

PEACE RIVER SITE C HYDRO PROJECT

AN OPTION TO HELP CLOSE B.C.'S GROWING ELECTRICITY GAP

PRE-CONSULTATION DISCUSSION GUIDE AND FEEDBACK FORM

DECEMBER 2007

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Site C: Where Are We Today?

The provincial government's *BC Energy Plan*, released in February 2007, says that BC Hydro will begin consulting about the Site C hydroelectric project as a potential option to help close the gap between electricity supply and demand in British Columbia. As we investigate energy alternatives, BC Hydro is taking a stage-by-stage approach to the evaluation of Site C. At the end of each stage of the process, the provincial government will make a decision about whether to proceed to the next stage of project planning and development.

A decision on whether the project will move forward to construction is still years away, and much more work and analysis needs to take place before the province can make that decision. To preserve Site C as a future option, BC Hydro is undertaking extensive consultation, research, environmental studies and other technical work to identify project options, and will explore new ideas from communities, First Nations and stakeholders about how the project may be refined to avoid, mitigate or compensate for potential impacts, and also provide lasting benefits to those most directly affected.

BC Hydro is committed to consultation and effective communications with communities, First Nations, stakeholders and the public as we embark on the next stage of review for the Site C project, with the goal of building positive long-term relationships that will be instrumental to the consideration, planning, and design of Site C as a sustainable project, should it proceed.

Overview Map



Pre-Consultation. The *BC Energy Plan* called for BC Hydro to "enter into initial discussions with First Nations, the Province of Alberta and communities to discuss Site C to ensure that communications regarding the potential project and the processes being followed are well known." In this process of Pre-Consultation, BC Hydro will ask British Columbians how they want to be consulted and about the topics they wish to discuss in the *Project Definition* consultation for Site C.

Project Definition Consultation will be conducted in 2008, and will include consultation with communities, First Nations, stakeholders, the public and others about key issues and features as the Site C project undergoes a thorough review. BC Hydro will seek feedback into project design and plans, benefits arising out of the project and how project impacts may be avoided, mitigated or compensated. *Project Definition* consultation begins before regulatory applications are filed.

First Nations Consultation. BC Hydro is committed to effective communications and consultation with First Nations. A parallel pre-consultation process will seek advice from First Nations on how they wish to be consulted. In addition, First Nations will be asked to identify issues and concerns that may need to be addressed through the evaluation of Site C.

B.C.'s Growing Electricity Gap

Clean, abundant electricity has been the key to our province's economic prosperity and our quality of life. As our province's population and economy continue to grow, so does our demand for electricity. We now depend on other jurisdictions to supply between 10 and 15 per cent of our electricity needs. In fact, over the past six years, BC Hydro has been a net importer of electricity. This gap between electricity demand and supply is expected to widen as demand increases up to 45 per cent over the next two decades.

BC Hydro is taking a number of steps to close the growing energy gap so that British Columbians will continue to have a secure, reliable and affordable energy supply.

Conserving More:

The first and best way to help close B.C.'s electricity gap is conservation and energy efficiency. BC Hydro is a global leader in conservation, providing Power Smart programs and incentives to help customers use less power. BC Hydro is introducing further conservation programs to meet the provincially established target to realize 50 per cent of our new energy needs through conservation by 2020. These programs include: new energy efficient products and buildings, smart metering infrastructure, and programs for schools and local governments.

Buying More:

BC Hydro is looking to innovative power projects, such as small hydro, wind power and biomass projects developed by independent power producers, to help meet future demand. BC Hydro has contracted for the purchase of approximately 15,000 GWh/year of electricity from independent power producers to date, of which 8,000 GWh/year is now online – enough energy to power approximately 800,000 homes. The majority of power acquired from independent power producers since 2002 has been clean, renewable energy. In addition, three new procurement processes for acquiring power are planned or underway: a standing offer for clean electricity projects of less than 10 megawatts; a Clean Power Call for 5,000 GWh/year; and a call for bioenergy projects that generate electricity from under-utilized wood residues, including mountain pine beetle-affected timber.

Building More:

BC Hydro continues to make important investments to modernize, expand the capacity and extend the life of its hydro assets. These investments improve reliability and increase efficiency and electricity production with little or no environmental impact.

