

DATE/TIME	December 14, 2010 9:00 a.m. – 5:00 p.m.
LOCATION	The Westin Grand, Symphony Room 433 Robson Street, Vancouver, B.C.
TYPE OF MEETING	Regular meeting of the BC Hydro Integrated Resource Plan Technical Advisory Committee (TAC). The TAC is a group of knowledgeable participants with significant interest, stake, and experience in BC Hydro's resource planning process assembled to provide detailed, technical input and feedback to BC Hydro during the development of the IRP.
FACILITATOR	Anne Wilson, BC Hydro
PRESENTERS	Craig Godsoe, BC Hydro Randy Reimann, BC Hydro Dave Ince, BC Hydro Cheryl Yaremko, BC Hydro Lindsay Fane, BC Hydro Basil Stumborg, BC Hydro
ATTENDEES TECHNICAL ADVISORY COMMITTEE MEMBERS	Bill Andrews, Sustainable Energy Association of British Columbia David Bennett, Terasen/Fortis BC David Craig, Commercial Energy Consumers Gwenne Farrell, COPE Local 378 (Alternate) Derek Griffin, Ministry of Energy Matt Horne, Pembina Institute Loch McJannett, Clean Energy BC Andrew McLaren, First Nations Energy and Mining Council Randy Reimann, BC Hydro Mark Thomas, BC Utilities Commission Brian Wallace, Joint Industry Electrical Steering Committee (Alternate) Absent: Fred Fortier, First Nations Representative
MEETING OBSERVERS	Paul Kariya, Clean Energy BC Jim Weimar, Weimar Consulting Inc.
ATTENDEES BC HYDRO	Chris Boltwood Susan Danard Kenna Hoskins Kathy Lee Cam Matheson

PRE-READING MATERIAL / HANDOUTS / PRESENTATIONS

- 2011 IRP Technical Advisory Committee Meeting #1 Presentation Slides
- IRP Technical Advisory Committee Terms of Reference
- 2011 IRP Technical Advisory Committee 20-Year Load Forecast Summary Brief
- 2011 IRP Technical Advisory Committee Load Resource Balance Summary Brief
- 2011 IRP Technical Advisory Committee Long-Term Rate Forecast Summary Brief

DISCUSSION OVERVIEW

- The committee reviewed the draft 2011 IRP TAC Terms of Reference, and provided input for revisions.
- The committee was presented an overview of the IRP process and requirements within the context of the Clean Energy Act, including when BC Hydro will submit the IRP for government approval and how the IRP relates to other BC Hydro projects, programs and expenditures.
- The IRP's purpose was reviewed in relation to Clean Energy Act's 16 energy objectives
- The committee was presented with an overview of the proposed IRP workplan including key IRP milestones and proposed committee meetings associated with these milestones.
- The 20-year load forecast was presented to the committee for their review and comment.
- The committee discussed BC Hydro's long-term rate forecast in relation to the forecasted load.
- The load resource balance was reviewed with the committee.
- BC Hydro's risk framework was introduced to demonstrate the process by which BC Hydro will incorporate uncertainty into the comparison of options.

KEY THEMES

- Participants asked several questions about the Clean Energy Act and the new IRP planning process.
- Participants were interested in the long-term load forecast and the impact that electric vehicles will have on peak loads.
- Some participants were concerned that BC Hydro's rate forecasts were not a reasonable projection and that both a high and a low forecast should be included.
- Participants asked questions about the connections between load growth and DSM savings.

1. Welcome and Review Agenda – Anne Wilson

Anne Wilson reviewed the agenda for the meeting.

2. Opening Remarks / Introductions – Cam Matheson

Cam Matheson thanked the committee for participating in this process and explained how this committee's role will be different from previous Long-Term Acquisition Plan (LTAP) BCUC led regulatory review where the regulatory review provided opportunities for scrutiny once the plan had been drafted and submitted for review to the BCUC; this no longer will happen and instead BC Hydro is involving interested parties during the development of the draft plan.

Cam explained that the public, First Nation and stakeholder consultation will differ from the TAC committee because they don't have the breadth of knowledge about the policy issues the TAC members do related to the task the provincial government has mandated BC Hydro.

