

January 29, 2013
Project Number: O-E8982

Ontario Rivers Alliance
379 Ronka Road
Worthington, ON
P0M 3H0

Attn: Ms. Linda Heron

**RE: The Ontario Rivers Alliance Response to Enerdu / OEL-HydroSys OE8982-00
Environmental Report on the Enerdu GS Expansion and Redevelopment Project**

Dear Ms. Linda Heron,

Thank you for your comments on the Final Environmental Report (ER) for the proposed expansion and redevelopment of the Enerdu generating station (GS), herein referred to as the proposed Enerdu project. In the following document, we offer our responses to the questions and concerns outlined in your January 18, 2013 letter.

We would like to begin by clarifying at the outset the confusion over the purpose and scope of the environmental assessment (EA), the findings of which are presented in the Final ER. Below is an explanation that was also provided to the Mississippi RiverWatchers in our response to their January 16, 2013 (revised on January 18, 2013) letter, as it is also applicable to many of the concerns raised in your own letter.

As indicated throughout the environmental assessment process, the proposed Enerdu project is categorized as a project associated with existing infrastructure. As explained in the “Class Environmental Assessment for Waterpower Projects” (April 2012), Section 3.1.1,

“the scope of *change* will often be restricted to the infrastructure itself and the *zone of influence resulting from modification*.” (Emphasis added)

Additionally, Section 4.2.2 of the same document explains that,



“An effect is any change to the environment, positive or negative, that could occur as a result of a project.”

The EA is intended to assess the potential impacts associated with the proposed expansion and redevelopment of the Enerdu GS; that is, *existing conditions* were compared to what may occur if the project proceeds. Since the proposed upgraded facility would continue to adhere to the Mississippi River Water Management Plan (MRWMP) as it currently exists, no changes to water levels between the Enerdu GS and the Appleton GS (i.e. Reach 18) would occur as a result of the proposed project. Since the scope of the EA focused on the areas that would experience change due to the proposed project, the Zone of Influence of the proposed project was limited to the immediate project area, rather than extending 9 km upstream to include the Appleton wetland and the tailrace of the Appleton GS. Numerous requests have been made from members of the public to address the alleged impacts of current operations at the Enerdu GS on the Appleton wetland and riparian rights; please note, however, that this EA is not the correct process through which to implement the requested changes. Any changes to current operations at the Enerdu GS would be the result of amendments to the MRWMP. If the MRWMP was to be amended, Enerdu will be required to fully comply with the new management strategies.

Finally, in the interest of providing you with a timely response to your questions and concerns, we focused on the issues that are relevant to the scope of this EA, as researching and providing responses to the questions not related to the EA would have resulted in us not being able to respond to you by your requested deadline.

1. Operating Strategy – Run-of-River

Note that some definitions of “run-of-river” (including one provided by the RiverWatchers in their January 16, 2013 response letter, whose letter you indicated you support), explain that there may be minimal storage and fluctuation of flows. While we acknowledge that operations at the Enerdu GS do not fit perfectly with the strictest definition of “run-of-river”, it is not accurate or appropriate to refer to it as a peaking facility. The latter implies a large storage capacity and seasonal fluctuations in water levels in the headpond, neither of which are the case for the Enerdu GS. This facility was referred to as a run-of-river facility as its operations resemble the latter much more closely than those of a peaking facility.

