YUKON WATER BOARD

Pursuant to the *Waters Act* and *Regulation*, the Yukon Water Board hereby issues a water licence to:

LICENSEE:	Yukon Energy Corporation
CONTACT INFORMATION:	P.O. Box 5920 Whitehorse, Yukon Y1A 6S7
LICENCE NUMBER:	HY25-027
RENEWAL:	This Licence is a renewal of HY25-088
UNDERTAKING:	Power, Class 3 **LICENCE TYPE:** A
LOCATION:	Mayo River and Mayo Lake
WATER MANAGEMENT AREA:	02 Yukon
PURPOSE:	Operation of the Mayo Generating Station
EFFECTIVE DATE:	February 27, 2026
EXPIRY DATE:	The earlier of December 31, 2030, or the effective date set out in the renewed licence.

This Licence replaces HY25-088 and is effective upon signature of the Yukon Water Board until the Expiry Date or until this Licence is renewed. This Licence is subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Waters Act* and *Regulation*.

Approved this 27 day of February, 2026.

Original Signed
Witness

Original Signed
Minister, Executive Council Office
Government of Yukon

Issued this 27 day of February, 2026.

Original Signed
Witness

Original Signed
Benjamin Bruce Warnsby on behalf of the
Yukon Water Board

PART A DEFINITIONS

“Act” means *Waters Act* S.Y. 2003, c.19, as amended from time to time.

“Application” means Application for water licence HY25-027 including any additional submissions or updates submitted to the Yukon Water Board by the Licensee, up to the date the Licence is issued.

"Board" means the Yukon Water Board.

“Dam Safety Guidelines” means the *Canadian Dam Safety Guidelines*, as amended from time to time, issued by the Canadian Dam Association.

“Dam Safety Inspection” means a dam safety inspection conducted in accordance with *Canadian Dam Safety Guidelines*, as amended from time to time.

“Dam Safety Review” means a dam safety review conducted in accordance with *Canadian Dam Safety Guidelines,* as amended from time to time.

“EOR” means Engineer of Record and is a third-party, qualified, professional engineer, licensed to practice in the Yukon.

“EPP” means the *Mayo Generating Station Emergency Preparedness Plan* submitted as part of the Application and included in register HY25-027 as exhibit 1.58, and any subsequent updates.

“Flow Monitoring Protocol” includes the *MLCS Discharge Data and Calculations* and the *Wareham Dam Discharge Data and Calculations* submitted as part of the Application and included in register HY25-027 as Appendix E and F of the OMS Plan, respectively, exhibit 1.23, and any subsequent updates.

“Ice Management Guidelines” means the *Ice Management Guidelines* submitted as part of the Application and included in register HY25-027 as Appendix H of the OMS Plan, exhibit 1.23, and any subsequent updates.

“Inspector” means any person designated as an Inspector under the Act.

“Lower Mayo River” means the Mayo River downstream of the Wareham Dam.

“m^3/s” means cubic metres per second.

“Maintain” means to preserve or retain in good repair and operation.

"MAMP" means the *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan* submitted as part of the Application and included in register HY25-027 as part of exhibit 1.10, and any subsequent updates.

"masl" means metres above sea level.

"Mayo A Powerhouse" means the structures described in Appendix 4-2.1, exhibit 1.5, register HY25-027.

"Mayo B Powerhouse" means the structures described in Appendix 4-2.1, exhibit 1.5, register HY25-027.

"Mayo Generating Station" includes the Mayo A Powerhouse, the Mayo B Powerhouse, the Wareham Dam, the Spillway, and the Mayo Lake Control Structure.

"Mayo Lake Control Structure" means the structures described in Appendix 4-2.1, exhibit 1.5, register HY25-027.

"Mayo Lake Full Supply Level" means 665.840 masl geodetic datum (674.065 masl Mayo Lake Local Datum).

"Mayo Lake Local Datum" means the Licensee's relative datum at Mayo Lake, calculated as 8.225 metres greater than the geodetic datum.

"Mayo Lake Low Supply Level" means 663.249 masl geodetic datum (671.474 masl Mayo Lake Local Datum).

"Natural Boundary" means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water is so common and usual, and so long continued, as to mark upon the soil of the bed of the lake, river, stream or other body of water, a character distinct from that of the banks thereof, both in respect to vegetation and in respect to the nature of the soil itself.

"OMS Plan" means the *Operations, Maintenance and Surveillance for Mayo Generating Station* submitted as part of the Application and included in register HY25-027 as exhibit 1.23, and any subsequent updates.

