**MEETING MINUTES**

Meeting: Wednesday, May 21, 2014

7:00 p.m. – 9:00 p.m.

Venue: Curling Lounge, NEMI Recreation Centre

**CLC Members in Attendance**: Tony Ferro, Alan MacNevin, , Delroy Prescott, Phreddie Shore, Brad Wilkin, Bruce Wood, Dale Wood.

**Attendance by Phone:** Art Jacko, UCCMM

**Regrets:** Melanie Sadie Debassige, Connie Ferguson, Donald McGraw and Valerie McIntyre.

**Public in Attendance:** Jo-Anne & Tony Audette, Anne Benness, Matthias Purdon and Nicole Thibodeau-Howard.

**Media in Attendance:** N|A

**Northland Expert Team**: John Gordon (GE), Steve Howard, Paul Kaminski (by phone), Rick Martin, Jim Mulvale, Luke Kupczyk, Wojtek Kupczyk and Stan Stret.

**Facilitator:**

Nancy Coldham, The CG Group

**7:05 p.m. WELCOME & CALL TO ORDER**

Nancy Coldham, the meeting Facilitator, welcomed the Community Liaison Committee (CLC) Members, members of the public and the additional Northland experts present to the third meeting of the Community Liaison Committee. Nancy recapped the purposes of each of the four meetings, gave an overview of the last two meetings and reminded all of the post-construction and operations focus of the current meeting.

Nancy extended the regrets of the CLC members unable to attend. She identified that Paul Kaminski (NPI) and Art Jacko (UCCMM) had been conference call linked into the meeting by Stan Stret.

**7:08 p.m. INTRODUCTIONS**

As a courtesy to the many participants seated in the public attendees section of the room, Nancy asked if each member of the CLC would provide their name and their interest | reason for applying and joining the Committee. Nancy then asked the Northland team to introduce themselves focusing on their project role. Rick Martin used the opportunity to introduce his new McLean’s Mountain Wind Farm operations staff, Steve Howard.

**7:11 p.m.** **MEETING TWO MINUTES APPROVED**

The Facilitator asked CLC Members if they had any changes or additions to make to the Meeting Two Minutes circulated post meeting and again with the Agenda for the current meeting. There were no changes. Minutes were approved to be accepted into the record.

**7:14 p.m.** **STATUS OF CONSTRUCTION ACTIVITIES**

Stan Stret and Paul Kaminski were called upon to update the CLC Members on the status of construction activities. The construction update reviewed the following core activities – completed civil work, electrical work, turbine work and the remaining work.

We note that the second CLC meeting was conducted in September 2013, and since that time the main project equipment was delivered to site and erection of the wind farm has been largely completed – in a span of about 6 months.

The construction update began with a review of the Project’s locations using the site map. The presentation continued with a recap of the main civil works undertaken, including site clearing and grubbing. There was a quick review of the access roads and public roads improvements. Stan went over the turbine foundation fabrication process, as well as construction of the substation and transition station. There was a review of the construction on Goat Island including the buried power line cables and the switching station construction. The submerged main power cables run across the Little Current channel, and Stan was involved in conducting underwater inspection of the cables. His inspections resulted in some corrections and changes to ensure the cables were laying fully supported on the bottom.

Some of the main construction challenges experienced were during the collector line installation. In particular, the installation of a 900+ meter horizontal directional drilling boring conducted under a wetland west of T29 was extremely problematic, as fractured subsurface rock repeatedly failed and prevented the installation of the collector line.

A section of trenched collector line was eliminated near the wetlands adjacent Turbine 13, by hanging the collector line overhead on the main transmission line poles where it runs between Turbines 6 and 12. This overhead segment also contains a wetland feature, so additional environmental stewardship requirements had to be met. The CLC Members were shown on the site map where the various collector lines cables were run, plus the locations of the temporary and permanent MET Tower. Finally, the group was shown the location of the new Operations and Maintenance (O&M) Building where Rick Martin, Steve Howard and the GE team work.

Stan provided a critical milestone date review of the turbine work, starting with the delivery of turbine components from a Sudbury storage yard starting in September, 2013, and with the final components completing their delivery across the Swing Bridge in October, 2013. The last turbine was erected prior to the Christmas holiday break. Pictures were provided of the turbine installation and the miles of wiring pulled inside each tower. The GE commissioning was completed April 24, 2014. This was slightly later than had been scheduled due to the cold winter and unusually late and wet spring. The McLean’s Mountain Wind Farm (MMWF) achieved its “COD” (commercial operations date) as of May 1, 2014.

