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Updated Hearing Schedule, November 14, 2012

[A290-1 - Panel-Commission - Updated Hearing Schedule for 2013 - A3D3Q7](#)

The updated hearing schedule added **54 new questioning hearing days** from February 4 to May 18, 2013, all in Prince Rupert. It also gives **dates for oral statements**: 7 in Victoria at the beginning of January, 8 in Vancouver in mid and late January and February 1, and one day in Kelowna on January 28. **Argument will end by June 29**, following the questioning hearings. Specific dates have yet to be finalized. The final report and recommendations to government will still be the end of 2013. A convenient hearing calendar is available at the **Northwest Institute for Bioregional Research** website: <http://northwestinstitute.ca/index.php/enbridge-jrp/final-technical-hearings>

Order of Appearances

Enbridge Northern Gateway Panel 4

Pipeline & Terminal Environmental & Socio-Economic Assessment Panel

Mr. Paul Anderson	Ms. Colleen Bryden	Dr. Colin Buchanan
Mr. Ray Doering	Mr. Tom Fiddler	Mr. Jeffrey Green
Mr. David Reid	Mr. Gord Rozon	Mr. John Thompson
Mr. Michael Preston	Mr. Jeff Paetz	

Examination by Ms. Rebecca Brown for the Joint Review Panel 143

Examination by JRP Member Hans Matthews 465

Examination by JRP Member Kenneth Bateman 532

Examination by the JRP Chairperson, Sheila Leggett 605

BC Nature & Nature Canada

Mr. Brian Churchill

Examination by Mr. Marc Haddock for BC Nature & Nature Canada 764

Examination by Mr. Richard Neufeld for Northern Gateway Pipelines 796

Re-examination by Mr. Haddock 1138

Re-examination by Mr. Neufeld 1174

Raincoast Conservation Foundation

Dr. Paul Paquet Dr. Christopher Darimont

Examination by Mr. Tim Leadem for the Coalition 1201

Examination by Ms. Rebecca Brown for the Joint Review Panel 143

Ms. Brown had organized her questions into environmental issues and socio-economic issues. She began with her environmental questions.

Effects of the pipeline on wildlife movement

She asked if NGP is “going to conduct field surveys to assist in the assessment of potential project effects on wildlife movements?” Mr. Anderson replied, “We do not plan

currently to undertake specific work to examine the potential effects of our project on wildlife movement specifically. ... [We will] look for opportunities to fund third-party research for things like caribou studies that involve radio telemetry work, so that we can look at current movement patterns. ... But our main focus in respect of wildlife on the centerline surveys that we propose to do would look at things like wildlife trails and other evidence of wildlife movement through this corridor.” He added, “We are doing some work with several of the First Nations communities today that look at movement patterns and distributions within certain areas.” 143

Collaboration with industry/industrial proponents

Ms. Brown cited a few evidentiary sources with respect to “collaboration efforts with industrial proponents towards ... no net loss in linear feature density,” and asked for an update. Mr. Green said, “The quick answer is we haven’t had specific discussions with industrial proponents but the intent is that ... we would engage in these Resource Road User Groups as the primary mechanism for engaging industry.” Mr. Anderson talked about “orphan roads.” 162

Ms. Brown said, “When do you plan to start collaboration with industrial proponents?” Mr. Anderson’s talked about agency collaboration and Aboriginal engagement then, “by mid-2013, have more in depth industry consultation.” 162

Beaver trapping and relocation

The Driftwood Pile Cree Nation noted that “The project will adversely affect beaver habitat resulting in a decline in beaver populations.” ([Exhibit D55-3-1](#)) Both Driftwood Pile Cree and Swan River First Nation state that NGP “should take steps to trap and relocate beavers prior to construction.” Ms. Brown quoted NGP evidence that “Beaver relocation is not a standard mitigation measure. ... [and] does not currently expect to undertake such measures.’ She asked for an update. Mr. Anderson said that the issue was unresolved. 182