The group proceeded with roundtable introductions.

3. TAC Terms of Reference – Anne Wilson

Anne Wilson walked through the package of materials that were circulated to all participants. Prior to the meeting, participants were asked to review the draft Terms of Reference and two written comments were received. The committee proceeded to review each of the suggested changes one at a time to finalize the terms of reference.

Summary of Discussion

Suggestions provided by members were largely accepted by committee members, with the following suggested changes:

- Section 2: delete "at all times"
- Section 3, bullet 4: add 'and constraints'
- Section 4: associations – update association names
- Section 4: add a few lines to distinguish the role of moderator and chair
- Section 5: last bullet – change 'media' to 'public' and add 'publically' in front of 'attributed'
- Section 6: bullet 5 add 'by BC Hydro'
- Section 7.2/7.3: BC Hydro to revise approach to meeting notes, attribution at certain stages of the process, and how to approach member recommendations
- Section 7.4: change 'may' to 'will'
- Section 7.7 delete last sentence

There was some discussion over Sections 7.2/7.3, Meeting Notes and Recommendations. One member liked the idea of having one set of detailed meeting notes for committee members use that included attribution to help with remembering the discussion; other members wanted a set of notes that did not include attribution to promote less positioning and more sharing. It was suggested that instead of having two sets of notes, have one set that provides a summary of the discussion without attribution.

In terms of attribution, it was suggested that at key junctions of the process people be asked to provide submissions which would include attribution. With respect to recommendations, committee members noted that neither the government or BCUC representative could approval a recommendation so that consensus was not practical. Another TAC Member noted that while achieving group consensus on advice to BC Hydro may be a good objective, there was likely to be many issues where one view is not possible and did not want to slow the process down a lot in trying to achieve it. BC Hydro was to think about what it wants in terms of recommendations (and how that would look) from the committee.

Action Items

Anne Wilson will revise the TOR and circulate to the committee for approval.

4. Legal and Policy Framework – Craig Godsoe

Presentation Overview

Craig Godsoe presented the legal and policy framework which included an overview of the IRP requirements within the context of the Clean Energy Act (CEA). Craig highlighted that the IRP action plan will not result in the implementation of projects but rather the IRP action plan may recommend advancing certain projects through the Definition phase, and that consequently there will be additional regulatory reviews of such projects in advance of implementation. Craig explained how the IRP is related to the following projects that BC Hydro is working on (in various stages of regulatory review): Revelstoke Unit 6, Ruskin, John Hart and Site C.

Craig outlined other programs and expenditures that BC Hydro is working on. Craig laid out BC Hydro's view that the 2011 IRP is the forum to establish the appropriate DSM targeted level, while section 44.2 DSM filings with the BCUC are more about how to cost-effectively get to the targeted DSM level. There will be a section 44.2 DSM filing with the BCUC in July 2010. Finally, Craig laid out the way that the Smart Metering Initiative (SMI) is relevant to the 2011 IRP – that is, SMI's impact on the load/resource balance through: (1) theft of energy loss reduction (reducing the gap); (2) possible Time of Use or other peak shaving rates, which would be traded off against other capacity resources in the 2011 IRP, and which will be the subject of rate application to the BCUC; and (3) how SMI is portrayed in the LTRF, which is an input to the load forecast.

Summary of Discussion

A number of questions were asked during this discussion regarding BC Hydro programs and projects their relationship to the IRP. It was clarified that there is a filing for the Ruskin resource smart project in February and there will be opportunity to review the Ruskin filing in detail in that forum. It was clarified that a market assessment will be included in the IRP and will constitute a separate chapter.

