Site C Clean Energy Project

Regional Community Liaison Committee Meeting

Meeting Summary November 25, 2020, 1:00 to 3:00 pm Conference Call

ATTENDEES	Mayor Dave Heiberg, District of Hudson's Hope
Regional	Mayor Lori Ackerman, City of Fort St. John
Community	Blair Lekstrom, CAO, City of Dawson Creek
Liaison Committee	Director Karen Goodings, Area B, Peace River Regional District
Members	Director Brad Sperling, Area C, Peace River Regional District
	Tyla Pennell, Acting CAO, District of Taylor
	Ranish Shakya, Blueberry River First Nations
	Milo McDonald, CAO, City of Fort St. John
	Jennifer Thomas, CAO, District of Tumbler Ridge
	Mokles Rahman, CAO, District of Hudson's Hope
	Dave Conway, BC Hydro
	Shanna Mason, BC Hydro
	Nancy Pepper, BC Hydro
	Chris Waite, BC Hydro
	Matt Drown, BC Hydro
	Kate O'Neil, BC Hydro
	Maria Eviston, BC Hydro
	Kelvin Ketchum, BC Hydro
	Greg Scarborough, BC Hydro
	Karen Von Muehldorfer, BC Hydro
ABSENT WITH	Mayor Rob Fraser, District of Taylor
REGRET	Stephanie Rocheleau, Land & Stewardship Director, McLeod Lake Indian Band
	Director Leonard Hiebert, Area D, Peace River Regional District
	Director Dan Rose, Area E, Peace River Regional District
	Victor Shopland, General Manager of Integrated Services, Fort St. John
	Mayor Allan Coutoreille, Chetwynd
	Tamara Wilkinson, MLA Assistant, for MLA Dan Davies
	Director Leonard Hiebert, Area D, Peace River Regional District
	MLA Dan Davies, Peace River North
	Mike Bernier, MLA, Peace River South
	Carol Newsom, CAO, Chetwynd
	Mayor Dale Bumstead, Dawson Creek
	Jennifer McCracken, Doig River First Nation

	Terri Paulovich, Constituency Assistant, Peace River South
	Mayor Lorraine Michetti, Pouce Coupe
	Christopher Leggett, CAO, Pouce Coupe
	Mayor Keith Bertrand, Tumbler Ridge
INVITED GUESTS	
ATTENDED	Troy Van Bostelen, AFDE
	Jim Morgan, ATCO
	Jamie Bodnarchuk, PRHP
	Brent Davies, MoTI
ABSENT WITH	Danny Fortin, Voith
REGRET	Cory Cooper, PRHP
	Brian Hassain, ATCO
	Erica Hitzroth, PRHP
	Craig Cornell, PRHP
	Stephane Giroux, Voith
	Sebastien Setticasi, Voith
	Adrianna DaCosta, MoTI

Documents Distributed (on November 25, 2020)

RCLC Meeting Agenda

RCLC Presentation Slides

RCLC Action item log

RCLC August & September Workforce Report

RCLC Q3 Business Report

RCLC Enquiries & FAQs Report August, September, October

RCLC September 9 Meeting Notes

1. Opening / Welcome / Agenda

- a) Dave welcomed all attendees.
- b) Acknowledgement of Indigenous Treaty 8 territories and additional traditional territories.

2. Review of Agenda & Action Items

- a) Dave reviewed agenda and action items.
 - a. Chair Sperling Can the two shoreline protection information sheets sent to Hudson's Hope be sent to the PRRD as it concerns the PRRD?
 - b. Mayor Heiberg the information sheets have been very helpful for our residents and are specific to work in the District. Mayor Heiberg is ok with them being shared with other local governments.

Action:

1. Send the RCLC the Hudson's Hope shoreline protection info sheets.

3. BC Hydro Project Update

Dam On-site Construction Update

Chris Waite introduced himself and provided updates on on-site construction update.

