakeholder	٠	The stakeholder engagement status remains "green."	
Engagement		BC Hydro continues to work with the communities, regional district and stakeholder groups on the implementation of various community agreements.	



1.8 Significant Project Updates for the Quarter

- 2 Significant Project updates that occurred between January 1 to March 31, 2025,
- 3 include the following:
- 4 January 2025
- The second of three transmission lines between the powerhouse and the Site C
 substation was completed and energized on January 17, 2025.

7 February 2025

- The third generating unit went into service on February 22, more than two
- 9 months ahead of the approved schedule.
- 10 March 2025
- The fourth generating unit went into service on March 31, more than three
 months ahead of schedule.
- 13 Refer to <u>Appendix A</u> for Site Construction photos from the reporting period and refer
- to <u>Appendix B</u> for a list of work completed since the Project commenced in 2015.

2 Safety and Security

- ¹⁶ During the reporting period, the Project saw a further reduction in workforce
- numbers as additional work fronts reached completion. Most of the remaining
- ¹⁸ Project work remains concentrated in and around the powerhouse.
- ¹⁹ Compared to the same period in 2024, there were improvements in the safety
- ²⁰ performance metrics for all-injury frequency and serious incident frequency, while
- there was a slight increase in the safety metric for lost time injury frequency.

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1 2.1 Safety Kickoff Sessions

The site teams held safety kickoff sessions in early February, setting a strong 2 foundation for the year ahead. Topics discussed during these sessions included the 3 importance of maintaining resources and managing stress during Project wrap-up, 4 increasing safety field presence, and improving communications across teams. In 5 addition, there was a strong emphasis on recognizing safe work practices, including 6 during Safe Work Observations (SWO). The discussions on these topics will be used 7 to shape ongoing safety initiatives and inform the Project safety goals for the next 8 fiscal year business plan. As part of this plan, the Construction Management team 9 will conduct quarterly reviews of upcoming work to identify the top two to three safety 10 risks, resulting in a Quarterly Risk Register to guide safety awareness and SWO 11 efforts over the next three months. The Project team will also be rewarding SWOs 12 that demonstrate excellence across five categories: descriptiveness, engagement, 13 corrective actions, pictures, and hazard and compliance checklists. 14

15 2.2 Fiscal 2025 Key Safety Metrics

The safety performance metric for serious incident frequency has improved
 significantly from 0.78 for the period January to March 2024 down to 0.38 for the
 period January to March 2025. For the January to March 2025 period specifically,
 the Project recorded zero serious incidents.

The Project team completed 1,600 SWOs in fiscal year 2025. Our Safety and 20 Construction Management teams reviewed approximately 10% of these SWOs to 21 ensure quality and identify improvement opportunities. The quality of the SWOs 22 continue to improve year-over-year. Most notably, verification of corrective actions 23 has increased from 33% in early SWOs to 80% in recent submissions. Additionally, 24 direct engagement with workers and supervisors has increased, with 75% of recent 25 SWOs documenting meaningful conversations with crews, compared to 67% in the 26 previous fiscal year. 27

Our incident review process continues to be a key component of our safety 1 management system. Between January 2024 and March 2025, the Project team 2 reviewed 546 total incidents. Of these, 74.4% were classified as "No Review" 3 (requiring no further action), 10.4% required Site Safety Incident Reviews (SSIRs), 4 and 0.7% were escalated to Senior Manager Safety Incident Reviews (SMSIRs). 5 The remaining incidents initiated a discussion with the contractor or an internal 6 review of their investigation report. The source of the incident reports has also 7 changed over time, with BC Hydro (37.4%) and Balance of Plant contractors (23.1%) 8 now being the primary sources of reported incidents. This represents a change from 9 previous years when the GSS contractor dominated the reporting statistics. Overall, 10 2024 saw a 41% reduction in total incidents compared to 2023.

2.3 **Coordinating Construction and Operations** 12

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During the reporting period, updates were made to the safety barrier standard within 13 our Prime Safety Management Plan. These changes clarify the visual 14 communication of hazardous areas, areas where hazardous tests are being 15 conducted, and areas that are under the control of BC Hydro Operations. The 16 updated standard specifies distinct barrier types for different risk levels and 17 situations. Red tape barriers are exclusively designated for high-risk areas, 18 indicating a potential for death or serious injury, and must not be crossed without 19 explicit authorization. Yellow tape barriers signify moderate-risk areas, where 20 caution and awareness are required due to minor or moderate injury potential. For 21 hazardous testing activities conducted under BC Hydro's Safety Practice Regulation. 22 yellow and black ribbon barriers will be used, also indicating a risk of death or 23 serious injury and requiring explicit authorization to cross. Finally, blue and white 24 rope barriers are employed to delineate in-service energized areas, typically set up 25 by BC Hydro Station Field Operations (SFO), and similarly require explicit 26 authorization before entry. To ensure widespread understanding and adherence to 27 these updated standards, teams implemented a comprehensive communication 28

- 1 strategy. Posters detailing the barrier types and their meanings were rolled out
- ² across the site. Additionally, descriptive sandwich boards were placed at key
- ³ locations to provide immediate, localized information.

4 2.4 Summary of Safety Performance Metrics

From July 2015 through March 2025, more than 64.6 million work hours have been
 completed across the Project, with no fatalities and one permanent partial disabling
 injury in August 2017.¹

- 8 During this reporting period, there were no serious injuries. In addition, there
- ⁹ were 43 non-serious incidents recorded. Of these 43 incidents, 25 incidents were
- 10 classified as near misses, with the potential for causing harm, 15 incidents involved
- injuries that required first aid, and three incidents required medical treatment.
- A near miss is defined as an incident that could have resulted in an injury but did not
- ¹³ 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
 missee
- 16 misses.
- 17 <u>Table 2</u> reflects the safety performance results for the Project, including all
- 18 contractors and all sub-projects.

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.

1

Table 2	Summary of Site C Safety Metric	S
	Reported January 1, 2025 to March 31, 2025 ²	Reported Since Inception (July 27, 2015 to March 31, 2025) ²
Fatality ³	0	0
Permanently Disabling Injury4	0	1
Serious Incidents ⁵	0	216
Lost Time Injuries ⁶	0	51
All-Injury Incidents ⁷ (Lost Time Injuries ⁶ and Medical Attention Requiring Treatment ⁸)	3	396

2 2.5 Safety Performance Frequency Metrics

- ³ 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
- 5 volume of work. <u>Table 3</u> summarizes these key safety metrics by quarter, for a
- 6 rolling 12-month average.

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.

1 2

Table 3

Summary of Safety Performance Frequency Metrics (2023 vs 2024)

	January – December 2024 (Rolling 12-Month Average)				January – December 2025 (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	0.78	0.72	0.43	0.34	0.38	N/A	N/A	N/A
Lost Time Injury Frequency	0.05	0.03	0.04	0.08	0.10	N/A	N/A	N/A
All Injury Frequency	1.05	1.11	0.82	0.68	0.86	N/A	N/A	N/A

³ During this reporting period, the serious incident frequency improved and was 0.38

4 compared to 0.78 for the same period in 2024, the all-injury frequency improved and

⁵ was 0.86 compared to 1.05 for the same period in 2024, while the lost time injury

⁶ frequency increased slightly from 0.05 to 0.10.

7 Key safety concerns identified through these incidents include gaps in Work

8 Protection Practices (WPP), the incorrect application of locks (contractor locks as

⁹ compared to WPP locks), and unauthorized entry into restricted areas during

10 commissioning activities. Winter conditions were a factor in the numerous slips, trips,

falls, and vehicle incidents involving ice and snow. Procedural compliance was

highlighted in tasks involving lifting techniques, pre-use equipment inspections,

13 chemical handling, and work planning. Incident trends included slips and falls often

related to weather, muscle strains (back, shoulder), and hand/finger injuries. The

15 frequency of WPP and procedural deviations signaled a need for enhanced hazard

recognition, adherence to safe work procedures, improved communications, and

¹⁷ better coordination, particularly during energization and commissioning.

18 Refer to <u>Appendix C</u>, <u>Figure C-1</u> for a graphic summary of Site C safety performance

¹⁹ metrics, including both BC Hydro employees and Project contractors.

2.6 **Regulatory Inspections and Orders** 1

WorkSafeBC, under the authority of the *Worker's Compensation Act*, is the primary 2 regulator with jurisdiction over safety for the Project. WorkSafeBC oversees worker 3 safety (employee and contractor) for the Project, both on and off the dam site. The 4 Ministry of Mining and Critical Minerals is the regulatory authority for worker safety 5 on any work fronts subject to the *Mines Act*, including West Pine Quarry, Portage 6 Mountain Quarry, and Area E. 7 As shown in Table 4, from January to March 2025, WorkSafeBC conducted

- 8
- three regulatory inspections related to the GSS contractor work in the Right Bank 9
- Drainage Tunnel and the Left Bank Drainage Adit. No orders were issued. The 10
- inspections focused on tunnel maintenance, including work methods, ventilation, 11
- duct air testing, air monitoring, and the recording of key information in the 12
- underground record such as ventilation checks, ground inspections, and 13
- maintenance activities. 14

From January to March 2025, there were no regulatory inspections by the Ministry of 15

Mining and Critical Minerals. 16

Table 4

17 18

Safety Regulatory Inspections and Orders (WorkSafeBC)

	Reported January 1 to March 31, 2025 ⁹	Reported Since Inception (July 27, 2015 to March 31, 2025) ⁹
Regulatory Inspections	3	383
Regulatory Orders	0	502

- Figure 2 shows the number of regulatory inspections and orders issued for the 19
- Project since 2015. 20

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

1 Refer to <u>Appendix C</u>, <u>Table C-1</u> for a summarized listing of the regulatory inspection

2 reports.