"or" includes "and".

"PFMA" means Potential Failure Modes Analysis.

“Qualified Professional” means a person with a recognized degree, professional certificate, or designation, and appropriate knowledge and experience in a subject field.

“Ramping Protocol” means the *Mayo River Flow Ramping Protocol* submitted as part of the Application and included in register HY25-027 as Appendix G of the OMS Plan, exhibit 1.23, and any subsequent updates.

“Regulation” means the *Waters Regulation* O.I.C. 2003/58.

“Rules" means the Yukon Water Board Rules of Procedure 2021, as amended from time to time.

“Spill Response Plan” means the *Mayo Hydro/Sub-Station Spill Response Plan* that was submitted as part of the Application and included in register HY25-027 as exhibit 1.15, and any subsequent updates.

“Spillway” means the structures described in Appendix 4-2.1, exhibit 1.5, register HY25-027.

“Upper Mayo River” means the Mayo River downstream of the Mayo Lake Control Structure and upstream of the Wareham Lake.

“VESEC” means valued environmental and socio-economic component.

“Wareham Dam” means the structures described in Appendix 4-2.1, exhibit 1.5, register HY25-027.

“Wareham Lake Full Supply Level” means geodetic datum (579.577 masl Wareham Lake Local Datum).

“Wareham Lake Local Datum” means the Licensee’s relative datum at Wareham Lake, calculated as 5.077 metres greater than the geodetic datum.

“Wareham Lake Low Supply Level” means 572.214 masl geodetic datum (577.291 masl Wareham Lake Local Datum).

“Waste” has the same meaning as in section 1 of the Act.

“Watercourse” has the same meaning as in section 1 of the Regulation.

“Winter Operating Guideline” means the *Winter Operating Guideline OPG-007* that was submitted as part of the Application and included in register HY25-027 as exhibit 1.9, and any subsequent updates.

PART B WATER USE AND DEPOSIT OF WASTE

1. Subject to the terms of this Licence, the Licensee is hereby authorized to:

   a) store water behind the Mayo Lake Control Structure;

   b) store water behind the Wareham Dam;

   c) divert the flow of the Mayo River through the Spillway, the Mayo A Powerhouse and the Mayo B Powerhouse; and

   d) operate and Maintain the Mayo Generating Station.

2. Except as authorized by this Licence, any deposit of Waste to a Watercourse is prohibited.

PART C OPERATING CONDITIONS

3. For greater clarity:

   a) condition 13 takes precedence over conditions 4, 6, 7, 8, 9, 10 and 115;

   b) conditions 8, 9 and 10 take precedence over conditions 4, 6, 7 and 115; and

   c) conditions 4, 6 and 7 take precedence over condition 115.

4. Subject to condition 5, the Licensee must maintain the mean daily water elevation on Mayo Lake between the Mayo Lake Low Supply Level and the Mayo Lake Full Supply Level.

5. If the water elevation on Mayo Lake exceeds the Mayo Lake Full Supply Level, the Licensee must open all gates at the Mayo Lake Control Structure.

6. Subject to condition 7, the Licensee must maintain the mean daily water elevation on Wareham Lake between the Wareham Lake Low Supply Level and the Wareham Lake Full Supply Level.

7. Between April 30 and July 31 of each year, the Licensee must maintain the mean daily water elevation on Wareham Lake between the Wareham Lake Low Supply Level and a water elevation of 572.8 masl geodetic datum.

8. Notwithstanding condition 4, the Licensee must maintain a minimum flow of 2.8 m^3/s in the Upper Mayo River.

9. Notwithstanding conditions 6 and 7, the Licensee must maintain from May 1 to September 30 of each year:

   a) a minimum flow of 6 m^3/s in the Lower Mayo River between the Mayo A Powerhouse and the Mayo B Powerhouse; and

   b) a minimum flow of 11 m^3/s in the Lower Mayo River downstream of the Mayo B Powerhouse.

10. Notwithstanding conditions 6 and 7, the Licensee must maintain from October 1 to April 30 of each year:

    a) a minimum flow of 5 m^3/s in the Lower Mayo River between the Mayo A Powerhouse and the Mayo B Powerhouse; and

    b) a minimum flow of 5 m^3/s in the Lower Mayo River downstream of the Mayo B Powerhouse.

11. The Licensee is not authorized to undertake any activity that changes the function of the Mayo A Powerhouse, the Mayo B Powerhouse, the Wareham Dam, the Spillway, or the Mayo Lake Control Structure from the function for which the structure was originally designed.