However, even with conservation, purchases from independent power producers, and reinvestment in existing assets, we will still need to pursue additional sources of electricity in British Columbia if demand continues to grow as projected. A mix of energy resources will be needed to meet this growing demand. Intermittent, clean sources of energy such as wind and small hydro will need to be employed. In addition, options for large power projects that can provide a large, dependable supply of electricity 365 days a year will also be required.





FOR GENERATIONS

Site C: An option to help close B.C.'s growing electricity gap

Site C is one option being considered to help meet our long-term electricity needs. Site C is a potential third dam and hydroelectric generating station on the Peace River in British Columbia's northeast region.

If built, Site C would be a publicly owned asset. The project would provide a reliable, clean and renewable source of electricity for more than 100 years. It would provide in the range of 900 MW of reliable, dependable electricity, or about eight per cent of B.C.'s existing electricity demands. The project would produce approximately 4,600 GWh a year, enough to power about 460,000 homes. As the third dam on the Peace River, Site C would gain significant efficiencies by taking advantage of water already stored in the Williston Reservoir and used to generate electricity upstream at the W.A.C. Bennett and Peace Canyon dams. Site C is similar to a run-of-river project in that its daily water inflows would be approximately equal to its daily water outflows. Plans assume a stable reservoir with a fluctuation of approximately three feet in normal operating conditions.

Large hydro projects require a long lead time. No decision has been made to build Site C at this time. A decision to proceed would only be made by the provincial government following extensive consultation and project evaluation.

First Nations Consultation

BC Hydro is committed to effective communications and consultation with First Nations, with the goal of building positive long-term relationships that will be instrumental to the consideration, planning and design of Site C as a sustainable project. As such, a parallel pre-consultation process for the First Nations communities potentially affected by the project will seek advice on how First Nations wish to be consulted, and help identify issues and concerns that may need to be addressed through the evaluation of Site C.

Site C Today: A New Approach

When Site C was examined as a resource option more than 25 years ago and again from 1989 to 1991, significant engineering work was done. However, much of this information is now more than two decades old. Therefore, the project as originally conceived must be updated to reflect current information as well as to incorporate new ideas brought forward by communities, First Nations, regulatory agencies and stakeholders.

Today's approach to Site C will consider environmental concerns, impacts to land, and opportunities for community benefits, and will update design, financial and technical work.

Updates to the project may include operating changes, design changes or compensation projects to minimize potential impacts to fish and wildlife. In addition, they could include opportunities to provide social benefits such as enhancing recreational uses of the proposed reservoir.

For example, BC Hydro will:

- Determine options to create recreational opportunities for local communities, including shoreline access, boat launches, and clearing the reservoir in advance of flooding to allow for safe recreation;
- Review reservoir operations (fluctuations in reservoir levels) to allow for recreational use of the reservoir and minimize environmental impacts (plans assume a stable reservoir with a fluctuation of approximately three feet in normal operating conditions);
- Conduct studies to understand impacts and identify opportunities to avoid or mitigate impacts on agricultural and forested lands within the reservoir area and land required for relocation of Highway 29;
- Conduct studies to understand potential impacts on fish and their habitats, and opportunities to avoid or mitigate those impacts;
- Conduct studies on wildlife and potential impacts of change in habitat to wildlife populations, and opportunities to mitigate or avoid these impacts, including feasibility of preserving or replacing island habitat; and
- Review options and locations for construction facilities to minimize effects on local and First Nations communities.



Potential Site C Benefits:

- Local benefits /opportunities. BC Hydro is seeking input to identify opportunities to benefit residents, communities and First Nations directly affected by the project.
- **Dependable energy and capacity.** Site C would be able to provide electricity 24 hours a day, 365 days a year. This would complement the development of intermittent energy sources such as wind and small hydro.
- Clean and renewable energy. Site C would have minimal greenhouse gas emissions once operational. There would be an initial impact from the construction of the dam and filling of the reservoir.
- Long operating life. Site C would have a significant upfront capital cost, a long operating life of more than 100 years and low operating costs if built. In addition, the cost of power generated would not be impacted by price and availability of natural gas.
- **Optimizing existing power generation.** As the third dam on one river system, Site C would take advantage of water stored upstream in the Williston Reservoir and used to generate electricity at the W.A.C. Bennett and Peace Canyon dams. It would offer a large amount of dependable power relative to its size when compared to new hydro development on a river without pre-existing dams and reservoirs.