ORA Questions/Concerns	Response
a. What are Enerdu’s “currently established practices” of river flow management for hydroelectric generation at this facility – especially during the low flow months of summer and winter?	The Enerdu GS manages water levels within the best management practices range of 117.2 to 117.7 metres above sea level (masl). The compliance range is 116.7 to 118.0 masl. The facility operates at peak hours (11 a.m. to 6 p.m.) or longer if sufficient water flow is available.
b. Have water levels fluctuated on a daily or hourly basis as a result of your operations?	Yes.
c. Does Enerdu currently cycle or peak this facility?	See response to question a.
d. Does the Enerdu GS manipulate river flows to maximize power generation during peak demand hours?	See response to question a.
e. Is it Enerdu’s intention to cycle or peak this expanded facility within the compliance range?	Enerdu will continue to adhere to the compliance levels and best management practices range currently outlined in the MRWMP. See also response to question a.
f. Before the additional flash board was installed in 2006, what was the operating band range approved for this facility?	No additional flashboards were installed in 2006; the operating band is the same.
g. What was the normal compliance range approved for this facility before the review that began in 2003?	The height of the flashboards has reportedly been consistent for decades.
h. The ER states, “The operating compliance range for the Enerdu GS is 116.7 to 118.m”. If Enerdu operates within this current compliance range of 116.7 to 118.0m range, then that means water levels could fluctuate by approximately 1.3 m (51 inches) daily, or on a several times daily basis under favourable flow conditions, is this correct?	For clarification, Enerdu GS is required to operate within the best management practices range of 117.2 to 117.7 masl. The compliance range represents a safety buffer in case unforeseen events (e.g. a larger than expected rainfall) cause water levels to momentarily fall outside the best management practices range. Only in the most extreme circumstances, beyond the control of Enerdu, could the 1.3 m fluctuation you cite occur.
i. Does Enerdu have a Feed in Tariff Contract?	Enerdu has an HCI Contract
j. Does Enerdu currently receive peaking rates for power produced during peak demand hours?	Yes

2. Weir Options 1 and 2 – Adjustable Weir Crest & Obermeyer Style Weir

ORA Questions/Concerns	Response
a. Will either Option 1 or 2 allow the weir to be raised above the maximum compliance water level approved by the current Mississippi River Water Management Plan (MRWMP)?	No. Enerdu will and must comply with the provisions of the MRWMP.
b. In Option 1 and 2, what will be the maximum height of the upper limit of the raised weir under– please provide this in terms of masl.	117.7 masl
c. How much increased water storage capacity would either proposed weir configuration result in?	None.
d. The ER states, Option 2, would be a “concrete spillway weir built downstream of the existing weir and equipped with an Obermeyer gate allowing operation at a higher level (but without exceeding the compliance limit of 118.00 masl) with enhanced and automated discharge capacity during flood conditions.” Since your “current operating range for Enerdu GS is 116.7 to 117.70 metres”, will Enerdu guarantee that the water control structure will be able to discharge water sufficiently to prevent flooding in the event of a 1:100 year flood event?	Note that Option 1 of the weir is the preferred option that the proponent intends to pursue, due to the strong public opposition to Option 2. The (Option 1) weir would be designed to discharge 1:100 year flood flows. Had the proponent been pursuing Option 2, the weir would have been designed to discharge 1:100 year flood flows as well.
e. Why is the height of the proposed weir not designed for 117.70 masl instead of 118.00?	For clarification, the height of the weir crest is 117.70 masl.

3. Zone of Influence

We would like to clarify that riparian land owners and other interested and affected parties were in fact consulted and approached during the EA for the proposed development. The details of the public consultation process are included in Section 6.2 of the ER; all correspondences between the project team and public contacts throughout the EA process are included in Appendix C of the ER.

It was acknowledged by the project team that some deficiencies existed in earlier attempts to engage the public, as it was later revealed that the Notice of Commencement did not reach all riparian land owners. Additional steps were taken to continuously improve the public consultation process, including (but not limited to) the development of a mailing list of residences surrounding the project site, direct mail outs, email updates and announcements on the OEL-HydroSys website (www.wesa.ca). To ensure that all interested parties were aware of the issuance of the Notice of Completion and the review period of the ER, notices were hand-delivered to the residences surrounding the project site, and were posted at various locations around the Town of Mississippi Mills: in addition to the four locations where hard copies of the report were available, the Notice of Completion (or a smaller, abbreviated notice, if there was insufficient space on the notice board) was also posted at the Old Town Hall and The Book Store. A copy of the Notice of Completion was delivered to the Millfall Condominiums with the request that it be given to the president of the Board of Directors. The notice was published in the Almonte-Carleton Place EMC and The Humm. Phone calls were also made to select public contacts to ensure and confirm that they were well aware of the availability of the ER.

