East Kootenay Community Relations 2019 Annual Report

A transmission line in Cranbrook.

Upgrades to Fernie Substation ready to serve the community for decades

In November 2018, BC Hydro celebrated the completion of a $27.5 million upgrade of the Fernie Substation to meet the growing electricity needs of the area over the next 30 years.

The substation was originally built in the early 1970s and was reaching capacity, so the upgrades and expansion will allow BC Hydro to continue to provide clean, reliable power.

Construction on the Fernie Substation began in 2016. Project work included building a new control building, installing an additional transformer and distribution feeder, adding new and improved technology, and replacing the substation's wooden poles with new steel structures.

This project was completed in partnership with the Ktunaxa Nation Council. The Ktunaxa Nation–owned Nupqu Development Corporation provided project management, environmental monitoring, skilled labour, procurement, and occupational first aid and safety services.
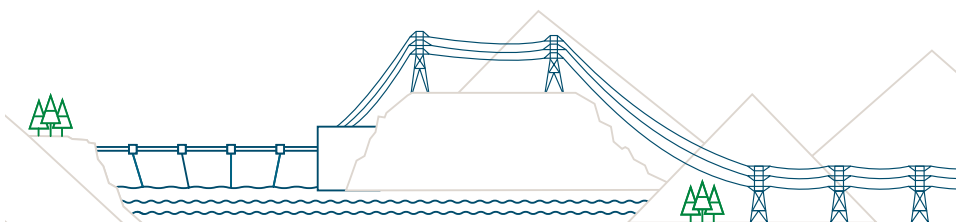
Following consultation with the City of Fernie, including review and approval of the proposed aesthetics by their Design Panel Review Committee, we enhanced the look of the substation with landscaping and design accents consistent with Fernie's downtown heritage theme.

The new Fernie Substation is expected to meet the electricity needs of Fernie for the next 30 years.

A ribbon cutting for Fernie Substation was held in November 2018 and we were joined by representatives from the Ktunaxa Nation, the City of Fernie, the Regional District of East Kootenay and the Kootenay East MLA's office.

BC Hydro
Power smart

Message from Chris O'Riley, President

BC Hydro is pleased to share our Community Relations annual report detailing some of our work in your region. We're proud to serve communities and their elected representatives in all parts of the province.

We know that affordable, reliable and clean electricity is vital to British Columbia's economic prosperity and our quality of life. BC Hydro continues to invest approximately $3 billion per year to upgrade aging assets and build new infrastructure to ensure our system is there to support British Columbia's growing population and economy.

At the same time, we have an important responsibility to keep electricity rates affordable for our customers. To support this goal, we worked with the Province to complete Phase 1 of the Comprehensive Review of BC Hydro and developed a new five-year rates forecast to keep electricity rates low and predictable over the long term. We've also continued to enhance the affordability programs we provide to our customers, and will continue to focus on making it easier for our customers to do business with us.

We're working with the Province on Phase 2 of the Comprehensive Review to ensure that BC Hydro is well-positioned to maximize opportunities flowing from shifts taking place in the global and regional energy sectors, technological change and climate action. Phase 2 will also focus on BC Hydro's role in implementing electrification initiatives critical to **CleanBC**, the Province's plan to reach its 2030 climate targets through reduction of greenhouse gas emissions in transportation, buildings and industry.

Inside this report, you'll find many examples of how we're working with your communities. As you know, we don't just sell electricity. We work closely with you on a daily basis to address a wide range of topics from infrastructure planning, reservoir water levels and planned outages, to new initiatives like LED streetlight conversions and readying your communities for electric vehicles by installing charging infrastructure. This report also includes some important indicators of how we're doing in providing you with reliable power.

In the East Kootenay region, we've been improving reliability in Moyie by upgrading equipment in the community, and interconnecting Moyie and Cranbrook. As well, we're undertaking a project in the Elk Valley to upgrade our telecommunications equipment at three stations, which will allow us to better control operations remotely.

With our operations extending to every corner of the province, we're proud to consider ourselves not just service providers, but also members of your communities. If you have any questions, please contact our Community Relations representatives in your region. We'd be pleased to help.