There was a question regarding the DSM target and the cost effectiveness test in the IRP and how could cost effectiveness be discussed in the s.44.2 filing without discussing the DSM target. It was clarified that Section 44.1 from the Utilities Commission Act (UCA) is no longer applicable to BC Hydro. In its place is the CEA requirement for BC Hydro to submit the IRP to government for approval. Section 44.1 was the section that required BC Hydro to pursue all cost-effective DSM. The test for cost-effectiveness under section 44.2 of the UCA, which is applicable to BC Hydro, is different. BC Hydro thinks the BCUC must recognize that section 44.1 is no longer applicable. However, one of the things that section 44.2 requires is that the BCUC consider and be guided by CEA section 2's "at least" 66% DSM target, and thus section 44.2 in a small way does deal with the DSM target as opposed to how you cost-effectively get to the target. Overall, given the restructured UCA and CEA, BC Hydro does not believe that the July 2011 section 44.2 filing should be another 2008 LTAP debate about the appropriate level of DSM.

There were questions regarding smart grid and it was clarified that there was not going to be a lot on the smart grid that would be part of the decision process of the IRP. When questioned about a cost benefit analysis for SMI, it was mentioned that the act clearly anticipates the issue of a smart metering regulation and it would not be analysed in the IRP. There is a project definition but it is high level at the moment and the business case for SMI will become public this month.

There was a question regarding what will happen if BC Hydro is late submitting the IRP. Although it wasn't sure whether there was a penalty, it was asserted that the plan will be delivered on time.

Action Items

No action items came out of the discussion.

5. Planning Process and Meeting Schedule – Randy Reimann

Presentation Overview

Randy Reimann presented on the IRP planning process and proposed committee meeting schedule. His presentation included the purpose of the Integrated Resource Plan, CEA – 16 Energy Objectives, Resource Planning Process and IRP Key Analytical Issues. Randy highlighted that the IRP planning process allows BC Hydro to assess risks when coming up with a base resource plan and contingency resource plans.

Randy outlined the IRP process and proposed committee meeting schedule in detail. The next TAC meeting will be held in January 2011 during Phase 2 of IRP to complete the review of inputs into the analysis.

Summary of Discussion

There were some questions regarding the direction given to BC Hydro from the clean energy act in terms of the process and objectives. It was clarified that the CEA provides direction that the plan is to achieve self sufficiency and then respond to the energy objectives. As well the process can be further defined by regulation from the Minister.

Role of Gas

There were some questions regarding the use of gas and the requirement for the use of clean resources. It was clarified that imports did not count in calculating the percentage clean, and that the 93% is a very narrow technology measurement and purely domestic. It was mentioned that the role of gas was a question to be examined in the IRP; and there is some room to use gas for areas perhaps that are not integrated such as Fort Nelson. However, it is the view that provincial government direction is for BC Hydro to build clean resources. It was confirmed that the 93% currently includes diesel fuel generation.

Export

There was a question regarding long-term contracts which export power used to meet self sufficiency requirements. It was clarified that the act allows for contracts but that there was no knowledge of any current proposals. It was mentioned that contracts can take some of the self-sufficiency surplus and commit it longer term at a higher price instead of selling it on the spot market at a lower price.

There was a comment that one of the BCUC's decisions from the 2008 LTAP was that in the next IRP, BC Hydro would reconcile the export data that is published with Statistics Canada as there is a huge debate around views of import/export. It was mentioned that BC Hydro and Stats Canada use different data and it's very confusing and BC Hydro spent weeks back in 2008 trying to reconcile the data. There were many inconsistencies as Stats Canada used a different data set than BC Hydro. It was mentioned that BC Hydro would follow up by sending out the documentation regarding this issue from the 2008 LTAP.

GHG Reductions and Electrification

It was clarified that greenhouse gas reduction targets are based on the emissions level in 2007.

It was clarified that the electrification scenarios were not filed during the Section 5 inquiry; and that further work is being done on them now and that they will be presented in the January meeting. There was a question as to whether BC Hydro has received feedback on electrification from government. It was confirmed that BC Hydro has not yet received feedback, and that it may come in advance of the drafting of the IRP, or it may be an addition afterwards, but hopefully in the April to May, 2011 timeframe. BC Hydro is currently working with government and presenting options.

DSM

There was a question as to whether there will be a DSM breakdown in terms of rates, codes and programs later in the process. It was confirmed that in January BC Hydro would be going over the DSM options. The details of these options and associated documentation will be available and will show up with the draft IRP.