Effects of blasting on caribou and mountain goats

The “Summit Report” ([Exhibit D56-5-3](#)) recommends that Northern Gateway more clearly address the impacts of blasting on ungulates. NGP has said it “is confident that key recommendations [of] the Summit Report can be addressed.” Ms. Brown asked the Panel to comment on these issues. Mr. Anderson replied briefly, and said more detailed descriptions will be provided in blast management programs. 197

Amphibians

With respect to issues raised in the Summit Report, Ms. Brown asked about amphibian surveys, which Mr. Anderson said would be conducted during centerline surveys, and about hydrological studies in relation to amphibians. Mr. Anderson said the Wetland Function Assessments would predict whether there could be an alteration to hydrology, and if so, they would undertake hydrological studies. “These studies wouldn’t be specific to amphibians but more to the health of the wetlands and their function.” 210

With respect to mitigation measures for amphibians, Mr. Anderson spoke about salvage and relocation for the Coastal Tailed Frog, culverts near access roads for dispersing or

migrating species, and daylighting of culverts. Ms. Brown asked, “Does Northern Gateway propose salvage activities for amphibians other than coastal tailed frog?” Mr. Anderson said the key mitigation is “around timing constraints.” Mr. Preston described “movement phases” in amphibians, the use of drift fences, and manually moving amphibians, particularly the Western Toad. Mr. Anderson said the centreline surveys would help them avoid specific areas, and timing of construction would be a second mitigation. 229

As for amphibians which hibernate beneath the forest floor, Mr. Anderson said the primary mitigation is to avoid wetlands. “There’s very little work that has identified an effective way to identify where Western Toads are hibernating on a fairly repeatable basis,” said Mr. Preston. 249

Ungulate migration routes

Ms. Brown noted that the Driftpile Cree Nation Aboriginal Traditional Knowledge Report ([Exhibit D55-3-1](#)) expressed concerns about the effect of the right-of-way on ungulate migration routes which it also identifies. It recommended drilling under the migration routes. Mr. Anderson said that NGP’s main mitigation is “temporal avoidance.” 256

Lake Sturgeon

Ms. Brown noted the endangered status of Lake Sturgeon in the Saskatchewan River in Alberta, and NGP’s commitment to do a trenchless crossing at the Nechako River which would see no impacts on White Sturgeon. She also noted that Northern Gateway had developed a protection plan for the White Sturgeon found in BC waters. Mr. Anderson said that the White Sturgeon protection plan would also be applicable to the Lake Sturgeon. “We continue to look at whether a horizontal directional drill crossing of [the North Saskatchewan River] has the potential to be successful. There have been failed attempts of directional drilling on that watercourse in the past” 265

Socio-economic questions beginning with trappers

In a [Letter of Comment](#), Mr. Don Wilkins, the past-President of the B.C. Trappers Association had raised a number of concerns related to the welfare of wildlife and trappers along the route. Ms. Brown asked about consultation with the Trappers Association and whether NGP had followed up on Mr. Wilkin’s recommendations. Mr. Paetz said they had attended a Trappers’ AGM and he described what NGP was proposing with respect to consultation with trappers in BC and Alberta, and a program that would include mitigation and compensation. 293

Mr. Wilkins had proposed that a fund be set up. Mr. Paetz said NGP has not proposed “a set-aside fund for sponsoring research initiatives.” [Exhibit B3-19](#) specifies trapper notification of at least one month before start of clearing. Ms. Brown asked why one month is appropriate or sufficient and how would notification be done. She asked that more details be included in the EPMP.