Sincerely,

Chris O'Riley
President & CEO
BC Hydro

Quick Facts

PROVINCE-WIDE:

4 million customers

Electricity is delivered through a network of:

- 79,000 kilometres of transmission and distribution lines
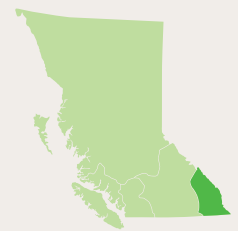- over 300 substations
- 1 million plus utility poles

Capital investments of approximately $3 billion a year

EAST KOOTENAY DAMS AND GENERATING STATIONS:

Aberfeldie
25 megawatts

Elko
not currently generating electricity

Spillimacheen
not currently generating electricity

Site C Update: Starting 5th Year of Construction

Site C will be a third dam and hydroelectric generating station on the Peace River in northeast B.C. Construction started over four years ago in July 2015 and the project is expected to be completed in 2024.

During the fourth year of construction, activities accelerated substantially, particularly the roller–compacted concrete placement work on the powerhouse buttress and the activities required in advance of river diversion in 2020. The project expanded into new work areas, including Highway 29 site preparation and construction, clearing the future reservoir area and transmission line construction.

The project reached several milestones in late 2018 and 2019, including:

○ the roller–compacted concrete buttress for the Site C powerhouse was completed in October 2018 and powerhouse construction is well underway

○ work began on the earthfill dam

○ the excavation of both river diversion tunnels is nearing completion, with concrete lining work in progress

○ more than 50 towers were raised along the 75–kilometre–long transmission line corridor between the Site C substation and Peace Canyon substation

○ reservoir clearing commenced, as did Highway 29 realignment construction

BC Hydro also delivered on several commitments in the region this year. We continued to provide grants to support non–profit organizations in the Peace region through the Generate Opportunities (GO) Fund, advanced our $20 million Peace Agricultural Compensation Fund and opened 50 affordable housing units in Fort St. John.

For more information on Site C, please select **sitecproject.com**.

The Site C spillways excavation (foreground), powerhouse and main service bay, looking upstream, in July 2019.

New BC Hydro installed fast–charging EV stations

By January 2020 there will be more than 80 BC Hydro–installed fast–charging EV stations that can charge most vehicles to 80% in 30 to 40 minutes. We began installing the stations in 2012 with support from the provincial and federal governments and in partnership with municipalities, regional districts and private businesses throughout the province.

The new network supports EV drivers travelling from the Lower Mainland to Prince George, Ucluelet to the Alberta border, and south to the U.S. border. Over 96% of BC Hydro's charging stations are located within 300 metres of a major road or highway corridor and around 80% are conveniently located within 50 metres of services, food or shopping. To learn more, please select **bchydro.com/ev**. Later this year, the website will have information about home and workplace charger incentives.

There are now over 26,000 electric vehicles on the road in B.C. and BC Hydro predicts by 2030, that the number will rise to over 350,000. About 98% of the electricity we generate comes from clean and renewable resources, which means making the switch to an electric vehicle will help reduce emissions.

In this region, the Accelerate Kootenays initiative has facilitated the installation of 14 fast–charging stations, creating a base network across our main highway corridors. This year, the final two fast–charging stations were launched in Field and Rogers Pass, joining stations in Cranbrook, Jaffray, Sparwood, Canal Flats, Radium Hot Springs, Golden, Creston, Salmo, Castlegar, Christina Lake, Greenwood and Revelstoke.

An electric vehicle uses the fast–charging station in Cranbrook, the first of 14 installed in the Kootenays through the Accelerate Kootenays initiative.

Columbia River Treaty negotiations

Negotiations between Canada and the U.S. on modernizing the Columbia River Treaty began in May 2018. There have been eight rounds of negotiations so far, with the latest round taking place September 10 and 11, 2019 in Cranbrook, B.C. Negotiators from both countries come together approximately every two months to discuss the future of the Treaty.

Global Affairs Canada is leading the negotiations for Canada. B.C. is part of the Canadian negotiating team. The Department of State is leading negotiations for the U.S.

The federal government announced on April 26, 2019 that Canadian Columbia Basin Indigenous Nations will be participating as observers at Canada–U.S. negotiations. Representatives of the Ktunaxa, Okanagan (Syilx), and Secwepemc Nations are now present in the negotiating room and observe negotiations between Canada and the U.S. They are also full participants in the break–out sessions with Canada and B.C. during the course of the negotiation meetings. The B.C. Government, Government of Canada and Indigenous Nations have been working closely since February 2018 to collaborate on developing negotiating positions and options.