TAC Schedule

After reviewing the draft TAC meeting schedule it was questioned whether the committee would be holding any meetings in September or October to review the draft IRP. It was confirmed that a two day meeting would be held in September-October to review the draft IRP, and that would be more favourable than just receiving written comments.

Renewable Energy Credits and Contingency Resource Plan

It was confirmed that the IRP will include a review of renewable energy credit (REC) forecasts and associated eligibility of B.C. resources into markets such as California. As well, it was confirmed that the contingency resource plan will be important for this IRP and the plan should be clear about any decisions made for the range of different scenarios. This will be discussed under the risk framework presentation.

Action Items

Craig Godsoe agreed to give Bill Andrews a record of the reconciliation of import/export data paper trail from the 2008 LTAP.

Anne to send out next meeting dates.

6. Review Load Forecast – Dave Ince

Presentation Overview

Dave Ince gave a presentation on the load forecast methodology as well as a general overview of the 2010 load forecast. Stemming from the work that was done on the 2008 LTAP, BC Hydro received a directive that required it to review the impact of historical DSM on the load forecast, and then address any substantive issues resulting from this in the next load forecast. He indicated what were the key inputs and considerations in the 2010 forecast in particular new oil & gas and mining loads. He also highlighted the risk areas in the forecast, which are also related to new industrial sector loads.

Summary of Discussion

Load Forecast Sector Components

There were a number of questions regarding what activity was included in each of the residential, commercial or industrial sectors. It was clarified that oil and gas is included in the industrial sector, however, pipelines would be included in the commercial sector. It was further clarified that the commercial sector includes services, and the industrial sector includes goods-producing activities. Electric vehicle loads are primarily included in the residential sector, with some included in the commercial sector.

Clarifying Load Forecast Methodology

It was confirmed that rate increases are included in the load forecast, which results in year over year forecast cumulative reduction in load. This is called rate elasticity; load is reduced when real (constant) dollar rate increases occur above the rate of inflation. BC Hydro assumes a 5% (or -0.5) rate elasticity; with a -0.05 elasticity and a 10% increase in rates there is an anticipated 1/2 % decrease in load. It was confirmed that BC Hydro has been using this approach and elasticity value for a number of years. This elasticity value is based on third-party expert advice made to BC Hydro; it is consistently applied across rate classes. In this forecast, cumulative effects of rates show a drop in demand of 2,300 GWh over the 20 year forecast horizon. It was

clarified that this drop could be due to a number of causes, including behavioural reasons such as people turning down thermostats or installing upgraded light bulbs.

It was further clarified that the load forecast is intended to cover BC Hydro's integrated system, and does not include the (non-integrated) Fort Nelson region. There is a separate load forecast for the Fort Nelson area, and numbers for Horn River are still being reviewed. The integrated system forecast presented does include the areas of Dawson Creek and Chetwynd and associated oil and gas loads.

There were some questions and comments around whether this load forecast considered climate change policy and what would be the future of natural gas. It was stated that climate change policy is not explicitly addressed in this load forecast, and that the effects of natural gas projects on carbon emissions is outside of the scope of the forecast.

Load Forecast Drivers

There were some questions regarding the drivers of the load forecast. It was emphasized that industrial growth is the primary driver of increases in this vintage of load forecast, with substantial projected increases in mining and oil and gas loads. However, oil and gas are finite resources and so will show an eventual decline in the future. It was stated that virtually all of the existing mining customers have announced expansions. As with any industry, the mining industry is very price dependent and with current high market prices, most of the mines are very profitable.

There is cautious optimism that these increasing industrial loads could signify a lift the economic health in the province, however, these loads are big, binary (either they happen or they don't), they are dependent on commodity prices, and are subject to environmental approvals. BC Hydro is carefully monitoring developments in the B.C. industrial sector, and the load forecast will be updated again before an IRP is submitted.

There was a question about the pulp and paper industry and why the line looked fairly flat when there has been talk about consolidation of companies. This has been looked at by BC Hydro and even with consolidation it was thought that production levels could be contained at these levels. This view has been informed by talking to BC Hydro's key account representatives, and by advice provided by sector-specific experts and consultants.

BC Hydro's load growth in the residential and commercial sectors is expected to be relatively steady.

