AGRIENERGY PRODUCERS' ASSOCIATION OF ONTARIO
ASSOCIATION DES PRODUCTEURS D'AGRIENERGIE DE L'ONTARIO

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22/07/2009 **Reference: EBR Registry** Number **010-6516**

Dear **Ms Wallace,**

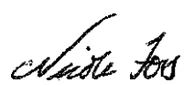
Thank **you for inviting APAO to your meeting on the** new environmental **regulations last** week. **It was very useful. We welcome the opportunity to comment on the proposals. I would have done so online, but the EBR site** would **not load on my computer. In fact it crashed my internet connection each time I tried. 1 do not know** if others **have** experienced **similar problems.**

APAO agrees **with the fundamental** idea of streamlining the **environmental approvals process** between **ministries, and the decision not to require a Renewable Energy Approval (REA) while a facility is operating under an existing Certificate of Approval (C of A) regime. However, it is important to note that** circumstances **that would lead to an amendment to a C of A are much more common for biogas plants than for other forms of renewable** energy, **as feedstock availability** varies **and new** generators **may** be **added.**

If such changes would **automatically trigger a shift to an REA, which is much more demanding than** an amendment **to a C of A** would **have been,** then **the regulatory burden on biogas will** increase **substantially in relation to other technologies. This could hamper the ability of** existing **systems to adapt to prevailing circumstances in an industry which is operating under the very fluid conditions of early development, APAO would like to see limits to the kinds of changes that would trigger the need for an REA. We would also like to see the REA process impose no greater regulatory burden of structural delays on project proponents than the C of A procedure. As currently constituted, an REA could take up to a year to obtain,** whereas **an amendment to a C of A would have taken perhaps two to three months.**

The **proposed set-back of 250m would eliminate many sites as potential biogas facilities,** especially **in areas of relative population density such as the Niagara Peninsula. While there are mechanisms to allow for reduced set-backs if certain studies** are **performed, this approach presupposes that the addition of a digester is likely to present greater odour potential than previously existed. In fact, the opposite is true. Anaerobic** digestion **eliminates the vast** majority **of odour causing chemicals and** results **in far less odour than would** be the case **for conventional** manure **handling methods. There is little justification for imposing a set-back of greater than 100m on an anaerobic digestion facility.** Set-backs **can sanitize land, and there should be a public debate as to what extent that would** be **reasonable.**

Regards,



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Introduction

The Canadian Solar Industries Association ("CanSIA") is a national trade association representing more than 300 solar energy companies, the majority of which are located in Ontario. Our mission is to develop a strong, efficient, ethical and professional Canadian solar industry that is able to provide innovative solar energy solutions and play a major role as the world transitions to a sustainable future.

On February 23rd 2009, the Ontario Government introduced Bill 150 - The Green Energy Act. Its vision is to make Ontario a global leader in the development of clean, green energy; creating jobs, economic prosperity and energy security. The Green Energy Act requires a series of coordinated actions on the part of several ministries.

The Ontario Ministry of Environment ("MOE") invited CanSIA to discuss changes to the proposed content for the Renewable Energy Approval Regulation under the Environmental Protection Act that will help streamline the approval of PV solar system installations thereby encouraging more renewable energy generation and economic growth in Ontario.

CanSIA has reviewed the MOE's proposed content document with its members and has identified key items listed in Table 1 that will have a pronounced impact on solar developers and their projects. The remainder of this submission discusses the identified key items in more detail and discusses the implications and recommendations in terms of both large ground mounted solar PV projects and rooftop, wall-mounted and small ground mounted solar PV projects where applicable.

Table 1 - Impact of Proposed REA Regulation on solar PV projects

Item	MOE's Proposed REA Requirements	Impact
A	Transition Provisions	High
B	Noise Requirements	High
C	Decommissioning & Financial Assurance	High
D	Public Notification	Medium
E	Timing & Third Party Appeals	Medium

A **Transition Provisions** **High**

In consultations between the MOE and CanSIA that were held on June 19, 2009, it was indicated that under the draft EBR posting, only developments holding all approvals would be exempt from new EPA act amendments. This means that virtually ALL solar PV RESOP contracted projects would be required to go through the new REA process. This represents a significant midstream shift in the requirements for existing solar PV RESOP projects. Under the Environmental Assessment Act, Electricity Projects (Ont. Reg. 116/01), the MOE itself classified solar PV projects as Category A - minimal environmental effects - not requiring approval under the EAA. Therefore, solar RESOP contract holders have diligently developed their projects in accordance with other applicable existing legislative requirements. This abrupt change puts at risk the efforts that solar developers have made over the past eighteen months to obtain Official Plan ("OP") and zoning amendments, and complete site plan agreements. They now face the prospect of altered requirements and a new and untested REA process that, in spite of the best efforts of the MOE, will likely experience difficulties and delays as the process is fine tuned.

The MOE requested information regarding the impact of using this particular REA transition mechanism for the solar industry. Responses from solar developers holding RESOP contracts indicate that at least 400 MW of RESOP projects representing approximately $1.8 billion in investments would be thrown back into the REA process. Wording of the REA regulation, as drafted, injects a significant amount of risk for projects that were issued contracts under the OPA's RESOP program and have completed a large portion of the existing approvals process. The proposed MOE transition mechanism is expected to stall financing and precludes the creation of 2000 construction jobs in the next two years.

It is CanSIA's position that solar PV developers with RESOP contracts should be allowed to elect to remain in the existing municipal planning process in order to complete their project approvals. These projects are under strict deadlines for completion by the Ontario Power Authority and a robust planning process already provides for the sound development of these solar PV projects.

In the event that the EPA amendments force all projects that are not completely permitted into the REA process, CANSIA proposes that the Table 2 (below) be used as a transition guideline. The table specifies sections of the REA that developers should be exempted from as they resubmit their projects under the REA process. The matrix was constructed by looking at the studies and planning criteria that have been required of solar PV projects at different stages of approvals. For example, solar PV projects that have obtained approval for a zoning-bylaw amendment have already satisfied municipal planning requirements for cultural heritage, natural heritage, water features, noise, and zoning setbacks; conservation authorities and the MNR must have been consulted for fish and wildlife concerns; public consultation are already completed as part of the re-zoning process. All that remains is for site planning issues such as road access location, traffic management, parking, site safety and servicing to be completed (Part III, Section 2 of the proposed REA).

Table 2 - Guidelines for Transition of Solar PV Projects into the REA Process

Type of Project	RESOP contracted Project	No RESOP contract
	Service guarantee: **2 months**	Service guarantee: **6 months**
1) No zoning applications made	No exemptions from REA	No exemptions from REA
2) ZB/OP applications made (no approval)	Exempt from Part III, section 1 if Public Meetings have already been held. Exempt from: Part III, section 3, 4, 5, 6, 7, Part IV	Exempt from Part III, section 1 if Public Meetings have already been held. Exempt from: Part III, section 3, 4, 5, 6, 7, Part IV
3) OP/ZB approval received	Exempt from: Part III, sections 1,3,4 (except as required through municipality), 5, 6, 7 and Part IV	Exempt from: Part III, sections 1,3,4 (except as required through municipality), 5, 6, 7 and Part IV
4) OP/ZB and site plan approval received *or* *Projects taking place in municipalities that have no requirements for OP/ZB amendments and/or site plans*	Exempt from all sections of REA	Proponent provides proof of site plan approval and receives REA (REA is required to obtain FIT contract).

Large Ground Mounted Solar Recommendation:

Allow solar PV projects with RESOP contracts a one-year transition period in which to obtain a site plan agreement, otherwise they may elect to move into the REA process. (No solar PV RESOP project can go ahead without either a site plan agreement or an REA.)

B	**Noise Requirements**	**High**

The MOE has proposed that *"all solar photovoltaic facilities (e.g. ground mounted, rooftop, and wall-mounted) solar projects with a name plate capacity greater than 10 kW would have to submit a study demonstrating noise levels at the nearest Point of Reception are consistent with the Ministry of the Environment's noise guidelines".*

Although CanSIA recognizes the importance of minimizing noise pollution, we feel that these requirements place an unnecessary burden and cost on the development of rooftop, wall-mounted PV solar installations, particularly in urban areas (Noise Guidelines: Class 1 & 2 Areas) and certainly in instances where inverters will be enclosed.

As defined in MOE's NPC-232 or NPC-205 Noise Guidelines, Class 1 Areas have an acoustical environment *"typical of a major population centre, where the background noise is dominated by the urban hum."* It would therefore seem redundant to require equipment with minimal noise levels, such as inverters, to the cost and time associated with a noise study.

Our concern with requiring noise studies in Class 2 Areas is similar. NPC-232 or NPC-205 Noise Guidelines define Class 2 Areas as those having an *"acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours."* The key distinction being the lack of an "urban hum" during evening hours, a time-frame when solar PV production is near its lowest and, as such, already limited inverter noise is further reduced.

Additionally, it is expected that the majority of PV solar installation will have inverters that are enclosed, either within the building structure (rooftop and wall-mount) or in a constructed enclosure (ground mounted).

CanSIA does recognize the need for the PV solar installations to operate within the guidelines of the MOE's noise guidelines. Nevertheless, we also feel that it is important that MOE requirements be consistent with other regulatory processes related to renewable energy, specifically the OPA's and OEB's process of streamlining "queue-exempt" distributed generation projects (i.e. 250kW connecting at less than 15kV or 500kW connecting at greater than 15kV). These "queue-exempt" projects are considered by the OPA and OEB to have a minimal impact and should not be subject to unnecessary regulatory processes so that there development can be encouraged.

Rooftop, wall-mounted and Small Ground Mounted Solar Recommendation:

To ensure consistency with the other regulatory processes and the MOE's noise guidelines and reasonableness of its application, CanSIA proposes that: "unless inverters are contained within an enclosed structure, all solar photovoltaic facilities (e.g. ground mounted, rooftop, and wall-mounted) solar projects with a name plate capacity greater than 500 kW and installed in a Class 3 Area as defined within the MOE's noise guidelines (NPC-232 or NPC-205 Noise Guideline) would have to submit a study demonstrating noise levels at the nearest Point of Reception are consistent with the MOE's noise guideline.

C	**Decommissioning & Financial Assurance**	**High**

The MOE has proposed that *"proponents will be required to submit a decommissioning plan, which would address, among other matters, procedures for equipment/building, dismantling and demolition, site restoration and final residue disposal."*

It is also proposed that *"Financial Assurance will be required for future clean-up and remediation of the site. Consideration will be given for the recycling value of the photovoltaic components. The Ministry of the Environment will develop a streamlined approach to this calculation."*

In terms of decommissioning, the MOE has mentioned concern regarding some thinfilm modules (CdTe, CIS) which contain small amounts of cadmium compounds (CdTe, CdS). It is important to note that researchers have conducted experiments and determined that there is no risk posed by cadmium leaching from broken modules. Steinberger conducted outdoor leaching experiments on CdTe and CIS modules that had been broken into small fragments (~Icm^2). This scientific paper has been attached to this submission. Steinberger estimated that, in a worst case scenario, materials leached from the fragments into rainwater would result in concentration levels that are no higher than the German drinking water concentration limit for cadmium (5|ug/l). Note that Ontario Drinking Water Standards also define the Maximum Acceptable Concentration (MAC) for cadmium as 5|j,g/l (0.005mg/l)[9]. He stated that for broken CIS and CdTe modules on the ground, "no critical increase of natural element concentration is observed after leaching into the soil for 1 year." This is partly due to the fact that the CdTe is encapsulated and not readily available to leach.

Ground mounted solar PV systems are expected to operate for 30+ years, and after decades of operation, they are easily decommissioned. Panels are taken down and the balance of system is removed. The aluminum and steel components of the racking and wiring can be recycled and concrete components, if used in the original installation, can be crushed or re-used. Some concrete ballasts are even designed to be re-used as concrete retaining wall components. The removal of the solar panels and underground cables will leave the land in the same condition as it was before the solar energy system was constructed. Drainage

systems will be intact and minimal additional remediation may be required to restore small areas to their original condition.

In terms of the disposal of modules, the ultimate solution being adopted by the PV industry is recycling of the modules. The industry recognizes the environmental and economic advantages of recycling. Reclamation of exotic metals such as telluride and selenium from spent modules is essential to continued production, as these elements are relatively scarce.

Recent studies have shown that recycling based on current collection/recycling infrastructure as well as proven PV recycling technologies is both technologically and economically feasible. The estimated cost of recycling technologies for both monocrystalline and thin film technologies is $0.04-0.05/Watt. Given these circumstances, the EU has chosen not to regulate solar PV modules under the Waste Electrical and Electronic Equipment (WEEE) Directives, but is opting for a Voluntary Agreement with the PV manufacturers acting together under PVCycle. In fact, First Solar, the largest manufacturer of CdTe thin film modules, has developed the PV industry's first comprehensive pre-funded module collection and recycling program (http://www.firstsolar.com/recycle_modules.php). At the time each module is sold, sufficient funding is set aside in an independent "recycling trust" to meet the estimated collection and recycling costs of each module at the end of its useful life.

PVCycle (http://www.pvcycle.org): To provide a bit of background, the PVCycle Association was founded in Brussels in July, 2007. PVCycle () currently has 41 members, covering 31 countries and representing roughly 75% of the European PV market. It is a voluntary industry body created in order to establish a reliable recovery system for end-of-life PV modules. This includes both crystalline silicon modules as well as thinfilm modules. The PV industry recognizes that, although proven full-scale module recycling processes have been developed, their effectiveness hinges on a comprehensive collection and transportation program. In May 2007, Germany's renewable energy agency, the BSW, and the European Photovoltaic Industry Association (EPIA), commissioned a study on the development of a take-back and recovery system for photovoltaic products (see link). Completed in March 2008, this study on the relevant technical, ecological, economic, legal and political parameters is the basis for the work of the European PV Cycle Association.