The construction Contractor has a “punch list” (a list of outstanding work orders) to finish before the construction process is fully complete. The majority of the remaining tasks are related to the fine tuning of turbine control settings and turbine testing, civil works (access roads and culverts), general clean-up, grading, landscaping and road repairs. Work has begun on completion and repairs of landowner gates as well as re-vegetation restoring the areas affected by construction to the same or better pre-construction conditions.

**7:22 p.m. Turbine Commissioning**

Rick Martin reiterated that the successful completion and start-up of the wind farm was a demonstration of the team effort between Northland, White Construction and GE team. We very much appreciated the on-going cooperation of the municipality and appreciated the community’s patience during the times that there was some minor inconvenience or disruption to the Island and its residents. Art Jacko, who joined the meeting by phone, voiced his agreement that the wind farm construction had been a successful undertaking.

Rick acknowledged that much of the details related to the physical turbine installation had been covered by Stan, then proceeded to provide an overview of the series of checks and inspections conducted by the Operations group as part of the commissioning process. These inspection not only provide a double check on the safe installation of the equipment, but also provides the Operations group with a great opportunity to become familiar with every aspect of the turbines design. Rick took the group back to one of the previous PowerPoint slides to some photos of the computer screens of the two computerized monitoring systems: GE Wind Control SCADA system and the Emerson Ovation Plant SCADA system. The SCADA (S**upervisory Control and Data Acquisition)** system collects information from instrumentation within each wind turbine and allows the information to be viewed/accessed from remote locations. Of particular importance for the MMWF, is that the SCADA will allow the real-time operational data to be shared with the Northland’s 24/7 renewable’s operations centre in Kingston, Ontario and also provides the same information to GE for their maintenance planning.

Rick reviewed the GE turbine commissioning process, the on-going work of the GE team based out of the O&M Building and the next steps in preparation of the hand over to long-term operations of the wind farm.

**7:30 p.m. REA Approvals & Post-Construction Monitoring**

Jim Mulvale, Northland’s Manager of Environment, Health & Safety, began by reminding the CLC that amendments to the REA (Renewable Energy Act) permit were obtained for the McLean’s Mountain Wind farm on May 17, 2013 and October 25, 2013. Jim started this part of the meeting by providing a thorough explanation of two amendments Northland had filed for MOE and MNR review and approvals.

The first amendment covered three key changes, all intended to reduce noise or reduce environmental footprint. One was the change to a new, quieter, gearbox option for all of the turbines. The second was the minor relocation of two turbines (T14 and T23) due to surface conditions, such as fractured bedrock or enlarged wet areas. The third issue was modification of a couple of access roads to avoid low, wet areas.

The second amendment involved a decision to string an overhead collector line from Turbine 6 to Turbine 12, using the already installed T-Line (transmission line) poles, which eliminated an extra 2.5 km of buried collector line that would have had to be trenched into the ground. A portion of the eliminated buried collector line would have run past a wetland feature which contains turtles, so the relocation minimized disruption to the turtles. Jim directed anyone interested in reviewing the REA documentation for the amendments or any of the company filings and requirements at the project website at <http://mcleansmountain.northlandpower.ca>

Jim reminded the group that the current half-load season was also inhibiting some final construction clean-up activities. The remaining clean-up activities, such as road surfacing, culvert repairs and ditch restoration would be conducted carefully to continue the protection of wildlife habitat.

Jim provided a recap of the environmental monitoring conducted throughout the construction phase including employment of best practices and proactive interventions. Jim pointed out the two independent environmental monitors the project used were rigorous in checking on all construction activities and in calling the White Construction team on anything they felt needed to be addressed and remedied. Jim reminded the CLC Members and public that unlike many other energy developers, Northland Power operates the projects it builds and therefore ongoing monitoring is always conducted and is a built-in process and not an extra or done solely to meet an immediate or short-term requirement. Jim used the PowerPoint presentation to take the group through the various environmental monitoring activities underway post-construction and the routine environmental inspections for spills, leaks, erosions and any identified potential impacts that would be conducted and reported on continuously.