The comments and concerns raised throughout the EA process were recorded for inclusion in the ER. In the preparation of the ER, care was taken to ensure that all issues and concerns were addressed, to the extent that they fell within the scope of the EA (see the discussion at the beginning of this letter about the project's Zone of Influence).

With regards to your comment about the excavation area not being included in the Zone of Influence, we would like to clarify that it was indeed included in the overall impact assessment of the proposed Enerdu project. We realize that some confusion over the Zone of Influence may have arose due to statements in the ER that it extended approximately from the weir to the end of the proposed new tailrace. We acknowledge that the wording could have been more specific, to indicate that the entire river width at the upstream end of the weir is included. We regret any confusion this may have caused, but please rest assured that the proposed excavation was recognized as being part of the affected area.

ORA Questions/Concerns	Response
a. Issues of “ <i>displacement, impairment, conflict, or interference with existing land uses, approved land use plans, businesses or economic enterprises, recreational uses or activities, cultural pursuits, social conditions or economic attributes</i> ” have not been addressed directly with those riparian land owners affected. Why have riparian land owners in and around the dam site not been consulted or even approached by Enerdu?	See response above.
b. Why are their concerns not reflected in your ER?	See response above.
c. An excavation of 2082 m ² of the upstream riverbed is proposed, so why was this area not included in your potential zone of influence in this ER?	See response above.
d. What other important details have been left out of the ER?	To the best professional knowledge of the EA project team, no important details are missing from the ER.
e. Did water levels rise with the installation of additional flashboards in 2006?	Past operations at the Enerdu GS as well as any possible impacts associated with current operations are not within the scope of the EA, and have therefore not been investigated as part of the EA.
f. If so, how much did they rise?	See response to <i>e</i> .
g. Did the rise in water level reach as far as the tail race of the Appleton GS?	See response to <i>e</i> .

4. Water Levels

Just to clarify, the first quote provided in Section 4 of your letter comes a January 27, 2012, cover letter to Transport Canada as part of a Request for Project Review. The same statement appeared in the draft ER that was distributed to regulatory agencies for their review. In their review letter issued on February 3, 2012 (included in Appendix B of the ER), the Mississippi Valley Conservation Authority pointed out that the statement as it was originally phrased was not correct; as a result, the sentence was revised to what currently appears in Section 3.1 of the Final ER.

ORA Questions/Concerns	Response
a. Are water levels upstream of the Enerdu GS controlled by the number and height of flashboards added to raise its head?	Partially, yes. The Enerdu GS can control water levels within the best management practices range outlined in the MRWMP (117.2 to 117.7 masl).
b. If the upstream Appleton Dam is responsible for Enerdu's upstream water levels, then it would stand to reason Enerdu is responsible for the Almonte GS upstream water levels, located approximately 125 m downstream – is that correct?	See explanation in the text above.
c. What is the geographic scope of this proposal?	See the discussion at the beginning of this letter regarding the scope of the EA.
d. Does the geographic scope take into account the extent of any increase in the area of inundation?	No increase in the area of inundation is proposed.
e. Would Enerdu's normal low flow operating levels ever reach the maximum height of 118.0 m or 117.7 m?	Low flow cannot reach 118.0 masl because the maximum weir crest elevation of the proposed new weir would be 117.7 masl. Whether operating levels ever actually reach 117.7 masl during low flow conditions will depend on the minimum flow requirements for the bypass reach and the amount of water reaching the Enerdu GS from upstream.
f. Does Enerdu ever operate in excess of the 118.0 m compliance level?	No.
g. Please explain in detail how water levels are controlled when "operating under extremely low flow conditions"?	Water is stored during off-peak hours, but are always released within 24 hours. In extremely low flow conditions, water levels in the headpond typically cannot be fluctuated across the entire best management practices range.