The association has worked to an aggressive schedule. This Spring 2009, PVCycle completed the detailed design of the recycling model and has documented this model through a voluntary agreement that includes the commitment of the PV industry producers. Invitations to tender for the collection and transport of end-of-life PV modules have started to be issued (e.g. Germany). The intention is to begin implementing the program throughout Europe in 2009, together with annual monitoring and auditing. This will allow the association to fully test and troubleshoot the detailed design before 2015, when many of the modules installed in the 1990's will reach the end of their predicted 25-year life (see also http://www.pvworld.com/pvworld/en-us/index/articles/display.articles.PhotovoltaicsWorld.equipment-and_materials-general.light-cycle_recycling.html).

Large Ground Mounted Solar Recommendation:

CanSIA recommends that all large ground mounted solar PV projects (500 kW +) be exempt from the MOE's suggested financial assurances requirements. It represents an arbitrary and inequitable measure. Firstly, it does not give due consideration to the benign nature of solar PV technology which has been scientifically documented and which is evidenced in installations around the globe. Secondly, it does not give due regard to existing reclamation programs, the enormous salvage value, or the minimal remediation that solar PV projects will entail. The scrap value of all the copper and aluminum in these projects alone is enormous and certainly places PV projects in a completely different category than other projects that require financial assurance such as private landfills, sewage treatment facilities, pits and quarries. In sharp contrast to solar PV projects, these latter projects have no residual value that could be realized. Finally, financial assurance is not required for wind or hydro projects.

Rooftop, Wall-mounted and Small Ground Mounted Solar Recommendation:

CanSIA recommends that all rooftop, wall-mounted, and "queue-exempt" (under 500 kW) ground mounted systems be exempted from the MOE suggested decommissioning plan and financial assurance requirements. This is consistent with the OPA and OEB regulatory processes for encouraging the development of small-scale low impact distributed generation.

D Public Notification Medium

The MOE has proposed that *"renewable energy project proponents will be required to provide public notice within no less than a 1.5 km radius of the proposed renewable energy generation facility at a preliminary stage of project planning. Proponents will also be required to post notice of the proposed project in a local newspaper of general circulation within the municipality where the project is located."*

CanSIA agrees that public notification and consultation is an important part of renewable energy development, but feels that the radius of notification is not appropriate for solar PV projects and is inconsistent with the impact this technology has on surrounding areas.

In terms of large ground mounted projects there is virtually no impact outside the project boundaries while a visual buffer can be easily added. In terms of rooftop, wall-mounted and small ground mounted projects do not have impacts to HVAC and other equipment that have a similar footprint and are not subject to the same requirements. Additionally, notification requirements would expose smaller projects to potentially unnecessary appeals.

In relation to small-scale ground-mount, it is important that building/property owners have the flexibility to install these small-scale solar PV systems in instances where access to rooftops is not possible (i.e. shading, structural issues, etc). CanSIA therefore considers it to be important that the MOE requirements be consistent with other regulatory processes related to renewable energy, specifically the OPA's and OEB's process of streamlining "queue-exempt" distributed generation projects as discussed in the recommendations above.

Large Ground Mounted Solar Recommendation:

CanSIA recommends that the public notification radius be reduced to 400 m for large ground mounted solar PV projects (500 kW +) due to the fact that large ground mounted systems have low visibility and almost no impact outside the project boundaries. This recommendation is consistent with existing typical zoning requirements throughout municipalities in Ontario.

Rooftop, Wall-mounted and Small Ground Mounted Solar Recommendation:

CanSIA recommends that all rooftop, wall-mounted, and "queue-exempt" (under 500 kW) ground mounted systems be exempted from the MOE suggested public notification process. This is consistent with the OP A and OEB regulatory processes for encouraging the development of small-scale low impact distributed generation.

E **Timing & Third Party Appeals** **Medium**

In relation to third party appeals, the MOE has proposed that *"the time period be 9 months from the date that a hearing is requested to the issuance of a decision by the Tribunal."*

CanSIA agrees that a right to third party appeal and sufficient time to render a decision is an important component of an approval process. However, we are concerned with the time lag between the request for a hearing and a final decision by the Tribunal, specifically in relation to low-impact projects such as ground mounted and rooftop, wall-mounted and small ground mounted solar PV projects. Due to solar's benign nature these projects are low impact with limited grounds for appeal.

Joint Large Ground Mounted and Rooftop, Wall-mounted and Small Ground Mounted Solar Recommendation:

CanSIA proposes that the time period for the issuance of a decision by the Tribunal be reduced to 30 days for all solar PV projects.

Closing

CanSIA appreciates this opportunity to provide input regarding the Renewable Energy Approval Process and looks forward to working cooperatively with the MOE to ensure this process is streamlined and effectively structured. Furthermore, CanSIA requests the opportunity to meet with the Ministry of Environment in order to discuss this submission in further detail.

Comment ID:	**123788**	First name:	[redacted]
Submission Date:	**2009/07/24**	Last name:	
EBR Registry Number:	**010-6516**	Organization:	
Title or Proponent:	**Proposed Ministry of the Environment Regulations to Implement the Green Energy and Green Economy Act, 2009**	Home address:	
		City:	
Comment Period:	**45 days**	Province:	
		Postal code:	
		Telephone #:	
		Email address:	

Is the Comment Available for viewing online? No, Contains personal information / Renferme des renseignements personnels.

July 24, 2009
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RE: EBR Posting 010-6516 (Proposed Ministry of the Environment Regulations to Implement the Green Energy and Green Economy Act, 2009) - CanWEA's Supplemental Submission

Dear Ms. Wallace,

CanWEA would like to thank you for this opportunity to provide additional comments regarding the proposed Renewable Energy Approval (REA) regulations posted to the EBR on June 9, 2009.

As you are aware, we submitted our preliminary comments to the EBR on July 7, 2009. In that submission, CanWEA outlined our serious concerns with two key elements of the proposed REA regulations - that is, the proposed setback requirements from receptors and from property lines and roads. To be clear, we believe that the success of the Green Energy and Green Economy Act (GEA) ultimately rests on the government's decision to modify these requirements to reflect good science rather than non-evidence based speculation. If these concerns are not properly addressed, we believe that sizeable investments will be jeopardized, landowners and municipalities will be deprived of significant financial benefits, and the long-term viability of the GEA will be brought into question. We have again attached that submission for your review.

The present supplemental submission addresses a series of "secondary" concerns that we have with the proposed REA. Again we would like to stress that these secondary issues are immaterial if the proposed setback provisions are not modified.

Comments on EBR 010-6516:
Part I - Definitions
Page 2, 3rd paragraph - "A REA will not be required for renewable energy testing facilities". Please provide clarification on whether or not testing facilities require Planning Act approvals. It is not clear in the definition or language provided in the proposed regulations.

Part II - REA Requirements
Page 3, "Construction Plan" - The construction plan requires the identification and mitigation of impacts related to the construction and installation of the renewable energy generation facility. This appears to be an overall environmental impact assessment. Is this the intent? This would also duplicate what is assumed to be an Environmental Impact Statement (EIS).

Page 3, "Site Plan" - The Province needs to identify what is considered to be "significant" and the ministries of Environment, Natural Resources & Culture should then be required to produce mapping products and inventories that identify those features from which the project is to be set back.

Page 4, "Application Process", 1st paragraph - "Once the Ministry has determined that an application is complete, it will post a proposal notice on the Environmental Bill of Rights (EBR) Registry. Following the public comment period, the Ministry will begin its formal review of the application." As the EBR is 45 days, is this incremental to the 'service guarantee' or included

within it?

Page 4, Transition", 1st paragraph - "Renewable energy generation facilities currently holding all required approvals, such as Certificate^) of Approval (C of A)...will not require a REA..." What is meant by 'currently'? Is this as of proclamation, as of Royal Assent or some date in the past? Clarification is required as there are a number of projects that have C of A applications in process.

The regulation also states that "renewable energy generation facilities currently holding all required approvals, such as C of A...will not require a REA..., unless or until an amendment to the C of A is required..." Does this mean that if a facility is making an amendment to the C of A it will have to comply with all the requirements of the REA?

Page 4, "Transition", 4th paragraph - "...for those proposed facilities that have been authorised to proceed (issued a statement of completion...) prior to the Environmental Protection Amendments coming into force, the new appeals process...will not apply..." Similarly when does it take effect? Again, there a number of projects in process to obtaining a Statement of Completion, therefore would these also be included?

Page 5, "Third Party Appeal of Director's Decision" - CanWEA submits that the proposed timeline for hearings and decisions (9 months) is excessive and unwarranted. An analogous timeline is found under the OWA Class EA which is sixty (60) days. CanWEA believes that this should be the benchmark.

"A third party must request an appeal within 15 days of the notice of the decision respecting the REA being posted on the Environmental Registry." Please provide clarification on whether or not all appeals will automatically be heard by the Environmental Review Tribunal (ERT). Is there a mechanism for frivolous or vexatious claims to be 'weeded out' before reaching the Tribunal?

With respect to the statement "A person may require a hearing under subsection (2) only on the grounds that engaging in the renewable energy project in accordance with the REA will cause, serious harm to human health or serious and irreversible harm to plant life, animal life or the natural environment" - CanWEA would like to confirm that in these cases it is the responsibility of the third party to prove irreversible harm.

Part lll - Explanation of General Requirements
Page 5, "Public Notice and Community Consultation" - The requirement that consultation be undertaken using "community consultation meetings" should be linked to eligibility for access to the ERT (i.e. only those who participate in the process can object to its outcome).

Page 5, "Public Notice and Community Consultation", 2nd paragraph - "...Once ready to submit the application for Ministry of Environment (MOE) review, the proponent will be required to hold at least 1 community consultation meeting to discuss the project and its potential local impact....The proponent will be required to provide documentation of all community consultation efforts, and explain how it attempted to address issues raised during the community consultation." CanWEA submits that if a meeting is held when the REA application is ready to be submitted; then how applicable is the consultation at this stage? If there are concerns raised, it may be too late in the process to address them as the proponent will have already completed studies and will be ready to submit an application for REA. The community consultation meeting should be held before the REA application is complete to permit minor adjustments to the application.

Page 6, "Municipal Consultation" - There is a concern about a potential for delay on some of the matters on the list, specifically requiring "location and type of municipal service connections" and "proposed road access location". For those, the proponent must reach an agreement with the municipality. The Issue of delay arises if the municipality refuses to provide the required information for some reason. How would this be rectified? Would the Province intervene directly?

Page 6, "Municipal Consultation", 4th paragraph - "The MOE will provide a template to the proponent that will be completed in conjunction with the municipality." CanWEA asks for clarification as to when this will occur as it will need to be done early in the project life cycle.

Page 6, "Aboriginal Consultation", 1st paragraph - "In fulfilling this duty, the Crown may delegate some aspects of consultation to proponents who are seeking approval on a particular project." Please clarify what aspects of consultation may be delegated to the proponents.

Page 6, "Aboriginal Consultation", 4th paragraph - "The Crown proposes to clarify, through subsequent guidance materials..." When will these guidance materials regarding the Crown's responsibilities for consultation be prepared and made available to the proponent?

Page 7, "Cultural Heritage", 1st paragraph - "It is proposed that proponents would be required to undertake a self-assessment to identify any known or potential effects to archaeological or heritage resources that could result from the project." Please clarify what would be involved in this self-assessment.

Page 8, "Natural Heritage" - Please confirm that the province will have responsibility for identifying the geographic location of the features from which projects must be set back.

In the "Study Alternative", how will a proponent go about proving that this risk is mitigated? Additionally, if it is proven that the risk is low will subsequent proponents have to 're-prove' what is already 'proven'? I

CanWEA recommends that previously established provincial policies relating to Infrastructure projects, as outlined in the Provincial Policy Statement (PPS), be upheld. In defining Infrastructure projects differently than Development projects, the PPS policies specifically recognize the necessity of Infrastructure projects and their importance to the public good. Specifically, PPS policies, as they relate to Infrastructure, do not preclude placing Infrastructure near to or within defined natural heritage features.

CanWEA proposes that the phrasing within the Natural Heritage section be reworded to reflect the intent of the regulation. The use of the term "minimum setback" implies that there can be no development within the applicable setback. However, this is not the case with Natural Heritage and Water Body features. The intent of the listed setbacks is not to preclude projects from being located closer to, or in some cases inside, the feature, but to require specific technical study (i.e., an EIS) when that setback is impinged upon. Proposed setbacks are based on the zone of influence or area of effect that the feature has on the surrounding landscape. Where project infrastructure is proposed to be placed closer to the feature than the proposed setback, an EIS is required. The purpose of the EIS is to determine whether a reduced setback would have any effect on the function of that feature. If additional studies are completed to confirm the feature's functions and any appropriate mitigation measures, if necessary, to preserve those functions, turbines and ancillary parts should be permitted within the setback.

CanWEA members' experience indicates that the public takes the term "minimum setback" literally and assumes the rules are being bent when a developer locates a turbine or ancillary parts within the Natural Heritage recommended setback distance.

CanWEA recommends that the term "minimum setback" and the table heading "setback required" within the Natural Heritage section be changed to reflect the intent of the regulation or that a paragraph similar to the clause within the noise section be added. Please see below.

It is proposed that if a wind turbine project proponent should be interested in obtaining a lower setback than indicated, it would have the option to complete an Environmental Impact Statement.