Questions arose regarding what drives commercial growth sector. It was clarified that Gross Domestic Product (GDP), employment and retail sales are the big drivers. The Conference Board of Canada provides much of the economic data that BC Hydro uses in its forecasting models for this sector. One additional factor increasing commercial sales is the potential for electrification of oil and gas pipeline drivers (for moving of the oil and gas).

There was a question around what drove the residential loads, and it was confirmed that it includes a combination of housing starts (driven by population growth) and forecasts of end-uses. The latter refers to the specific electricity loads in residences (such as refrigeration and lighting). The load forecasting group looks at usage rates that consider the combination of efficiency trends versus more features on the appliances.

Electrification and Electric Vehicles

There were a number of questions about the load forecast and electrification. This forecast does include some electrification and uptake of electric vehicles, and there were a number of questions on what is included. The electric vehicles in this forecast include all ICBC registered vehicles. The forecast provides the percentage of electric vehicles in the overall fleet, and a forecast of expected electricity consumption. It was questioned whether BC Hydro has a percentage of total vehicle fuel used which provides a different perspective; people can get confused with the difference between vehicle numbers versus percentage of fuel used. There was interest in continuing this discussion with Dave off line. It was clarified that vehicle stock is assumed to turn over on average of every 10 years (i.e. average vehicle life is 10 years).

It was pointed out that in terms of electric vehicle growth from 2020 to 2030, there would need to be a massive investment by manufactures. This was confirmed, and that it needs to be driven by market demand. It was also confirmed that BC Hydro and Manitoba Hydro are the only two utilities in North America to include electric vehicles in their forecasts. Manitoba Hydro introduced this in 2008.

DSM Integration in the Load Forecast

There were some questions as to the reasoning behind removing half of the DSM savings associated with non-lighting residential codes and standards from the load forecast. The intention of this was to avoid the potential double-counting of these savings in the load forecast. BC Hydro also removes 100% of the potential double counting associated with residential lighting. BC Hydro indicated that there is fairly good information for lighting, but not for other areas, so the remaining was cut in half as a starting point. It was further mentioned that the definitive solution is probably somewhere in this range.

Peak Load Forecast

Question arose as to why the peak forecast went up as much as it did when the key sectors (oil and gas) are not as sensitive to temperature. Several factors impacting the peak forecast were discussed, and that the peak load forecast will not necessarily increase in direct proportion to the energy forecast. The overall shape of the energy and peak sales curve will track one another, but several factors will alter the relationship between energy and peak.

Peak load is driven by temperature, residential and commercial sectors, but not so much on the industrial side. Oil & gas and mining have a pretty flat load. They run all the time and you are getting a significant increase in the energy load relative to the peak. In the latter years of the forecast electric vehicles increase the load, which in the long-term is predicted to have a significant and disproportionate effect on the peak. That is a significant risk to BC Hydro's system.

Process to Address Questions

There was a request to develop a process of addressing further questions posed by committee questions. This was further addressed at the end of the day.

Action Items

Dave Ince and David Bennett will talk offline about the use of total number of vehicles (as a percentage) versus percentage of fuel used in the forecast of electrification

7. Review Long-Term Rate Forecast – Cheryl Yaremko

Presentation Overview

Cheryl presented on BC Hydro's long-term rate forecast in relation to the forecasted energy load.

Summary of Discussion

There was some discussion around the long-term rate increase. It was pointed out that this rate forecast is lower than the one supplied for the last Revenue Requirements Application. It was confirmed that it is lower, and that this forecast takes into account the difference that was agreed to in the Negotiated Settlement Agreement (NSA). There was a further comment from TAC members that it was thought this was low.

Cost Assumptions

There was some questions around the inclusion of Site C as an assumed investment in the forecast, and that with it's inclusion in 2021 there should be a more of an increase than was shown. It was clarified that there is a smoothing effect, as Site C comes into service as a rate rider drops off, and these offset each other.