The Government of B.C. continues to engage with Columbia Basin residents as negotiations progress. It is a priority for the Province to ensure Basin residents are heard and see their input reflected in a modernized Treaty. This process began with the 2012–2013 public consultation during the Treaty Review. Since then, the Government of B.C. and the federal government have been connecting regularly with the Columbia River Treaty Local Governments' Committee and the Columbia Basin Regional Advisory Committee to ensure Basin community interests continue to be part of Treaty discussions.

The B.C. Government held 10 community meetings in 2018 to provide an update on negotiations and seek input on key issues that residents feel should be considered during negotiations. A summary report on those meetings is available on B.C.'s Columbia River Treaty website. The Government of B.C. has since been seeking ways to potentially address some of the issues raised by residents. Another round of community meetings will be held throughout the Basin in the fall of 2019, dates to be confirmed.

Visit the B.C. Columbia River Treaty website **engage.gov.bc.ca/columbiarivertreaty** or follow the Columbia River Treaty on Facebook and Twitter to stay informed.

Canada's Minister of Foreign Affairs, Chrystia Freeland, with B.C. Minister Katrine Conroy, representatives of the Ktunaxa, Okanagan (Syilx) and Secwepemc Nations, and members of the Canadian Columbia River Treaty negotiating team in Castlegar, B.C., April 2019.

Regional information

Capital projects

MOYIE DISTRIBUTION IMPROVEMENTS

This summer, we carried out an improvement project for customers living in Moyie, south of Cranbrook. We've upgraded equipment in Moyie, and interconnected Moyie and Cranbrook.

Before the project began, a distribution line that ran south from Cranbrook along Highway 3 ended in Lumberton. This year, we extended the line by four kilometres to meet the Moyie distribution line near Swansea Bridge. Construction began in April, and the line extension was completed in July, ahead of schedule and under budget.

BC Hydro crews and a crane operator install a new pole beside Highway 3 south of Cranbrook, part of a line extension linking Cranbrook and Moyie.

The project improves reliability in Moyie by upgrading equipment in the community, and by interconnecting Moyie and Cranbrook. Completion of this new section of line provides switching capability between our Moyie and Steeples substations.

The new section of distribution line extending from Cranbrook meets the Moyie system, just beyond the crossing of Moyie River at Swansea Bridge.

ELK VALLEY TELECOM AND SWITCHYARD PROJECTS

We're making improvements to telecommunications equipment in the Elk Valley this year. A project at Natal Substation in Sparwood, Morrissey Ridge microwave station south of Fernie, and a remote mountaintop location northwest of Sparwood will improve communications between our facilities in the East Kootenay, and our central operations centre in the Lower Mainland.

The project includes installing a new microwave tower at Natal Substation, extending the height of the microwave tower at Morrissey Ridge, and upgrading a passive reflector we have purchased from Telus. We're also upgrading equipment in the control buildings at Natal and Morrissey Ridge.

It's a $6.5 million project that addresses telecom deficiencies and helps us meet Western Electricity Coordinating Council requirements.

A second project at Natal Substation is in the design stage. The Natal Switchyard Project will rebuild the switchyard at the substation to replace end–of–life equipment and improve voltage connections in the station. We're currently identifying design options and you can expect to hear more about this project as it advances.

Telecom upgrades at Natal Substation in Sparwood will add a 12-metre-high microwave tower, as well as upgrading equipment in the control building (pictured).

SPILLIMACHEEN VOLTAGE CONVERSION

Starting this fall, we're replacing equipment and poles on a distribution line between Radium and Parson. We're upgrading 50 transformers and replacing or reframing 140 poles. The project will swap all 12 kilovolt (kV) equipment for 25 kV equipment.

After the upgrades, the distribution line will be fed from Radium and Parson substations and we'll decommission Spillimacheen Substation, which is located at the Spillimacheen Dam.

Cranbrook power line technicians hosted a bucket truck ride during Sam Steele Days in Cranbrook.

High school students in the Elk Valley were given hands–on safety training in Sparwood in May. Project Heavy Duty shows students how to safely operate equipment by mentoring with equipment operators.

Supporting communities

Trees and vegetation management

Our electrical system is complex and highly efficient, with over 79,000 kilometres of overhead transmission and distribution power lines throughout the province. Managing trees and plants around these lines is important for safety and service reliability.