Page 9, "Records Review and Site Investigation" - This step must be accompanied by a scoping meeting led by the proponent at which all agencies (including federal) provide all known information about the site (Site Description Package). Failure of an agency to participate should not be allowed to delay the proposal. CanWEA suggests it is the Province's responsibility to identify the boundaries and location of a feature in order that the proponent can confirm their presence.

Page 9, "Records Review and Site Investigation", 1st paragraph - "The proponent shall undertake a records review of documents containing natural environment baseline information about any features within 120 metres of the facility." It is unclear as to what will be involved in a records review. Is this a NHIC search?

Page 10, "Assessment" - There is no indication in the document of what will constitute an "EIS" and no procedures or guidance from the Ministry of Natural Resources (MNR) has been provided. CanWEA requests an opportunity to review and comment on such guidance before the regulation takes effect.

Part IV - Explanation of Technology-Specific Requirements
Page 13, "Noise Setbacks", 4th paragraph - "...it is proposed that the number of turbines considered for determining the appropriate setback include all wind turbines found within the 3 km radius of the Point of Reception..." CanWEA finds that the proposed expectation to assess the impacts of turbines outside of the proposed project area, including those planned and those approved under previous rules, would be very difficult to meet, as it may result in wind turbine sound power levels over the limit even before the proposed turbines are assessed. The requirement to consider proposed projects should come into effect where an application has been submitted to the MOE for approval and not be affected by previous projects outside the project study area and approved under previous standards.

In addition, how does a proponent determine what constitutes a "planned" facility? What are the criteria? CanWEA suggests that the MOE set an 'as of date' on which all existing and planned projects will have to be taken into account. This could happen at a pre-consultation meeting with the Ministries, for example.

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'preliminary information' is and what will be required in the 'field investigation'? Is it reasonable to assume that the current guidelines will remain intact? If new guidance documents are prepared, CanWEA suggests that a grandfathering approach be used for projects that have already completed field programs.

Developers need some certainty from the MNR with respect to the field programs to be completed for both bird (those within MNR's jurisdiction) and bat studies. CanWEA suggests that prior to the commencement of a field program a developer must submit a field program protocol based on existing policies to the MNR for review and approval. We also request that the MNR guarantee a response time on approvals for field protocols prior to a field program commencing. Once a reasonable field program is agreed upon between the proponent and the MNR, both parties should sign-off on the program. This will establish a clear process with certainty for the project developer early on in the process and will hopefully prevent the MNR from requesting proponents to complete additional studies as the project nears the end of the project permitting stage which has been the case to date.

If the MNR deems that the results of the approved field program warrants additional studies, these studies, if reasonable, should be made as a condition of the REA approval and should not prevent or delay a proponent from receiving a REA approval.
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Other Comments:
Service Guarantee - Where is the Service Guarantee within the REA? Proposed regulations appear to be silent on this important issue.

Timelines - The current timeframe for confirmation of approvals appears to be onerous on the proponent and needs to be clarified. The steps and timelines (where known) are presented in the following Table. A clarification of the timelines to review the application for completeness and for the review of the REA is needed. CanWEA suggests that the time to review the REA for completeness by the MOE be limited to 10 days and the time for the MOE to review the REA be limited to 4 months, giving a total time of approximately 6 months from submission to approval, assuming no elevation to the ERT.

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CanWEA respectfully submits these comments and welcomes the opportunity to discuss any of the issues raised in our submissions.
Sincerely,

Robert Hornung
President

End. July 7,2009 letter to the Honourable John Gerretsen, Minister of Environment

CAVAO AN WIND I ASSOCIATION CANADIcNNE
ENERGY ASSOC At OX I DE I tKtSOIC COUENNC

July 24, 2009

Marcia Wallace
Ministry of the Environment
Environmental Programs Division
Program Planning and Implementation Branch
55 St. Clair Avenue West
Floor 7

Toronto, ON M4V2Y7

Dear Ms. Wallace,

RE: EBR Posting 010-6516 (Proposed Ministry of the Environment Regulations to Implement the Green Energy and Green Economy Act. 2009) - CanWEA's Supplemental Submission

CanWEA would like to thank you for this opportunity to provide additional comments regarding the proposed Renewable Energy Approval (REA) regulations posted to the EBR on June 9, 2009. As you are aware, we submitted our preliminary comments to the EBR on July 7, 2009. In that submission, CanWEA outlined our serious concerns with two key elements of the proposed REA regulations - that is, the proposed setback requirements from receptors and from property lines and roads. To be clear, we believe that the success of the Green Energy and Green Economy Act (GEA) ultimately rests on the government's decision to modify these requirements to reflect good science rather than non-evidence based speculation. If these concerns are not properly addressed, we believe that sizeable investments will be jeopardized, landowners and municipalities will be deprived of significant financial benefits, and the long-term viability of the GEA will be brought into question. We have again attached that submission for your review. The present supplemental submission addresses a series of "secondary" concerns that we have with the proposed REA. Again we would like to stress that these secondary issues are immaterial if the proposed setback provisions are not modified.

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Comments on EBR 010-6516:

Part **I** - Definitions
Page 2, 3rd paragraph - "A REA will not be required for renewable energy testing facilities". Please provide clarification on whether or not testing facilities require Planning Act approvals. It is not clear in the definition or language provided in the proposed regulations.

Part **II** - REA Requirements
Page 3, **"Construction** Plan" - The construction plan requires the identification and mitigation of impacts related to the construction and installation of the renewable energy generation facility. This appears to be an overall environmental impact assessment. Is this the intent? This would also duplicate what is assumed to be an Environmental Impact Statement (EIS).

Page 3, "Site **Plan"** - The Province needs to identify what is considered to be "significant" and the ministries of Environment, Natural Resources & Culture should then be required to produce mapping products and inventories that identify those features from which the project is to be set back.

Page 4, "Application Process", 1st paragraph - "Once the Ministry has determined that an application is complete, it will post a proposal notice on the Environmental Bill of Rights (EBR) Registry. Following the public comment period, the Ministry will begin its formal review of the application." As the EBR is **45** days, is this incremental to the 'service guarantee' or included within it?

Page 4, "Transition", **1st paragraph** - "Renewable energy generation facilities currently holding all required approvals, such as Certificate(s) of Approval (C of A)...will not require a REA..." What is meant by 'currently'? Is this as of proclamation, as of Royal Assent or some date in the past? Clarification is required as there are a number of projects that have C of A applications in process.

The regulation also states that "renewable energy generation facilities currently holding all required approvals, such as C of A...will not require a REA..., unless or until an amendment to the C of A is required..." Does this mean that if a facility is making an amendment to the C of A it will have to comply with all the requirements of the REA?

Page 4, "Transition", 4th paragraph - "...for those proposed facilities that have been authorised to proceed (issued a statement of completion...) prior to the Environmental Protection Amendments coming into force, the new appeals process...will not apply..." Similarly when does it take effect? Again, there a number of projects in process to obtaining a Statement of Completion, therefore would these also be included?

Page 5, 'Third **Party Appeal of Director's Decision"** - CanWEA submits that the proposed timeline for hearings and decisions (9 months) is excessive and unwarranted. An analogous

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timeline is found under the OWA Class EA which is sixty (60) days. CanWEA believes that this should be the benchmark.

"A third party must request an appeal within 15 days of the notice of the decision respecting the REA being posted on the Environmental Registry." Please provide clarification on whether or not all appeals will automatically be heard by the Environmental Review Tribunal (ERT). Is there a mechanism for frivolous or vexatious claims to be 'weeded out' before reaching the Tribunal?

With respect to the statement: "A person may require a hearing under subsection (2) only on the grounds that engaging in the renewable energy project in accordance with the REA will cause, serious harm to human health or serious and irreversible harm to plant life, animal life or the natural environment" - CanWEA would like to confirm that in these cases it is the responsibility of the third party to prove irreversible harm.

Part III - Explanation of General Requirements

Page 5, "Public Notice and Community Consultation" - The requirement that consultation be undertaken using "community consultation meetings" should be linked to eligibility for access to the ERT (i.e. only those who participate in the process can object to its outcome).

Page **5, "Public** Notice **and Community Consultation", 2nd paragraph** - "...Once ready to submit the application for Ministry of Environment (MOE) review, the proponent will be required to hold at least 1 community consultation meeting to discuss the project and its potential local impact....The proponent will be required to provide documentation of all community consultation efforts, and explain how it attempted to address issues raised during the community consultation." CanWEA submits that if a meeting is held when the REA application is ready to be submitted, then how applicable is the consultation at this stage? If there are concerns raised, it may be too late in the process to address them as the proponent will have already completed studies and will be ready to submit an application for REA. The community consultation meeting should be held before the REA application is complete to permit minor adjustments to the application.

Page 6, "Municipal Consultation" - There is a concern about a potential for delay on some of the matters on the list, specifically requiring "location and type of municipal service connections" and "proposed road access location". For those, the proponent must reach an agreement with the municipality. The issue of delay arises if the municipality refuses to provide the required information for some reason. How would this be rectified? Would the Province intervene directly?

Page 6, "Municipal Consultation", 4th paragraph - "The MOE will provide a template to the proponent that will be completed in conjunction with the municipality." CanWEA asks for clarification as to when this will occur as it will need to be done early in the project life cycle.

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Page 6, "Aboriginal Consultation", 1st paragraph - "In fulfilling this duty, the Crown may delegate some aspects of consultation to proponents who are seeking approval on a particular project." Please clarify what aspects of consultation may be delegated to the proponents.

Page 6, "Aboriginal Consultation", **4th** paragraph - "The Crown proposes to clarify, through subsequent guidance materials..." When will these guidance materials regarding the Crown's responsibilities for consultation be prepared and made available to the proponent?

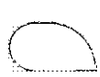
Page 7, "Cultural Heritage", **1st paragraph** - "It is proposed that proponents would be required to undertake a self-assessment to identify any known or potential effects to archaeological or heritage resources that could result from the project." Please clarify what would be involved in this self-assessment.

Page 8, "Natural Heritage" - Please confirm that the province will have responsibility for identifying the geographic location of the features from which projects must be set back.

In the "Study Alternative", how will a proponent go about proving that this risk is mitigated? Additionally, if it is proven that the risk is low will subsequent proponents have to 're-prove' what is already 'proven'? I

CanWEA recommends that previously established provincial policies relating to Infrastructure projects, as outlined in the Provincial Policy Statement (PPS), be upheld. In defining Infrastructure projects differently than Development projects, the PPS policies specifically recognize the necessity of Infrastructure projects and their importance to the public good. Specifically, PPS policies, as they relate to Infrastructure, do not preclude placing Infrastructure near to or within defined natural heritage features.

CanWEA proposes that the phrasing within the Natural Heritage section be reworded to reflect the intent of the regulation. The use of the term "minimum setback" implies that there can be no development within the applicable setback. However, this is not the case with Natural Heritage and Water Body features. The intent of the listed setbacks is not to preclude projects from being located closer to, or in some cases inside, the feature, but to require specific technical study (i.e., an EIS) when that setback is impinged upon. Proposed setbacks are based on the zone of influence or area of effect that the feature has on the surrounding landscape. Where project infrastructure is proposed to be placed closer to the feature than the proposed setback, an EIS is required. The purpose of the EIS is to determine whether a reduced setback would have any effect on the function of that feature. If additional studies are completed to confirm the feature's functions and any appropriate mitigation measures, if necessary, to preserve those functions, turbines and ancillary parts should be permitted within the setback. CanWEA members' experience indicates that the public takes the term "minimum setback" literally and assumes the rules are being bent when a developer locates a turbine or ancillary parts within the Natural Heritage recommended setback distance.



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CanWEA recommends that the term "minimum setback" and the table heading "setback required" within the Natural Heritage section be changed to reflect the intent of the regulation or that a paragraph similar to the clause within the noise section be added. Please see below. *It is proposed that if a wind turbine project proponent should be interested in obtaining a lower setback than indicated, it would have the option to complete an Environmental Impact Statement.*

Page 9, "Records Review and Site Investigation" - This step must be accompanied by a scoping meeting led by the proponent at which all agencies (including federal) provide all known information about the site (Site Description Package). Failure of an agency to participate should not be allowed to delay the proposal. CanWEA suggests it is the Province's responsibility to identify the boundaries and location of a feature in order that the proponent can confirm their presence.

Page 9, "Records Review and Site Investigation", 1st paragraph - "The proponent shall undertake a records review of documents containing natural environment baseline information about any features within 120 metres of the facility." It is unclear as to what will be involved in a records review. Is this a NHIC search?

Page 10, "Assessment" - There is no indication in the document of what will constitute an "EIS" and no procedures or guidance from the Ministry of Natural Resources (MNR) has been provided. CanWEA requests an opportunity to review and comment on such guidance before the regulation takes effect.

Part IV-Explanation of Technology-Specific Requirements

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Sincerely,

Robert Hornung
President

End. July 7, 2009 letter to the Honourable John Gerretsen, Minister of Environment

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July 7, 2009

The Honourable John Gerretsen
Minister of Environment
Province of Ontario
135 St Clair Avenue West, 12th Floor
Toronto, ON M4V 1P5

Dear Minister Gerretsen,

We would like to thank you for this opportunity to provide early comments on the proposed Renewable Energy Approval (REA) process. We will be submitting detailed comments on the EBR by the July 24th deadline but wanted in the interim to highlight some major concerns we see with specific elements of the proposed regulations, namely the proposed setback regulations and the proposed transition provisions. With respect to the proposed setbacks - namely, the mandatory minimum setback of 550 metres from the closest Point of Reception and the setback distance equal to or more than turbine hub height plus blade length ("tower plus blade") from all roads, railways, and property side and rear lot lines - **CanWEA believes that these two requirements, if enacted, would jeopardize over three-quarters of all "construction ready" wind projects in Ontario,** thereby calling into question the potential for the government's Green Energy and Green Economy Act (GEA) to reach its objectives. The remainder of this submission outlines our views on this critical issue and proposes solutions going forward.

