



MKE

McGhee-Krizsan Engineering Limited

**ORILLIA POWER GENERATION CORPORATION
MINDEN DAM WATERPOWER GENERATING STATION
WATER MANAGEMENT PLAN
IMPLEMENTATION REPORT
FOR PERIOD JANUARY 2010 THROUGH DECEMBER 2020**

**FOR SUBMISSION TO:
MINISTRY OF NATURAL RESOURCE AND FORESTRY**

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McGhee-Krizsan Engineering Limited

December 1, 2020

Ministry of Natural Resources and Forestry
Peterborough District Office, Southern Region
1st Floor, 300 Water Street,
Peterborough, ON
K9J 3C7
(Submitted by email to kris.windover@ontario.ca)

Attention: Kris Windover, IRM Technical Specialist

Dear Mr. Windover:

**RE: MINDEN DAM WATERPOWER GENERATING STATION,
WATER MANAGEMENT PLAN IMPLEMENTATION REPORT
FOR THE PERIOD JANUARY 2010 THROUGH DECEMBER 2020**

Please find attached a copy of the first Implementation Report for the *Minden Dam Waterpower Generating Station Water Management Plan* (WMP) dated January 2010 and amended June 2018. MKE is submitting this report on behalf of Orillia Power Generation Corporation to fulfill the requirements of Section 8.0 of the Amended WMP.

Please do not hesitate to contact the undersigned at kmcghee@m-k-e.ca or 905-331-9692 if you have any questions regarding this report or require any additional information.

Yours truly,

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Karen McGhee, P.Eng.
President

c.c Grant Hipgrave, President & CEO OPGC

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1.0 INTRODUCTION

The *Minden Dam Waterpower Generating Station Water Management Plan* (WMP) was prepared and finalized in January 2010 to follow the goals and principles set out in the Ministry of Natural Resources and Forestry's (MNRF) *Water Management Planning Guidelines for Waterpower* (MNRF, 2002). The WMP was subsequently amended in 2018 to align with MNRF's *Maintaining Water Management Plan Technical Bulletin* (MNRF, 2016) that replaced the earlier 2002 guidelines.

The following document is the initial Implement Report for the facility since the requirement was added to the WMP in June 2018. Implementation Reports are generally required to be issued every five (5) years, however, as outlined in Section 8.0 of the amended WMP, this initial report is intended to cover the timeline from January 2010 through December 2020. It has been prepared on behalf of the Orillia Power Generation Corporation (OPGC)

This Implementation Report was prepared to provide plan proponents, MNRF, and interested parties with a status update on the WMP, provide transparency of dam operations, and help to inform adaptive management considerations. It is not intended to initiate a fundamental review of the WMP.

The WMP is categorized as a "Simplified WMP". A Simplified WMP is defined by MNRF as follows:

"Plans prepared for a river section based on limited control over water flows and levels by waterpower facilities and water control structures, with few issues to resolve."

A Standing Advisory Committee was initially appointed for the WMP, however, this committee has since become inactive.

2.0 SUMMARY OF AMENDMENT REQUESTS RECEIVED

2.1 Amendments Completed

The following is a list of all approved amendments completed since the original issuance of the Water Management Plan in January 2010:

June 29, 2018:

The MNRF approved an amendment for the Facility to align the plan with MNRF's approved 2016 Maintaining Water Management Plans Technical Bulletin. This amendment included changes to the following:

- o Removal of the expiry date, plan term, and mandatory review;
- o New amendment classification, processes and proponent roles, and responsibilities;
- o New compliance monitoring and data processes; and
- o Details of the new Implement Report.

Specifically, changes were made to the following sections:

- o Section 6.4 Monitoring and Reporting was revised;
- o Section 6.4 Compliance was revised;
- o Section 7 was replaced; and
- o Section 8 and Appendix F were added.

2.2 Other Amendment Requests Received

No other amendment requests were proposed or received by Orillia Power Generation Corporation during this review period of January 2010 through December 2020.

3.0 STATUS OF THE STANDING ADVISORY COMMITTEE

OPGC formed a Standing Advisory Committee (SAC) shortly after the implementation of the WMP. Invitations to participate in the new SAC were issued to the Department of Fisheries and Oceans (DFO), Ministry of Natural Resources and Forestry (MNRF), the Township of Minden Hills, and Public Works Canada – Trent Severn Waterway (PWC-TSW). DFO, MNRF and the Township of Minden Hills participated in the initial meetings and correspondence exchanges. PWC-TSW declined to participate. After a few initial meetings, the committee became inactive. OPGC will reactivate the SAC should it propose or receive a request for an amendment that requires collaboration / consultation. A member(s) of the public may be invited to participate in a re-activated SAC if it is deemed to be in the public interest.

4.0 EFFECTIVE MONITORING PROGRAM (EMP)

The Effective Monitoring Program (EMP) established in the WMP is focused on confirming that the operational regime of the facility maintains adequate downstream water elevations to support the aquatic environment.

As outlined in Section 6.3 of the WMP, OPGC established a manual water level gauge on the downstream golf course bridge. This gauge was monitored periodically after the implementation of the WMP, specifically during low flow periods. At no time did OPGC observe the water level being less than 269.5 m. However, there are no records of these readings. The gauge is currently in poor shape and in an inconvenient location for operations staff to use for regular reading.

OPGC alternatively configured its plant control system to trigger an alarm when conditions are such that the plant is required to go into daily recoverable flow. OPGC intends to continue this practice.

Moving forward, however, OPGC will replace the deteriorated gauge on the golf course bridge and take the hourly water levels of the Gull River at both gauges for June, July, August, Dec, Jan, and February twice, to satisfy the requirements of Section 6.3 of the WMP. The results of these readings will be provided in the next Implementation Report.

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5.0 STATUS OF ANY DATA OR INFORMATION COLLECTION

5.1 Information Gaps

No information gaps were identified associated with the operation of the Minden Dam Generating Station.

5.2 Required Data Reporting

OPGC has retained all required data outlined in Section 6.4 of the WMP. It is available to the Ministry upon request.