Our vegetation management team regularly inspects trees and other tall vegetation growing under or adjacent to our overhead system to identify potential problems. Tall, diseased or dead trees can fall or grow into power lines, causing electrical outages.

Vegetation management contractors — we employ professional arborists and foresters that follow strict environmental guidelines — prune or remove trees and vegetation in areas where the lines may be impacted. What's more, when an area experiences reliability issues, we assess the local distribution lines for potential tree–related causes. Even with a proactive management program, more than half of all outages in B.C. are caused by trees. For more information, please select **bchydro.com/trees**.

Community ReGreening Program

Our Community ReGreening Program helps fund urban tree planting that's related to visual aesthetics and environmental enhancements. We pay for seedlings, medium and large trees in cities and towns across B.C. Over the past 20 years, we've funded the planting of more than 300,000 trees.

We partner with local communities and Tree Canada to help make sure appropriate trees are planted around power lines, while enhancing open spaces. The program is intended for small-scale community projects and is open to local governments served by BC Hydro. All applications need to be received by January 31, to be eligible for funding within the same year. For more information, please select **bchydro.com/regreening**.

In 2018–2019, successful applications included:

The City of Cranbrook received a $3,500 Community ReGreening grant in 2018 to plant 38 trees at Idlewild Lake Park. Pictured, left to right: Mark Krahn, BC Hydro Vegetation Maintenance Coordinator; Dee Williamson, Heather Gemmell, Mathew Pocock, Haley Rutten, Kelly Quinn and Sarah Wimmer, City of Cranbrook.

Community	Project	Funding
Cranbrook	Idlewild Lake Park planting	$3,500
Fernie	Fernie rink construction park rehabilitation and beautification	$4,000
Invermere	Columbia Valley Centre beautification	$5,000
Kimberley	Spray park tree planting	$4,000
Radium Hot Springs	Stanley Street EV charging station beautification	$2,320
Regional District of East Kootenay	Columbia Valley landfill greening	$3,000

The District of Invermere planted 35 trees at the Columbia Valley Centre in 2018, with help from a $5,000 Community ReGreening grant from BC Hydro. Pictured, left to right: Dave Meadows, Peter Von Niessen, Rory Hromadnik and Stacey Harrison, District of Invermere, with Krista Ohman-Relph, BC Hydro.

Beautification fund — new information

BC Hydro's Beautification Fund provides financial assistance to municipal governments for conversion of overhead service to underground facilities to enhance and improve the use of public spaces.

Select **bchydro.com/beautification** for more information and to apply. Applications must be submitted by September 30 to be considered for the following year.

Decorative Wrap Grant Program — new information

Our Decorative Wrap Grant Program provides financial assistance to municipal governments looking to improve the visual aesthetics of a neighbourhood by installing decorative wraps on BC Hydro–owned pad–mounted equipment boxes. Eligible applicants can receive grant funding of $350 or $700 per unit, depending on the size of the equipment box to be wrapped.

The application closing date for each year is September 30. For more information, please select **bchydro.com/wrap**.

Example of a decorative wrap on our pad–mounted equipment.

Fish & Wildlife Compensation Program

The Fish & Wildlife Compensation Program (FWCP) is a partnership of BC Hydro, the B.C. Government, Fisheries and Oceans Canada, First Nations, and public stakeholders, to conserve and enhance fish and wildlife in watersheds impacted by BC Hydro dams.

In the East Kootenay, the Upper Kootenay Ecosystem Enhancement Plan (UKEEP) helped conserve and enhance fish, wildlife and ecosystems in the upper Kootenay River watershed, including Koocanusa Reservoir. The five–year plan was initiated in 2013 and funded by the Columbia Basin Trust. 2018–2019 marks year five of the FWCP's partnership agreement with the Trust to fund UKEEP projects.

Under UKEEP, 63 fish and wildlife projects have been funded with an investment of $2.9 million. Applicants have leveraged an additional $3.1 million for a total project investment of approximately $6 million.

Projects funded this year included developing a burbot conservation strategy, restoring habitats impacted by recreation use, restoring grasslands and open forests at Tobacco Plains, supporting endangered whitebark pine, and monitoring kokanee populations in Koocanusa Reservoir.