5. Appleton Wetlands

ORA Questions/Concerns	Response
a. Do you agree that the MRWMP Standing Advisory Committee recommended there be an amendment to the MRWMP with the objective of restoring water levels to those that existed prior to 2004?	We are awaiting the final meeting minutes from the MNR regarding the final recommendations and conclusions from the meeting in question.
b. Why did Enerdu fail to include this recommendation of the MRWMP Standing Advisory Committee in the ER?	Please refer to the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland. The purpose of the EA was to assess changes to the environment as a result of the project itself, and not to assess the impacts of amending the existing MRWMP. Therefore the meetings with the Standing Advisory Committee and the Steering Committee were not described in further detail in the ER.
c. Why has Enerdu refused to take responsibility for the damage caused to Appleton Wetland as a result of their operation?	See the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland.
d. What steps will Enerdu take to protect Appleton Wetland from further damage?	See the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland.
e. Why is Enerdu leaving out the important fact that their operations are having a negative impact on the Appleton Wetlands?	See the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland.
f. Apparently the normal historical upstream operating level of 117.7 m above sea level has resulted in serious damage to the Appleton Wetland, so how does Enerdu plan to protect this ANSI site from further damage?	See the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland.
g. The ER reports that the Appleton Wetland is 9 km upstream of the existing weir. Does the existing Enerdu GS ever back water up to and beyond the Appleton Wetland with its operations? If yes then how often?	See the discussion at the start of this letter regarding the scope of the EA relative to the Appleton wetland.

6. Turbine Operations

ORA Questions/Concerns	Response
<p>a. Please explain why Enerdu has not specified Alden turbines which are less harmful to eels and fish in general?</p>	<p>The use of Alden turbines for waterpower production still appears to be in the preliminary stage. If it can be demonstrated with confidence that Alden-type turbines are effective and efficient for both electricity production and the prevention of fish injury and mortality, the proponent may explore the possibility of using this type of turbine. For the moment, the application of other mitigation measures is the preferred option.</p>
<p>b. ORA is concerned that the proposed low-head higher efficiency turbine would mean less water in the downstream river for longer periods throughout the dry summer season. Based on the past 5 years of flow reports, what would be the approximate increase in power generation time?</p>	<p>Water levels upstream and downstream of the Enerdu project site would not differ compared to current conditions.</p> <p>Knowing that water levels upstream and downstream would not change, please provide additional clarification regarding your concern that an increase in power generation time would result in less water in the downstream river for longer periods throughout the dry summer season.</p>

7. Flows

ORA Questions/Concerns	Response
a. What effects would this holding back of flows have on the <ul style="list-style-type: none"> i. Natural functions of the river, ii. Scenic value of the location, iii. Aquatic life and riverine ecosystem, iv. Appleton GS, and v. Mississippi River Power GS? 	The Enerdu GS would continue to operate according to the best management practices range and the compliance range currently outlined in the MRWMP. With regards to the effects of the manipulation of flows, the listed items would not experience any change as a result of the proposed Enerdu project.
b. Has Enerdu received any complaints from Appleton GS or Mississippi River Power GS that their operation has been negatively impacted by your operations?	Impacts of current operations on the neighbouring facilities are not within the scope of this EA.
c. Currently a compensatory flow of only 1cms is proposed throughout the by-pass reach. ORA is requesting at least 2.2 cms at all times when flows permit.	Thank you, your suggested compensatory flow value will be considered. To assist in the selection of a suitable compensatory flow, we also welcome further details on how you arrived at your proposed value of 2.2 cms.
d. What would be the approximate increase of time with only compensatory flow in the bypass reach?	Would depend on the amount of compensatory flow that is ultimately selected.