12. The Licensee is prohibited from constructing any new structures or replacing any existing structures.

Spillway

13. Notwithstanding conditions 4, 6, 7, 8, 9, 10 and 115, the Licensee is prohibited from allowing water to flow through the Spillway at a rate greater than 60 m^3/s.

14. The Licensee must implement the *Current Spill Mitigation Practice,* exhibit 10.60, register HY25-027.

15. When water is flowing through the Spillway, the Licensee must conduct daily inspections of the Spillway.

16. The Licensee must engage a Qualified Professional to provide training to staff who conduct the inspections of the Spillway.

17. The Licensee must ensure that staff are trained by the Qualified Professional referenced in condition 16 before staff are allowed to conduct inspections of the Spillway.

18. The Licensee must maintain records of the daily Spillway inspections required by condition 15.

19. The Licensee must send the results of the daily inspections of the Spillway to the EOR.

20. The Licensee must lower the flow rate set out in condition 13 if advised to do so by the EOR.

21. When the Licensee lowers the flow rate set out in condition 13, the Licensee must report in writing within 24 hours the new flow rate to the Board and the Inspector.

22. If the Licensee notices deterioration of, or damage to the Spillway, the Licensee must lower the flow rate immediately and seek advice from the EOR.

23. Each year between March 1 and July 31, the Licensee must generate weekly forecasts of flow rates through the Spillway incorporating the data from the hydrometric stations outlined in Schedule C.

24. Within seven (7) days of generating the weekly forecasts required by condition 23, the Licensee must provide the results to the Board.

Mayo Lake Control Structure

25. The Licensee must conduct weekly inspections of the Mayo Lake Control Structure.

26. The Licensee must engage a Qualified Professional to provide training to staff who conduct the inspections of the Mayo Lake Control Structure.

27. The Licensee must ensure that staff are trained by the Qualified Professional referenced in condition 26 before staff are allowed to conduct inspections of the Mayo Lake Control Structure.

28. The Licensee must maintain records of the weekly inspections of the Mayo Lake Control Structure.

29. The Licensee must send the results of the weekly inspections of the Mayo Lake Control Structure to the EOR.

30. The Licensee is authorized to conduct debris clearing at the Mayo Lake Control Structure.

Ramping

31. Subject to condition 13, the Licensee must follow the Ramping Protocol.

32. If the Licensee is unable to follow the Ramping Protocol, the Licensee must notify the Board, the Inspector, the First Nation of Na-Cho Nyäk Dun and Fisheries and Oceans Canada, in writing within 24 hours.

33. The notification required by condition 32 must include:
    a) the rationale for not following the Ramping Protocol; and
    b) any actions, including fish salvage, taken as a result of not following the Ramping Protocol.

34. The Licensee must update the document entitled *Mayo River Flow Ramping Protocol*, Appendix G of exhibit 1.23, register HY25-027, to:
    a) include two distinct ramping procedures for the Upper Mayo River and the Lower Mayo River;
    b) include the methodology for developing ramping procedures for the Upper Mayo River;
    c) address site specificity including river geomorphology, bathymetry, time of year, time of day and natural flow changes for critical fish habitat sites located on the Mayo River; and
    d) address mitigating impacts from ramping to ice formation, erosion and flooding.

35. The Licensee must use the data from the bathymetric survey required by condition 122 and the data from the aerial survey required by condition 123 to update the document entitled *Mayo River Flow Ramping Protocol*, Appendix G of exhibit 1.23, register HY25-027.

36. The Licensee must test and verify the updated protocol required by condition 34 prior to finalizing the document.

37. Notwithstanding condition 38, by December 31, 2027, the Licensee must submit to the Board, the First Nation of Na-Cho Nyäk Dun and Fisheries and Oceans Canada the updated document required by condition 34.

38. The Licensee must collaborate with the First Nation of Na-Cho Nyäk Dun when updating the Ramping Protocol.

39. Each year, the Licensee must evaluate the effectiveness of the Ramping Protocol.

40. The Licensee must report on the effectiveness of the Ramping Protocol as part of the MAMP annual reporting.

41. The Licensee must include, as part of the annual report, any updates to the Ramping Protocol.

Spills and Unauthorized Discharges

42. The Licensee must follow the Spill Response Plan.

43. The Licensee must include, as part of the annual report, any updates to the Spill Response Plan.

44. The Licensee must have personnel trained on the Spill Response Plan.

45. The Licensee must maintain a logbook of all spills of fuels, chemicals, oils or other hazardous substances, to be made available at the request of an Inspector.