6 3 Construction, Engineering, Quality Management, 7 Commissioning and Assets In Service

8 3.1 Construction

Work on the Site C Project continues to advance consistent with the approved
schedule. Reservoir filling was safely completed on November 7, 2024, when it
reached the normal operating range of 460 metres to 461.8 metres above sea level.
The monitoring of the slopes around the reservoir also commenced at the start of
reservoir filling and to date, all reservoir slopes are performing as expected.
The Project remains on-track to have all six generating units in-service by the

- approved final unit in-service date of November 2025. However, there continues to
- 16 be uncertainty related to achieving the contractual schedules, and there are
- ¹⁷ identified risks that could adversely affect these schedules.

- 1 The Project reached two key milestones during the reporting period. On
- ² February 22, 2025, the third generating unit went into service, over two months
- ahead of the approved schedule. On March 31, 2025, the fourth generating unit went
- ⁴ into service, more than three months ahead of the approved schedule.

Prior to the reporting period, on October 27, 2024, the first generating unit (first
power) was placed into service approximately six weeks ahead of schedule. The
second unit went into service on December 14, 2024, approximately two months
ahead of the approved schedule. All of the in-service generating units were safely
brought into operation following the successful completion of the required testing
and commissioning processes.

The construction and commissioning activities for the fifth and sixth generatingunits are underway.

3.1.1 Dam and Reservoir Performance

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The reservoir has been at the normal operating range of 460 metres to 461.8 metres since November 2024. The dam and conveyance structures are performing well and as expected. Since reservoir filling was completed, instruments, such as flumes and piezometers, have been showing stabilized readings and most of the instrument readings are decreasing, indicating a decrease in seepage. Instruments monitoring potential underground movements (inclinometers and extensometers) are all showing readings within expectations.

The slopes around the reservoir have shown a natural and expected reaction to the rising water levels, including the appearance of tension cracks and shallow slides along and above the reservoir shoreline. Larger failure surfaces have also developed near Tea Creek. Communication continues with residents to remind them to avoid the slopes. All changes observed to date are within the range of expectations for slope performance.

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1 3.1.2 Main Civil Works

² During the reporting period, construction activities took place on the earthfill dam,

and the right and left banks as described below.

4 Earthfill Dam

- 5 The construction of the earthfill dam is substantially complete. The remaining
- 6 construction activities that are planned are the paving of the dam roads, the
- 7 installation of lighting, the installation of the permanent instrumentation buildings,
- ⁸ and the final grading and removal of stockpiled materials on the downstream toe.

9 Reclamation and Demobilization

- ¹⁰ The Main Civil Works contractor has now completed their contractual work, including
- their assessment of contaminated sites, addressed their environmental deficiencies,
- ¹² fully demobilized from site, and applied for their Total Completion Certificate during
- the reporting period. BC Hydro anticipates processing the final payment to the
- contractor and issuing the Certificate in the next reporting period.
- **3.1.3 Generating Station and Spillways**
- During the reporting period, construction progressed on the generating station and spillways civil works, and the hydromechanical equipment as described in the
- ¹⁸ following sections.
- 19 Generating Station and Spillways Civil Works
- 20 The generating station and spillways civil works contract includes the delivery of civil
- 21 works associated with the powerhouse, intakes, penstocks and spillways.
- All concrete placements for the powerhouse, intakes and spillways were complete
 as of March 2024.

1 Penstocks

The penstock upper flexible couplings (penstock sections that allow the penstocks to 2 expand and contract) were redesigned to fully meet BC Hydro's specifications. The 3 installation was completed in October 2024, and minimal leakage was detected in 4 the flexible couplers for the four penstocks (penstocks 1, 2, 3 and 4) that have been 5 filled with water. This minimal leakage was anticipated and is a result of the heating 6 and cooling associated with the transitions through winter weather. Adjustments will 7 be made to the seals in the flexible couplers following the onset of warmer weather 8 to address any ongoing minor leakage. 9

10 Hydromechanical Equipment

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The final commissioning is progressing for the six intake gates on permanent power and permanent controls, consistent with the approved schedule. Commissioning of intake gates 1 and 2 was completed in advance of the commencement of reservoir filling in late August 2024, the commissioning of intake gate 3 was completed in November 2024, and intake gate 4 was completed in February 2025. The remaining intake gates are scheduled to be commissioned in 2025 in advance of wet testing of their associated generating units.

The final commissioning is progressing for the three spillway operating gates on 18 permanent power and permanent controls, consistent with the approved schedule. 19 The gates will continue to be operated on construction power with temporary 20 controls through the spring of 2025, while the commissioning of the permanent 21 systems progresses. Commissioning is progressing for the remaining low-level 22 operating gates on permanent power and permanent controls but there is a risk of 23 not completing all the outstanding work this summer, as the maintenance gate was 24 frozen in place until late-May. This delayed the start of remediation work on low-level 25 operating gate 6 operating cylinder. 26

1 Right Bank Drainage Tunnel and Left Bank Drainage Adit

The operations and maintenance of the right bank drainage tunnel and left bank drainage adit continued during the reporting period. The remaining work required in the right bank drainage tunnel and left bank drainage adit includes structural enhancements to the shotcrete and the rock bolt linings of the tunnels, and the installation of the permanent portal structures and electrical and mechanical

7 systems.

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8 3.1.4 Right Bank Foundation Enhancements

All the planned work for stabilizing the bedrock foundations for the dam, powerhouse
and spillways was complete as of the end of March 2024, except for a couple of
minor deficiencies, including riprap placements on the embankment of the tailrace
above the water line that were not required to be completed prior to reservoir fill.
Construction of the remaining work is scheduled for completion in summer 2025.

14 **3.1.5 Diversion Tunnel Backfill**

Since the temporary diversion tunnels will not be used for the ongoing operation of
the facility, they are in the process of being decommissioned. The decommissioning
scopes of work include backfilling the tunnels with granular material, construction of
a concrete plug within each tunnel located slightly upstream of the tunnel's
mid-point, and the placement of granular fill overtop of the downstream portal.

In support of reservoir filling, the diversion tunnel intake gates were permanently
closed in September 2024. In November 2024, construction of the outlet channel
cofferdam was completed allowing both diversion tunnels to be dewatered and
inspected. Upon inspection, limited seepage was observed flowing through the
tunnel's intake structures and the concrete lining within both tunnels was observed
to be in good condition.

- 1 In January the installation of temporary electrical and ventilation systems
- 2 commenced. These systems are required to allow for the commencement of the
- hauling and placement of granular material which is scheduled to commence in the
- 4 spring of 2025.

5 3.1.6 Balance of Plant

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- ⁶ The balance of plant contracts are split between three contractors and include the
- ⁷ following scopes of work: (1) mechanical; (2) electrical (includes architectural,
- ⁸ heating, ventilation, and air conditioning, and fire detection and protection work); and
- 9 (3) permanent upstream fishway and other out structures.
- ¹⁰ The mechanical and electrical work continues to progress in the powerhouse.
- 11 The mechanical contractor has completed the final work on the unit 1 to unit 6
- common mechanical systems and is in the process of transferring the completed
- 13 work, including the required documentation, over to BC Hydro. The main focus of the
- remaining work for the mechanical contractor is the completion of deficiencies and
- 15 the hydronic heat system which will be completed over the summer.
- ¹⁶ The electrical contractor has completed the heavy electrical scopes of work,
- including all of the station service and the isolated phase bus that connect the
- 18 generators for unit 1 to unit 6 to the main step-up transformers. The contractor has
- ¹⁹ now shifted to completing any outstanding deficiencies.
- ²⁰ The architectural work in the operations building is nearing completion and the
- heating, ventilation and air conditioning work continues. The installation of the fire
- protection is also continuing, and the piping portion of the fire protection is nearing
- completion. The completion of the commissioning of these scopes of work is
- scheduled for June, with the exception of the heat recovery systems.
- The wet commissioning of the permanent upstream fishway continues. The fishway
- has started to be used to capture and transport fish.



- 1 The emergency response building, which is located in the powerhouse yard adjacent
- to the penstock for generating unit 1, is complete except for minor deficiencies.
- **3 3.1.7 Turbines and Generators**
- 4 The scope of work for turbines and generators includes the complete design, supply,
- 5 installation, testing and commissioning of six turbines, generators, governors and
- 6 exciters.
- 7 During the reporting period, the contractor continued working on all turbine and
- 8 generator units, including additional wet commissioning of the first unit. Units 1, 2, 3
- ⁹ and 4 are now in-service and providing electricity to BC Hydro customers. The
- 10 construction and commissioning activities for the fifth and sixth generating units are
- 11 underway.

12 **3.1.8 Transmission**

The first of three transmission lines between the powerhouse and the Site C
 substation was completed and energized in August 2024. The second transmission
 line was energized on January 17, 2025. The third and final transmission line is
 scheduled to be energized in late May.

17 3.1.9 Highway 29 and Boat Launches & Recreation Sites

The construction of the approximately 30 kilometres of highway and five new bridges along Highway 29 is complete with some minor deficiencies. The Project is working to resolve the remaining deficiencies related to the small, non-structural bridge deck cracking, the expansion joints, and the emergency turnarounds.

- 22 Portage Mountain Quarry
- No construction activity occurred at Portage Mountain Quarry during the reporting
- 24 period. The final reclamation phase at Portage Mountain is scheduled to occur in
- ²⁵ May 2025 and involves the planting of vegetation.

