

Participants:

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Highlighted text indicates changes to be made to protocol from V4 Draft.

Minutes:

1. **Introductions**
2. **Review of the process**
3. This is the first round of technical review – there will likely be some revisions – hopefully nothing too substantial.
 - **Consensus is no sustained objection** – want to have something that we can all live with.
 - All comments and issues must be tracked. It will go to the regulator for final approval.
 - Once we are happy for this it will move forward for a broader consultation. The next step for this protocol will be to streamline it and have a technical/market consultation. If things arise along the way, we will work on those things. The final steps are to go back to the regulator and post for public review.
4. Keith Driver – Walk through of the protocol – approach, logic and calculations
 - Scope and Description – where it is applicable, where it fits
 - Process Flow Diagrams – show which sources and sinks are applicable based on ISO 14064-2. Not all sources and sinks are relevant to all projects
 - **Project Condition** – what actually happens due to the project
 - **Baseline condition** is what is happening in the absence of the project. “5 Box approach” in Figure 2.1. Top to bottom is what is happening during the project. Going from Left to Right is looking at what is happening before and after the project – site development on left, site decommissioning on right. We look at this for both the baseline and project condition.
 - **The difference between the project condition and the baseline condition is the GHG benefit of the project**

- **Discussion of functional equivalence** – ensure we are comparing apples to apples
- **Process flow diagrams** – materials and energy
- **Project Applicability** – what this protocol applies to
- **Flexibility Mechanisms** – here is a few little things you can do if your project is a little bit different and what you can do to make your project fit.
- **Want to identify all the sources and sinks - Definitions:**
 - i. **Controlled** – onsite – project operator controlled
 - ii. **Related** – upstream – the more they use the more is used but not directly responsible
 - iii. **Affected** – Unexpected market consequences.
 - iv. **Materiality** – defined as greater than 5%
- Equations – for all the sources and sinks included – Calculators are built for those equations.
- **KD - Do we have the right sources and sinks? Are we using the right equations? Is there an alternate source of data that would make things easier?**
- **Problem in equation – page 14**

5. Protocol Details:

- Wind generation either connected to the grid or dedicated end user.
- No nec. Consumed in AB but must be generated in AB
- Flex. Mech allows for change in emission factor to be more representative of province (with justification in third party verification)
- **Want to use familiar language re:EcoLogo in that project qualifies under program – For all protocols**
- Project condition is installation of wind; BL is alternative electricity generated.
- Metering of net electricity must be down stream of any interconnection (to net out line loss).
- Based on actual measuring and monitoring
- Given that we are excluding P5 – P11 – question about fuel extraction and processing for on site fuel. What kind of fuel used on site are we thinking? NG or Diesel – such as to warm buildings. Typically very small but easily measured. This group can chose to exclude. Also will have power required to do commissioning which might come from diesel – protocol allows for flexibility to account for this. It is a small one time event and negligible – therefore excluded.
- On fuel extraction and processing is covered from site load (net to grid metering) – most fuel used on site is electricity (net). If there is a small Demand Transmission Services (DTS) would you minus off on site electricity consumption from to grid.
- Materiality is defined as 5% - we can exclude based on this – therefore using this we can exclude P5 – P11 if they are coming in

at <1% (as they are) – emissions associated with wind farm construction are offset by the farm within 4 months of operation.

- What about transportation – trucks, gaters, ATVs. Average truck is likely not relative to the production in wind farms.
- In BL – electricity is net electricity – project can sell both RECs and GHGs but has to ensure that they are not double counting. Can't sell the same MWh for both RECs and GHG offsets. Third product is physical electricity.
- Protocol is net of any parasitic load and net of anything purchased from the grid. It is the net electricity going to the load at the end of the day.
- Add that may be net of multiple meters – to account for parasitic load as well as any purchase from grid
- Need to be clear that whoever owns the output has the option of selling the REC or Offset. Does the protocol account for joint ventures in which one party solely owns output – ownership question. Yes.
- Will be adding appendix for fuel use
- Need to clarify that contingent data approaches including 2.5.2 (For all protocols) are only for temporary use – not long term

6. Identified Issues

Summary of Technical Issues

The following technical issues may be considered as part of the technical and stakeholder review processes:

- Setting of a Grid Intensity Factor for the province of Alberta
 - EDC can finish before the end of year and WG will convene early in the new year.
- Addressing the emissions / emission reductions from the change in overall system line losses associated with the location of these generation sources - – there are two protocols for dealing with line losses in transmission system. Also, at this point, the protocol doesn't account for a location choice that increases line loss. Difficult to measure and irrelevant
- Addressing any emissions from new / developing electricity storage devices

Summary of Policy Issues

The following policy issues may be considered as part of the technical and stakeholder review processes:

- Setting of a Grid Intensity Factor for the province of Alberta
- Addressing the emissions / emission reductions from the change in overall system line losses associated with the location of these generation sources

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- Recognizing that GHGs are a component of the environmental benefits included in any RECs generated and sold from the project
 - We are looking at the net electricity benefit to the grid – therefore downstream of any parasitic load, etc. At the end of the day, we want people to show how they are measuring the net benefit and that it is appropriate. Need to measure at the point of interconnection. Anything that is part of the grid (non-owned assets) is downstream of this protocol.
- 7. Technical review of the line loss protocols will occur early in the New Year. This group wants to be contacted in that review.
- 8. When we did the solar Protocol, we decided that there would need to be a smaller scale, anchored to micro-gen policy, is there value here to generalizing to small scale applications. For ease, stick to commercial applications. Possible, suggestion to have a micro-protocol for renewables. Does this group want to see how the solar document comes in? Poll on micro-gen protocol for small scale-renewables. Agree that key priority is to move the commercial scale protocol but can't hurt to share the Solar. Likely a different set of technical reviewers sitting around the table for small scale wind. For that form of generation to participate in the offset market, there is a need for aggregation and likely need and experience that the offset market is working. Worth keeping in mind.