**7:50 p.m. Noise Emissions**

Throughout the presentation, the Facilitator stopped Jim, and other presenters, when terminology was used that CLC Members or the public may not be fully familiar. One such example was the difference between “immissions” and “emissions” in the context of REA approval and monitoring for sound. Jim responded by first explaining that as turbine noise is such a contentious issue for residents living in proximity to wind farms, the Ontario Ministry of the Environment (MOE) now requires Renewable Energy Approvals of wind projects to include acoustic audits of wind turbine noise emissions at the source, as defined by Canadian and International standards ([CAN/CSA-61400-11 and IEC 61400-11](http://shop.csa.ca/en/canada/distributed-generation-technology/cancsa-iec-61400-1113/invt/27027332013)). Jim shared that previously, typical approvals from the Ministry only required measurement at points of reception. The change is in keeping with evolving and more demanding regulatory assessment requirements being legislated in jurisdictions across Canada and around the world. The new standards demand that three different sets of data, (sound pressure, wind speed/direction and turbine electrical power) all be captured in-field, simultaneously and at different times of the year. The acoustic audit must be conducted by an independent third party with does not have a stake in the design. Jim explained Northland was pleased to engage HGC Engineering to conduct the immissions audit of the turbines and Aercoustics Engineering will conduct the emissions audit. Both Aercoustics and HGC are North American leaders in the precision measurement and management of noise from wind turbine farms. Aercoustics is the only firm in Canada with the required qualifications to meet the IEC international standards.

The workable definition of the two terms was provided --

Emissions: The sound emitted by the turbine (or piece of equipment) and is measured at or near the source (ie. at the turbine).

Immissions: The sound heard by an observer (or at point of reception) and is measured at a distance from the noise source (ie. at a receptor house).

Both are measured to verify the sound level at each turbine and to confirm the sound level intrusion/impact at a 360 degree area around the wind farm.

Jim referred to the Mclean’s Mountain Wind Farm REA approval and noted that the acoustic audit requirements are listed under Condition E, Condition F and Condition G.

Condition E requires the “immissions” monitoring of sound levels at three resident receptors both in the Spring and the Fall seasons of 2014. Condition G requires an audit of the main Transformer Station. HGC will conduct both of these audits. Condition F requires the “emissions” monitoring at the location of four (4) Turbines in keeping with IEC Standard 61400-11. This audit work will be performed by Aercoustics.

All results from the acoustic audit will be reported to the MOE with the audit of Condition F and G expected to be submitted within six months of the start of commercial operations which would be a November 1, 2014 filing. The results of the audit required by Condition E will be submitted shortly after the required data has be recorded and processed.

**7:58 p.m. Complaint Process**

Jim Mulvale also led the agenda topic discussion about the Complaint process. Jim shared that community concerns are presented either as generic questions or specific complaints. The company is required and is organized to address any resident complaints promptly and as completely as possible. To date, complaints received directly to Northland or indirectly via the MOE have been about:

(i) traffic on or obstruction of roads during construction;

(ii) obstruction of the skidoo trails this past winter;

(iii) unsightly debris and excavation piles;

(iv) a spill concerns, and, most recently,

(v) a resident concern about noise.

Jim said he wanted to apologize on behalf of the entire project team for any inconvenience and to share the team’s appreciation for the residents’ tolerance, patience and understanding during the construction phase. Jim wanted the CLC message ambassadors to be familiar with the Complaint Process. All complaints can be called into the McLean’s Mountain Wind Farm office at 705-368-0303 or the Northland Power 24/7 Call Centre at 1-866-290-6992 or to the Ministry of the Environment (MOE) 24/7 number at 1-800-268-6060. Jim explained that staff document all complaints, conduct a prompt investigation into the matter, respond to all complaints and concerns and conduct a monthly summary review conducted internally to ensure efficient resolution and recording of concerns.

**8:03 p.m. Operations & Maintenance**

Rick Martin led this topic presentation and discussion. Rick provided an overview of how the wind farm is “dispatched”, meaning how it responds to IESO (Independent Electrical System Operator) direction to put power onto the electricity grid or to shutdown. Rick explained that the IESO monitors power production and power quality throughout the Ontario power grid and that the wind farm will not always be “on” in terms of generating electricity, even if suitable wind is present.

The McLean’s Mountain Wind Farm (MMWF) is designed to run under varying conditions and the Northland Power Operations group (either the local Team or the remote control center I Kingston) will follow the IESO dispatch instructions. GE staff will monitor the production output of each turbine to ensure it is operating efficiently and will schedule preventative maintenance as required. Rick wanted to confirm that the power produced is not being exported to the States or sent to Toronto as some have questioned or assumed locally. Rick explained the wind farm’s connection to the grid – noting the transformer’s MW size, the electricity conductor/cable capacity and the design of the whole sub-station is sized only to meet the current wind farm capacity. The maximum capacity of the wind farm is 60 MW and the average output produced annually is expected to be 20-22 MW (approx 35%). The local electricity use on Manitoulin Island varies between 9-13 MW depending on load and time of year, plus 7.5-11 MW is needed to serve Espanola residents not including the mill. Northland Power is responsible for the wind farm operations and will report to the Project’s joint venture partners.