It was clarified that this forecast does not include the infrastructure costs of a Northeast Transmission Line. It was further clarified that this rate forecast does not include the increased activities in the oil and gas sectors. It was also clarified that this rate forecast is a step behind the load forecasts, and so as the IRP is developed, there is a need to loop back and look at the rates based on anticipated actions. This rate forecast is based on the 2009 load forecast and it will be updated in 2011 based on the 2010 load forecast.

Elasticity and Sensitivity Analysis

It was mentioned that the need for the long-term rate forecast is to calculate the elasticity driven reduction in the load forecast. There was a concern, with respect to elasticity, that there are industries with major customers that just disappear, like Catalyst Paper, if the electricity price becomes too high.

It was acknowledged that the last 10 years no longer show zero real rate increases. TAC members felt there had been an improvement, but there was a question if BC Hydro has gone far enough. There was a concern that there are a lot of activities (expenditures) that may not get included after the first 5 or 10 years; and this is a deficiency in BC Hydro's basic planning, such as its transmission planning and other system plans. Currently BC Hydro has included John Hart and Ruskin expenditures but not all future projects have been mapped out because they haven't been studied extensively. It was confirmed that for capital expenditures in this exercise, approximately \$2 billion is assumed over the 20-year long-term forecast period. There was just a concern around estimating costs and if future capital costs are underestimated and the real story is 200%, 300% or 400% rate increases for load growth sensitivities that are electric intensive.

Given the concerns over the last 10 years, there was a request to conduct some sensitivities on the rate forecast and its effect on load. TAC members felt that the probability that annual rate increases will be higher than 0.9% is very high.

Action Items

BC Hydro to run some sensitivity analysis on the second 10 years of the long-term rate forecast and its effects on load.

8. Review Load Resource Balance – Lindsay Fane

Discussion Overview

Lindsay Fane presented on the load resource balance. The key provisions in the load resource balance are outlined in the Clean Energy Act that was put into effect early this year. The Clean Energy Act says that BC Hydro must achieve self sufficiency by 2016 (F17) and they must hold the rights to additional 3000 GWh of energy by 2020 (Fiscal 21).

Summary of Discussion

Some questions arose regarding the difference between a critical water year and an average water year. It was confirmed that the difference is about 4000 GWh, and that constitutes non firm heritage hydro. So, with 3000 GWh of insurance, and another 1000 GWh of non firm energy from IPPs the surplus could be up to 8000 GWh.

It was mentioned that the DSM target was not changed in the load resource balance from the 2008 LTAP irrespective of current DSM program spending to meet targets. Actual GWh of savings are tracked; however, the longer term target remains the same. The IRP will take a look at the DSM target and confirm or make changes to the target as appropriate.

It was clarified that the Burrard Thermal Power Station will not be used except for emergencies and that it is not included in any of our longer term plans. It was confirmed that Burrard is not used for export purposes. Burrard will remain available (will not be decommissioned), will continue to be used for VAR support, and could be used in an emergency if BC Hydro can not meet customer needs.

It was clarified that Alta Gas is treated a bit differently than other IPP projects because it received an exemption in Section 7 of the Clean Energy Act, in that the Northwest Transmission Line and related facilities and contracts are exempt. Alta Gas is a significant driver for the Northwest Transmission Line. It was also confirmed that 30% attrition is assumed for Alta Gas, as it is assumed BC Hydro will get 70% of the contracted energy from the project and as they get closer to their commercial operation date (COD) that number will go up. At this point, attrition is not dependant on transmission.

It was clarified that the (existing and committed) energy supply levels in the graph are decreasing due to the removal of the 2,500 GWh/year non-firm / market reliance is removed due to the self sufficiency requirement. The planning reserve margin for capacity also gets reduced by 400 MW because of self sufficiency. As well, some supply will decrease over time, such as biomass supply, as contracts expire due to an uncertain fuel supply. For other clean resources, it is assumed that contracts would be renewed. It was confirmed that Forest Kerr was included in the calculation.

There was a question whether BC Hydro was using this load resource balance slide for other consultation streams, and if so, perhaps think about changing the Y axis to start at 0, rather than 50 000 GWh. Currently, it looks like the gap is perhaps out of proportion and bigger than it really is. The potential to mistake the need as being much larger was acknowledged. The public consultation stream would be receiving higher level information, rather than this kind of detailed information.