- a. Chris reviewed a photo of site and briefly reoriented everyone on what is going on at site.
- b. Provided an overview of the civil work activities.
- c. We opened the gates to the diversion tunnels in late September. We closed off the upstream rock berm on October 3. The upstream cofferdam will be built up to 433.8m elevation before freshet 2021. Downstream will be built up to 418 m elevation. The moving and placing of the materials is going very well. We will dewater the area between the cofferdams to allow for construction of the dam.
- d. PRHP has installed 322 steel piles of 380. This is expected to be finished in December. Downstream there have been 200 piles installed of 424, expected completion of this is in mid-late January.
- e. Upstream has progressively increased flows. We have tested out 1,700 cm/second. We are increasing by 100 cms increments, working up to full generation flows in next the 2 weeks.
- f. Bar Island, which is downstream from the construction bridge, is where PRHP are extracting aggregate material to construct the cofferdams.
- g. Left & right bank dam core trenches work is continuing, primarily drilling and grouting of the core trenches and some excavation on the right bank. This is all in preparation for dam construction.
- h. In the right bank core trench, the Roller Compacted Concrete (RCC) has been installed. The third buttress is covered in insulation panels to help it to cure over winter. 140,000cms of RCC have been placed. This is complete for season and is insulated. 340,000cms needs to be completed starting next spring in 2021.
- i. Approach channel ongoing work here over the winter, drainage, access and some preparation excavations work is going on here.
- j. 85th avenue lands; we expect full production will begin in spring 2021. There has been a reasonable amount of till moved via the conveyor to site. PRHP has been testing it out to be ready for next spring.
- k. Penstocks and Intakes unit one penstock is almost complete. Progress is going very well in this area of the project. Units 1, 2, 3, 5 & 6 are all making good progress. The reason unit 4 is not as developed is because it's an area that is used for access to the other units.
- I. There has been large concrete placement at the spillways. The headworks are starting to be worked on. The auxiliary overflow channel still has insulating panels on it to help with curing the concrete. The transition block from the powerhouse to the spillway is making good progress.
- m. Spillway stilling basin the weir, once complete, will create a zone of water that will flow down to the river.
- n. Powerhouse structural steel is making good progress.
- o. We are now starting to install penstocks in the powerhouse. The first elbow for unit 1 has been shipped to site. It's 10m in diameter, 5m tall. It comes in quarters from Quebec and is put together at the LAR fabrication facility and shipped to site. The cone for unit one is ready to be installed. Work will continue to pick up in this area.

Action: N/A

Dam Off-site Construction Update

Matt Drown introduced himself and provided updates on dam off-site construction.

- a. Substation we hit a milestone in October, the first transmission line was energized on October 9. The substation is 100% complete and energized.
- b. Highway 29 the Cache Creek East bridge will be 660m long.
- c. Cache Creek West at the Halfway River Work will continue until summer of 2022.
- d. Cache Creek East We are working on installing foundations and diverting the creek to allow construction of one of the piers. Diversion of the creek will happen in December. This work is being done by Kingston.
- e. Blair L Cache Creek East where are Kingston construction from?
- f. Matt D Delta, BC
- g. Farrell Creek East Procurement is in progress. We expect to do some clearing work in early 2021, likely February.
- h. Farrell Creek Flatiron is the contractor. This section includes a 400m bridge and 1km of highway. Work started here in October. All segments have work started aside from Farrell Creek East.
 - At Farrell Creek the contractor has cleared out the middle of the curve. They are extracting gravel to make concrete and asphalt. Here we are building 5 concrete bridge piers, similar to halfway river. They are building up the embankments to put the piers in. Piles will be into the ground in January.
- i. Dry Creek Formula is doing this work. This section is 1.5km road and a 190m bridge. We are putting in piles for piers and are working on the 2nd pier now.
- j. Lynx Creek (east & west) Will be done by one contractor. Work started in October. The boat launch will remain open throughout most of the construction. This area was cleared back in March.
- k. Hudson's Hope Shoreline Protection This work is being done by Cantex and started in October. Cantex has created a secondary access downstream and they are going to work their way from the upstream access towards that downstream secondary access, building the toe berm. Larger rip rap installation will start next year. Water quality monitoring is being done to monitor sediment levels in river. Area 4 on Canyon Drive is a stock pile of rip rap for the Hudson's Hope berm. The material is being hauled to the berm.
- I. Halfway River Bridge is 85% complete, it will be paved in Summer 2022. There are 12 piers in total here and the piers are 50m tall. 8 of 12 piers have been finished and we have started putting steel on top of them, which are called bridge girders. On top of the girders goes the pre-cast concrete deck panels. We are lifting the girder sections up on top of the piers and we will join them up. All bridge pier concrete work is expected to be finished by Christmas. By February/March, all bridge steel will be up and then they will start on concrete deck panels.
- m. Winter clearing Halfway River drainage and north bank work is well under way.
- n. Portage Mountain Quarry there is some leftover rock from last season that hasn't been hauled down yet. The quarry is closed and will open back up in May. Our blasting window is from May 15 September 15.
- o. Blair Who is doing the Portage quarry work?
- p. Matt Duz Cho