1 Boat Launches and Recreation Sites

- DA Thomas Road and Recreation Site No construction activity occurred at
 DA Thomas during the reporting period. Construction is scheduled to resume in
 April 2025.
- Lynx Creek Boat Launch No construction activity occurred at Lynx Creek
 during the reporting period. The final site completion construction works are
 planned for the summer of 2025.
- Halfway River Boat Launch No construction activity occurred at Halfway River
 during the reporting period. The remaining phase 1 construction deficiencies
- are scheduled to be addressed in May 2025. The phase 2 site completion
- 11 construction works are planned for the summer of 2025.
- The gangway and dock installations will occur at all three sites after the
 reservoir has been deemed safe for recreation, including boating.

14 **3.1.10** Site Operations and Infrastructure

- The site operations and infrastructure section of this report includes updates for the reporting period on the worker accommodation and infrastructure projects.
- 17 Worker Accommodation
- ¹⁸ During the reporting period, the worker accommodation facility housed an average of
- ¹⁹ 453 workers daily. The room utilization was 28% for this period.
- ²⁰ The contract for the worker accommodations was originally set to expire on
- December 31, 2024, based on the Worker Accommodations bed night model.
- However, based on an updated schedule forecast for the remaining number of
- workers required to complete the Project, the term of the contract has been
- extended to July 31, 2025.

- 1 Options continue to be explored to decommission the remaining worker
- 2 accommodation camp facilities once they are no longer required for the Project,
- ³ including discussions with potential buyers of the dormitories to align with work
- 4 completions.

5 Debris Management

- ⁶ During the reporting period, the work activities for debris management were
- 7 transitioned to the BC Hydro Project and Contracts Management (**PCM**) group. PCM
- 8 will commence debris collections and removal from the reservoir for BC Hydro
- 9 Operations in late April 2025.

10 Roads and Reclamation

- 11 Road maintenance continued throughout the reporting period. Project planning for
- the final Site C road construction, including paving, is ongoing with procurement
- packages targeted to be issued in May 2025 and September 2025.
- 14 The first phase of the reclamation with respect to PAG rock was completed on Upper
- ¹⁵ Blind Corner during the reporting period. Reclamation contracts were also
- 16 established for several sites during the reporting period, including the earth works in
- Area A (May 2025), and the planting of vegetation in Portage Mountain Quarry, a
- ¹⁸ portion of the Conveyor Corridor, and the P3/P8 areas (all May 2025).

19 3.2 Engineering

- 20 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 during construction. The team consists
- of in-house design specialists from BC Hydro and a range of external consultants
- ²⁴ from engineering firms who are responsible for the various design components.

1 3.2.1 Main Civil Works

The Site C reservoir reached its normal operational level of 460 metres to 461.8 metres elevation above sea level on November 7, 2024. Instrumentation monitoring and surveillance inspections related to the structural performance of the dam site water retaining structures, including the earthfill dam, the roller-compacted concrete buttresses, the approach channel and the dam abutments continue to indicate positive results. Surveillance inspections of the reservoir slopes will resume in April 2025 after the ground has thawed and the surface snow has melted.

9 **3.2.2** Right Bank Foundation Enhancements

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 performance of the foundation enhancements and construction
 of the Project.

As a result of the significant progress made related to the Project, it is anticipated
 the Technical Advisory Board's oversight will be complete as early as summer 2025.

16 3.2.3 Large Cranes, Hydromechanical, and Turbines and Generators

- During the reporting period, the focus continued to be on supporting equipment
- installations and commissioning activities at site, resolving open nonconformities,

and reviewing final quality documentation and record drawings.

The engineering team oversaw the operation of the spillway gates during the reservoir filling period and early operations phase of the generating station to ensure the safe and reliable performance of the spillway during the winter period.

233.2.4Generating Station and Spillways, Balance of Plant, and Equipment24Supply

During the reporting period, work continued to focus on the production of record drawings for the powerhouse, intakes, penstocks, and spillway, and this work is

- ¹ proceeding according to plan. The remaining certificates of compliance were
- ² prepared and issued. The monitoring of assets is ongoing following the filling of the
- ³ reservoir, with all structures performing as intended.

The balance of plant scopes of work continued with the preparation and issuance of 4 issued-for-construction drawings, as needed, to support the integration design for 5 contractor-designed equipment for the balance of plant mechanical; electrical 6 (includes architectural, heating, ventilation, and air conditioning, and fire detection 7 and protection work); and the permanent upstream fishway and other out structures 8 contract packages. The balance of plant team also prepared a proponent technical 9 information package for the permanent electrical and mechanical equipment for the 10 right bank drainage tunnel and left bank drainage adit. Support for the construction 11 and commissioning activities for these contracts, including the review of the 12 technical submittals and contractor design drawings, field reviews, and technical 13 support to the commissioning team, also continued. The balance of plant team also 14 had technical specialists on site to support the water-to-wires equipment 15 (e.g., turbines-generators, isolated phase buses, generator circuit breakers, 16 generator step-up transformers, etc.) commissioning work. The final 13.8 kV 17 emergency backup generator was also delivered to site and placed on a foundation 18 pad. 19

- 20 Engineering support to construction for the BC Hydro designed protection and
- 21 controls and telecom systems continued. With issued-for-construction drawings now
- ²² 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
- 25 systems that interface with contractor-supplied equipment.

1 3.2.5 Transmission

Transmission Engineering continues to provide construction support, produce record
drawings, and resolve the final remaining minor deficiencies for the transmission
lines that will connect the Site C substation to the Site C powerhouse. Geotechnical
and civil engineering support is also being provided to determine future maintenance
requirements and plans.

7 3.2.6 Highway 29

Engineering support for record drawings and certificates of conformance are in
 progress for the Halfway River segment.

Engineering support is also being provided for the design of turnarounds as part of
 the landslide-generated wave response plan.

Small, non-structural surface cracks have been identified in the concrete decking of the Halfway River and Cache Creek bridges. These cracks do not pose any safety risks related to the structural integrity of the bridges but may require additional maintenance or repair. The monitoring of these cracks was initiated to determine the root cause and to develop a solution to repair the cracks. A recommendation to repair the cracks is expected in 2025.

183.2.7Technical Advisory Board and Independent International Dam19Experts

The most recent meeting with the Technical Advisory Board and the independent international dam experts was held in December 2024. Updates were provided by the engineering team on the performance of the right bank foundation enhancements, the approach channel, and the earthfill dam during and after the reservoir filling period, and the feedback they provided was supportive of the Project team's work. The next, and final planned advisory board meeting is scheduled for 2025 and the intent is to report out on the performance of the reservoir and


1 structures six months after the completion of reservoir filling and a cycle of winter

² performance.

3 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. When a quality issue is identified during
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.
During the reporting period, the performance of the main dam, the approach

channel, the structures, the foundation and the hydromechanical equipment during
the reservoir filling and early operations phase has continued to be good and is
evidence of the good quality of work during the manufacturing and construction
phases of the Project.

- ¹³ For the generating station and spillways civil works sub-project, the main
- construction activities are complete, and BC Hydro is focusing its efforts on rectifying
- outstanding deficiencies and collating quality documentation to facilitate the
- handover of assets to the BC Hydro Operations team.
- ¹⁷ For the turbines and generators sub-project, units 1 to 4 have been put into
- commercial service and continue to operate reliably. For unit 5, the mechanical
- ¹⁹ offline commissioning (overspeed testing) was successfully completed on April 21
- 20 and online electrical testing is scheduled to commence in late May. For unit 6, the
- quality of the assembly and installation work continues to be good and there are no
- significant installation quality issues to report.
- ²³ For the electrical and mechanical balance of plant sub-projects, there are no
- significant quality issues to report.



3.3.1 Quality Nonconformance Management

- ² The identifying and reporting of nonconformances continues to be an important part
- ³ of quality management on Site C.
- ⁴ <u>Table 5</u> summarizes quality nonconformity instances during the reporting period.

5 Table 5 Qual	ity Management Nonconformity
6 Repo	ort (NCRs) Metrics
7 Repo	orting Period – January 2025 to
8 Marc	ch 2025

Contract	NCRs Reported January 1 to March 31, 2025	NCRs Closed January 1 to March 31, 2025	NCRs Reported as of March 31, 2025	NCRs Closed as of March 31, 2025	NCRs Open as of March 31, 2025
Turbines and Generators (total = manufacturing + installation)	70 (= 0+70)	114 (= 0+114)	1704 (= 655+1049)	1601 (= 646+955)	103 (= 9+94)
Generating Station and Spillways Civil Works	7	5	1895	1886	9

9 **3.3.2 Deficiency Management**

Deficiencies are a normal and expected part of completing complex infrastructure projects. A deficiency is typically a minor outstanding item or issue identified during the final stages of a project that does not prevent the system from operating safely, but still requires a resolution before full project closeout.

BC Hydro implements a comprehensive deficiency management program to identify, track and resolve the items as projects near completion. This process supports a smooth transition to operations and ensures contractual obligations are met during closeout. Examples of common deficiencies include minor paint touch-ups, labeling updates, or equipment recertifications. In one instance, handrails on a spillway were damaged due to ice jacking caused by misting during winter spilling. These were identified as deficiencies and scheduled for repair prior to final handover.

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1 To further strengthen this process, the Site C Deficiency Management Plan was

² updated in January 2025 to improve accountability, streamline workflows, and

³ prioritize the timely resolution of deficiencies. A dedicated Deficiency Management

4 Committee was also established, supported by the Project Engineering, Quality

⁵ Assurance (**QA**), and Construction Management teams. The revised process

6 includes a new Master Deficiency Log (**MDL**) that consolidates historical data, a new

7 deficiency entry tool, evidence repositories and formalized workflows for tracking,

8 reviewing, and closing deficiencies.