Since 1995, the FWCP's Columbia Region has invested more than $100 million in local fish and wildlife projects. To learn more and see a list of projects in the region, please select **fwcp.ca**.

Did you know?

The FWCP is funded annually by BC Hydro. The FWCP directs those funds towards priority actions across its three regions to fulfill its mission and work towards its vision of thriving fish and wildlife populations in watersheds that are functioning and sustainable.

FWCP helped fund a burbot conservation strategy in the East Kootenay in 2018–2019. Photo credit: iStock, Scubaluna.

Grants–in–lieu

We pay net property tax and grant payments to local governments. The grant program is a provincial government initiative and the amounts paid are determined under the current legislation. Listed below are the grants paid to each community in the East Kootenay region as of June 30, 2019.

Municipality/District	School Taxes*	Grants	Other Taxes	Total Payments
Village of Canal Flats	$15,874.32	$10,814.77	$1,028.00	$27,717.09
City of Cranbrook	$145,234.26	$320,486.08	0	$465,720.34
Regional District of East Kootenay	0	$82,213.00	0	$82,213.00
District of Elkford	$41,284.32	$190,117.64	0	$231,401.96
City of Fernie	$89,850.52	$144,439.27	$351.00	$234,640.79
Town of Golden	$73,951.66	$140,878.36	$1,328.60	$216,158.62
District of Invermere	$16,526.40	$60,696.33	0	$77,222.73
City of Kimberley	$50,664.76	$69,835.84	0	$120,500.60
Village of Radium Hot Springs	$27,779.40	$53,884.72	0	$81,664.12
District of Sparwood	$244,058.76	$269,385.80	0	$513,444.56

Local governments collect school taxes which are then forwarded to the provincial government to help fund school districts.

Community grants

By providing power to the people and businesses of this province, we provide an essential and important service. We also believe in doing more than that: we offer two types of grants to support non–profit organizations and registered charities that are making a difference in their communities. This year, we supported nearly 100 community–based projects across every region of the province.

Our grants are given out in three focus areas: building the workforce of tomorrow, safety education, and developing smart energy ideas. When planning for your project, please keep in mind that our grants have set criteria and application deadlines. To learn more, please select **bchydro.com/grants**.

Some of the organizations that we supported in the region this year include:

Organization	Project	Community	Grant
Columbia Basin Environmental Education Network	Wild Voices for Kids	East Kootenay	$10,000
Mainstreams Environmental Society	Climate and Water Primer	East Kootenay	$5,000
Columbia Outdoor School	Get STEMulated	East Kootenay	$5,000
Cranbrook Community Theatre Society	Studio/Stage Door lighting upgrades	Cranbrook	$2,000
Cranbrook Public Library	Thermal imaging kits	Cranbrook	$2,000
East Kootenay Regional Science Fair	Science fair	East Kootenay	$1,000
Columbia Lake Stewardship Society	Ecosystem monitoring, education and outreach	Columbia Valley	$1,000
Wildsight Invermere	Columbia Valley Electric Vehicle Share	Columbia Valley	$1,000
Fisher Peak Performing Artists Society	Tech mentorship	Cranbrook	$1,000
Wildsight Elk Valley	Fernie Food Yard	Fernie	$1,000
Freshwater Fisheries Society	Kootenay Trout Hatchery outreach programs	Wardner	$1,000
Triangle Women's Institute	Pioneer Hall upgrades	Grasmere	$1,000

Community grants continued

Organization	Project	Community	Grant
Meadowbrook Community Association	McGinty Lake environmental education program	Meadowbrook	$1,000
Wasa & District Lions Club	Outdoor rink lighting improvement project	Wasa	$1,000
Steamboat Mountain Music Society	Steamboat Mountain Music Festival	Columbia Valley	$500
Sam Steele Society	Sam Steele Days 2019	Cranbrook	$500
Creston Valley Blossom Festival Association	Creston Valley Blossom Festival	Creston	$500
Cranbrook & District 4H Council	Safe with 4H	Cranbrook	$500
Spark Society for Youth	Youth Saving Energy	Kimberley	$500
Wasa Volunteer Fire Prevention & Suppression Group	Shelter, equipment and outreach	Wasa	$500

In 2018, Invermere Public Library received a $1,500 grant for STEM (science, technology, engineering and math) programming. Cassius Cowles (right) drives Dash the robot beneath Isaac McLeod.