8. Proposed Spillway

ORA Questions/Concerns	Response
a. Has Enerdu made a request for an amendment to the MRWMP for the repair of this spillway?	No. The spillway needs to be repaired because failure to do so would result in water levels at the Enerdu GS dropping below the best management practices range outlined in the MRWMP. It is not expected that the repairs would require any amendment to the MRWMP, aside from the possible addition of a sentence noting that repairs had been made.
b. Is the repair of the spillway essential to the overall final outcome of this proposed project?	Not so much the project itself, but the ability of the Enerdu GS (whether it be the current GS or the proposed upgraded/expanded GS) to comply with the MRWMP.

9. Mississippi River Water Management Plan

ORA Questions/Concerns	Response
a. Is 118 masl the targeted operating level?	No. The Enerdu GS aims to operate within the best management practices range of 117.2 to 117.7 masl. See the response to question 1.h) about the purpose of the upper compliance limit of 118 masl.
b. Do water levels exceed 117.70 masl on a daily basis?	No.
c. How often have water levels exceeded 118.0 masl?	Rarely. See also responses to questions 1.h) and 9.a).
d. Has Enerdu applied for an amendment to the MRWMP yet, and if so what is the wording of the request?	Not as of yet. The administrative amendment would only involve an update to the description of the facility (e.g. information on the turbine capacity and the weir structure). A request to amend the MRWMP would be made once specific details about the GS are finalized during the final engineering design or upon commissioning of the upgraded facility.

10. Existing Infrastructure

ORA Questions/Concerns	Response
a. Please provide details of how the benefits of this project would offset the loss of the safe recreational use, heritage and esthetic values of this area.	The benefits of the project are outlined in the Conclusion (Section 13.0) of the ER.

11. Site Release

Discussions with the Ministry of Natural Resources (MNR) on “Quit Claim Eligibility” and Site Release have been carried out concurrently with the EA process, rather than after the completion of the EA, as requested by the Ministry. All available records related to this topic, up to December 10, 2012 (right before the ER went to print), are included in Appendix B of the ER. Discussions and the development of land ownership agreements with the MNR are currently ongoing.

In the proponent’s discussions with the MNR, the latter indicated that a 3-metre buffer around existing structures would be included for Quit Claim eligibility, hence why the proposed new weir was included as “Quit Claim” lands on Figure 3 of the ER. The proponent recognizes that depending on the exact positioning of the new weir relative to the existing one, and the positioning of the 3-m buffer, part of the width of the proposed new weir may not be eligible for Quit Claim. The requirements for Site Release will ultimately be decided by the MNR, and the proponent will adhere to their decision.

In more recent discussions with the MNR, it was agreed that only built structures are subject to the requirements of Site Release, and therefore the proposed excavation area is not included in the land ownership discussions.

Note that although there is no formal “ER approval”, the proposed Enerdu project cannot and will not proceed to implementation without the necessary permits and approvals; neither will it proceed without resolution to the land ownership issue. The proponent will adhere to the final decision made by the MNR regarding land ownership.

ORA Questions/Concerns	Response
a. Has it yet been determined whether Enerdu owns the bed of the river or is it owned by the Crown?	Discussions with the MNR regarding land ownership are ongoing.
b. Has it been determined whether Enerdu requires Site Release or has Quit Claim Eligibility?	See response in the text above.
c. Would the proposed new weir, powerhouse and excavations fully fit within the Quit Claim zone?	See response in the text above.

12. Dam Decommissioning Provisions

ORA Questions/Concerns	Response
a. Will Enerdu put funds up front for future decommissioning if at some time in the future this facility is no longer environmentally, socially or economically sustainable and viable?	There are currently no funds set aside for decommissioning as there are no plans to decommission the Enerdu GS in the foreseeable future. The GS is expected to operate for 100 years.