CanWEA Survey on Impacts of Proposed Setbacks

Upon the release of the proposed regulations on June 10th, CanWEA commissioned a survey amongst our members to assess the impacts that both proposed setback requirements (550m and "tower plus blade") would have on their "advanced projects" - that is, projects that were either bid into RES III or had reached a late stage of development (e.g. final layouts complete, Notice of Commencement issued, etc.) It is important to note that members made the following assumptions in their analysis:

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1. That the proposed setback distance of "tower plus blade" is from all NON PARTICIPATING roads, railways, and property side and rear lot lines (in other words, they assumed that lot lines, receptors, and lots that are involved in, or on the wind farm project, are not subject to the proposed setbacks).
2. That the noise level limit of 40 dBA is for wind speeds of 4-6 m/s and ramps up with wind speed in reference to wind induced background noise as per the Ministry of Environment's October 2008 guidelines.

CanWEA received responses from 25 developers representing a wide range of project sizes and locations. These developers collectively assessed the impact that the proposed regulations would have on 103 **projects representing** 3**,262** MW **of construction-ready projects.** Note that all of these projects are/were compliant with the regulations that existed prior to the GEA. The survey results revealed the magnitude of the impacts that the proposed regulations would have:

- Of the 103 projects, 96 projects (93% of the total) representing 3,107 MW would be impacted to some degree by the proposed requirements (in other words, in each of these projects, one or more turbines would be deemed to be non-compliant with the new proposed requirements)
- Within the 96 affected projects, the proposed requirements would eliminate 48% of all the turbines, representing 1,624 MW of capacity
- **The net effect is that 79 construction-ready projects (77% of the total) representing 2,591 MW would either be rendered immediately non-viable or would require a complete "back to the drawing board" redesign.**

CanWEA estimates that the 79 "lost" projects represent development costs in excess of $50 million. Survey results also suggest that the impacts would be greatest on projects in southern Ontario (due to the narrow lots that are characteristic of that region) and on small projects less than 20 MW (which are more sensitive economically to reductions in turbine numbers). It is important to note that these results are based on the assumptions discussed above. If either or both of those assumptions are incorrect, the resulting impact statistics on advanced projects would be much higher and our recommendations below would also include a requirement to exclude participant receptors and lots from these setbacks.

The cumulative effect of both required setbacks are considerable. The 550 metre minimum tends to push the turbines to the rear property lines while the "blade + tower" requirements drive turbines towards the centre of the leaseholders' lands. The end result of these two setbacks is that significant portions of the Province will effectively be 'sterilized' from wind energy development. For example, many farm lots in Ontario are 600 to 650 metres deep. Applying the 550 m receptor setback and the "tower plus blade" lot line setback would effectively exclude all of these lots.

Here it is important to note the complexity involved in development of an optimized wind farm layout. During design, the proponent must control for a wide range of "constraints" that limit where turbines can and cannot go. These include considerations for topography, wind speed, flora and fauna impacts, sound, safety, inter-turbine spacing etc. If any of these constraints are increased without reference to peer-reviewed evidence and practical experience, the net effect on the wind farm could be detrimental without providing any concurrent benefits. The sensitivity is such that the loss of even one or two turbines in a layout can force a complete reconsideration of the wind farm.

To be clear, CanWEA believes that the cumulative effects of both proposed setback requirements would contradict Ontario's Provincial Policy Statement; specifically Section 1.8.3 which states that:

"Alternative energy systems and renewable energy systems shall be permitted in settlement areas, rural areas and prime agricultural areas in accordance with provincial and federal requirements. In rural areas and prime agricultural areas, these systems should be designed and constructed to minimize impacts on agricultural operations."

As mentioned, the proposed setbacks would achieve the absolute opposite of this, by pushing turbines and related infrastructure into the middle of fields.

CanWEA Recommendation on Setbacks

CanWEA believes that the proposed requirements would have a devastating impact on wind development in Ontario. To avoid this, and allow the government to reach its objectives, CanWEA recommends that the government base setbacks on scientifically-proven references that speak to the specific issues they are designed to address. In other words, setbacks for sound should be based on acceptable sound, and setbacks from public access points should be based on public safety. To this end, CanWEA recommends that the government:

a) Eliminate the minimum setback and instead use the Ministry of Environment (MOE) October 2008 sound guidelines as a reference, and
b) Set a minimum distance equal to one turbine blade length plus 10 metres from all non-participating property lines and public roads.

The rationale for each is discussed below.

Setbacks from non-participating residences

CanWEA maintains that setbacks for sound should be based on sound, not an arbitrary fixed distance. In our opinion, the current MOE Sound Guidelines updated as recently as October 2008 are more than sufficient to ensure acceptable sound levels. In fact, with these existing

guidelines, Ontario already has one of the strictest regimes in the world when it comes to setback distances based on acceptable sound levels. A survey of projects that are approved or already in the ground in Ontario demonstrates that acceptable minimum setbacks established by municipalities are in the neighbourhood of 400m. Site specific noise studies, based on the October 2008 guidelines, push this number higher in many locations depending on layout, topography and turbine type. CanWEA maintains that there is no compelling scientific rationale behind setting a minimum setback distance in excess of current distances which were approved by the municipalities. Based on discussions with MOE staff, it is our understanding that the 550m figure was achieved by modeling a worst-case scenario which contradicts the logic behind having a "minimum" setback and unjustly penalizes projects that complete site-specific noise models and demonstrate compliance with the applicable noise guidelines.

Setbacks from roads, railways, and non-participating property side and rear lot lines

CanWEA believes that there is no rationale for a setback from roads, railways, and property side and rear lot lines of "blade length + tower height" (in effect, 120 to 125 metres). To date, the only rationale provided to CanWEA for this requirement was that "concerns were raised about safety during the GEA committee hearings." We find this rationale to be categorically unacceptable.

The determination of these distances should be based on evidence rather than an arbitrary figure. CanWEA commissioned a comprehensive, objective study in 2007 from Garrad Hassan entitled "Recommendations for Risk Assessment of Ice Throw and Blade Failure in Ontario" (attached for your review) which looked into the existing data and current publicly available literature. The report recommended how the risk of public injury from ice throw or blade loss can be calculated with distance from a turbine to all non participating property line and public roads. Many municipalities across Ontario have used this document as the basis to determine their own setbacks from roads, railways, and non-participating property side and rear lot lines. The majority of these have determined through their own assessments that "blade length +10 metres" was more than sufficient to ensure public safety. Here, it is important to note that advances in turbine technology have decreased the risk of ice throw and blade failure even further as the turbines shut down automatically when ice forms on the blades through 1) ice sensors & shut down mechanisms; 2) remote and visual monitoring for shut down; and 3) vibration sensors for the purpose of protecting the blades. As a result, if ice does form, it falls from the blades onto the surrounding ground and is not thrown.

It should be noted that this setback is consistent with application of the Ontario Building Code under which wind turbines are assessed. Under the Building Code, public access routes can be situated directly adjacent to tall building, even though these buildings are sometimes (but rarely) known to experience failures and sometimes (but rarely) shed ice fragments. In this way, a setback of "blade length +10 metres" for wind can be considered to be more conservative with respect to the treatment accorded to buildings.

Proposed Resolution

If, after considering our position on the proposed setback regulations above, the Ministry is still of the opinion that there be some sort of mandatory minimum setback distance, CanWEA recommends the following:

- If a developer follows the proposed matrix and elects not to do a Noise Impact Assessment (NIA), then the minimum non-participating receptor setback would be 550m;
- If instead a developer elects to complete a site-specific NIA, setbacks would be based on its results per the October 2008 guidelines, with an absolute minimum of 400m;
- Consistent with our assumptions above we recommend that participant receptors and participant property rear and side lot lines should be exempted from the proposed setbacks under the REA.

It is CanWEA's opinion that this represents a reasonable and scientifically-sound solution that achieves the government's goal of having minimum setbacks and allows development to continue while safeguarding the interests of the public in areas where investment and jobs are desperately needed in Southern Ontario.

Transition

Unless the setback requirements are structured to constitute the largest common denominator among the advanced-stage projects - i.e. the least stringent combination of setbacks currently applicable to these projects - there will be a need to establish a fair and equitable transition process to allow proponents to continue with their development and construction plans and prevent the loss of significant time, effort and cost incurred to-date.

The proposed regulations suggest the Certificate of Approval (C of A) as the transition point. It is well known that the C of A is obtained at the very end of the environmental assessment process. Therefore it is CanWEA's submission that this transition point fails to recognize the significant work undertaken throughout the permitting process of a wind project as it moves through several milestones.

The proposed Renewable Energy Approval (REA) merges the environmental assessment and municipal permits in a single process which will streamline permitting for new projects moving forward. To-date, however, noise setbacks have been determined as per the provincial environmental process and setbacks from roads, property lines and waterbodies have been determined as per the municipal requirements.

Furthermore, the proposed REA transition milestones do not recognize the fact that several hundred megawatts of wind capacity were recently contracted under the RES III competitive process. These projects bid and were awarded contracts based on their price and project maturity. The price bid was based on assumptions of project maturity and construction-readiness. These projects were also encouraged by the Ministry of Energy not to advance their projects to Notice of Completion (NOC). The proposed regulations would strip these projects of their maturity and severely hamper the developers' ability to move forward with the projects under the contracted price and Commercial Operation Date (COD).

Therefore CanWEA submits that it is logical to establish additional cut-off points (instead of just C of A) for advanced-stage projects depending on their maturity:

- All projects with executed RES III contracts should be transitioned without prejudice through the REA process (therefore not subject to the proposed mandatory setback requirements) to meet the milestone schedules as outlined in their contracts with the OPA;
- All projects that have issued a Notice of Completion (NOC) should be transitioned with an exemption from the mandatory minimum setbacks from Points of Reception under the REA;
- All projects that have issued the NOC and are compliant with policies and regulations established by the local municipality or the upper tier municipality under the previous Planning process related to roads, railways, and property side and rear lot lines should be exempted from the setbacks under the REA.

Conclusions

The proposed setback requirements would effectively eliminate over three-quarters of all construction-ready wind projects in Ontario while providing no apparent benefits to the government and citizens of Ontario. The implications cannot be understated, and CanWEA believes that the success of the GEA ultimately rests on the government's decision to modify these requirements to reflect good science rather than non-evidence based speculation. We urge the government therefore to establish sound setbacks based on the MoE October 2008 guidelines, and setbacks of "blade length plus 10 metres" from rear and side lot lines. If the government is still of the opinion that minimum setback distances are necessary, we submit that the government maintain the 550m setback distance from non-participating receptors only in circumstances where a developer has chosen not to undertake a site-specific noise impact assessment. Otherwise, sizeable investments will be jeopardized, landowners and municipalities will be deprived of significant financial benefits, and the long-term viability of the GEA will be brought into question.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Robert Hornung
President

End.

cc: Minister George Smitherman

45 Sheppftrd Avenue East, Suite 409
Toronto, Ontario M2N 5W9

Telephone: (416) 961-2339 * Fax: (416) 961-1173

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Ontario En&rgy Association

July 27,2009

Ministry of the Environment
Environmental Programs Division
Program Planning and Implementation Branch
55 St Clair Avenue West, Floor 7
Toronto Ontario M4V **2Y7**

Attention: Marcia Wallace
Manager

Program Planning and implementation Branch

Dear Ms. Wallace:

REi Proposed Content tor the Renewable Energy Approval Regulation under the Environmental Protection Act, EBR Registry Number; 010-681$

Enclosed are the Ontario Energy Association's comments on the proposed Renewable Energy Approval (REA) Regulation under the Environmental Protection Act, which is being developed to streamline provincial approval processes for renewable energy projects under the Green Energy and Green Economy Act 2009.

we appiaua tne governments snorts to streamline provincial approval processes tor renewable enerov oroiects based on a comoletB **inteorated aoolication with a coordinated Drocess** to **secure ail provincial authorizations** within **set timelines We oeiieve tnat it is imperative to estauiisn setoacKS tnat are exempt trom lurtner municipal regulation, and that certain types of projects (based on size and noise profile) be exempt from the REA process,** it **is equally important that the regulatory framework and startdards be transparent, easRy interpreted, and ensure trie concerns or all staKenoiders are carefully balanced, in order to enable proponents'** to **deliver renewable sources of energy efficiently and for the Province to achieve** if **a for** green **energy objectives.**

While individual members of our Association will locus on more detailed and comprehensive submissions, we believe some basic principles should apply overall, as outlined below:

Under the new process, proponent® will be **required to submit a complete application meeting a series of requirements supported by applicable expert studies and other documentation. Most of these are already required under existing legislation and regulations; the main difference if that they must now be completed before the approval and evaluation process begins. While the Association does not disagree with this change in process we would ask that the Ministry consider the following:**

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- The development end construction of a renewable energy project is a dynamic and iterative process, in order to facilitate the completion of the application while minimizing the cost of "at risk" capital, the requirements must be transparent, cieany aracuiatea, ana not suDject to arpitrary cnange.
- The process must have the flexibility to allow some variance from the original planned design, as elements of a project — such as the construction plan, technological specific requirements, and site requirements — may be subject to change as stakeholder concerns are addressed. Consequently, the Ministry should define the "significant modifications" that would require a proponent to submit a new complete application for an REA.
- For some projects, current approval processes may be more efficient and effective than the proposed REA process. For example, for hydroelectric oroiects. the current OWA Class EA orocess works well because it is well-understood, workable, addresses the specific environmental and technical asoects of wateroower oroiects. and has been extensivelv stakeholdered and recently approveo. we recommeno mat tne KEA process nave in© nexiDHity to allow Droiect deveioDers to elect to use existina Class EA processes, oarticulariv for oroiects a l readv underwav.
- , we believe that the obligation to consult with Aboriainal peoples rests with the Government of Ontario. However, since the regulation proposes that proponents be required to carry out certain duties to consult, we recommend that the Ministry be as clear and as specific as possible about the proponents' responsibilities.