Action:

1. N/A

Reclamation Overview

Greg Scarborough introduced himself and provided an overview of the Site C Reclamation

- a) The Construction Environmental Management Plan (CEMP) defines reclamation and shows reclamation requirements of the project.
- b) Areas included in reclamation are the transmission lines, Highway 29, the 3 quarries, the dam site and the Hudson's Hope berm.
- c) Reclamation end-features depend on what work was done in that area.
- d) We have various steps to ensure contractors leave the sites clean. Contractors have a requirement to provide an environmental completion report. A BC Hydro staff member reviews the report and the site to confirm it was completed. Payment is withheld until the report is submitted, reviewed and accepted. These sites should be left free from debris and spills etc.
- e) Greg provided an overview of reclamation requirements in the specific areas.
- f) If an area, for example Portage Mountain Quarry, is handed over to MoTI, they will take over the reclamation commitments for that site.
- g) Most of the reclamation will be delivered by contractors and it will be done before handing over to BC Hydro. After it is handed over, we will review the completion report.
- h) Main CEMP reclaim requirements are different depending on the characteristics of the area, south facing slopes, north facing slopes, riparian area, wetlands all have different end features and end goals. South facing slopes will have native grassland with woody debris, north facing slopes will have white spruce forest with woody debris and alder, etc.
- i) Next steps we are currently engaging First Nations on traditional plant use. We have procured services from reclamation experts. We are developing a reclamation trial on the left bank dam site. A large area that has not been successfully seeded before will be used to test different applications. The large-scale reclamation won't happen until 2023 and 2024, this would include laydown areas and superficial areas that contractors use.
- j) We use coarse woody debris throughout most of the reclamation. Our forecast is that the debris booms will collect and produce all the woody debris for reclamation at the dam site.
- k) Sperling After sites are reclaimed, will we be notified?
- I) Dave We can provide updates to the RCLC and through the bi-weekly construction bulletins.
- m) Shanna I see reclamation to a site as another stage of construction and providing detailed overview on how it's working.

Action:

 Include standard reclamation section in bi-weekly construction update and in future RCLC presentations.