She asked about Swan River First Nation concern about the location of the construction camp near Whitecourt. Mr. Fiddler replied that discussion was ongoing, and their commitment to consultation as they develop plans for campsites and stockpile sites. 337

Post-AD 1846 culturally modified trees (CMTs)

[Exhibit B3-18](#) states that eight post-AD 1846 CMT sites have been identified on the route in BC. The most significant sites are near the proposed Kitimat terminal. [Exhibit B40-5](#) later corrects the number to eleven. Ms. Brown cited a number of exhibits in evidence relating to CMTs. She asked, has Northern Gateway developed its uniform approach to dispensation for these sites? Mr. Anderson replied that “The approach would need to be developed in association with each community... We have developed a protocol with the Haisla First Nation in this respect. ... We have not got to that stage as of yet.” Ms. Brown asked that the CMT plan be submitted as part of the EPMP. 353

Later in the day, Mr. Neufeld stated that Mr. Anderson had erred, and that no protocol agreement for CMTs has been reached with the Haisla Nation. 729

Construction Environmental Protection and Management Plan (EPMP)

Ms. Brown asked whether the final Construction EPMP ([Exhibit B3-19](#)) would include evidence of further consultations with stakeholders and Aboriginal groups. Mr. Anderson said they will track consultation and commitments in tracking tables, rather than in the EPMP. Mr. Fiddler added that NGP intends to produce a number EPMPs specific to different segments of work. 367

Measures to support local employment and training opportunities

Ms. Brown asked specifically whether “Contractor Readiness Sessions” have taken place. Mr. Fiddler spoke about assessment of the resources in communities, and other dialogues that have taken place, but did not mention the contractor readiness sessions. He suggested that the answers to these questions and ones related to training might be best directed to the consultation panel scheduled for Prince Rupert. 375

Contractor Aboriginal Participation Plan

In [Exhibit B40-2](#), NGP states that “all prime contractors will be expected to provide an Aboriginal Participation Plan detailing how they plan to include, and be inclusive of, an Aboriginal workforce as well as detail the number of local and Aboriginal employees, jobs, duration, etc.” Ms. Brown asked whether guidelines for contractors have been developed, and update. Mr. Fiddler said, “At this stage we have not developed specific project guidelines.” He mentioned the “objective of a minimum of 15 percent Aboriginal on-site construction labour,” and described some of what they intend to do. 411

Ms. Brown asked whether concerns have been raised by Aboriginal groups about criteria used by contractors that could hinder economic participation of Aboriginal individuals or Aboriginal companies. Mr. Fiddler stated that there are two criteria that come into play. One is criteria that's required to pre-qualify a subcontractor or a prime contractor, a process which can be quite rigorous. With respect to individuals, there are requirements with respect to safety and physical fitness, generally, and specific fitness for the job (vision standards for a welder, for example). Enbridge and Northern Gateway also have a

pre-access drug and alcohol testing program which has to be completed for all individual workers at least 90 days before they start work. 426

Ms. Brown asked if NGP would file reports about Aboriginal employment and training. Mr. Fiddler said these reports are “routine for us.”

Forestry & the neutral footprint program

Ms. Brown referred to Northern Gateway’s “neutral footprint program” of one tree replaced for every tree cut, and one for one acre replacement. Where would replacements be? How will commercial value of the loss be calculated? Mr. Anderson said the program is described on Enbridge’s website, and it has a third part: a renewable kilowatt generated for every kilowatt used. He explained that replanting would focus first on construction work areas, then on areas of concern to communities or for wildlife, then elsewhere in BC or Alberta, not elsewhere in Canada. 443

Examination by JRP Member Hans Matthews 465

Engineering Procurement and Construction Management (EPCM)

Mr. Matthews asked, will there be an EPCM established? Mr. Fiddler described the organizational “Major Projects” team within Enbridge which will be used for NGP, and its accountability will be to Enbridge. Mr. Matthews asked where does Northern Gateway fit into that accountability. Mr. Fiddler: NGP will operate and maintain the assets and are the entity that will finance and oversee the project and deal with the funding participants. The Major Project team in Enbridge will be a specialist execution team, responsible for delivering the project to Northern Gateway.