Opportunities for Community Benefits

As part of BC Hydro's consultation with communities, First Nations and stakeholders in the region, discussion will also focus on creating long-term benefits for the region. Proposed projects such as Site C are much more than an addition to B.C.'s stock of heritage assets that deliver reliable power to British Columbians. They are also an opportunity to provide a legacy of benefits for the communities that are directly affected by such large projects. BC Hydro will be seeking feedback to identify opportunities to benefit First Nations, residents and communities directly affected by the Site C project.

Potential Site C Impacts:

Should the provincial government decide to continue pursuing Site C, the project would be subject to provincial and federal regulatory review, including comprehensive environmental assessment and permitting processes.

During *Project Definition* consultation, BC Hydro will look at ways to avoid, minimize or mitigate against these and other project impacts:

- **Environment.** Effects on the environment include flooding and water flow impacts on fish, wildlife and agricultural land, local air quality impacts and construction impacts.
- First Nations. Site C would impact traditional lands of First Nations, including cultural, heritage and land use.
- **Social.** Site C would require the relocation of some families, and some buildings would need to move above the reservoir safeline. It would also require the relocation of some sections of Highway 29.
- **Construction.** Construction of Site C would require a large number of workers for the construction phase, resulting in demand for housing and services. It would also result in noise, traffic, temporary construction facilities and access roads.
- Land. Development of Site C would create a reservoir, flooding portions of the Peace River valley between the Peace Canyon Dam and the confluence of the Peace and Moberly rivers, as well as in the lower reaches of the Moberly and Halfway rivers.

How Do You Want To Be Consulted?

BC Hydro has adopted a staged decision-making process for evaluating Site C, providing opportunities to re-evaluate and decide at key points in the project whether or not to proceed.

Since June 2004, BC Hydro has conducted a high-level review of existing Site C materials and information. Called the Stage 1 review, BC Hydro looked at existing studies, historical reports and previous stakeholder and First Nations input. *Stage 1 Review of Project Feasibility* is available at **www.bchydro.com/sitec**.

BC Hydro is now in Stage 2, which is expected to take about two years. This stage involves comprehensive consultation with communities, First Nations and stakeholders, as well as further updating and analysis of design, economic, social and environmental elements of the project. At the end of Stage 2, the provincial government will decide whether to proceed to a regulatory stage for Site C, including environmental reviews.

Consultation will continue through all stages of project development, including: pre-consultation; *Project Definition* consultation; a regulatory process and related consultation; preliminary design consultation; and detailed design consultation.

Pre-Consultation is underway, and will:

- 1. Consult local, regional and provincial stakeholders about **how they want to be consulted** about Site C.
- 2. Consult local, regional and provincial stakeholders about **consultation topics** for the *Project Definition* consultation. This includes design, economic, social and environmental elements of the project.
- 3. Refine the *Project Definition* consultation plan, incorporating public and stakeholder input.

Pre-Consultation input will be gathered in the following ways:

- Pre-Consultation Discussion Guide and Feedback Form
- Stakeholder meetings with local, regional and provincial stakeholders
- Online Feedback Form
- Written submissions, email and faxed correspondence
- Toll-free Site C information line: 1-877-217-0777
- Community Consultation Office, Fort St. John (opening early 2008)
- Parallel process for discussions with First Nations

Site C - A stage-by-stage approach

Consultation will occur in each stage of the project

1 Timelines are preliminary and may vary.

On What Topics Do You Want To Be Consulted?

Over the years, local residents, First Nations and stakeholders have identified many important topics that could be further explored through the Site C *Project Definition* consultation. Many of the topics are listed below and in the attached feedback form. BC Hydro would like your input regarding whether these topics are appropriate, and whether there are other topics about which you would like to be consulted.

During the *Project Definition* consultation, topics could include these and other topics (please note that the topic order does not reflect topic priority):

Local Benefits and Opportunities include options to create recreational opportunities for local communities, including shoreline access, boat launches, and clearing the reservoir in advance of flooding to allow for safe recreation. Other opportunities could include community amenities such as parks, community centres, health care or other facilities.