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9 Current priorities include identifying and rectifying deficiencies on key asset systems

being handed over to BC Hydro Stations Field Operations (e.g., Units 1–4, the

Permanent Upstream Fishway) and addressing issues tied to the upcoming unit 1,

unit 2, and main T1 transformer outage scheduled for April 2025. Deficiencies are

being tracked across all work fronts, with focused effort on systems approaching

14 Fit-for-Service (**FFS**) milestones.

Training has been delivered to key Project personnel, and evidence export packages
 are being prepared to meet the requirements of the Generation Project Acceptance
 Checklists (GPAC). As the system matures, progress will be monitored through a
 comparison of open to closed deficiencies, similar to historical NCR tracking, with a
 reporting dashboard under development.

20 3.3.3 Commissioning

A comprehensive commissioning plan for the Site C Project has been developed and is being implemented as equipment is constructed and installed. The plan includes a detailed schedule to sequence commissioning activities, including each test, its duration, and the resources required. The commissioning process is comprised of safely testing and proving intended function and integration of Site C equipment with other systems. This commissioning workplan is based on

- 1 BC Hydro's decades of experience building hydroelectric generating stations and
- ² operating the BC Hydro system, and on accepted industry standards.
- 3 The commissioning of the Site C assets follows a process that includes
- 4 testing/pre-commissioning; dry commissioning (energization); wet commissioning
- 5 (offline); wet commissioning (online); then handover to BC Hydro Operations as the
- 6 final step.
- 7 The pre-commissioning testing includes offline testing of individual pieces of
- 8 equipment. Once the offline testing is completed, BC Hydro prepares and signs a
- 9 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
- 12 formalizes the commercial operation and places the unit in-service. The
- 13 commissioning process undertaken for the earthfill dam and associated assets forms
- 14 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.
- 17 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 BC Hydro Operations.
- As of March 31, 2025, 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;

- Two new 500 kV transmission lines that connect the Site C substation to the
 Peace Canyon substation;
- Two of three new 500 kV transmission lines that connect the Site C substation
 to the Site C powerhouse (the second transmission line was completed during
 the reporting period on January 17, 2025);
- Two out of three sets of new Generator Step-Up Transformers (the second set vas completed during the reporting period on January 17, 2025); and
- Generating units 1 through 4.

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4 Project Schedule

2 4.1 Project In-Service Dates

- 3 The Project remains on-track to have all six generating units in-service by the
- 4 approved final unit in-service date of November 2025.
- 5 <u>Table 6</u> shows the status of the key Project milestones in relation to the approved
- ⁶ schedule with a final unit in-service date in November 2025.

7	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	Complete (October 27, 2024)
	Unit 2	February 2025	Complete (December 14, 2024)
	Unit 3	May 2025	Complete (February 22, 2025)
	Unit 4	July 2025	Complete (March 31, 2025)
	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 Transition to BC Hydro Operations

- ² During the reporting period, the engineering team continued to work closely with
- BC Hydro Operations to coordinate the Site C spillway operations with the
- 4 commissioning of the Site C generating units, while balancing upstream flows from

5 Peace Canyon Generating Station and local tributaries between Peace Canyon

⁶ Generating Station and Site C.

7 The Project team continues to develop the comprehensive packages of information

⁸ required by established BC Hydro practices for the handover of assets to BC Hydro

9 Operations for the on-going operation and maintenance of the assets. The plan is to

- ¹⁰ progressively handover the assets over the remainder of the Project.
- 11

6

Project Governance, Costs and Financing, and Risk

12 6.1 Project Governance

¹³ During the reporting period, activities supporting Project governance included:

- The BC Hydro Board of Directors met in January 2025 and March 2025 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, which will wind down in connection the sixth and
 final generating unit being brought into service, met in January 2025 and March
 2025 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 met in January
 2025 and March 2025 to provide oversight on claims management, commercial
 strategy and contractual negotiations;

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- The Technical Advisory Board continued to provide technical expertise and
 guidance to the Project Assurance Board and support to the Project team; and
- Ernst & Young Canada continued to provide independent oversight for the
 Project, specifically with respect to risk management, which included reviewing
 Project risks, the analysis of the Project costs, commercial management, and
 schedule progress. During the reporting period, BC Hydro and Ernst & Young
 Canada worked closely and collaboratively in monthly risk review committee
 meetings. Ernst & Young Canada also conducted a site visit in March 2025.
- 9 6.2 Project Budget Summary

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As of March 31, 2025, the life-to-date actual costs for the Project are \$14.4 billion,
which results in an estimated \$1.6 billion of remaining costs based on the forecast of
\$16 billion. The Project remains on track to be completed within the budget of
\$16 billion, which was approved in 2021. BC Hydro, with oversight from the Project
Assurance Board, continues to actively manage the Project budget and potential
Project risks for the remaining work.

6.3 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 March 31, 2025,
 and the remaining budget.

1

2

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

Description	Project Budget ¹¹	Actuals, Life-to-Date (as of March 31, 2025)	Remaining Budget (as of March 31, 2025)
Dam, Power Facilities and Associated Structures and Transmission ¹²	8,258	8,293	(35)
Off Dam Site Works, Direct Construction Supervision and Site Services ¹³	2,895	2,547	348
Total Direct Construction Cost	11,153	10,840	313
Indirect Costs ¹⁴	2,082	1,641	441
Total Construction and Indirect Costs	13,235	12,481	754
Interest During Construction and Contingency	2,765	1,899	866
Total	16,000	14,380	1,620

- 3 <u>Table 8</u> provides a summary of the approved total Project budget, the current
- 4 forecasts, and related variances. The table also presents the cumulative plan and
- ⁵ actual costs to March 31, 2025, and the related variances. The plan amount reflects
- 6 the Project budget of \$16 billion approved in June 2021 and the related preliminary
- 7 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.

1	Table 8
1	i able c

- 2 3
- 3 4

Total Project Budget Compared to Forecast to Completion and Life-to-Date Plan Compared to Actuals to March 31, 2025 (\$ million)

	Total Project			Life-to-Date (LTD) to March 31, 2025		ch 31, 2025
Description	Budget	Forecast to Completion	Variance	Plan	Actual	Variance
Total Construction & Indirect Costs	13,235	13,235	0	12,697	12,481	216
Interest During Construction and contingency	2,765	2,765	0	2,426	1,899	527
Total	16,000	16,000	0	15,123	14,380	743

5 Details of the variances between life to date actuals and plan are in <u>Appendix H</u>.

6 <u>Table 9</u> 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

8				
9				
10				

2024/25 to 2026/27 Service Plan Fiscal 2025 Plan Compared to Actuals (\$ million)

Description	2024/25 to 2026/27 Service Plan, Fiscal 2025	Actuals, Fiscal 2025	Variance
Total Project	1,865	1,250	615

¹¹ Details of the variances between actual and plan are in <u>Appendix H</u>.

12 6.4 Site C Project Financing

- ¹³ Most of BC Hydro's capital projects, including the Site C Project, are debt financed.
- 14 The Site C Project costs are included as part of BC Hydro's overall borrowing and
- are included in the Government of B.C.'s budget and fiscal plan. The debt and
- related interest costs are managed corporately by BC Hydro.

6.5 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 the implementation phase, the Project risks and
 opportunities will continue to evolve.
- 9 The criteria for selecting which risks and opportunities to include in internal and
- 10 external reporting include both objective and subjective measures; these criteria
- ¹¹ have been utilized to select the risks and opportunities included in this report.¹⁵
- ¹² For the reporting period ending March 31, 2025, no material opportunities have been
- ¹³ identified. Please refer to <u>Table 10</u> for the list of material project risks.

Project.

14

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	

 Table 10
 Material Project Risks

continue to include safety in BC Hydro and contractor onboarding orientations to promote and encourage a strong safety culture across the

¹⁵ The risks and opportunities included in <u>Table 10</u> 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	
Adits or right bank drainage tunnel may need additional structural support post	Impact: Requirement for additional structural support, resulting in additional costs.	
reservoir filling	Response : Design additional support as required and implement measures to address as-found conditions.	
Defects or deficiencies surface during installation or commissioning for units 5 and 6	Impact : Delay to units 5 and 6 in-service and potential additional costs. Response : A commissioning plan has been developed. The plan is being implemented with commissioning activities are starting as early as possible.	
Project cannot close out on time	Impact : Project does not transition to BC Hydro Operations as planned, requiring additional effort and trailing costs.	
	Response : Prepare and coordinate close out plan with BC Hydro Operations; identify key project resources; close out Project in segments as it becomes operational; meet the requirements of the GPAC.	
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.	
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 the performance of the additional wrap-up work.	
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.	
Water management requires additional funds after contract obligation is completed	Impact: Work progress impacted by failure to provide required care of water and/or by environmental regulatory enforcement. Response: Negotiate to extend water management services.	



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7 Key Procurement and Contract Developments

2 7.1 Key Procurements

- ³ The vast majority of the major Site C contracts have been awarded. The remaining
- ⁴ major procurements on the Project are summarized in <u>Table 11</u>.
- 5 6

Table 11Remaining Major Project Procurements
and their Planned Delivery Models

Component	Contract	Procurement Model	Anticipated Timing
Permanent Roads	Permanent road construction contract(s)	Design-Bid-Build	Procurement will start in 2025
Cultural Centre	Cultural Centre design and construction contracts	Design-Build	Procurement began with the Request for Proposals (RFP) issued in February 2025 and the Phase 1 contract is anticipated by Summer 2025.
Reclamation	Multiple contracts to be	Design-Bid-Build	2025 season:
Program	awarded over the next two years	over the next	Three seedling packages; procurement started in fall 2024 and awarded in January 2025.
			 Two planting packages identified; procurement started in fall 2024 and awarded in January 2025.
			 One physical works package identified; procurement started in fall 2024 and is scheduled to be awarded in April 2025. (No change – this pertains to Central Area A)
			2026 season:
			Three seedling packages; procurement will start in fall 2025.
			Two planting packages identified; procurement will start in fall 2025.
			One physical works package identified; procurement will start in fall 2025.