Mr. Matthews asked if the EPCM component could be put on the ownership structure diagram (from [Exhibit B128](#)). Mr. Fiddler said this was a question better put to Janet Holder in the next panel. NGP accepted an undertaking to put together an organizational chart that outlines ownership structure including EPCM for Ms. Holder to speak to. 466

Traditional territory

Mr. Matthews asked what is NGP’s understanding of what a traditional territory is? Dr. Buchanan replied that NGP does not define traditional territories. Aboriginal communities or First Nations provide those definitions. He said, “We understand that traditional territories are the lands that Aboriginal peoples have traditionally used for traditional activities.” The discussion which followed was about effects of the pipeline and impacts to Aboriginal rights. 514

Census data and Aboriginal socioeconomic data

Mr. Matthews asked about reliance on census data for socioeconomic information – and is it possible that a lot of Aboriginal groups have not participated in the census? Mr. Thompson said, “That is an issue.” He repeated the example of there being no data other than population for Kitimaat Village 2 Reserve, and data for small communities being withheld out of confidentiality concerns. He concluded that “the regional information is probably pretty good.” 521

Asked by Mr. Matthews if NGP would be collecting more socioeconomic data. Mr. Thompson said that when they asked questions of the Coastal First Nations through an IR, the information they got back was from even older census reports. 527

Examination by JRP Member Kenneth Bateman 532

15% Aboriginal participation

Mr. Bateman asked where the 15% Aboriginal participation figure came from. Mr. Fiddler replied that it has been a target that has been easy to meet. Mr. Bateman asked, “So why not 20%?” Mr. Fiddler said that their lack of understanding of the region leads to less confidence than they have in Alberta. 532

Attrition

“Based on your experience, has there been a fall off?” Mr. Fiddler agreed that there is some attrition, but they continue to recruit. Sometimes that leads to hiring from other geographic regions. “The trades themselves have grown to have quite a population of First Nations and Métis Nations members as ongoing workers in the workforce. ... It is fairly substantial in the pipeline industry, in the four trades in particular: the operators, the welders, the labourers and the teamsters.” 541

Kilowatts in the neutral footprint program

Asked how this works, Mr. Anderson said, “We ... are pursuing a number of opportunities with respect to independent power production and green energy within the Province of B.C., provincially speaking, and we are looking at the communities ... as partners in that. ... Whether or not those opportunities will actually become generation projects ... we can't yet determine.” 558

Aboriginal Traditional Knowledge (ATK) studies

Mr. Bateman asked, “How do the ATK studies inform decision-making?” Mr. Anderson said that “the main examples of how it's shaped our project would likely be through routing.” Mr. Bateman: “How will Northern Gateway proceed where the overlap between an ATK and an environmental study come to material different conclusions or views?” Mr. Anderson replied, “There isn't ever a prioritization that I can say environment will always win out or a traditional use information would always win out or safety would always win out. But if any of them do, it would be safety. ... Until now, I can say that there hasn't been an issue where we said this is untenable for any one of them.” 566

Mr. Bateman asked, “Has the entire pipeline route been addressed by at least one group's ATK input?” Dr. Buchanan said, “There are some gaps.” Mr. Anderson: “I think the percentage is quite low. ... It's focused more on the coastal side of the project.” 579

What keeps you awake at night, and what have you learned?

Mr. Bateman asked this of Mr. Green, who replied, “trying to reconcile a project like this with the regional plan, so looking at the regional context. ... other linear projects going

on at the same time the difference between sort of regional planning and project cumulative effects assessment.” 584

Mr. Bateman asked both Mr. Green and Mr. Anderson, “What have you learned to date on this project that is significant for application on a go-forward basis?” The two replies are in the transcript beginning at paragraph 590.

Mr. Green said that it would have been useful to have the ecological and human health risk assessment and identification of high consequence areas sooner in their planning.

Mr. Anderson said, “We’ve talked a lot about environmental assessment as a planning tool, but we haven’t talked as much about environmental assessment as a communication tool. ... I think we always make the base assumption that the public and interested parties have a detailed understanding of the process, but we probably shouldn’t make that assumption. ... We could have done a better job of communicating.”

Examination by the JRP Chairperson, Sheila Leggett 605

What would you do differently?