46. The logbook referenced in condition 45 must include, at minimum:

    a) date and time of the spill;

    b) substance spilled;

    c) approximate amount spilled;

    d) location of the spill;

    e) distance between the spill and the nearest Watercourse; and

    f) remedial measures taken to contain and clean-up the spill area or to cease the spill.

47. The Licensee must report all spills as part of the annual report.

48. The Licensee must maintain a complete inventory of chemicals, fuels, oils, lubricants and other hazardous substances and their locations.

49. The hazardous substances referenced in condition 48 must be stored or transferred in a manner that ensures the substances are not deposited in or allowed to be deposited in any Watercourse.

50. The Licensee must post the Spill Response Plan.

PART D PLANS, STUDIES AND DATA COLLECTION

OMS Plan

51. The Licensee must follow the OMS Plan.

52. By December 31, 2026, the Licensee must submit to the Board an updated version of the document entitled *Operations, Maintenance and Surveillance for Mayo Generating Station,* exhibit 1.23, register HY25-027.

53. The updated version of the document entitled *Operations, Maintenance and Surveillance for Mayo Generating Station,* exhibit 1.23, register HY25-027 must:

    a) address all items listed in Schedule A; and

    b) include a concordance table indicating how it has addressed each of the items listed in Schedule A.

54. Each year, the Licensee must evaluate the effectiveness of the OMS Plan.

55. The Licensee must report on the effectiveness of the OMS Plan as part of the annual report.

56. The Licensee must update the OMS Plan:

    a) based on the results of the annual evaluation required by condition 54;

    b) based on a recommendation by the EOR; or

    c) to reflect current operations, maintenance or monitoring.

57. Notwithstanding condition 52, by May 1, 2027, the Licensee must submit to the Board an updated OMS Plan based on the PFMAs required by conditions 72 and 73.

58. The Licensee must include, as part of the annual report, any updates to the OMS Plan.

59. Any updated OMS Plan must include a revision table documenting all changes from the previous version.

EPP

60. The Licensee must follow the EPP.

61. By December 31, 2026, the Licensee must submit to the Board an updated version of the document entitled *Mayo Generating Station Emergency Preparedness Plan,* exhibit 1.58, register HY25-027.

62. The updated version of the document entitled *Mayo Generating Station Emergency Preparedness Plan,* exhibit 1.58, register HY25-027 must:

    a) address all items listed in Schedule B; and

    b) include a concordance table indicating how it has addressed each of the items listed in Schedule B.

63. Each year, the Licensee must evaluate the effectiveness of the EPP.

64. The Licensee must report on the effectiveness of the EPP as part of the annual report.

65. The Licensee must update the EPP:

    a) based on the results of the annual evaluation required by condition 63;

    b) based on a recommendation by the EOR; or

    c) to reflect current operations, maintenance or monitoring.

66. Notwithstanding condition 61, by May 1, 2027, the Licensee must submit to the Board an updated EPP based on the PFMAs required by conditions 72 and 73.

67. The Licensee must include, as part of the annual report, any updates to the EPP.

68. Any updated EPP must include a revision table documenting all changes from the previous version.

69. The Licensee, in collaboration with Government of Yukon, must conduct an annual desktop emergency response drill and emergency preparedness training based on the EPP with the Village of Mayo, the First Nation of Na-Cho Nyäk Dun, Mayo area residents, including Elsa, Keno and Stewart Crossing, and must document the drill and training as part of the annual report.

70. The Licensee must conduct a formal emergency response drill in 2026 testing all emergency protocols including siren communication and testing the physical actions taken in an emergency situation from community members, and must document the drill, training and results of the drill as part of the annual report.

71. Twice a year, the Licensee must provide written communication about the EPP to the Village of Mayo, the First Nation of Na-Cho Nyäk Dun, Mayo area residents, including Elsa, Keno and Stewart Crossing.

PFMA

72. By December 31, 2026, the Licensee must submit to the Board a PFMA on the Wareham Dam.

73. By December 31, 2026, the Licensee must submit to the Board a PFMA on the Mayo Lake Control Structure.

74. The Licensee must retain a third-party, qualified, professional engineer, licenced to practice in the Yukon, to complete the PFMAs required by conditions 72 and 73.

75. The Licensee must request that the EOR participate in the completion of the PFMAs required by conditions 72 and 73.

Hydrometric Monitoring

76. The Licensee must follow the Flow Monitoring Protocol.

77. By May 1, 2028, the Licensee must update the Flow Monitoring Protocol to reflect:
    a) the calibrated streamflow rating curves required by condition 78;
    b) the calibrated turbine flow measurements required by condition 82; and
    c) the real-time water elevation and flow monitoring stations required by condition 85.