7.2 Major Construction Contracts Exceeding \$50 Million

Since inception of the Project, 16 major construction contracts have been awarded
that exceed \$50 million in value, as shown in <u>Table 12</u>. The contract values reflect
the current value including executed approved changes to the end of the reporting
period.

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

Table 12

8 9

Awarded					
Contract	Contract Value at March 31, 2025 ¹⁶ (\$ million)	Contract Execution Date			
Site Preparation: North Bank	60	July 2015			
Worker Accommodation	714	September 2015			
Main Civil Works ¹⁷	3,354	December 2015			
Turbines and Generators	622	March 2016			
Transmission and Clearing	92	October 2016			
Quarry and Clearing ¹⁸	150	February 2017			
Generating Station and Spillways Civil Works ¹⁹	3,083	March 2018			
Hydromechanical Equipment	81	April 2018			
Transmission Line Construction	139	May 2018			
Clearing and Aggregates	87	December 2018			
Highway 29	380	October 2019			
Balance of Plant Mechanical	106	July 2021			

Major Project Construction Contracts

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 The Quarry and Clearing value only reflect work executed under the blanket Master Services Agreement related to construction. Unique purchase orders with this vendor not under this Master Services Agreement are not included in this table but are identified in Table F-2 where they exceed \$10 million.

¹⁹ Includes some of the scope of work for the right bank foundation enhancements.



Contract	Contract Value at March 31, 2025 ¹⁶ (\$ million)	Contract Execution Date
Balance of Plant Electrical (includes balance of plant architectural; heating, ventilation, and air conditioning; and fire detection and protection work)	364	September 2021
Balance of Plant Permanent Upstream Fishway and Other Out Structures	120	January 2022
Fish Habitat and Debris Clearing	64	July 2021 (added new this reporting period as the current contract value now exceeds \$50 million)
Erosion and Sediment Control, Reclamation and Site Maintenance	57	October 2017(added new this reporting period as the current contract value now exceeds \$50 million)

1 7.3 Contracts Exceeding \$10 Million

- ² For open contracts procured and awarded in excess of \$10 million, refer to
- 3 Appendix F.

4 **7.4 Contract Management**

5 7.4.1 Material Changes to the Major Contracts

The main civil works contract is a unit price contract and, as such, variations in 6 guantities and design are expected over the term of the contract. Since contract 7 award in December 2015, the main civil works contract value has increased by a 8 total of \$1.61 billion to reflect approved changes to March 31, 2025. These approved 9 changes include work for the right bank foundation enhancements. The overall 10 contract value has decreased this guarter as variations in guantities are reconciled 11 and finalized for the completed scopes of work. The contractor has now applied for 12 13 total completion under the contract.

- 14 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.
- ¹⁶ Since contract award in March 2018, the generating station and spillways contract

value has increased by a total of \$1.48 billion to reflect approved changes to

² March 31, 2025. These approved changes include work for the right bank foundation

³ enhancements and diversion tunnel backfilling.

4 The turbines and generators contract is a milestone-based contract for the design,

⁵ supply, installation, testing and commissioning of six turbines, generators, governors

and exciters. Since the March 2016 contract award date, the contract has increased

7 by a total of \$158 million to reflect approved changes to March 31, 2025, which

⁸ includes settlement agreements in 2022 and 2024.

The balance of plant contracts are split between three contractors and include the 9 following scopes of work: (1) mechanical; (2) electrical (includes architectural, 10 heating, ventilation, and air conditioning, and fire detection and protection work); and 11 (3) permanent upstream fishway and other out structures. Since the contract award 12 dates in 2021 (for contracts 1 and 2) and 2022 (for contract 3), the contract values 13 have increased to reflect approved changes to March 31, 2025 as follows: the 14 mechanical contract has increased by a total of \$35 million which includes a 15 settlement agreement in 2024, the electrical contract has increased by a total of 16 \$142 million which includes settlement agreements in 2024 and 2025, and the 17 permanent upstream fishway and other out structures has increased by a total of 18 \$32 million which includes a settlement agreement in 2024. 19

20 8 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 the
review and implementation of mitigation, monitoring and management plans, and
permit conditions.

- ¹ During the reporting period, BC Hydro continued to engage with Indigenous Nations
- ² on Project activities and milestones through regular Project update meetings and
- 3 other venues.
- ⁴ BC Hydro held a meeting with the Environmental Forum on March 5, 2025, with
- 5 participation from 10 Indigenous Nations. The agenda included updates and
- 6 discussion on various topics including reservoir slope stability and monitoring,
- 7 wildlife monitoring, ice formation, and reclamation of construction areas.
- 8 Various Site C updates were also issued on topics including slope stability and
- 9 monitoring, reclamation, the Rustic Recreation Site Fund, wildlife and ice monitoring.

8.1 Indigenous Procurement, Training and Employment

- BC Hydro continues to advance economic opportunities for Indigenous Nations
- 12 through capacity building and procurement opportunities. Over \$821 million in Site C
- directed procurement opportunities have been awarded to companies designated by
- 14 Indigenous Nations since the beginning of the Project, pursuant to BC Hydro's
- ¹⁵ Indigenous Procurement Policy. Information on BC Hydro's Indigenous Procurement
- ¹⁶ Policy can be found on the BC Hydro website at the following link:
- 17 https://www.bchydro.com/work-with-us/suppliers/indigenous-procurement.html.
- In February 2025, 49 Indigenous people were working on the Site C Project, which
- ¹⁹ represents approximately 5 percent of the total workforce.

20 8.2 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 conceptual design for the facility has now been completed and endorsed by the participating Indigenous Nations. During the

- ¹ reporting period, BC Hydro hosted the 20th meeting of the Cultural Center Working
- ² Group, to discuss and develop the exhibit design and cultural content for the facility.
- ³ A request for proposals is currently underway to select a general contractor for
- 4 construction, through a competitive process. The Cultural Centre is on schedule for
- 5 completion in spring 2027.

6 9 Litigation

8

7 The details of open proceedings as of March 31, 2025, are summarized in <u>Table 13</u>.

Description		Date	
B.C. Supreme Court: Treaty Infringem	ent 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	Civil claim filed.	January 18, 2021	
(Residents of Old Fort community)	Response to claim filed.	September 8, 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.	October 24, 2022	
Impact Drywall Inc.	Civil claim served.	July 12, 2024	
	No steps have been taken in litigation that require a response from BC Hydro.		

 Table 13
 Litigation Status Summary

Description		Date	
Property owners	Description Property owners Of 27 notices of claims filed to keep open each plaintiffs' rights to claim further compensation under the <i>Expropriation Act</i> , 11 have been resolved during this period and 16 remain active. BC Hydro has filed responses to all of the outstanding claims.		

10 Permits and Government Agency Approvals

The regulatory, permits and tenures performance indicator on the Project status 2 dashboard in section <u>1.7</u> remains "green." As of March 31, 2025, almost all permits 3 (approximately 97%) for the construction of the Project have been issued. The 4 remaining approvals for the construction are related to the permanent upstream 5 fishway (Leave to Commence Operation, anticipated in Spring 2025), the future 6 Peace River Construction Bridge decommissioning, minor works on Highway 29 7 (e.g., turnarounds) and the construction of the future Cultural Centre. All construction 8 permits continued to be managed and renewed as needed for demobilization and 9 reclamation works. 10 All key permits and approvals for the operation of Site C have been issued. These 11 include: 12 Fisheries Act Authorization, issued in July 2016 and amended in July 2022; 13 Canadian Navigable Water Act approval, issued in July 2016 and most recently 14 amended in April 2024; 15

- Conditional Water Licences 132990 (for diversion and use of water)
 and 132991 (for the storage of water), issued in 2016; and
- Conditional Water Licence for the Permanent Upstream Fishway, issued
 in 2018.

- 1 Multiple conditions are attached to construction and operations permits and
- 2 approvals. As of March 31, 2025, all required conditions and submissions have been
- ³ met in accordance with the schedule and requirements of the conditions.

4 **10.1** 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
March 31, 2025, BC Hydro has requested and received 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

- 13 Project.
- 14 On February 12, 2025, BC Hydro submitted a request to the Environmental
- 15 Assessment Office to amend the Environmental Assessment Certificate to reflect the
- increased installed capacity of the generating units from 1,100 megawatts (MW) to
- between 1,150 MW and 1,230 MW. This amendment is required because the
- as-built generating units are more efficient and able to produce more power with the
- 19 same amount of water than anticipated during the environmental assessment.
- ²⁰ BC Hydro's assessment shows that the effects of the amendment on the Project's
- valued components (e.g., fish, wildlife, vegetation) are not expected to be different
- from what was assessed in the Project's Environmental Impact Statement (EIS). The
- change is anticipated to provide a benefit to the province, meeting the peak demand
- of more homes than anticipated in the environmental assessment.
- ²⁵ BC Hydro remains in compliance with all requirements of the Environmental
- ²⁶ Assessment Certificate amendments.