The Chairperson seized on Mr. Anderson’s comment about communicating. What would you do differently?” Mr. Anderson replied, “We could have provided a map, you know, a timeline of what we planned to do ... and what we’ve done up until now.... A large calendar or scale Gantt chart ...” 605

Acre for acre commitment in the neutral footprint program

The Chairperson asked how this commitment is approached on Crown land. Mr. Anderson said that “It shouldn’t be a very difficult process. This is something [provincial agencies are] anxious to work on because they see this as a liability ... no one has a disposition on these lands. They’re orphan roads.” They don’t have a budget set aside for rehabilitating and removing these facilities. Working together with industry, provincial agencies, Aboriginal communities. “I think we can facilitate that.” 615

“The second one would be around things like the Nature Conservancy of Canada. We’ve, in past projects, had close relationships with them to try to purchase land in perpetuity and that typically isn’t Crown land.” He acknowledged that this has more relevance in Alberta with little relevance in BC. 620

The Chairperson: “What’s your estimation of the timeframe that you think it would take ... to deliver on that acre for acre ... commitment?” Mr. Anderson said that it will be location specific. “It’s not an easy process at all. There will be a lot of consultation required.” She also asked what would they do if they could not meet the commitment. Mr. Anderson: “There’s a lot of ways that we can achieve the goal.” 624

The Chairperson asked Mr. Paetz about the innovative features in a settlement agreement between the Manitoba Pipeline Landowners Association, Saskatchewan Association of Pipeline Landowners and Enbridge from October 12, 2007. It had been used by Ms. Kerr of the Fort St. James Sustainability Group as an aid to questioning. Mr. Paetz said, “It’s

considered to be innovative for a number of reasons.” The Chairperson asked a few times what was innovative about it, what elements from it might be used with Northern Gateway. Mr. Paetz was not able to identify any very definitively. 636

She asked, “Are there any further innovations that ... may not yet have been captured in the pro forma agreements that were filed and should be thought about further?” Mr. Paetz said that with the advent of pipeline landowner associations, “we have learned to work with them and include them in the process, and that’s something that’s just gotten better and better as the years have gone on since that agreement was first inked.” 652

Trained local workforce

The Chairperson asked Mr. Fiddler, “What Northern Gateway needs to do in advance of a project coming along so that you [have] a trained local workforce available should a project proceed.” Mr. Fiddler described the development of “construction execution plans” which include detailed models of everything that needs to be built. From that, they identify skills and labour requirements which they use to discuss with organized labour, contractors and internal teams. He acknowledged the practical challenges with the goal of a trained local workforce. 657

The Chairperson: “So ... you rely on, to a large extent, on the contractors to deliver the locally trained individuals for the project? Mr. Fiddler: That is correct, we facilitate. We aren’t the direct employer.” 681

“Do you believe the Northern Gateway’s on track to meet the objectives of having locally available, trained manpower ready for this project?” Mr. Fiddler: “Yes, I do and I feel very confident about that.” 685

The Chairperson asked, “Can you give us some concrete examples ... of ways that you can support the development of an employment force being locally available, who will meet the needs of Northern Gateway?” Mr. Fiddler replied, “We have committed to providing the unions a forecast -- an updated forecast of our resource loaded requirements as soon as possible.” 694

100% of pipe to be procured within Canada

The Chairperson asked what factors need to be in place for this to occur. Mr. Fiddler said the only element of doubt is that there’s aren’t mills in Canada that are tooled to produce the exceptionally heavy wall, the 22-millimetre plus 36-inch diameter pipe that has been committed to. 699

Introduction and Examination of BC Nature & Nature Canada Panel by Mr. Marc Haddock 739

In his introduction, Mr. Haddock introduced Mr. Brian Churchill, a registered professional biologist and principal of Chillborne Environmental. Mr. Churchill has worked since 1977 on industrial impacts to wildlife, both as an official of the B.C. Ministry of Environment and as an independent consultant. Most of this time he has been

based in the Peace Region where his work has involved ungulate species of wildlife including caribou and assessing and managing the impacts of industrial development including oil and gas industry. His resume is [Exhibit D12-18-2](#).