Under the proposed REA procs88« the Ministry will: (i) determine whether the application ^ complete: (ii) if complete, post It to the EBR for public consultation" and (Hi) fbllowina public consultation begin the formal review of the application. We recommend that timelines be set for each of these three stages of the REA process.

Once an application has been approved, the decision is posted to the Environmental Ettl of Rights (EBR) Registry. A third party then has 15 days to appeal the decision to the Tnounai. me appeal process entails oeiay ana costs to tne proponent, tnererore tne regulation should:

- opeciry tne circumstances ana oasis on wnicn a oecision can oe appeaieo. ine intent should be to ensure an aooeal is not immaterial or frivolous in nature
- Ensure the Tribunal is obligated to immediately set a hearing date on the date an appeal is grantea. a neanng ana aectsion snouia oo renoereo wnnm o montns rrom the date of the appeal.
- . Ensure that the proponent has the right to elect not to accept the decision of the Tribunal and not proceed with a proposed project.

Throughout the proposed process there is the potential for delay because of the open-ended nature of the processes. We would encourage wherever possible to clearly identify expectations and deliverables. The more certainty that can be provided about me requirements ana evaluation or an application, ine more UKeiy investors will DO to Invest Ontario.

We remain concerned that the Ministries of Energy and Environment continue to have somewhat competing policy interests around the development of a sustainable and renewable energy industry In Ontario. Accordingly, we would encourage the Ministries consider ine Denerii OT regular consultations at uie mgnest levels about now oest to achieve the government's overall objectives.

Paramount to achieving these objectives will be the need to ensure that the Ministry has the adequate resources (both human and technological) to process the applications.

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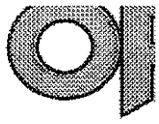
Paul McMillan
Interim President and CEO
Ontario Energy Association

cc Board of Directors (OEA)

Gregor Robinson (OEA)
John Priddle (OEA)



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Ontario AgriCentre
100 Stone Road West, Suite 206, Guelph, Ontario N1G 5L3
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July 20, 2009

Marcia Wallace, Manager
Ministry of the Environment
Environmental Programs Division
Program Planning and Implementation Branch
55 St. Clair Avenue West, Floor 7
Toronto ON
M4V 2Y7

Re: EBR Registry Number 010-6516 - Proposed Ministry of the Environment Regulations to Implement **the Oreen Energy and Green Economy Act, 2009**

Dear Ms. Wallace:

The Ontario Federation of **Agriculture (OFA) represents the interests of over 38,000 farm businesses in Ontario. We are** pleased **to offer our comments, on their behalf, to the Proposed Ministry** of **the Environment** Regulations **to** Implement **the Green Energy and Green Economy Act, 2009**

Ontario farmers are **well positioned to provide Ontario with a green and affordable supply** of **renewable energy now and into the future.** The **regulations** that **govern the generation and delivery** of **such energy will be critical in determining the** degree **to which** our **farm families** can **and** will **invest in renewable energy projects.**

As rural **landowners, and** as generators of **organic materials, our members have several** options available **to** them **to participate** in **renewable energy** projects. Consequently, **the** Q... Has **cause to be concerned with many aspects** of **the proposed regulations.**

Part HI - Explanation **of** General **Requirements**

In section 1) of this **Part** the requirements for public notice and community consultation are outlined. **We** find the requirement for **public** notice to **be** onerous for **small,** private **projects** such **as will likely be found on farms.**

However, we also note **that** it is proposed that large scale projects ("greater than **3kW°** for wind and "greater than **10kW"** for solar) are exempt from the requirement to hold community consultation. In other words, the larger **the** project the less onerous is **the** requirement for public notice **and** consultation. **This** is wrong **and** needs to **be** reversed.

We **note this** situation **to** be the **case** for **Municipal** Consultation and Cultural Heritage requirements, as well as **on** set-backs **for** Farm-Based anaerobic **digesters.**

5) Natural Heritaga

The posting requires **that projects must meet minimum setbacks form natural heritage features. Locating** within **n the applicable setback requires documentation of a** "proposed **mitigation approach".**

For example, locating within 120 metres of a significant **area of natural and** scientific **interest requires a demonstration of "the ability to** mitigate **negative impacts".**

The setbacks appear to be arbitrary. Is there rationale for the proposed setbacks? Are there any guidelines available to identify "negative impacts" that require mitigation?

Under "Assessment" requirements, proponents are required to submit explanatory notes about the feature and its **natural values and significance. Is the onus exclusively on the proponent to have the ability to recognize such features? What are the consequences for a proponent who unknowingly locates a** facility **within the prescribed setback? The Ministry itself will need to take some responsibility for the identification of all such features based on the filed** Site **Plan.**

Part IV - Explanation of Technology-Specific Requirements

We note that Section A. provides that small scale wind projects (less **than 3 kW) are not subject to a** Renewable **Energy Approval and therefore not subject to the setback requirements of the section. This will facilitate small** scale **wind developments.**

Noise Setbacks

Wind turbine project setbacks are identified, growing increasingly larger with the number of turbines and sound power levels. The OFA recognizes there is a delicate balance between the need to ensure the health and well being of rural Ontariarts and the practical exploitation of wind.

Rural residents **in Ontario, as well as elsewhere in North America, are reporting significant hearth related** problems **they attribute to nearby wind turbine projects. The OFA has called for a comprehensive epidemiological study on wind turbine impacts to justify appropriate setback provisions and strongly suggests a review be done prior to the approval of projects using setbacks.**

The purpose of empirical scientific research is to uncover relationships between variables; **an epidemiological study looks at human populations, and attempts to link anomalies in human health to a specified cause. For this study to have any merit, the research methodology must be designed to provide results that will be accepted by both proponents and critics of wind turbine** technology. **Furthermore, it must have the scope to explore alternative explanations for reported health problems.**

From the other perspective, it is important to understand appropriate setbacks for wind project to ensure **wind is harvested in economical areas. Wind power** is best **situated near to high load density centres such as the GTA.** Additional **transmission infrastructure would be required to handle energy generated in more remote locations, with additional line loss and** land **used for transmission corridors.**

The balance Is delicate. Does a 1500 metre setback provide ample protection for the health of rural Ontarians without unnecessarily sterilizing ground that could otherwise provide efficient wind energy?

The OFA strongly recommends a scientific study be undertaken on wind turbine setbacks, immediately.

"Setback" is defined as the distance from the centre of a Point of Reception to the "base of the closest wind turbine". For the sake of clarity, the definition should be amended to measure from "the Centre of the closest wind turbine"

Setbacks from Roads, Railways, and Property Lines

It is proposed wind turbines be set back a distance equal to or more than "the turbine height plus blade length" for roads, etc.

Again, for clarity the definition should be "turbine height plus the rotor radius" as reference to 'blade length' does not account for the hub radius.

This setback from roads, railways and property lines sterilizes large areas of land against wind power development. Any reference to 'hub height' puts an unnecessary burden on the overall height of the wind turbine which, in turn, threatens the energy production efficiency of the installation and compromises its financial viability.

When Ontario was originally surveyed, the common lot size was only 100 acres. The nature of agricultural land holdings in Southern Ontario means that this setback requirement could bring about the sterilization of more than 50% of available land against wind power development. This will force wind farms to be located much further north, away from high load centers. This serves to increase transmission costs, lower energy transmission efficiencies, increase the overall negative impact on the environment and reduce the income potential of the farming community.

The setbacks proposed in this section will range between 120 to 150 meters away from all property lines whether or not adjoining properties are 'participating' in the wind farm. This will require the establishment of turbines in the middle of most farm fields, unnecessarily using farmland for the turbine and associated infrastructure.

The concept of 'dissolved property lines' needs to be considered. Adjoining properties that are 'participating' (by legal agreement) in the wind farm can have common property lines 'erased' for the purpose of siting wind turbines along property lines. Those farmers would need to consider their future building needs (for example, new bams, silos, and residences) prior to agreeing to turbine development, and also consider the impacts to the resale of their farm property. Most farmers will want to see wind turbines, along with their access lanes, installed adjacent to property lines so as to minimize the land intrusion caused by the wind farm.

Neighbours, on whose property the wind turbine encroaches, would agree with the siting in a contract and be compensated from the rental or other revenue from the turbine. The concept is similar to mineral rights agreements.

Farmland preservation can also be accomplished with the siting of wind turbines dose to roads. The principle is the same as for property lines but also guards against future land severances.

Experience in both Toronto and Tiverton, Ontario, has proven that 50 meter setbacks from front yard property-lines is both reasonable and safe.

Detailed mapping is available to demonstrate how detrimental these setback proposals can be to wind farm development.

Conditions of Approval

Proponents will be required to monitor and address any perceptible infrasound or low frequency noise as a condition of the Renewable Energy Approval. The OFA fully supports this requirement as low frequency noise seems to be the main culprit in reported health effects.

The definition of "perceptible" must be objective and science-based.

C. Biogas Facilities (Anaerobic Digesters)

The posting proposes that proponents of digesters located on a farm that are subject to the Nutrient Management Act (NMA) with regards on-farm manure treatment will not require a Renewable Energy Approval and so are not subject to the requirements under this section.

Presently, the NMA regulates operations in excess of 300 animal units - that is large farms. The number of units falling under regulation is being reduced periodically. Consequently, only large facilities are exempt from regulation, requiring smaller installations to be subject to the full slate of requirements of the section.

The OFA is not opposed to the avoidance of duplicate regulation. As larger facilities are subject to existing minimum distance separation, the requirements of the proposed regulations are already largely met. However, the requirement for smaller facilities to obtain a Renewable Energy Approval is burdensome. Subjecting small proposals to the appropriate MDS requirements (as is the case for the larger operations) would be sufficient.

The OFA is pleased to been provided the opportunity to comment on the EBR posting of the proposed Ministry of the Environment regulations. We trust the comments made on behalf of over 38,000 farm families and businesses will be given due consideration.

Sincerely,

Bette Jean Crews
President

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July 24, 2009

Marcia Wallace
Manager, Environmental Programs Division
Program Planning and Implementation Branch
Ministry of the Environment
55 **St. Clair Avenue West, Floor** 7
Toronto Ontario M4V 2Y7

Re: EBR Registry Number: 010-6516 - Proposed Ministry of the Environment Regulations to Implement the Green Energy and Green Economy Act, 2009

Dear Ms. Wallace:

Thank you for meeting with the Ontario Forest Industry Association (OFIA) on June 19 **and inviting us to comment on the "Proposed MOE Regulations to Implement the Green Energy and Green Economy Act,** 2009".

The OFIA is a provincial trade association representing member companies ranging from large multinational corporations to small, family owned businesses that produce a broad range of products including pulp, paper, paperboard, lumber, panel board, plywood and veneer. OFIA member companies represent approximately 70 **percent of Ontario Crown land that is certified under internationally recognized systems. The Ontario forest industries directly employ** 66,800 **and produce approximately** $16 **Billion of goods each year.**[1]

Between 1990 **and** 2006, **the Ontario Pulp and Paper industry reduced its greenhouse gas (GHG) emissions (excluding GHG emissions related to electricity production) intensity from** 21.1 **tonnes /TJ to** 7.9 **tonnes /TJ or by** 63%. **In the same period the total pulp and paper GHG emissions were reduced from** 3.0 **M tonnes of** C02e **to** 1.1 **M tonnes or by** 63%.[2] **The energy intensity figures demonstrate that a large part of the reduction can be attributed to GHG emissions reductions that the industry obtained by switching from fossil fuels to biomass. In Ontario, biomass (wood waste and pulping liquor) comprises** 61% **of the pulp and paper energy use[2].**

[1] **Source: http://canadaforests.nrcan.gc.ca/ststsprofile/economicimpact/on**
[2] **Source: http: www.oee.nrcan.gc.ca/corporate statistics neud/dpa/trends agg on.cftn**

The OFIA supports the concept of an efficient, streamlined approvals process for "Green Energy" projects, including biomass. The OFIA supports that for non-significant modifications to existing facilities, the facility will only have to meet the technology specific requirements for that portion of the project in order to receive a Renewable Energy Approval.

In summary, the OFIA members are encouraged by MOE's intent to streamline the approvals process for Green Energy Projects. Please contact me at you have any questions.

Sincerely,

Barbara Mossop, P.Eng. MBA
Manager, Environment and Energy

power

July 15, 2009

Memorandum to

Marcia Wallace
Manager
Ministry of the Environment
Environmental Programs Division
Program Planning and Implementation Branch
55 St. Clair Avenue West
Floor 7
Toronto Ontario
M4V 2Y7

Sue Jones
Technical Officer
Ministry of Natural Resources
Natural Resource Management Division
Lands and Waters Branch
300 Water Street
Floor 5
PO Box 7000
Peterborough Ontario
K9J 8M5

SUBJECT: EBR Postings 010-6516, 010-6708 - Regulation and Approvals Under the Green Energy Act

This is in response to the above referenced EBR posting, dated June 9, 2009. At the outset, I want to thank staff from the Ministries of Environment and Natural Resources for meeting with representative members of the Ontario Waterpower Association (OWA) over the past few weeks. Our comment and recommendations reflect the outcomes of those discussions. I am providing a single set of comments to both ministries as, in our view, one of the fundamental challenges in this process has been the apparent lack of alignment between the requirements of the agencies and of other ministries (e.g. Culture).