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

3 11 Environment

4 **11.1** Mitigation, Monitoring and Management Plans

5 As per the requirements of the Environmental Assessment Certificate and Federal

- 6 Decision Statement, all mitigation, monitoring and management plans and related
- 7 reports can be found on the Site C Project website at this link: Environmental &
- 8 <u>Socio-Economic Plans & Reports | Site C (sitecproject.com)</u>.

9 11.2 Project Environmental Compliance

- 10 Environmental compliance on the Project remains high.
- During the reporting period the EAO conducted a single remote
- inspection/information request on the Project on March 20, 2025. This inspection
- 13 was triggered by a public complaint and focused on compliance with the drinking
- water well monitoring program required by Environmental Assessment Certificate
- ¹⁵ Condition 56. BC Hydro responded to this information request on March 26, but as
- ¹⁶ of April 24, 2005, an inspection report has not been issued by the EAO.

17 **11.3** Potentially Acid-Generating Rock Management

¹⁸ The Project's Construction Environmental Management Plan has a well established

- ¹⁹ potentially acid-generating rock management plan that employs a variety of
- recognized techniques to identify, test, monitor and treat, if necessary, any
- 21 potentially acid-generating rock during construction. Any potentially acid-generating
- rock sites located within the reservoir are rendered inert now that 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
- ²⁵ qualified environmental professionals.

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- The April 2022 Environmental Assessment Office order related to potentially
 acid-generating rock exposures necessitated revisions to the Construction
 Environmental Management Plan. The revision process began in October 2022, and
- 4 included a consultation period, which was initiated in April 2023 and concluded in
- 5 October 2023 when BC Hydro published the revised plan on the Project website,
- ⁶ and notified regulators that the revised plan would be followed from that date
- 7 forward.

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In parallel with these revisions, this order accelerated the need to consider potential 8 mitigation options for potentially acid-generating rock exposures on the dam site that 9 will not be covered by the reservoir. For this, the Project is seeking engineered 10 options and cost estimates for a subset of the potentially acid generating rock 11 exposures across the Project that were not inundated by the reservoir or that have 12 been identified in past Environmental Assessment Office inspection reports. The 13 Phase 1 mitigation at one of these exposures (Blind Corner on River Road) was 14 completed during the reporting period, with the Phase 2 mitigation scheduled to 15 occur with the final road/paving scopes of work. The Environmental Assessment 16 Office continues to assure BC Hydro that it will not pursue enforcement against the 17 April 2022 order. 18

19 **11.4** Temporary and Permanent Fish Passage Facilities

During the reporting period, BC Hydro continued to commission the permanent fish passage facility and implement required repairs. BC Hydro has almost completed the decommissioning of the temporary fish passage facility including the crushing of most of the facility's concrete foundations that protrude above elevation 415 metres.

24 **11.5 Wetland Compensation Plan**

BC Hydro and the contractor continue to work on advancing wetland re-builds and
 new construction options in the Peace Region. The main focus during the reporting



- 1 period was investigating potential wetland compensation sites and refining the
- ² assessment of wetlands impacted by the Project.

3 **11.6 Greenhouse Gas Monitoring**

- In August 2024, two greenhouse gas (**GHG**) monitoring stations were installed as
- 5 part of the Greenhouse Gases Monitoring and Follow-Up Program. A draft version of
- 6 the Plan was submitted to regulators in January 2025 and the monitoring at these
- 7 new stations continued through the reporting period.

8 **11.7** Agricultural Mitigation and Compensation Plan

- 9 The BC Hydro Peace Agricultural Compensation Fund first intake period for 2025
- 10 closed on January 17, 2025, with the application review process taking place on
- 11 March 20, 2025. During this reporting period, the fund distributed
- approximately \$118,824 in grant funding to nine projects to support agricultural
- production and related economic activity in the Peace Region. As of March 31, 2025,
- the fund had distributed more than \$3.7 million to 124 projects.
- 15 The five-year review of the BC Hydro Peace Agriculture Compensation Fund was
- ¹⁶ ongoing during the reporting period.

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1 12 Employment and Training Initiatives and Building 2 Capacity Initiatives

3 **12.1 Labour**

6

⁴ Since the beginning of the Project, unions that have participated in the construction

5 of Site C are listed in <u>Table 14</u>.

Table 14 P	articipating Unions
	Union
Construction Maintenance and Allied Worker	rs (CMAW)
Christian Labour Association of Canada (CL	AC), Local 68
Canada West Construction Union (CWU)	
Construction and Specialized Workers Union	(CSWU), Local 1611
International Union of Operating Engineers (I	UOE), Local 115
Millwrights Union, Local 2736	
Ironworkers, Local 97	
International Brotherhood of Electrical Worke	ers (IBEW)
MoveUP, Local 378	
Pile Drivers Union, Local 2404	
Boilermakers, Lodge 359	
United Association of Journeymen & Apprent	tices of the Plumbing & Pipefitting Industry of the U.S. & Canada, Local 170
Teamsters, Local 213	

- 7 In addition, ten unions affiliated with the B.C. Building Trades are signatory to the
- 8 special project needs agreement for the installation of the turbines and generators.
- 9 The Site C balance of plant contractors are signatory to a special project needs
- agreement between the Construction Labour Relations Association and the
- ¹¹ Bargaining Council of B.C. Building Trades Unions.

1 12.2 Employment

- 2 Contractors submit monthly workforce data electronically to BC Hydro. <u>Table 15</u>
- ³ presents the monthly number of construction contractors, non-construction
- 4 contractors, engineers, and Project team workers for the reporting period.
- 5 As with any construction project, the number of workers and the proportion from
- 6 any particular location will vary month-to-month and also reflects the seasonal
- 7 nature of construction work.
- 8 9

Table 15	Site C Jobs Snapshot Reporting Period –
	January 2025 to March 2025

Month	Number of B.C. Primary Residents ²⁰	Total Number of Workers ²¹
January 2025	1,394	1,717
February 2025	1,284	1,604
March 2025	1,311	1,578

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

In March 2025, there were 1,578 total workers on the Site C Project. Residents of

- British Columbia made up 83% of the workforce (1,311), while 23% of the
- 13 on-Site Contractor workforce (235 workers) lived in the Peace River Regional
- District. The on-Site Contractor workforce number also includes 18% women
- 15 (185 workers) and 6% Indigenous (61 workers). There were 54 apprentices working
- ¹⁶ 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
- ¹⁸ apprentice carpenters, electricians, millwrights, ironworkers, mechanics, and

²⁰ 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.

²¹ 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.

- 1 plumbers. Refer to <u>Appendix D</u> for an overview of the current Site C workforce that
- ² includes the following information from January to March 2025: the Site C jobs
- snapshot (<u>Table D-1</u>), the Site C apprentices snapshot (<u>Table D-2</u>), the Site C job
- 4 classification groupings (Table D-3), and the Indigenous inclusion snapshot
- 5 (<u>Table D-4</u>).
- ⁶ Figure 3 shows the monthly Site C workforce over the period from March 1, 2024, to



7 March 31, 2025.

BC Hydro

Power smart

²² The Indigenous workers and women workers numbers are a subset of the construction and non-construction contractors workforce number.

1 12.3 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

- 6 Skilled Training Bursary Awards, established in 2013. As of March 31, 2025, a total
- 7 of 295 students had received bursaries, including 137 Indigenous students have
- 8 benefitted from the bursary in programs such as electrical, welding, millwright,
- 9 cooking, social work, and many others.

10 12.4 Labour and Training Plan

In accordance with an Environmental Assessment Certificate condition, a Labour 11 and Training Plan was developed and submitted to the Environmental Assessment 12 Office on June 5, 2015. This plan, as well as Environmental Assessment Certificate 13 Condition 45, include annual reporting requirements to support educational 14 institutions in planning their training programs to support potential workers in 15 obtaining Project jobs in the future. This report has been issued to the appropriate 16 training institutions in the northeast region annually since 2016. The latest report 17 was issued in August 2024. 18

19 13 Community Engagement and Communication

13.1 Local Government and Community Engagement Activities

- BC Hydro continues to advance commitments within five community agreements:
- the District of Chetwynd (2013), the District of Taylor (2014), the City of
- Fort St. John (2016), the District of Hudson's Hope (2017), and the Peace River
- 24 Regional District (2024).

- 1 The Regional Community Liaison Committee (**RCLC**), which is comprised of local
- ² elected officials and local First Nations communities, met for a final time on
- ³ November 27, 2024.
- ⁴ Over the construction period, the RCLC has been a valuable forum for BC Hydro to
- share Project updates and receive information from community representatives –
- ⁶ helping to identify and address important issues in a timely manner.
- 7 Eight local governments and four local First Nations communities (McLeod Lake
- 8 Indian Band, Doig River First Nation, Saulteau First Nations, and Blueberry River
- 9 First Nations) as well as the two MLAs for Peace River North and Peace River South
- ¹⁰ participated as committee members. Representatives from the Project's major
- 11 contractors also attended the meetings as invited guests.

12 **13.1.1 District of Hudson's Hope Water System**

In fall 2022, the District of Hudson Hope initiated a three-phase plan to switch its raw 13 water source from a well water system to the Peace River. In early 2023, BC Hydro 14 and the District of Hudson's Hope finalized an agreement that provided funding to 15 support the initial two phases of this plan. The District of Hudson Hope has installed 16 a temporary surface water intake along with upgrades to the treatment facility and is 17 providing the community with potable water. In September 2024, BC Hydro 18 submitted a revised proposal to the District of Hudson Hope, which included a 19 commitment to complete the permanent water treatment system and fund the rental 20 of a water clarifier until the permanent clarifier is operational. Based on BC Hydro's 21 revised offer, the District of Hudson Hope and BC Hydro signed a Memorandum of 22 Understanding in December 2024. 23

BC Hydro and the District of Hudson Hope continue to negotiate the terms of a final
 agreement.