Project Design includes topics such as logging of the flooded area, removal of organic material, fish passage, spillway design, roads, turbine type or design and other related topics.

Socio-economic covers topics such as construction activities, worker housing, health care facilities, schools, recreation, traffic, temporary jobs, permanent employment, tourism and trapping.

Recreation takes into account fishing, trapping, hunting, tourism, reservoir access, boating, shoreline access and aesthetics.

Land Use encompasses topics such as agriculture, forests, heritage sites, archaeological sites, erosion, transmission lines, source material for the dam, and regional planning impacts.

Fish/Wildlife explores water quality, endangered species, hunting/ trapping and viewing/aesthetics, as well as species population numbers.

Infrastructure examines roads and bridges, industry, municipal services and the relocation of Highway 29.

Water Management looks at establishing a relatively stable reservoir (with plans assuming a fluctuation of approximately three feet in normal operating conditions) to allow for recreational opportunities and minimize environmental impacts, reservoir filling, temperature, sediment, downstream flows and ice management.

Local and Provincial Climate considers topics such as dust, fog, construction noise, greenhouse gases and air temperature.

Additional Consultation Topics

Please consider additional topics you may want explored through consultation and environmental assessment. In addition, preliminary information about properties will be available to those who may be directly impacted. Further studies and consultation are required in the upcoming year to update the information regarding property impacts. BC Hydro remains committed to an equitable and consistent property acquisition process.

How Will Your Input Be Used?

Public input gathered through this Pre-Consultation will help BC Hydro to:

- design the *Project Definition* consultation program for the Site C project;
- generate options for providing long-term benefits to local communities and First Nations;
- identify issues and impacts for comprehensive environmental assessment;
- identify how to avoid and minimize impacts; and
- assist BC Hydro in refining the scope and key features of Site C during the *Project Definition* consultation.

A Pre-Consultation Summary Report will summarize input gathered during this pre-consultation process and a Pre-Consultation Consideration Memo will be issued to show how input is used to refine the design of the *Project Definition* consultation. Both reports will be posted on **www.bchydro.com/sitec**.

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FEEDBACK FORM We'd like to hear from you.

As the Site C project undergoes a comprehensive review, the next step, *Project Definition* consultation, involves consulting with communities, First Nations, stakeholders, the public and others about key issues and features of the project. Consultation discussions involve feedback into project design and plans, benefits arising out of the project and how project impacts may be avoided, mitigated or compensated. *Project Definition* consultation will be conducted in 2008.

Please provide your feedback below or online at www.bchydro.com/sitec.

1. Please indicate how important the following topics are for inclusion in *Project Definition* consultation in 2008.

PLEASE CIRCLE ONE NUMBER BESIDE EACH TOPIC AREA: (Please note that the topic order does not reflect topic priority.)	Very unimportant	Somewhat unimportant	Neither important nor unimportant	Somewhat important	Very important
Local Benefits and Opportunities include options to create recreational opportunities for local communities, including shoreline access, boat launches, and clearing the reservoir in advance of flooding to allow for safe recreation. Other opportunities could include community amenities such as parks, community centres, health care or other facilities.	1	2	3	4	5
Project Design includes topics such as logging of the flooded area, removal of organic material, fish passage, spillway design, roads, turbine type or design and other related topics.	1	2	3	4	5
Socio-economic covers topics such as construction activities, worker housing, health care facilities schools, recreation, traffic, temporary jobs, permanent employment, tourism and trapping.	^{es,} 1	2	3	4	5
Recreation takes into account fishing, trapping, hunting, tourism, reservoir access, boating, shoreline access and aesthetics.	1	2	3	4	5
Land Use encompasses topics such as agriculture, forests, heritage sites, archaeological sites, erosion, transmission lines, source material for the dam, and regional planning impacts.	1	2	3	4	5
Fish/Wildlife explores water quality, endangered species, hunting/trapping and viewing/ aesthetics, as well as species population numbers.	1	2	3	4	5
Infrastructure examines roads and bridges, industry, municipal services, and the relocation of Highway 29.	1	2	3	4	5
Water Management looks at establishing a relatively stable reservoir (with plans assuming a fluctuation of approximately three feet in normal operating conditions) to allow for recreational opportunities and minimize environmental impacts, reservoir filling, temperature, sediment, downstream flows and ice management.	1	2	3	4	5
Local and Provincial Climate considers topics such as dust, fog, construction noise, greenhouse gases and air temperature.	1	2	3	4	5

2. Are there any additional topics that you would like to be consulted about during the Site C Project Definition consultation? Please specify.