Summer Rain Events

Kelvin Ketchum

- a) We had record high inflows during summer 2020.
- b) We previously used 42 different weather model outcomes which produce a variety of variations of the forecast.
- c) The most-extreme summer rainfall events over Site C originate in the Gulf of Mexico and move north into Alberta before sometimes coming across to the Site C area. 7 days in advance, we can begin seeing if such a system will come across and the forecasting becomes more accurate as we get the closer to the date.
- d) We have expanded our forecasting to 115 weather model outcomes. By the time we get to next summer we will be using 160 weather model outcomes. We will look at both the most likely and most extreme inflow forecast for an event and consider these in our planning for Williston Reservoir discharges.
- e) Summer 2020 was very wet with 5 major rainfall events. We were operating Williston at a little lower storage level and we were watching the levels to maintain a 5 foot buffer. We had 67% above average inflows during 2020.
- f) In the weather events on the slide we compare day 7, day 4, day 1 average precipitation forecast versus what was observed. The overall basin average forecasts were pretty good.
- g) A new forecasting system is being implemented, this gives a better forecast of a potential extreme event. It's state of the art forecasting.
- h) We had severe rainfall events in early July and mid August. July was a higher inflow event than August. We were holding the Williston reservoir discharge low during June. We started to creep up the discharge in early July and then had to back off discharge during the rainfall event as we had debris issues near site. 5 days prior to the rainfall event, the Site C Local inflow forecast peak was 448 m3/s (2-day average). One day ahead, the forecast peak inflow had climbed to 974 m3/s, and the actual peak inflow was 1210 m3/s.
- i) Nancy We wanted to link the information Kelvin has outlined in the forecast to the events you observed yourselves. On day 1 (July 3), we issued an advisory to boaters (issued to the public and the RCLC). We had debris issues on our boom. On the next day, the RCLC received an update about debris accumulation and we provided an update to the PRRD. We addressed the debris issues by implementing our emergency operations centre and by mobilising equipment to remove it. It took a few weeks to remove all the debris.
- j) Shanna We spent the last year engaging with local governments and key agencies on emergency communications. It was a good low-risk real life exercise. We got to practise using weather forecasting and informing the local governments of what is going on at site and in the surrounding areas.
- k) Kelvin If the cofferdam were built, the forebay level would have peaked at 418.4 m during the early-July event, still well below the top of the cofferdam, and well within the expected forebay range for normal operations. This shows the kind of reaction that we had with the high flows.
- I) For the rain event in August, when it started to appear, we started to reduce discharge, forecast peak Site C Local inflows (2-day) went from 126 to 352 m3/s. The actual peak inflow was 204 m3/s. Once the event was over, we started to increase the discharge again. If the cofferdam had been in place, forebay levels during this event would have peaked at 419.8 m, well within the normal FB operating range.
- m) Kelvin suggested coming back to present again after cofferdam is in place to check in.
- n) Dave Heiberg this was good information. What are you predicting for snow pack?

- o) Kelvin The November 1 forecast showed a seasonal Williston Reservoir runoff volume 2.5% higher than average. We won't get really good snowpack measurements until January 1 and February 1.
- p) Dave Heiberg any additional water and rain events will have an impact on that flow.
- q) Kelvin We are committed to getting as much water out of Williston as safely as we can.

Action:

1. Kelvin to present on snow pack and forecast Williston Reservoir levels (schedule for June meeting)

EAC Amendments Update

Karen Von Muehldorfer introduced herself

- a. There are 7 amendments received, we just received the Halfway River East Borrow Source.
- b. The Halfway River East Borrow Source amendment provides gravel for reservoir access roads. May also be used for Halfway River drainage.
- c. There are two EAC amendments being worked on. One is a request to use haul trucks on an as/if need basis to haul material from 85th Avenue Industrial Lands to the dam site. Right now, the EAC only allows to use conveyor at the moment. If something happens to the conveyor or it has to be down for maintenance, we don't have an alternative way of getting till to site which is critical for the dam construction. The other amendment is clarification on what can be defined as the construction phase. We are requesting this as when the construction is finished, for example, the highway will be transferred to MoTI once the roads are complete.
- d. Blair Will we see what the Conveyor EAC amendment looks like before it's submitted?
- e. Karen We are happy to share the draft before it's sent
- f. Shanna we have been working with MoTI on traffic management and impacts. We appreciate that this will be of interest for folks living in that area.
- g. Blair it will disrupt a lot with the locals and it depends on the route you chose to take.
- h. Shanna we will share the route we intend to use.