13. Fish/Eel Passage

ORA Questions/Concerns	Response
<p>a. ORA requests that Enerdu provide the final detailed design plans for upstream and downstream Eel Passage.</p>	<p>The management strategy for minimizing impacts to American eel will be developed and agreed upon with the MNR as well as the Algonquins of Ontario. Detailed project designs for the protection of American eel, including upstream and downstream eel passages, cannot yet be presented without the necessary agreements in place. Additionally, the precise details of the management strategy are partially dependent on the final design of the proposed facility, which is still at the conceptual stage. The final engineering plans would be produced during the permitting and approvals stage of the project, after completion of the EA.</p>

14. Methymercury

ORA Questions/Concerns	Response
<p>a. Will Enerdu undertake a study to determine the current and projected mercury levels in fish tissue?</p>	<p>No changes to water levels are proposed for this project. The production of methyl mercury is a concern when a project contemplates the inundation of land. No additional land would be flooded as a result of the proposed Enerdu project, so methylmercury impacts are not anticipated; for this reason, a study of fish mercury levels was not conducted for this EA.</p>

15. Riparian Rights

The following is a summary of the attempts to properly notify all interested/affected members of the public about the proposed Enerdu project, the alleged failure to notify all individuals, and the subsequent improvements that were made to the public consultation process.

Arrangements were made to directly distribute the Notice of Commencement (NOC) to riparian landowners via post. The creation of a mailing list of nearby riparian landowners was arranged with the Town of Mississippi Mills (see Appendix C of the ER for correspondences between OEL-HydroSys and the Town of Mississippi Mills on this subject). Once the mailing list was compiled, the NOC was distributed. However, it was later brought to our attention that a number of riparian landowners still did not receive the NOC. The project team sought to correct this deficiency by requesting the contact details (mailing address and/or email) of individuals wishing to remain informed of project updates.

At the April 11, 2012, community-organized meeting, various individuals noted that they did not receive the NOC. Having been informed of the issue, OEL-HydroSys acknowledged that the distribution of information was still deficient, accepted responsibility, and offered their apologies. OEL-HydroSys subsequently sought to further improve the public consultation process, the results of which are explained below.

Project updates were provided via email to the public contacts for the proposed Enerdu project and were posted on the OEL-HydroSys website at www.wesa.ca (please refer to Appendix C of the ER for copies of these updates). The Notice of Completion, which included information on accessing both printed and electronic versions of the ER, was issued in mid-December, 2012. The notice was published in the Almonte-Carleton Place EMC and The Humm. Copies of the notice were hand-delivered to the residences surrounding the project site, and were posted at multiple locations throughout the Town of Mississippi Mills. A copy of the Notice of Completion was also delivered to the Millfall Condominiums with the request that it be given to the president of the Board of Directors. Phone calls were also made to select public contacts to ensure and confirm that they were well aware of the availability of the ER.

ORA Questions/Concerns	Response
a. Has Enerdu met with impacted riparian land owners to discuss their concerns?	Yes. See Section 6.3 of the ER for a summary of the public consultation process for the proposed Enerdu project.
b. Has Enerdu received any complaints from riparian landowners about not being consulted or notified?	Yes. See the summary provided above.
c. Has Enerdu worked out a deal with the riparian landowners whose river access, aesthetics, and property values could be compromised?	No, because the proposed Enerdu project would not result in any changes to water levels upstream or downstream of the GS compared to current conditions, and therefore no impacts/changes to shoreline properties as a result of the proposed project are expected. Impacts of <i>current</i> operations on riparian landowners are outside the scope of this environmental assessment, and were therefore not evaluated. Issues associated with water levels and facility operations are best addressed under a separate water management planning process.

We hope this document addresses the questions and concerns raised in your January 18, 2013 letter. Thank you for your ongoing participation in the environmental assessment process for the proposed Enerdu GS expansion and redevelopment.

Should you have additional comments or concerns, please do not hesitate to contact the undersigned at mkim@wesa.ca or at (613) 839-3053 ext. 261.

Respectfully,



Muriel Kim, M.Sc.
Environmental Scientist

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