BC Hydro

Power smart

1 13.1.2 Generate Opportunities Fund

- ² In 2016, BC Hydro launched the GO Fund to support Peace Region non-profit
- ³ organizations. The GO Fund is being distributed to organizations that provide
- 4 services to vulnerable populations including children, families and seniors.
- 5 The GO Fund, administered by Northern Development Initiative Trust on behalf of
- ⁶ BC Hydro, has now concluded. The GO Fund Committee met for the final time on
- 7 March 13, 2025. During this reporting period, BC Hydro distributed
- 8 approximately \$80,000 to nine non-profit organizations in the Peace Region. As of
- 9 March 31, 2025, a total of 118 projects had received over \$1,000,000 since the fund
- 10 was launched.
- ¹¹ More information about the GO Fund can be found at the following link: <u>Generate</u>
- 12 <u>Opportunities (GO) Fund | Site C (sitecproject.com)</u>.

13 13.1.3 Community Relations and Construction Communications

- BC Hydro continued to communicate about construction progress throughout the reporting period. These communications included updating and maintaining the Project website (<u>www.sitecproject.com</u>) with current information, photos and videos of construction activities, as well as providing information to local and regional
- 18 stakeholders as required.
- ¹⁹ On February 24, BC Hydro announced publicly the third generating unit had come
- ²⁰ into service. On March 26, a public advisory was issued about the construction
- resuming in the spring at the D.A. Thomas recreation site in Hudson's Hope.
- 22 Business Liaison and Outreach
- No procurement notifications were sent out during the reporting period.

- 1 Public Enquiries
- ² In total, BC Hydro received 28 public enquiries between January 1 and
- March 31, 2025. <u>Table 16</u> shows the breakdown of some of the most common
- 4 enquiry types.

⁵ In total, BC Hydro has received 14,837 enquiries since August 2015.

6

Table 16 Public Enquiries Breakdown by Topic

Enquiry Type ²³	January 1 to March 31, 2025
Employment Opportunities	8
Business Opportunities	2
General Information	10
Construction Impacts ²⁴	5
Other ²⁵	3

7 13.2 Human Health

8 13.2.1 Health Care Services Plan and Emergency Service Plan

9 The on-site health clinic provides workers with access to primary and preventative

- 10 health care and work-related injury evaluation and treatment services and is
- currently open seven days a week, from 6 a.m. to 8 p.m. Outside these hours,
- workers can access medical care from ATCO security, and for any emergency
- situations, the nurse practitioner is on call. Since opening the health clinic, there
- have been more than 53,513 patient interactions. During the reporting period, there
- were 348 patient interactions, of which 48 were occupational and 300
- non-occupational. Several preventive health themes were provided to workers

²³ 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.

²⁴ The nature of the construction impact enquiries are primarily related to air quality and dust, traffic and road conditions, and safety.

²⁵ "Other" accounts for enquiries related to a variety of other topics, such as wildlife and beavers, river closure, and tour requests.



- during the reporting period, including information on skin conditions, and awareness
- 2 around cancer and women's health.
- 3 Property Acquisitions
- ⁴ Property acquisitions required for the Project are now complete.
- 5 In cases where BC Hydro acquired or expropriated land or rights for the Project
- ⁶ under the *Expropriation Act*, notices of claim have been filed by owners to keep
- ⁷ open their rights to claim further compensation under the *Expropriation Act* as noted
- ⁸ in section <u>9</u> of this report.

9 14 Plans During Next Six Months

<u>Table 17</u> shows the key milestones for the Project over the next six months, from
 April 2025 to September 2025, including the work to complete the remaining two
 generating units on the Site C Project. The in-service dates for units 1 to 4 are also
 included.

Plan dates will be adjusted as contract changes are approved to amend milestone
 dates. BC Hydro remains on track to achieve the approved final unit in-service date
 of November 2025.



Table 17Key Milestones for Activities Plann During the Next Six Months (April 2 September 2025)		tivities Planned onths (April 2025 to	0	
Milestone	Performance	Plan Date	Forecast ²⁸	

Milestone	Performance Measurement Baseline (June 2021 ²⁶)	Plan Date (Control Date ²⁷)	Forecast ²⁸	Status (Measured by Month)
Turbines and Generator	S			
Unit 5 – Ready to Turn	February 2024	April 2025	April 2025	On Track
Unit 6 – Ready to Turn	April 2024	June 2025	June 2025	On Track
Unit 1 – In-Service Date	December 2024	December 2024	October 2024	Complete (October 27, 2024)
Unit 2 – In-Service Date	February 2025	February 2025	December 2024	Complete (December 14, 2024)
Unit 3 – In-Service Date	May 2025	May 2025	February 2025	Complete (February 22, 2025)
Unit 4 – In-Service Date	July 2025	July 2025	March 2025	Complete (March 31, 2025)
Unit 5 – In-Service Date	September 2025	September 2025	September 2025	On Track
Unit 6 – In-Service Date	November 2025	November 2025	November 2025	On Track
Transmission				
5L17 In-Service Date	July 2023	July 2023	May 2025	Late

4

1 2 3

²⁶ The Performance Measurement Baseline dates included in the table were established to support the possibility that reservoir filling could start in late fall 2023, one year earlier than the approved schedule.

²⁷ As of January 1, 2025, control dates reflect plan, adjusted for approved contract changes to milestone dates.

²⁸ Forecast dates reflect schedule progress up to January 1, 2025.

Site C Clean Energy Project

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Appendix A

Site Photographs



Figure A-1 The ice build up on the centre wall of the spillways. There is no structural concern with the spillway centre wall. (January 2025)



Figure A-2 Generating Station and Spillways. (January 2025)





Appendix A



Figure A-3 Site C reservoir and generating station (January 2025)

Figure A-4 Looking north along the crest of the earthfill dam, with the reservoir upstream of the dam (left)





Appendix A

Figure A-5 The three transmission towers on top of penstocks 1, 3, and 5, and the three transmission lines that connect the Site C substation to the generating station



Figure A-6 Looking down from the transmission towers into the six penstocks and three sets of three main generator step-up transformers




Figure A-7 The diversion tunnel outlet portals. The tunnels have been dewatered for the decommissioning of the tunnels (March 2025)



Figure A-8 The decommissioning of the temporary fishway (March 2025)





Figure A-9 Overview of the damsite from the right bank viewpoint (looking north)



Figure A-10 Spillway Operating Gate 1 (SPOG 1)





Figure A-11 Spillway Operating Gate 1 (SPOG 1) in the fully-open position as part of the gate commissioning process (March 2025)





Figure A-12 The powerhouse yard. The six penstocks are on the right of the picture, the generating station on the left (March 2025)



Figure A-13 Inside the powerhouse, looking along the main floor from unit 1 to unit 6







Figure A-14 Installing rotor links on unit 3 (January 2025)







Figure A-16 Adjusting the air admission valve on unit 3 (January 2025)





Figure A-17 Installation of the cooling water piping on unit 4 (February 2025)



Figure A-18 Unit 4 Penstock Drain Valve (February 2025)











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Appendix B

Work Completed Since Project Commencement in 2015



Appendix B

- 1 Construction began on July 27, 2015, and is ongoing. Since the commencement of
- 2 construction, the following work has been completed up to the end of the reporting
- з period:
- 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)
- ¹⁸ 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
- 21 dam buttresses and will 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 initial 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
- ¹⁵ completion of the Project's overall roller-compacted concrete placement
- ¹⁶ 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; 1 Completion of the concrete work for the intakes; 2 Completion of the 96 steel piles in the spillway and downstream of the 3 powerhouse, as part of the right bank foundation enhancements; 4 Completion of the concrete pile caps in the powerhouse tailrace excavation; 5 Completion of the Highway 29 realignment; 6 Decommissioning of the old sections of Highway 29 that were realigned; 7 Completion of the earthfill dam to the elevation required to enable reservoir 8 filling; 9 Completion of the tunnel conversion process, which involved installing four 10 large rings inside one of the two tunnels that are diverting the Peace River 11 around the dam site, to restrict the flow of water through the tunnel; 12 The removal of the right bank cofferdam and the placement of riprap in the 13 tailrace channel; 14 The completion of the approach channel, including the enhancements that were 15 part of the right bank foundation enhancements. These enhancements included 16 bedrock surface excavations and cleaning, the installation of waterproofing 17 lining materials, grouting, and reinforced concrete and granular fill placements; 18 The final placements of riprap in the approach channel; 19 Completion of all concrete placements in the powerhouse; 20 The installation of all six turbine runners; 21 Assembly and installation of the three transmission towers on top of the intake 22 structures for the transmission lines that connect the Site C substation to the 23 powerhouse; 24



- Completion of the coatings for the penstocks;
- Substantial completion of the construction of the earthfill dam including the final
- work on the toe of the dam, road construction, and the installation of the duct
 banks for lighting and instrumentation;
- Construction of the permanent fishway;
- Installation of all six upper flexible couplers on the penstocks;
- The first 500 kV transmission line between the Site C substation and the Site C
 powerhouse was successfully energized;
- The approval and commencement of reservoir filling. In advance of the start of
 reservoir filling, all required regulatory, construction and commissioning
 activities were completed;
- Closure of both diversion tunnels 1 and 2;
- Generating unit 1 brought into service;
- The safe completion of reservoir filling;
- Generating unit 2 brought into service;
- The second 500 kV transmission line between the Site C substation and the
 Site C powerhouse was successfully energized;
- Generating unit 3 brought into service; and
- Generating unit 4 brought into service.
- ²⁰ Figure B-1 shows the location of the key Site C components that are being
- constructed.