Action: N/A

1. Karen to share draft of EAC amendment for the 85th Ave. lands/conveyor belt with the PRRD and City of Fort St. John.

Job and Business Update

Kate O'Neil presented the business update.

- a) The July workforce numbers reflect mid-May decision to gradually resume construction activities on the dam site.
- b) There was a total of 4,944 workers in September 2020, which is highest number to date; 3,547 from BC (72%) and a total of 1,006 workers from PRRD (24%), which is an increase of 72 workers from August.
- c) Q3 business participation has increased by 11 from Q2.

- d) Brad asked to go back to total number of workers on site if there are only 1,500 workers in camp where are the other workers?
- e) Dave there are just over 1,000 local workers during the month.
- f) Nancy the numbers are the total workers during the month at any time so if two workers both work two weeks opposite of each other doing the same job, they are counted as two.
- g) Shanna Can't compare the daily camp number to the total monthly workforce number. We are representing the total numbers and not the numbers at 1 point in time. They are 2 different things.

Action: N/A

4. Contractor Updates

Jamie Bodnarchuk PRHP

- a) Chris did a great job on construction activities, cofferdam, core trench all progressing
- b) Starting next week, we are kicking off annual holiday season giving. Announcements are coming next week.
- c) Our recycling program recycling bottles, cans and construction material. We use those funds for the holiday season giving.
- d) We are aiming to give to food banks and libraries across the region.

Troy - AFDE

- e) It's exciting to be part of process. Chris did a good job of displaying the work that is going on. The work is going well and is making a lot of progress.
- f) We have reached our peak/plateau with employment. We want to stay at 1,800 for the next year. We are focusing on local employment. We participated in a career fair.
- g) We have 200 indigenous workers.
- h) We are making a donation to the food banks in Fort St. John, Dawson Creek and Chetwynd. We have just got a grassroot initiative for the women's resource centre in the Salvation Army in Fort St. John. Last year we collected approximately \$10,000 and made a donation on behalf of our employees.
- i) Dave Heiberg would you consider Hudson's Hope food bank?
- j) Troy Yes we wouldk) Dave Heiberg we are trying to raise funds and collect food
- I) Dave Ann was the communications manager and Troy has taken over her roll and Ann has moved on.

Jim Morgan - ATCO

- m) We are focusing on feeding and housing employees working on site.
- n) As we head into holiday season, we continue relationship with the Salvation Army by giving away dinners, 50 full meals for the holidays. We are continuing the empty tree campaign, that is being put up and implemented in December. We supported 54 children in different households, where residents can purchase gifts for the kids or make cash donations.
- o) Camp occupancy numbers will decrease over Christmas break and New Years and will increase again in early January.
- p) Brad thanks to all contractors for giving back to the communities, especially this year.

- q) Jamie every year we do meals on wheels and we will continue to do that throughout the holiday season.
- r) Lori I want to echo what Brad is saying. With the outbreak of COVID-19 in some of the senior homes, they are overwhelmed so everything helps.

Action:

1. Dave Conway to pass on Troy's contact information to Mayor Heiberg.

5. Roundtable

A roundtable update occurred from the local community representatives:

- a) Mayor Heiberg Good information today, it will be good getting contact information on the food banks etc.
- b) Mayor Akerman We are looking at engaging an organisation to help with understanding provincial health orders. Community foundation is busy.
- c) Milo MacDonald Echoed Mayor Ackerman's comments.
- d) Chair Sperling good to hear information and continue these talks, nothing further.
- e) Ranish thanks for the information and no update.
- f) Blair Lekstrom great update, nothing to add.
- g) Tyla logged off before roundtable.
- h) Jennifer logged off before roundtable.

Action:

i. N/A

6. Next Steps

a) Proposing March 10th or March 17th for next RCLC meeting. Nobody opposed either of those dates.

Action:

1. Maria to send out a poll for next meeting dates.

Dave thanked everyone for their time and wished everyone well and hoped everyone stays safe and has a happy holiday.

RCLC meeting ended 3.07pm