In short, it is evident that the "setback" model developed primarily for modular projects that can be moved does not lend itself to waterpower. This has forced MOE and MNR to develop an "exception" approach for waterpower projects that is far more complex than the existing process. Moreover, given that all waterpower projects involve federal approvals (fisheries, navigation), the proposal, in our view, will result in additional time and costs for waterpower projects, rather than the streamlining that was intended. Our advice to help address some of these issues is provided below. In addition, I have attached for your consideration an analysis undertaken by one of our member companies with practical experience in environmental assessment (Ortech Environmental, Leah Deveaux, author) that outlines the significant areas of divergence between the two postings.

General

1. Provide for projects in process and those brought forward in the short term (two years) the option of using the newly approved Class EA for Waterpower

   A fundamental tenet of the *Green Energy and Economy Act (GEEA)* and this proposal is to improve upon and streamline the planning and permitting requirements for renewable energy projects. As such, our assessment of the proposal is based on its comparison to the existing process, which, unique to waterpower, is represented by a Class Environmental Assessment, approved by the Minister of Environment only months ago. Based on a careful review of the proposal, we have concluded that it will not result in any improvement, rather that it will add significant time, (one year or more) complexity and cost for waterpower projects. Reasons for this additional burden include:

   i. The requirement to have Plans and Specifications Approval (i.e. detailed engineering) as a condition of CSP;
   ii. The requirement to have federal approvals prior to Location Approval and therefore prior to CSP;
   iii. Business case approval to proceed with detailed design is typically provided after Class EA completion/approval but since REA/CSP process is longer, design and construction schedule will be longer;
   iv. The proposed REA/CSP requirements are over-focused on meeting the needs of government reviewers and not the needs of the developers;
   v. The proposed REA/CSP process does not provide a natural progression in the approvals process in terms of the availability of information from conceptual to more detailed/engineering information on a proposed development; and
   vi. The ERT process is considerably longer than the current elevation request process.

   There are presently more than one hundred (100) waterpower projects at some stage of pre-development. Proponents of these projects have made and are making investments premised on the existing approvals framework and should in all fairness be permitted the option of adopting the proposed Renewable Energy Approvals/Complete Submission

Policy framework or completing the project using the existing EA processes. More specifically, projects that have filed Notice of Commencement should be allowed to complete the planning process. In addition, to ensure consistency with the recently published Feed In Tariff Program Rules, a proponent of a waterpower project that "has submitted a complete application to the Ministry of Natural Resources (Ontario) for selection as an "Applicant of Record"" as of the date of the effect of regulation should be considered eligible for the Class EA option as well. In addition, for projects where the proponents have reached an agreement with MOE or MNR (e.g. New Post Creek Project) and no Notice of Commencement has been issued as of the date of the effect of regulation, there should be a reasonable transition period during which the proponent can choose the applicable process. Moreover, for projects in which the proponents can demonstrate that discussions have been initiated with the MOE or MNR and no Notice of Commencement has been issued as of the date of the effect of regulation, the same transition provision should apply. Finally, it is our strong recommendation that new waterpower projects that come forward over the next two years be provided this option, and that all those projects that choose to apply the Class EA be subject to the elevation requirements contained therein. This would help ensure a smoother and gradual transition to the new REA/CSP process while the details of its implementation are developed (e.g. federal/provincial coordination, Aboriginal community participation etc.).

2. Amend the legislation to require that "leave to appeal" be sought

We have consistently raised the issue of what is now an appeal by right to the Environmental Review Tribunal (ERT) for all renewable energy projects. As currently designed, the ERT has no choice but to hear an appeal and can only determine that such appeal does or does not meet the test of the legislation after having considered the appeal. The MOE proposal suggests that the ERT be granted nine (9) months to consider a case. As compared to the proposed MOE regulated timeline of nine months, the analogous process under the Class EA for Waterpower Projects produces a result within sixty (60) days. It is our expectation based on experience with the current process that, in the absence of an appellant having to demonstrate in the first instance that the case passes a threshold test of validity, through a "leave to appeal" mechanism, the vast majority of new waterpower proposals will be taken through the ERT process. All that will have been achieved is the addition of time and the expenditure of resources. As such, a leave to appeal mechanism, triggered within 15 days from the REA decision, by an interested party is a critical aspect of any appeal process. If the government is unwilling to re-open the legislation to effect this change, at the very least more reasonable bounds should be placed on the ERT process. For instance, at present, any resident of Ontario (except the applicant) may require a hearing before the ERT with respect to a Director's decision on an REA. To ensure fairness to proponents, we propose that this be limited to residents who have an interest in the decision as expressed through their participation in the process.

3. Limit the scope of appeals for waterpower to water quality issues

Through our discussions it has become apparent that the original intent of MNR and MOE with respect to the separation of legislative approvals requirements (i.e. REA/CSP) regarding appeals may be compromised. We were advised throughout the legislative drafting process that those approvals under the purview of the Ministry of Natural Resources would only be subject to the appeals provisions of the respective legislation (e.g. *Lakes and Rivers Improvement Act (LRIA)).* It was also suggested that the *GEEA* would provide a vehicle to resolve the longstanding issue of overlap with the *Ontario Water Resources Act.* The Permit to Take Water for hydroelectric operations under the *Ontario Water Resources Act* and the Water Management Plans under *LRIA* should be streamlined so that the same activity should be regulated by one piece of legislation, i.e. *LRIA,* to avoid regulatory duplication. If this were the case, waterpower project components under the REA would be primarily related to issues of water quality. We are very concerned, therefore, that the REA proposes to adopt the "natural environment" definition of the *Environmental Protection Act.* The regulation must clearly articulate that for waterpower projects, issues are to be scoped such that those addressed through MNR's Complete Submission Policy (CSP) are not included in the REA. Otherwise, as originally suggested in our advice on the legislation, MNR's decision-making authority should be removed so that the REA truly becomes a single, integrated process.

4. Transition projects currently caught in MNR's Site Release Policy

As is evidenced by the relative lack of project procurement of renewable energy to date, waterpower has been significantly underrepresented, due, in our view, in large measure to the unique requirements of MNR's Waterpower Site Release and Development Review Policy. The majority of active waterpower proponents have spent months and in some case years navigating through the EA-like requirements of this policy and should in our view be transitioned directly into a position of eligibility for the FIT program. Moreover, MNR's policy and procedure must be re-written so as to be consistent with the new REA/CSP process. This is of particular importance with respect to the requirements for "Aboriginal Community Participation". The OWA has actively supported mechanisms that enhance Aboriginal participation through the *GEEA* and related instruments (Aboriginal Loan Guarantee, FIT Aboriginal Community Price Adder etc.) We believe that such an approach provides an incentive model for Aboriginal participation irrespective of resource type or jurisdiction over land. MNR should therefore remove the business case requirement of the existing policy and focus instead on contributing to a coordinated government effort with respect to engaging, enabling and empowering Aboriginal communities interested in renewable energy projects.

5. Remove the detailed engineering requirements (e.g. "Plans and Specifications") as a condition of a Complete Submission/ Renewable Energy Approval

   One of the most troubling elements of the proposal for waterpower projects is the concept that a proponent would require satisfaction of "Plans and Specifications" (i.e. detailed engineering) under the *LRIA* as a condition of MNR's Complete Submission Policy. This, quite simply, is not how these projects get built and speaks directly to the fact that the overall model is not transferable to waterpower. The *LRIA* approvals process is a two-step (Location Approval, Plans and Specifications) process for new facilities. The former deals with "planning" the project and is focused on the environmental considerations relevant to approving the location of proposed infrastructure. The latter addresses strictly engineering requirements. Proponents should not be forced into investing needlessly in detailed engineering prior to receiving environmental approvals (REA/CSP). Plans and specifications must follow approval of the CSP, not precede it with a continued allowance of a phased approach to Plans and Specification approval.

   This same issue arises with respect to some of the materials required by MOE to support the REA application (see p. **3,** MOE document), such as storm-water management plan and response plan. Detailed information is generally not available at this project stage.

Specific

1. MOE Document

   Page 2 - Associated or ancillary equipment - This presumes a "one project" approach to planning and review. Note that this can have implications for the differentiation of the waterpower facility from the associated infrastructure, particularly with respect to the application of/exemption from setbacks. Note also that permitting for some associated infrastructure (e.g. access roads) may have different timing requirements than the facility proper (road may be required to get to the location of the potential site).

   Page **3** - Construction Plan - The construction plan requires the identification and mitigation of impacts related to the construction and installation of the renewable energy generation facility. This appears to be an overall environmental impact assessment. Is this the intent? This would also duplicate what is assumed to be an EIS.

   Page **3** - Application Requirements - Site Plan - It is not the responsibility of the proponent to locate and identify natural heritage or other features the province considers "significant" - it is a provincial responsibility. MOE/MNR/MOC must

produce mapping products and inventories that identify those features from which the project is to be set back.

Page 3 - Application Requirements - Response Plan - Waterpower facilities require the development of OMS and EPP Plans as a requirement of the Lakes and Rivers Improvement Act. This requirement is duplicative for waterpower and should be removed.

Page 3 - Application Requirements - Cultural Heritage - These requirements appear to go well beyond those agreed to by the province in our Class Environmental Assessment and, hence, compromise the stated objective of "streamlining".

Page 4 - Federal/Provincial coordination - As noted above, all waterpower projects involve federal approvals and, in some instances *(Fisheries Act* Authorization), the federal government must approve a project in principle prior to a provincial approval being granted. Federal/Provincial coordination is a key achievement of the OWA Class EA and should be a key element of the province's efforts. If that is not the case, waterpower projects will be negatively and disproportionately affected as a result.

Page 4 - Transition - Please confirm that an amendment to or renewal of a Permit to Take Water or Certificates of Approval will not trigger a requirement to commence the REA/CSP process, as discussed at our June 25 working session.

Page 4 - Transition - It is inconsistent with the purpose of the REA/CSP (i.e. streamlining) to require a proponent with a project in process to re-submit an application. At the very least, MOE must identify transitional milestones in the two processes. Moreover, as recommended above, waterpower projects that are proceeding under an existing process (Reg. 116/01, OWA Class EA, MNR Site Release), a process that has been agreed to between the proponent and one of the regulators or where discussions with MOE or MNR have been initiated should have the option of completing that process. In addition, the new appeal process (if it survives) must not apply to these projects as they will be subject to potential elevation requests.

Page 5 - Significant Modifications - Please confirm that this term is consistent with its current use for waterpower (i.e. a modification that results in greater than 25% increase in nameplate capacity). Please confirm also that changes that are not significant per the above definition will be exempt from the REA (as is the case under Reg. 116/01 and the OWA Class EA).

Page 5 - ERT timeline - The proposed timeline for hearings and decisions (9 months) is excessive and unwarranted. An analogous timeline under the OWA Class EA is sixty (60) days. This should be the benchmark otherwise it is clear that the timelines for projects will be considerably longer, rather than streamlined.

Page 5 - Public Notice and Community Consultation - The requirement that consultation be undertaken using "community consultation meetings" should be linked to eligibility for access to the ERT (i.e. only those who participate in the process can object to its outcome). In addition, proponents should not be required to hold a public information session before studies are completed. Proponents should decide when and how the public information sessions should be held. Community consultation meetings should be revised to community consultation forums.

Page 6 - Notice provisions - Please add "minor modifications to waterpower facilities" to the list of those undertakings that do not require community consultation forums.

Page 6 - Municipal Consultation - Please add "minor modifications to waterpower facilities" to the list of those undertakings that do not require municipal consultation. Many of the requirements under municipal consultation require detailed design information which will not proceed, in most cases, until after REA approval.

Page 6/7 - Aboriginal Consultation - Please provide details of which Ministry will act to coordinate the Crown's obligations in this regard as well as the basis for the identification of Aboriginal Communities (e.g. within 1.5 km?). In addition, please clarify that the Crown rather than the proponent will have responsibility for the determination of the potential to adversely affect Aboriginal or treaty rights.

Page 7 - Cultural Heritage - The proposed "self assessment" fails to provide the necessary information required to determine whether this process is of any value. Based on our experience to resolve cultural heritage issues through the Class EA, we expect it is not (e.g. any undertaking within 300m of water requires an assessment). Any requirements that go beyond our Class EA cannot be seen as streamlining the process. Please add "minor modifications to waterpower facilities" to the list of those undertakings that do not require a cultural heritage assessment.

Page 8 - Natural Heritage - Please confirm that the province will have responsibility for identifying the geographic location of the features from which projects must be set back. Note also that renewable energy development is_permitted within Parks and Conservation Reserves (for Aboriginal Community and Park purposes and on a case-by-case basis (e.g. Newpost Creek has an agreed to regulatory process in place)). In addition, there is no prohibition in MNR's Lake Trout Lake Policy against renewable energy projects.

Page 9 - Records Review and Site Investigation - This step must be accompanied by a scoping meeting led by the proponent at which all agencies (including federal) provide all known information about the site (Site Description Package). Failure of an agency to participate cannot delay the proposal. It is NOT the responsibility of the proponent to confirm the presence, location and boundary of a feature - this rests clearly with the province.

Page 10 - Minimum setbacks maintained - MOE should not be prescribing that an air photo be submitted - there are other means of demonstrating that separation distance is maintained.

Page 10 - Assessment - There is no indication in the document of what will constitute an "Environmental Impact Study" and no procedures or guidance from MNR has been provided. The OWA requests an opportunity to review and comment on such guidance before the regulation takes effect. Moreover, it is unclear whether or how MOE will use the MNR EIS process in making its REA decision and whether the information submitted for MNR purposes then becomes appealable to the ERT. This potential expansion of the scope of "evidence" to be brought forward to the ERT process is a significant concern for waterpower projects that are, by definition, required to complete an EIS.