Mr. Churchill is the author of two documents in evidence:

- “A Submission Regarding Risks to SARA Lifted Woodland Caribou the Northern Gateway Pipeline Project” dated December, 2011, [Exhibit D12-8-5](#)
- A review of Seip and Jones 2012 and its implications for the Northern Gateway Pipeline Project dated November 14, 2012, [Exhibit D12-23-3](#)

Frequent reference will also be made to “Population Status of Caribou Herds in Central Mountain Designatable Unit within British Columbia 2012”, Seip and Jones, [Exhibit D12-23-4](#).

Examination by Mr. Richard Neufeld for Northern Gateway Pipelines

796

A detailed discussion about caribou evidence

Mr. Neufeld quoted from Exhibit D-12-8-5, ‘This submission will identify that we believe the Northern Gateway Environmental Assessment has incorrectly identified caribou mortality in the winter as the determining factor for population viability when recent literature clearly shows that summer mortality is prevalent.’ He asked where in the evidence it is stated that “caribou mortality in the winter as the determining factor for population viability.” Mr. Churchill cannot identify the source of that statement. 838

Mr. Neufeld’s questions to Mr. Churchill are very specific with respect to details in Mr. Churchill’s evidence, summer and winter habitats, linear densities, mitigation measures and best management practices, and mortality risks. The dialogue, which at times is quite confusing, is not easily summarized, so in these notes we are making no attempt to do so. Readers with an interest should follow it directly in the transcript.

Mr. Neufeld brought up [Exhibit D12-20-3](#), Recovery Strategy for Woodland Caribou, by Environment Canada. Mr. Churchill described this as the only approved recovery plan for Woodland caribou, though he cannot speak to its details. 892

Mr. Neufeld brought up Seip and Jones ([Exhibit D12-23-4](#)) and his questions elicited an interesting explanation from Mr. Churchill of Figure 2, which shows herd ranges based on telemetry data, about how herds are identified as such, and why their designations will often change. The intense discussion is about population counts in the model versus observations, methods, and especially, discrepancies. 1044

Habitat restoration

On redirect questioning, Mr. Haddock asked Mr. Churchill to comment on the question of restoration. Mr. Churchill said that COSEWIC uses three generations as a minimal thing to look at whether these animals are increasing or decreasing. The timeframes for caribou to react are long. It takes a long time to grow trees and a pipeline goes on for quite a long period of time. Then, if you’re going to restore after that, it’s -- you’re talking a number of decades after that before you even get any significant forest growths. “So I have a

difficult time grasping with any practical restoration that would deal with caribou and then -- in the time frames that would be relevant in this area.” 1164

Introduction and Examination of Raincoast Conservation Foundation Panel by Mr. Tim Leadem 1201

In his introduction, Mr. Leadem introduced Dr. Paul Paquet, a consultant in the areas of wildlife biology and ecology as well as environmental assessment. Dr. Paquet is a senior scientist with the Raincoast Conservation Foundation. His resume is [Exhibit D66-18-5](#).

Mr. Leadem also introduced Dr. Christopher Darimont, Assistant Professor and a Hakai-Raincoast Scholar in the Department of Geography at the University of Victoria. He has authored over 35 papers in the areas of wildlife biology and ecology. His resume is [Exhibit D66-18-3](#).

Dr. Paquet and Dr. Darimont are co-authors of the first section of the first of these documents and co-authors of the second.

- “Written Evidence of Raincoast Conservation Foundation Part 1: Terrestrial and Cumulative Impacts, Pipeline Risks, Natural Hazards and Climate Change” [Exhibit D170-2-02](#)
- “Evaluating External Risks to Protected Areas; the Proposed Northern Gateway oil pipeline in British Columbia, Canada” [Exhibit D170-2-05](#)

With five minutes remaining, the session was adjourned.