There was a question about how BC Hydro will deal with people who see these presentations on the website and want more information behind the assumptions around these numbers? It was mentioned that the summary briefs developed will help with information; and if someone needs more information and they have the email or phone inquiry contact information and BC Hydro will follow up with official responses.

9. Introduction to Risk Framework – Basil Stumborg

Presentation Overview

Basil Stumborg presented on the IRP risk framework which is the way in which BC Hydro will incorporate uncertainty into the comparison of options. Basil explained that the risk framework will cover an uncertainty analysis of qualitative and quantitative data.

Basil talked about how these options will be prepared and he will revisit it further in the January meeting.

Summary of Discussion

Methodology

There were some questions on methodology and what will be looked at. It was clarified that at this time the connection between load growth and DSM saving has not yet been explored but it is being looked into. As well attrition rate uncertainty has not been addressed but it is the plan to do so.

There was also concern regarding DSM uncertainty; in that there is a normal distribution around the savings. It was thought that the shape of the curve changes dramatically based on what is planned. It was confirmed that for the DSM savings, five DSM options are examined and the distribution of savings will all be very different. Further, the actual GWh of savings will be very different, and when the numbers are worked through they are not expected to be normally distributed.

A question arose as to whether there were other uncertainties, and it was acknowledged that there are. For example on the supply side, for the 2008 LTAP the ILM project timing was very uncertain. Rather than putting another branch on the probability tree, it will be placed when it is expected. There will always be other factors, however one of the constraints is how many portfolio runs can be done within the time allowed.

Uncertain Public Policies on GHG

There were some comments around the role of uncertain public policy, such as trade with Alberta and GHG policy. At Terasen Gas there is no netting out of exports from imports when calculating GHG impacts. However it was mentioned that some importance is given to GHG emissions, and if GHG emissions were counted from imports that would make a difference to our planning. It was mentioned that was recommended with the Western Climate Change Initiative. Counting imports may be roughly 8 million tonnes of GHGs.

Comparing Options

Questions arose regarding how the decision analysis could deal with qualitative impacts. It was confirmed that for each level of impacts, quantitative impacts are shown. That would include such measures as employment. Ultimately there will be some professional judgement. It was mentioned that the portfolio analysis is better for impacts that can be quantified, like employment. But it may not work as well for the environmental impacts, which may be more difficult to quantify.

A question arose regarding whether BC Hydro puts a different preference on different resources. It was clarified that BC Hydro will take a look at the policy options and make policy recommendations to the government and characterize the tradeoffs, and that BC Hydro is not choosing individual resources.

If an option is a portfolio of resources, there was a question of whether there will be targeted calls or would BC Hydro go for the lowest cost resources that are compatible with the outcome. There was a concern that prices may go up with a targeted call, and it would be preferable to have an open call to all resource types. It was mentioned that the analysis will need to be looked at. Part of this discussion could be what do future acquisitions look like.

10. Wrap Up and Next Steps

Discussion Overview

Anne Wilson thanked the group for attending the meeting and went over the next steps for the group. Anne will schedule the next meeting at the end of January. The summary briefs and slide presentations will be put on the website. The draft Terms of Reference will be revised and sent out before the next meeting as well as a summary of the notes for the meeting.

Randy asked if the level of detail is right or if they want more or less and in what areas. Feedback about how the meetings are going would be great. The entire group appreciated the opportunity to participate in the process and thought the level of detail was appropriate. Participants also expressed that they were grateful that the meeting materials were circulated prior to the meeting as it helped to better understand the consultation topics and gave them time to prepare questions. A roundtable provided the following requests:

- To provide an objective statement beside the agenda item so that committee members know what BC Hydro would like them to focus on.
- An opportunity to provide BC Hydro with areas of interest. It was decided that people would send Anne areas of interest, and Anne will compile them and distribute them to the group. It was also acknowledged that it may be a bit of an iterative process.

The group agreed that any areas of interest would be emailed to Anne Wilson within one week of the meeting, or to let Anne know that you are interested, so that she can compile them in a timely manner.

The meeting ended at 4:30 p.m.