Page 10 - Exception - Parts of land-based components of a waterpower facility will invariable fall within 120 metres of a water body.

Page 10 - Waterbodies - The proposal has without explanation or rationale expanded the application in the Provincial Policy Statement of "sensitive hydrologic features" to include all hydrologic features. The requirement for an EIS should be tied to sensitive hydrologic features, as is the case with other "significant" natural heritage values.

Page 11 - Records review and site investigation - This section seems to contradict the previous one with respect to the setback requirements from "sensitive" hydrologic features. Again, it is NOT the responsibility of the proponent to confirm the presence, location and boundary of a feature - this rests clearly with the province.

Page 22 - Hydro Electric Facilities - Facilities not requiring a REA should include those with a head of less than three (3) metres as well as minor modifications (<25% increase in nameplate capacity), along with kinetic hydro.

Page 23 - Water Taking - Hydroelectric operations should be exempt, by regulation, from the requirements for a Permit to Take Water. These objectives are met through the *LRIA.* Details of water taking such as rates, amounts and time periods are not available during the planning stages but at either detailed design or construction phases.

2. MNR Document

Page 3 - Introduction - This section should articulate some understanding of the relative role of renewable energy technologies. A key attribute of waterpower, for example, is its flexibility (i.e. storage) and ability to respond to changes in demand (i.e. peaking).

Page 4 - Relevant Statutes - A nice to know, not need to know - what would be more valuable is a process flow chart to demonstrate how MNR intends to incorporate the elements of the various statutes through one integrated process, with MOE and the federal government.

Page 6 - Please remove the statement "Renewable energy projects may also require additional information or approvals...." This is supposed to be a "one window" approach.

Page 7 - Reduced requirements - This should indicate that the document establishes the maximum scope of requirements (i.e. most complex). The scope should be determined and agreed with the proponent at the initial "scoping meeting"

Page 8 - Projects not subject to all requirements - Per the Class EA, it is reasonable to expect that the "maximum" requirements are most appropriate for a Greenfield waterpower development on an un-managed waterway. Projects on existing managed systems and at existing infrastructure are expected to have a narrower scope of requirements. Please amend the waterpower section to reflect this. Moreover, "small scale" waterpower is defined to be that with less than three (3) metres of head.

Page 9 - Complete Submission process overview - It would be very helpful to have one, common (MEI/MOE/MNR/MOC) process flow chart created for the REA/CSP. For waterpower projects, it is also necessary that the flow chart describe federal/provincial coordination.

Page 9 - Preparing a Complete Submission - Proponents are encouraged to "meet with MNR frequently" - is the province not providing for a single, coordinated approach and a focal point of contact (REFO) for these projects? The section goes on to suggest that proponents seek federal and agency input. Again, is this not a role for the provincial government? MNR's CSP is different from MOE's REA application. Should one document or two documents be prepared? Common terminology for the requirements is needed.

Page 9 - Agency Review - There must be a target timeline for agency review of the complete submission. Thirty (30) days is recommended. There must be a timeline established for EBR postings. Thirty (30) days is recommended. MNR/MOE refusal of the submission as "complete" must be accompanied by a description of the deficiencies and the requirements for their rectification. Subsequent submissions should only be assessed on these outstanding issues. Finally, the province must be in a position to issue "conditional approvals" pending the satisfaction of any federal requirements and any further implementation-related details.

Page 10 - Issuance of Approvals - The "exceptional circumstances" provision opens the door to MNR requiring more and additional information for every project (new

information is often gained and used during construction). Unless the project scope changes after submission, there should be no provision for additional information.

Page 10 - Appeals - Please confirm that information collected for MNR's CSP will not be subject to the appeal provisions of the REA (i.e. ERT).

Page 10 - Expansions. Modifications, redevelopments - Depending on the nature of the change (if any), these may or may not be subject to the requirements of the CSP (e.g. disposition).

Page 13 - Requirements for renewable energy projects - Notwithstanding that the CSP separates the waterpower facility proper (Section 6.4) from the ancillary works (Section 5.0), for the purposes of differentiating those elements covered by the *LRIA* it should be made clear that the proponent (and the review agencies) are to apply a "one project one process" approach. Separate documentation for consultation, for example, is not appropriate. A proper "Environmental Impact Study" will differentiate project elements and mitigation strategies within a single body of analysis.

Page 15 - Aboriginal Consultation - The Crown should articulate this once (MEI?) rather than repeating it in both the CSP and REA documents.

Page 16 - Project Description/Site Plan - The Crown should articulate its position in one document that applies to all ministries rather than repeating it (differently) in both the CSP and REA documents.

Page 16 - Natural Resource Assessments - It is NOT the responsibility of the proponent to identify natural resource or other values the province considers significant, rather, the respective agencies must identify these values "on the ground", with the requirement that the proponent mitigate the potential impact on the values, if affected. Moreover, the inclusion of "cumulative effects" in this context in inappropriate and should be removed. None of MNR's relevant legislation, regulation or policy addresses cumulative effects. Waterpower projects will, through the requirements of the *Canadian Environmental Assessment Act,* be required to consider this issue.

Page 17 - Typical Natural Features to be considered - MNR appears to have developed a "laundry list" rather than a scoping document to be applied in the REA/CSP. This list should be specific to those "significant" features upon which setbacks will be based (Pages 8 and 9, REA). MNR should be defining "significance" and geo-referencing the locations within which an EIS will be required rather than creating a separate list of what seems to be "nice to knows" (Crown Forest Resources, Mineral Aggregate Resources etc.).

Page 17 - Other Natural Features - This is simply a catchall to ensure that every project undertakes an EIS, regardless of location. We submit that this is incongruous

with the stated objective of streamlining. Again, the reference to cumulative effects is inappropriate and should be removed.

Page 19 - Proponent Responsibilities for Species At Risk - It is NOT the proponents responsibility to undertake research or conduct surveys with respect to the identification and location of listed species - the province should provide such information at the initial scoping meeting.

Page 20 - Other interests on Crown land - The last bullet (measures to address compatibility with or effects to existing land use direction) opens MNR's list of potential requirements up to almost anything (District Guidelines, Regional Planning, local land use requirements etc.). This would result in inconsistency of application of the policy direction across the province. The statement should be removed. Further, the list is "not limited to" and creates uncertainty, which, given the stated intension to streamline, is unacceptable.

Page 20 - Construction Plan - In many instances (e.g. transmission and blasting schedule) it may be premature to require detailed engineering and construction plans. As is proposed with the REA, a "conditional approval" premised on a will thought out and documented initial plan is recommended.

Page 21 - Public Safety Plan - Waterpower projects are required to prepare both a Public Safety and Emergency Preparedness plans. There should be no additional requirement in this regard for "ancillary infrastructure". The same can be said for post-constriction monitoring and decommissioning.

Page 21 - Post Construction Monitoring Plan - In order to verify the extent of effects, this would result in a very, very extensive monitoring program. It is suggested that this pertain to considerable effects in discussion with MNR.

Page 25 - Waterpower Projects - This section requires some up front linkage to the revised Waterpower Site Release and Development Review Policy. It is unclear what will have been submitted by the proponent prior to the Multi-Use Application Form

Page 26 - As indicated above, the requirements for completion of Plans and Specifications as a condition of CSP should be removed. Engineering approvals should follow the satisfaction of the CSP/REA. In addition, "conditional approvals" should be granted in advance of attaining all required federal approvals.

Page 26 - Information for Location Approval - Please replace "rule curve" with "operating band" throughout - there is an increased need for flexible generation in Ontario's electricity system.

Pages 26-32 - Information for Location Approval and Plans and Specifications Approval - Appendix E (Reference Sources) quotes as a source for Lakes and

Rivers Improvement Technical Guidelines and provides a web-link to the 2004 Draft Technical Guidelines - Criteria and Standards for Approval, Section 4. This can create the following confusion: both the MNR CSP and the 2004 Draft Technical Guidelines are similar but not identical with respect to the requirements listed. At the same time, the current 2009 Draft Technical Guidelines which define requirements in Volume 3 (Chapter 14 - Location Approval and Chapter 15 - Plans and Specifications Approval) are similar to the former two but are again not identical.

Page 27 - Ecological Information - The Ministry must consider the characteristics of existing and natural processes in aquatic ecosystems - many systems are already subject to an established water management regime and associated aquatic ecology. Please ensure that the statement reads "information that may be required but shall not exceed…." In order to clarify that this is not an exhaustive list.

Page 27/28 - The List - This is a confusing mixture of generalities and specifics, some of which are ecological, some of which are not. Information requirements should be restricted to a description of:

- the existing hydrologic, sediment and thermal regime;
- the aquatic and terrestrial species, communities and associated habitats dependant on the existing regime;
- the presence of listed species under the *Endangered Species Act (ESA);*
- the zone of influence of the proposed facility and new regime; and
- the potential effects on aquatic, terrestrial and listed species of the proposed facility and new regime.

Page 28 - Erosion and sediment control - This is premature and should be incorporated into the approval as a condition to be met in the future of approval (i.e. a plan will be developed).

Page 28 - Natural Amenities - The concept of "tradeoff" is introduced for the first time and should be much more prevalent throughout the document (perhaps embedded in the EIS).

Page 28 - Historical and Archaeological Sites - This appears to overlap with (and differ from) MOE's document.

Page 29 - Water Management Plans - Please remove the last sentence - proponents of new facilities must not be required to prepare a Water Management Plan.

Page 29 - Plans and Specifications - MNR should apply the same "at a maximum" approach to Plans and Specifications (i.e. add to the introductory sentence). As indicated previously, Plans and Specifications must follow REA/CSP.

Page 29/30/31 - The Lists - Again, these lists must be reduced to exclude that information that has already been provided (watershed description, location and description of proposed works) information that is not included in the LRIA Technical Guidelines (e.g. Fluvial Geomorphologic Assessment) and information that is not relevant at the engineering stage of a new project (all of the ecological information). We recommend that additional clarity be provided for those projects that require both Location and Plans and Specifications Approvals (Section 14, *LRIA)* and those that require only Plans and Specifications (Section 16, *LRIA).*

Page 32 - Water Management Plans - Again, please remove the last sentence in this section.

Page 33 - Decommissioning Plan - Waterpower facilities have a lifespan that can last a century or more. A decommissioning plan for these facilities produced at the time of construction would be almost completely irrelevant.

Page 37 - Projects in Parks and Conservation Reserves - The Ministry has made it clear that it will entertain waterpower development within Parks and Conservation Reserves on a case-by-case basis, through the regulatory instrument of partial deregulation premised on the replacement of removed lands with lands of equivalent or higher ecological value. This direction must be articulated in the document.

Page 7.5 - Projects in natural hazard lands - As was the case with other setbacks, please indicate waterpower projects, in particular, will not be restricted, for example, within floodways.

Page 45 - Transition provisions - The same transition provisions recommended for the REA approvals are applicable to the CSP. Proponents should be given a choice whether to pursue the new REA/CSP or continue with established planning process like the OWA Class EA. MNR should establish process flow charts and milestones to ensure that proponents can make an informed decision with respect to the option to transition. Proponents already in the OWA Class EA process or a process agreed to by MOE or MNR should be allowed to continue.

Page 47 - Low head waterpower - The common industry standard is three (3) metres.

Page 51 - Determining the Presence of Species at Risk and Habitats - It is NOT the proponent's responsibility to locate a listed species and or its habitat. MNR (through the NHIC and Districts) should be required to bring to the table (i.e. scoping meeting)

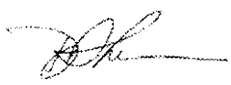
all documented information in this regard. The province has the responsibility for identifying the location of all its provincial interests.

Page 63 - Federal Approvals - It is insufficient to simply point the proponent to the respective federal agencies - this is a critical flaw of the proposed process compared with the Waterpower Class EA. MOE/MNR must clearly articulate one coordinated approvals process that includes a mechanism for coordinating with federal agencies. For waterpower, achievement of the streamlining intent of the *GEAA* depends on both federal and provincial governments being on the same page.

Scoping Meeting - There is a need for a scoping meeting with the government agencies early in the process so that requirements and expectations are clearly communicated and understood.

As you are aware, we have sought the input and advice of a number of experienced environmental practitioners and project proponents in preparing this response - people with real, "on the ground" expertise in getting projects built. The unanimous conclusion of their review is that the process, as currently proposed, will render waterpower projects worse off than they already are with respect to meeting the province's renewable energy objectives. In short, waterpower projects will take longer and cost more. I have been informed as recently as this week that practitioners of active projects are already facing delays due to staff uncertainty. It is critical therefore, that the newly approved Waterpower Class EA be offered as an optional pathway for projects already in the system or with an approved regulatory process in place and for a reasonable interim period for new projects. This government supported and championed the Class EA, but has yet to realize its benefit. This is, in our view, a principled and pragmatic approach forward.

I would be pleased to discuss this submission with you at your earliest convenience.



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OWA Task Team - Streamlined Approvals Process

ORTECH

Appendix 1 - Comparison of MOE/MOE Requirements (Credit Ortech Environmental)

June 19, 2009

Summary of Proposed MOE REA and draft MNR Application Requirements for Renewable Energy Projects

Items are broken down by Ministry to show where further information can be found. The proposed application requirements for each section will include all items from both columns. Except where indicated, listed requirements are required for all Renewable Energy Developments that qualify under the REA program.