**8:08 p.m. CLC Member Question**

**Q.1. What are the OPA requirements for commercial operation approval?**

Paul Kaminski responded to this question by stating the McLean’s Mountain Wind Farm received confirmation from the Ontario Power Authority (OPA) on May 19th, 2014 that it had achieved Commercial Operation Date (“COD”) effective May 1, 2014. He explained that to achieve the OPA COD, the proponent is required to submit multiple documents to the OPA prior to the milestone operations date, examples of the documents are electrical one line diagrams, OEB Electricity Generation License(s), approved Metering Plan, certification from the Independent Engineer that the plant is built in accordance with local codes and regulations to produce full capacity output as specified in the OPA contract(s) and to meet all other requirements as stipulated by the OPA contract.

Paul explained that the wind farm must test and prove its ability to produce, measure, adjust power output in responsive to the IESO instructions while following IESO grid compliance rules.

**Q.2. How will transmission lines and turbines be monitored during operations?**

Rick Martin responded to this question by first asking if there was still a need for further explanation to satisfy this question given all the ground covered earlier in the meeting. The response from CLC Members was affirmative that the question had been addressed, but requested clarification that should there be over production of power from MMWF where would that extra power go – Sudbury? Blind River? Espanola?

Rick repeated the information about the wind farm’s capacity relative to local need and then shared the power produced would be routed to/through Martindale and not Algoma. Rick shared that just that day the MMWF switched to voltage control mode of operation to stabilize the local power system. Rick also reviewed the ongoing monitoring, metering and sharing of data that occurred and was logged using latest technology.

**Q.3. Landowner Concerns – Lien, Fences, Drainage and Cattle Issues**

Rick, Paul, Jim and Stan all responded to various aspects of the landowner issues starting with the construction lien. Firstly, Northland apologized to landowners affected by the lien which was the result of a dispute between White Construction and one of its contractors. The contractor had several remedy options and the lien should never have been applied. Once the matter was raised, the lien was removed promptly.

Fence reconstruction is underway and there is a team out working on fences and gates at this time. Stan shared a photo from the PowerPoint that captured a new gate. The landowner response was very favourable to the fence work and the gate in particular. Work on the ditches and drainage would commence as weather and land conditions improved, and will quicken once half-load restrictions were lifted from the local roads, grading was underway and cattle would not be impacted. Jim Mulvale mentioned he meets weekly with Dillon regarding drainage updates and the monitoring of watersheds. Landowners were very complimentary about the quality of the workmanship done to date. There was some discussion if gates would need to be locked or if additional security would be required. It was explained that even if humans or animals came right up to the base of the turbines there was no safety or risk of harm (care needs to be observed if ice forms on blades in the winter). It was mentioned there was no intention of lock gates.

The public members in attendance were asked if they had any questions they’d like to raise.

There was a question about when the bands within the UCCMM would start to see money from the project. The audience was reminded commercial operation was only achieved May 1, that the farm had not been producing power every day since May 1, that reports on power produced had to be submitted to the IESO, accepted and any revenue would be split 50-50 by the partnership. It would be up to the UCCMM to disburse funds based on separate agreements with each band. The advice was to check with the Chief or Band Council.

**8:45 p.m. Community Fund**

Rick Martin shared that a Community Fund was established linked to the municipal road users agreement and approved by NEMI Council. He explained a Committee was created with two (2) municipally-selected members and one (1) MMWF project representative that was Rick himself. The Committee meets annually. This was Year 1 for the Community Fund and that the Committee chose to financially support the Sheguiandah Seniors’ Community Hall.

There were comments about how grateful the community was for the investment in the seniors’ hall, the overall benefits to the local community from this addition.

There was a question if the Fund could benefit community groups located outside of NEMI. The response was groups should make application to the Fund Committee via NEMI Council and make their case for how all would benefit should it be chosen.

**8:52 p.m. Wrap-Up**

The facilitator summarized the information and items covered during Meeting 3, and mentioned that CLC Meeting 4 ought to be scheduled for October or November. There was a comment that no meeting should occur until after the hunting season which would be late November.

Next Meeting: Tentative TBC -- Wednesday, November 26 from 7-9 p.m.

**8:55 p.m. Meeting Adjourned**