1

Appendix B

Figure B-1 Site C Project Components



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Appendix C

Safety

Appendix C

1 Safety Incidents

2 From January 1 to March 31, 2025, there were three all injury incidents reported and

3 no serious incidents.

4 All Injury Incidents (includes all work-related medical attention requiring treatment

- 5 *incidents, lost time injuries, and fatalities):*
- 6 1. A worker was beginning to descend a ladder when the ladder moved causing

the worker to slip. The worker attempted to break their fall by grabbing a nearby
 handrail, and their shoulder was dislocated.

- 9 2. While a worker was performing testing, they removed their gloves to use their
 phone and experienced a cold-related injury to their exposed hand. The worker
 later went to the hospital and received follow up treatment from a doctor.
- A worker's knee slipped off the pipe they were leaning on while installing a
 conduit. The worker experienced swelling in their right knee and was treated at
 the site clinic. The worker later went to the hospital and received treatment for
- 15 an infection.
- 16 Safety Performance Frequency Metrics
- 17 The following graphs provide information on employee and contractor serious
- incidents/near miss frequency, lost time injury frequency and all-injury frequency
- 19 from April 2024 to March 2025.



1

2 3 Appendix C

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

Employee & Contractor Serious Incident / Near Miss Frequency 0.0 0.0 0.12-Month Rolling Average 15 Serious Incident / Near Miss 🖈 10 0.78 0.77 0.72 0.72 0.59 0.50 5 0.43 0.41 0.38 0.36 0.34 0.35 0 Aug-24 Nov-24 Apr-24 May-24 Jul-24 Sep-24 Oct-24 Jan-25 Jun-24 Dec-24 Feb-25 Mar-25







Lost Time Injury Frequency Lost Time Injury Incidents



Appendix C



All-Injury Frequency

Regulatory Inspections and Orders 1

Table C-1 lists the safety regulatory inspections and orders received from WorkSafeBC and the Ministry of Energy and Climate Solutions from January 1 to March 31, 2025. 2

Table C-1 Safety Regulatory Inspections and Orders 3

#	Date of Inspections	Regulatory Agency	PPM Subproject	Inspection Report Number Title	Inspection Report Type	Inspection Report Status	Number of Orders Issued	Subject of Order	
1	February 11, 2025	WorkSafeBC	Main Civil Works	202517876007A	General Site Inspection	Closed	0		Referen
2	February 26, 2025	WorkSafeBC	GSS	202517876013A	General Site Inspection	Closed	0		Referen
3	February 26, 2025	WorkSafeBC	Main Civil Works	202517876010A	General Site Inspection	Closed	0		Referen OHS22.

0 Total

Appendix C

Regulation	Order /	Reference	
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nce(s): OHS3.25; OHS3.23(1); OHS22.16(1); WCA60(1)

nce(s): OHS3.7; OHS22.58; OHS22.60; OHS22.61

nce(s): OHS22.15; OHS22.17; OHS22.18(1)(a); OHS22.30; 2.48; OHS22.62

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Appendix D

Workforce Overview

1 2

Table D-1Current Site C Jobs Snapshot
(January 2025 to March 2025)29

	Number of B.C. Workers and Total Workers	Construction and Non-Construction Contractors ³⁰ (Including Some Subcontractors). Excludes Work Performed Outside of B.C. (e.g., Manufacturing)	Engineers and Project Team ³¹	Total
January 2025	B.C. Workers	856	538	1,394
	Total Workers	1,118	599	1,717
February 2025	B.C. Workers	773	511	1,284
	Total Workers	1,029	575	1,604
March 2025	B.C. Workers	823	488	1,311
	Total Workers	1030	548	1,578

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

4 Employment numbers are provided by Site C contractors and are subject to revision.

⁵ Data not received by the Project deadline may not be included.

⁶ BC Hydro has contracted companies for major contracts, such as the main civil

- 7 works, who have substantial global expertise. During the month of March 2025,
- 8 there were no workers in specialized positions working for a Site C construction or
- 9 non-construction contractor, who were subject to the Labour Market Impact
- 10 Assessment process under the Federal Temporary Foreign Worker Program.
- Additionally, there were nine management and professionals working for Site C

²⁹ Employment numbers are direct only and do not capture indirect or induced employment.

³⁰ 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.

³¹ 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.



- 1 construction and non-construction contractors through the Federal International
- 2 Mobility Program.

3 4

Table D-2Site C Apprentices Snapshot (January 2025 to
March 2025)

Month	Number of Apprentices		
January 2025	89		
February 2025	77		
March 2025	54		

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

6

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	Cement Masons	Social Science	Ironworkers
Office managers/ supervisors	Other construction trades					

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

8 9

Table D-4Indigenous Inclusion Snapshot
(January 2025 to March 2025)

Month	Number of Indigenous Workers
January 2025	57
February 2025	49
March 2025	61

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



- 1 The information shown has been provided by BC Hydro's construction and
- 2 non-construction contractors and their subcontractors that have a contractual
- ³ requirement to report on Indigenous inclusion in their workforce.
- 4 Employees voluntarily self-declare their Indigenous status to their employer and
- 5 there may be Indigenous employees that have chosen not to do so; therefore, the
- 6 number of Indigenous employees may be higher than shown in <u>Table D-4</u>.
- 7 As with any construction project, the number of workers, and the proportion from any
- 8 location will vary month-to-month and reflects the seasonal nature of construction
- ⁹ work. The number of workers will also vary as a contract's scope of work is
- 10 completed by the contractor.
- 11 *Women*
- ¹² In March 2025, there were 185 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
- ¹⁵ contractual requirement to report on the number of women in their workforce.

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Appendix E

Technical Advisory Board Report and Independent International Dam Experts Report



Appendix E

Site C Technical Review Panel John W. France, P.E., D.GE, D.WRE and Kaare Hoeg, ScD, NAE REPORT NO. 9 January 10, 2025

This report presents an update to the Technical Review Panel's (Panel's) findings subsequent to Panel Reports Nos. 1 through 8, issued on January 22, 2021, February 15, 2021, April 6, 2021, August 12, 2021, February 28, 2022, September 23, 2022, May 22, 2023, and February 13, 2024.

Since February 13, 2024, the Panel has participated in virtual briefings to the Technical Advisory Board (TAB) by the Engineering Design Team (EDT) on March 18, May 21, July 7, September 24, and December 9, 2024, during which the EDT updated the TAB on activities related to the right bank foundation enhancements, the approach channel, and the earthfill dam, which are the components of the project within the scope of the Panel's assignment. The briefings included information on the responses of the project features to original reservoir filling during the summer and fall 2024. The Panel participated live in most of these briefings, but in some cases of schedule conflicts Panel members reviewed recordings of the briefings. In addition, the Panel reviewed the October 15 **Readiness for Completing the Reservoir Filling Plan** memorandum prepared by the Engineering Design Team (EDT) and the Resident Engineering Team (RET) and the October 15 letter captioned **Technical Advisory Board View on the Monitoring Processes** in place for Reservoir Inundation prepared by the TAB.

This update is expected to be the final reporting requested by BC Hydro for this assignment.

FINDINGS

The Panel's opinions expressed in the previous reports remain unchanged. As outlined in previous reports, the work associated with the right bank foundation enhancements, the approach channel, and the earthfill dam has been completed with appropriate attention to constructing a quality project.

Visual monitoring and instrumented data collection during reservoir filling have been completed diligently and reported to the TAB and the Panel in the briefings noted above. Reservoir filling began in late August 2024 and was completed in early November 2024. The data reported to the Panel indicate that the performance of the right bank foundation enhancements, the approach channel, and the earthfill dam during reservoir filling has equaled or exceeded design expectations.

The December 9, 2024 TAB virtual briefing included updates on the plans for diversion tunnel backfilling and support enhancements for the right bank drainage tunnel (RBDT) and left bank drainage adit (LBDA), all yet to be completed. The Panel supports those plans as presented.

STATEMENT OF LIMITATIONS

The Panel functioned as advisors of the methodologies used by the EDT for analysis and design of the right bank foundation enhancements, the approach channel, and the earthfill dam, based on information provided by the EDT. Given the large amount of work being completed by the EDT

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Appendix E

Site C Technical Review Panel John W. France, P.E., D.GE, D.WRE and Kaare Hoeg, ScD, NAE REPORT NO. 9 January 10, 2025

and the associated voluminous documentation, it was not possible for the Panel to perform a detailed review of all of the material in the available time. In particular, the Panel has not performed detailed checks of calculations and designs completed by the EDT. Such detailed checks are provided by the quality control/quality assurance programs for the Project. The Panel provides its opinions concerning the methods and approaches being used based on information provided by the Project Team. However, the ultimate decisions and responsibilities for the designs remain with BC Hydro.

Our advisory services were performed within the limits prescribed by BC Hydro in a manner consistent with the level of care and skill normally exercised in the current standard of professional engineering practice. No other representation to BC Hydro, expressed or implied, and no warranty or guarantee is included or intended.

Respectfully submitted,



John W. France



Kaare Hoeg

Technical Review Panel Report No. 9 January 10, 2025 Page 2 of 2

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Appendix F

Summary of Individual Contracts Exceeding \$10 Million

PUBLIC



PUBLIC Appendix F

CONFIDENTIAL APPENDIX

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Appendix G

Project Progression

PUBLIC



CONFIDENTIAL APPENDIX



Quarterly Progress Report No. 37

Appendix H

Detailed Project Expenditure

PUBLIC



PUBLIC Appendix H

CONFIDENTIAL APPENDIX