1. Description of Project

Proposed MOE	Draft MNR
• **Proponent name and address** • **type of facility** • **nature of activity** • **location of facility** • **land tenure** • **name place capacity and expected generation** • **name and address of municipal clerk where project is located**	**Description of the project including all associated or ancillary equipment, infrastructure and works** **Purpose of the project** **Outline of basic technologies to be used** **Installation, duration and operation** **Proposed installed capacity**

2. Construction Plan

Proposed MOE	Draft MNR
Identification and mitigation of impacts related to the construction and installation of the RE facility	Must outline construction activities, timing, proposed mitigation measures, monitoring and reporting.
	Complete plan for submission must include: • Construction timing • Blasting schedule • Clearing and vegetation management • Clearing and disposition of merchantable wood • Any specific construction requirements • Road construction and upgrades • Water crossing, bridges, culverts and causeways • Staging and laydown areas • Above and below ground transmission installations and substations and other related infrastructure • Sediment control • Fire suppression and prevention, identification of fire response agency • Aggregate sources
	Decommissioning Plan • Required to ensure that the site is restored to a clean and safe conditions • Includes: retiring, abandoning, dismantling or removing from active service, working order or operation of all elements of the project including access roads. Conditions will be set out in the final tenure document
	Post construction monitoring plan • May be required to evaluate the effectiveness of proposed mitigation measures to be implemented during project development and operation • It will outline the procedures to verify the extent of effects, compare actual with predicted effects, the effectiveness of mitigation strategies and whether additional measures are warranted Should cover

	• Reason for monitoring • Environmental component or mitigation measures being monitored • Scope of the program • Methods and procedures for monitoring • Timing and duration of monitoring activities including extension of monitoring if unanticipated effects are found • Monitoring results reporting provision Provision for additional actions that may be required

3. Site Plan

Proposed MOE	Draft MNR
One or more scaled diagrams showing site features: property boundaries, facility location, on site infrastructure, natural heritage and sensitive hydrological features, surrounding land uses and points of reception which may be impacted	• One detailed map showing location of facility and all associated temporary and permanent infrastructure including staging and laydown areas and existing and proposed access to the site in relation to site features • One detailed map at a larger scale that shows project in relation to all adjacent land uses, land tenure, existing and proposed access and trails, natural features and protected areas up to the maximum applicable setback distance

4. Stormwater Management Plan

Proposed MOE	Draft MNR
On site drainage and the management of stormwater collected on site	

5. Response Plan

Proposed MOE	Draft MNR
Processes and procedures for communication operational changes and emergency circumstances and management of issues arising from operation of the renewable energy generation facility	Public Safety Plan • Operational safety • Access for emergency vehicles • Forest fire prevention and preparedness plan • Signage and proposed access restrictions • Lighting • Hazard lands

6. Consultation Summary

Proposed MOE	Draft MNR
Detailed summary of public, municipal, and aboriginal consultation including what concerns were raised and how they were dealt with	It is highly advised that in situations where public interest or scope of effects are anticipated to be large the proponent should consider providing for additional consultation during development of complete submission
Preliminary Planning Phase: • Notification required within at least 1.5km of proposed project site during preliminary planning • Post notice in local newspaper of general circulation within municipality where project is located • Community consultation meeting	
Following required studies and prior to application submission: • At least one community consultation meeting to discuss project and potential local impact • Required studies must be available for public review 30 days prior to the meeting date • Document all consultation efforts and explain how it attempted to address issued raised during this process	
Municipal Consultation: • Required consultation relating to	

project area and property boundaries, proposed road access, location and type of municipal service connections required, traffic management plans, construction plans in relation to rehabilitation of temporary disturbance areas and municipal infrastructure, emergency management procedures, proposed site landscaping • Template will be provided by MOE which must be completed by Municipality and proponent • Must submit information to MOE gathered from municipality on: easements or restrictive covenants on property, location of fire hydrants and service connections to drainage, water works, sanitary sewer and gas/hydro, location of buried kiosks and above grade utility vaults, existing and proposed services for local gas and hydro lines	
Aboriginal Consultation: • Evidence of contact with crown for a list of aboriginal communities (AC) that must be consulted • Consultation plan addressing delegated aspects • Form or type of notice given to the identified AC in early planning stages • Evidence that the AC were informed about the location and nature of the proposed RES facility and the regulatory and approval process that apply to it • Evidence that the proponent made best efforts to meet with the identified AC to discuss the project • All requests for information arising out of consultation and documentation of discussion of any asserted right identified by the community and measures the community suggest to mitigation • Evidence of potentially adverse effects on rights and mitigation measures in the RES design	Same items as MOE document

7. Cultural Heritage

Proposed MOE	Draft MNR
Demonstration that any cultural heritage resource considerations are assessed and mitigated	
• Self assessment to identify known or potential effects to archaeological or heritage resources • If any are identified than proponents would undertake archaeological and/or heritage assessment to confirm findings and mitigate potential negative impacts and to provide written confirmation that the MOC has reviewed the assessment	

8. Natural Heritage/Natural Resource Assessment (MNR)

Proposed MOE	Draft MNR
Evidence that the facility is sited outside setbacks for significant natural heritage features or documentation of a mitigation approach and written confirmation that MNR reviewed the approach when siting closer	Proponent must identify and document the natural features on or near the site and determine significance of this feature. List of items to be considered on pg.17 of draft policy
• Do not apply to projects which maintain a minimum setback distance or where a more stringent requirement exists (in section 7) • Proponent must demonstrate in REA that the proposed facility will meet minimum setbacks outlined in table on pg 8 of the Draft Regulation • If the proponent wishes to locate facility within the applicable setback the proponent must provide documentation of the proposed mitigation approach, and provide written confirmation that the MNR has reviewed this approach	Set backs are listed in the MOE Regulation document Other natural features • Development or site alternation shall not be permitted in fish habitat except where relevant provincial and federal permits are acquired
• The proponent shall undertake a records review of documents containing natural environmental	For natural features not found to be significant there are no specific restrictions or site alteration however proponent should provide

baseline information about any features within 120m of the facility. It will document locations of features, natural values and evaluate the significance of the feature • Site investigation will follow the records review. The proponent will investigate the significant natural features as identified in the records review. During the investigation they will confirm the presence, location and boundary of the feature	ministry with: • The potential effects of the project including loss of connectivity between and among features • Mitigation measures proposed by the proponent • Net effects after mitigation • Significance of net effects • Consideration of existing wildlife management plans or fisheries management plans
• Where proposed facility will meet the setback requirement for all features listed in table on pg 8 of the draft regs, they will prepare and submit explanatory notes about the features and their natural values and significance. They will also prepare and submit an air photo documenting the boundary of the features, the location of the facility and required setback to show that the required separation distance is maintained	Endangered Species Act • Where protected species or habitat are present the proponent must assess the potential effects of all aspects of the project (constructions, operation, retirement, decommissioning etc) on species and habitat. This must include assessment of any off site effects resulting from proposed activity in consultation with the district MNR office • If project has potential to effect any protected species or protected habitat in a way that would be prohibited the proponent must determine if the project can be modified to avoid effects, all reasonable alternatives must be considered and documented in complete submission • Where project is not expected to have impacts on protected species or habitat, the proponent must document this in the submission in order to satisfy the MNR • Proponent responsibilities in respect to species at risk are listed on page 19 of the draft policy
• Where the facility is proposed within the setback distance of a natural heritage feature or ear science area of ANSI the proponent must provide an air photo showing the boundary of the feature, the location of the facility and explanatory notes about the features, their natural values and significance • The proponent will complete an EIS documenting potential level of effect of the facility on features and proposed mitigation measures. They will submit a letter confirming that the EIS was	Fish and Wildlife conservation act • A project that for purpose of constructing or operating a project will destroy the nests or eggs of birds, a beaver dam or the den of a black bear or some furbearing mammals, and interfere with a black bear in its den must obtain authorization. • The proponent should submit in complete submission a written request for authorization

done in accordance with procedures and guidance established by the MNR. It will also include advice if any to the MOE on issues related to natural heritage features within setback	Petroleum Resources operation setbacks • Development is not permitted within 75 meters of petroleum resources operation unless an engineers report demonstrating there are no effects is provided
Exception: Hydro and Offshore Wind • Will be required to assess effects and document mitigation measures that will be used to protect the natural environment including natural heritage features. Therefore these projects are not subject to requirements regarding natural heritage features. • The proponent can voluntarily use setbacks instead of undertaking an EIS when siting land based components of the facility	

9. Water Bodies

Proposed MOE	Draft MNR
Evidence that the facility site is outside setbacks for sensitive hydrological features or documentation of a mitigation approach when siting closer	
• Policies associated with sensitive hydrologic features do not apply to RES facilities that maintain minimum setback distance, or if there are more stringent requirements • Sensitive features include: lakes, permanent and intermittent streams, seepage areas and springs that are susceptible to impacts from activities or events including but not limited to water withdrawals and additions of pollutants	Water crossings, bridges, culverts and causeways • Type of structure • The specifications of the structure including materials to be used and the size • Watershed calculation for flow/flood estimates • When and how the structure will be in stalled and how long construction will take • Erosion and sediment control Any other construction details specific to the site

• A RES will not be permitted within 120m of a hydrologic feature unless proponent demonstrates ability to mitigate the effects • Will not, at any time, be permitted closer than 30m of a sensitive hydrologic feature • Water crossing, bridges, culverts and causeways are exempt from this requirement as they are under LIRA	
• To show that the site meets setback requirements, proponent will complete a records review of documents containing natural environment baseline information about hydrologic features within setback. It will document locations of features, natural values and evaluate sensitivity of the feature. • Site investigation will follow, investigation will look at sensitive hydrologic features identified in records review, confirm the presence, location and boundary of the feature	
Exception Offshore Wnd and Hydro • All these facilities will be required to assess effects and document mitigation measures used to protect the natural environment including sensitive hydrologic features, and are therefore not subjects to requirements regarding hydrologic features. • The proponent can voluntarily use setbacks instead of undertaking an EIS for land based components	

10. Provincial Policy Plans\Other Crown Land issues (MNR)

Proposed MOE	Draft MNR
Description of if and how PP plans apply to the RES facility and documentation that development is permitted.	
The following areas will be incorporated into the regulation • Niagara Escarpment • Oak Ridges Moraine	• Title searches and legal agreements from affected landowners • Consents from unpatented mining claim holders or agreement from mining lease holders to surrender all

• Green belt • Lake Simcoe • Central Pickering Refer to Regulation document and PPS for further info	or part of leases where required • Legal agreements with petroleum lease holders regarding infrastructure • Mitigation of effects to existing users (may require consent/agreement) • Site access controls to mitigate the effects to other resource users or management activities • Measures to address compatibility with or effects to existing land use direction

11. **Technology Specific Requirements (for Land Based Wind, Biogas, Biomass and Hydro only, all others refer to regulation document)**

Proposed MOE	Draft MNR
Other documentation as appropriate to support technology specific requirements	In support of compilation of natural environment baseline information the proponent must also undertake specific studies
Hydroelectric Facilities Exemptions • Low head (less than 2 meters) and hydro kinetic power • Facilities greater than 200 MW (required to do an individual EA)	
Hydroelectric Application requirements • Identification of the watercourse • Statement as to whether facility relies on existing structure or new structure • Statement as to whether the facility is on a managed or unmanaged waterway • Scaled diagrams and explanatory notes that approximate location of: the dam, and any area to be flooded; land of persons other than the applicant that may be affected by the flooding	**Lakes and Rivers Improvement Act** • Complete and submit a multi use application form which will be used to determine if LRIA applies and will form part of the project description. Copy should also be submitted with the complete submission • Two part process: Location Approval and Plans and Specs approval • Location Approval can be issued prior to the complete submission, sometimes this may require federal approval
Hydroelectric water taking A facility that would take more than 50,000 litres of water any day by any means must also include in their application: • Description of the period and duration of the water takings associated with the facility life	**LRIA Location Approval Requirements** • Preliminary drawings and diagrams of the dam • Proposed dam operation water levels and flows • Aboriginal consultation (as per consultation requirements listed above)

cycle including construction phases • Description of water taking needs including rates amounts and time periods and assessment of availability of water to meet demand • An assessment and documentation of the potential for interference with other users	• Legal instruments and right to flood • Statement of authorization from affected riparian owners • Watershed maps, official plans, existing and future (20 years) • Ecological information • Clearing crown owned forest resources from areas to be flooded • Proposed erosion and sediment control measures construction and operation • Natural amenities present at the site • Historical and archaeological sites • Hazard potential classification • Existing WMP for waterpower
Hydroelectric waste management Should the facility have associated waste management or waste disposal activities the proponent may be required to submit: • Design and operation plan which would address detailed description of processes at the facility, potential environmental impacts and quality/quantity of waste being managed • Surface water assessment • Hydro-geologic assessment • Effluent management plan	**LRIA plans and specs approval** • Final design report (stamped) • Hydrologic and hydraulic analyses • Geotechnical investigations and structural design calculations • Soils analysis • Ecological information (where there is no LA required) • Detailed construction drawings and specifications stamped by an engineer • Construction timing window and schedule • Existing WMP
Hydroelectric emissions to air or land • Should any associated or ancillary equipment, systems or technologies discharge contaminants the following will be required: • ESDM report • Noise study	**Post construction monitoring plan** • May be required to evaluate the effectiveness of proposed mitigation measures to be implemented during project development and operation • It will outline the procedures to verify the extent of effects, compare actual with predicted effects, the effectiveness of mitigation strategies and whether additional measures are warranted Should cover • Reason for monitoring • Environmental component or mitigation measures being monitored • Scope of the program • Methods and procedures for monitoring • Timing and duration of monitoring activities including extension of

	monitoring if unanticipated effects are found • Monitoring results reporting provision • Provision for additional actions that may be required
	Section 8 details site specific requirements related to developments on private land