3. How important are each of the following factors to you when evaluating Site C as a potential option to help close B.C.'s growing electricity gap?

PLEASE CIRCLE ONE NUMBER BESIDE EACH FACTOR:	Very unimportant	Somewhat unimportant	Neither important nor unimportant	Somewhat important	Very important
Providing dependable energy throughout the year	1	2	3	4	5
Becoming energy self-sufficient in B.C.	1	2	3	4	5
Providing clean electricity	1	2	3	4	5
Providing renewable power for more than 100 years	1	2	3	4	5
Providing affordable power	1	2	3	4	5
Managing local environmental impacts	1	2	3	4	5
Managing local social and infrastructure impacts	1	2	3	4	5
Understanding transmission requirements	1	2	3	4	5

4. What community benefits would you like to see if the project proceeds? Please specify.

PRE-CONSULTATION

Discussion Guide and Feedback Form

5. How likely are you to participate in the following methods of Site C Project Definition consultation?

PLEASE CIRCLE ONE NUMBER BESIDE EACH METHOD:	Not at all likely	Not very likely	Neither likely nor unlikely	Somewhat likely	Very likely
Newspaper insert with feedback form	1	2	3	4	5
Stakeholder meetings	1	2	3	4	5
Public open houses	1	2	3	4	5
Fort St. John Community Consultation Office	1	2	3	4	5
Online feedback form	1	2	3	4	5
Online stakeholder meetings	1	2	3	4	5
Online bulletin boards	1	2	3	4	5
What other methods are you likely to participate in?					

6. How likely are you to read further information about the Site C Project Definition consultation program if you receive it in the following way:

PLEASE CIRCLE ONE NUMBER BESIDE EACH METHOD:	Not at all likely	Somewhat likely	Very likely
Mail	1	2	3
Email	1	2	3
Newspaper ad	1	2	3
Website	1	2	3
Community Consultation Office, Fort St. John	1	2	3
Other?			

7. Additional comments

How Feedback Will Be Used:

Feedback gathered through this pre-consultation will be used along with technical and financial input to refine the Site C *Project Definition* consultation process. Feedback collected via meetings, web, fax, and mail will be recorded and summarized in a Pre-Consultation **Summary Report**. A Pre-Consultation **Consideration Memo** will also be issued to outline ways in which input is used to refine the design of the *Project Definition* consultation. Any quoted comments will be anonymous. Both reports will be posted on the web at **www.bchydro.com/sitec**.

Would you like to receive updates on the project, including the Pre-Consultation Summary Report?	🖵 Yes	🖵 No
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Please provide	your contact	information	(optional)
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Name:		
Address:	Postal Code:	
Phone:	Email:	

CONSENT TO USE PERSONAL INFORMATION

I consent to the use of my personal information by BC Hydro for the purpose of contacting me and keeping me updated about the Peace River Site C Hydro Project. For purposes of the above, "my personal information" includes name, mailing address, telephone number, and email address, as per the information I provide.

Signature: Date:

Pre-Consultation deadline: The deadline for submitting your input is Friday, February 15th, 2008.

For further information or to submit your feedback form:

Peace River Site C Hydro Project:

 Toll-free:
 1-877-217-0777

 Email:
 sitec@bchydro.com

 Fax:
 604-623-4332

 www.bchydro.com/sitec

Mailing Address: PO Box 2218, Vancouver, BC V6B 3W2 Community Consultation Office: 9948 100th Avenue, Fort St. John, BC V1J 1Y5 (Opening early 2008) Any personal information you provide to BC Hydro on this form is collected and protected in accordance with the **Freedom of Information and Protection of Privacy Act**. BC Hydro is collecting information with this form for the purpose of its Site C Hydro project and related energy resource options in accordance with BC Hydro's mandate under the **Hydro and Power Authority Act**, the BC Hydro Tariff, the **Utilities Commission Act** and related Regulations and Directions. If you have any questions regarding the Site C Hydro project, and/or the information collection undertaken on this form, please contact the Site C Hydro Project at 1-877-217-0777.

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