The South Country fire departments received a $4,000 grant in 2018 to support new fire–fighting equipment: a portable pump and tank skid that allow the fire departments to quickly respond to fire starts in remote locations. Pictured: Sally MacDonald, BC Hydro Public Affairs Officer, and Mike Hockley, deputy fire chief for the South Country Rural Fire & Rescue Service.

BC Hydro has been a long–time supporter of Columbia Basin Environmental Education Network's Wild Voices for Kids program, which takes students out of the classroom and into nature to increase their science, wilderness and environmental knowledge.

Reliability performance

We recognize how important the reliable supply of electricity is to our customers. We'll continue to improve, reinforce and maintain the electrical system.

The information below provides a comparison between Fiscal 2018 and Fiscal 2019 for communities in the East Kootenay region. These statistics include interruptions due to planned outages.

Community	Fiscal 2018 Average customer interruption duration (hours)	Fiscal 2019 Average customer interruption duration (hours)	Fiscal 2018 Average number of interruptions per customer	Fiscal 2019 Average number of interruptions per customer
Canal Flats	2.26	0.89	4.42	3.00
Cranbrook	3.31	2.13	1.75	1.46
Elkford	2.83	1.45	4.57	2.04
Fernie	1.68	1.29	10.32	4.84
Golden	3.29	2.80	8.38	1.76
Invermere	1.35	0.84	3.41	2.82
Kimberley	3.15	1.83	5.86	3.77
Radium Hot Springs	1.70	0.87	2.90	2.80
Sparwood	3.09	1.58	2.76	2.60

Powerline technicians make regular improvements to BC Hydro's infrastructure to improve reliability, such as this pole replacement undertaken in Cranbrook in July 2019.

BC Hydro Community Relations

At BC Hydro we build strong relationships to support the unique needs and strengths of the communities we serve. Our Community Relations team does this by listening, providing information and working together with communities. We're the point of contact for local government, media, local business and community groups. Whether it's for capital projects, corporate initiatives and programs, local BC Hydro activities, significant planned outages, emergency response or unplanned power outages, we work hard to meet the needs of our stakeholders and ensure communities are kept informed.

East Kootenay

If you have questions or comments for us, please contact:

Diane Tammen Manager, East Kootenay Community Relations **250 489 6862** diane.tammen@bchydro.com	**Sally MacDonald** Public Affairs Officer **250 489 6841** sally.macdonald@bchydro.com	To report a power outage call: **1 800 BCHYDRO (1 800 224 9376)** or ***HYDRO (*49376)** from your mobile phone.

BC Hydro guide for local government

Quick access to key information on **bchydro.com**

My Hydro and Energy Savings initiatives	
My Hydro bchydro.com/myhydro/	Log in to manage your account.
Energy Savings Programs bchydro.com/energysavings	Learn how you can be smart with your power. Take advantage of rebates and programs.
Projects	
Capital Projects bchydro.com/projects	Learn more about major projects taking place in your region.
Programs	
Beautification fund bchydro.com/beautification	Find out more about our beautification program that provides financial assistance to municipal governments for conversion of overhead to underground facilities.
Decorative Wrap Grant Program bchydro.com/wraps	Learn about our program that provides financial assistance to municipal governments looking to install decorative wraps on BC Hydro pad–mounted equipment boxes.
Community ReGreening Program bchydro.com/regreening	The regreening program assists municipalities with urban tree planting while helping to make sure appropriate trees are planted around power lines.
Community Giving	
Grants for community groups bchydro.com/grants	Learn about our grants for community groups and how to apply for them.
Scholarships & Endowments bchydro.com/scholarships	We look to build the next generation of engineers, electricians, and many other key roles who will help us deliver clean energy to our customers. Learn about our scholarships and endowments.
Electric vehicles	
Fast charging stations bchydro.com/ev	Learn more about how clean and affordable power makes B.C. a great fit for electric vehicles.
Report an outage	
How to report a power outage bchydro.com/outages	Check the outage map or list to see if we know your power is out. If not, call us at **1 800 BCHYDRO (1 800 224 9376)** or ***HYDRO (*49376)** on your mobile phone to report it.
Report graffiti	
How to report graffiti on our equipment bchydro.com/graffiti	We rely on the public to report graffiti on everything from our pad–mounted transformer boxes to our offices.

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BC Hydro
Power smart