Streamflow Measurements

78. The Licensee must calibrate its streamflow rating curves and validate rating curve data using the Water Survey of Canada monitoring stations upstream of the Mayo Lake Control Structure and the Lower Mayo River.

79. The Licensee must use water elevation and flow data from Water Survey of Canada to calibrate the Licensee's streamflow rating curves and validate rating curve data when ice is and is not present.

80. The calibration and validation of streamflow rating curves required by condition 78 must be verified by a third-party Qualified Professional.

81. By December 31, 2027, the Licensee must provide to the Board evidence of the third-party verification required by condition 80.

Turbine Flow Measurements

82. The Licensee must calibrate its turbine flow measurements when ice is and is not present.

83. The calibration of the Licensee's turbine flow measurements required by condition 82 must be verified by a third-party Qualified Professional.

84. By December 31, 2027, the Licensee must provide evidence of the third-party verification required by condition 83.

Real-Time Monitoring Stations

85. The Licensee must install, calibrate and maintain real-time water elevation and flow monitoring stations at the following locations:
    a) in a major tributary of the Mayo Lake watershed (Mayo Lake Tributary);
    b) in the Upper Mayo River (Compliance Point 1);
    c) in the Lower Mayo River between the Mayo A Powerhouse and the Mayo B Powerhouse (Compliance Point 2); and
    d) in the Lower Mayo River downstream of the Mayo B Powerhouse (Compliance Point 3).

86. The Licensee must install and calibrate the real-time water elevation and flow monitoring stations required by condition 85 during ice-free stream conditions but no later than September 30, 2026.

87. The Licensee must install, calibrate and maintain a real-time snowpack monitoring station at Edwards Lake.

88. The Licensee must install and calibrate the real-time snowpack monitoring station required by condition 87 during ice-free ground conditions but no later than September 30, 2026.

89. The Licensee must install a staff gauge and camera at Roop Lakes to monitor water elevation during ice-free ground conditions but no later than September 30, 2026.

Water Level Response Plan

90. The Licensee must develop a water level response plan that includes both low water and high-water events.

91. The water level response plan referenced by condition 90 must:
    a) include thresholds and adaptive management actions to be taken in response to low-water events or drought conditions;
    b) include thresholds and adaptive management actions to be taken in response to high-water events or flood conditions; and
    c) use the modelling referenced in condition 95 to inform the development of the water level response plan.

92. By December 31, 2026, the Licensee must submit to the Board the water level response plan required by condition 90.

93. Each year, the Licensee must evaluate the effectiveness of the water level response plan required by condition 90.

94. The Licensee must report on the effectiveness of the water level response plan required by condition 90 as part of the annual report.

95. The Licensee must model extreme high, extreme low and average water years that impact the Mayo River watershed.

96. The Licensee must incorporate snowpack data, precipitation data, river flow data, lake water elevation data, evaporation, infiltration and runoff into the modelling required by condition 95.

Winter Monitoring

97. The Licensee must follow the Winter Operating Guidelines.

98. The Licensee must follow the Ice Management Guidelines.

Waste Rock Seepage

99. The Licensee must monitor seepage from the waste rock locations shown in exhibit 1.52 of register HY25-027.

100. The Licensee must follow the sample locations, parameters and frequency listed in Schedule D when conducting the monitoring required by condition 99.

101. Water quality results from locations WR-1, WR-2 and WR-3 must meet the following effluent quality standards:

Parameter	Maximum Concentration in a Grab Sample (mg/L)
Nitrite (total)	10
Aluminum (total)	5.0
Arsenic (total)	0.025
Cadmium (total)	0.080
Chromium (total)	0.050
Copper (total)	0.50
Lead (total)	0.010
Nickel (total)	1.0
Zinc (total)	5.0

102. The Licensee must report water quality data collected each year from locations WR-1, WR-2, WR-3 and Control as part of the annual report.

103. The annual reporting required by condition 102 must include water quality data compared to the effluent quality standards listed in condition 101 and an analysis of the data trends over time.

Heritage

104. The Licensee must collaborate with the First Nation of Na-Cho Nyäk Dun and Government of Yukon to identify any heritage resources that are impacted by activities authorized in condition 1.

PART E MONITORING AND ADAPTIVE MANAGEMENT

105. By July 1, 2026, the Licensee must submit to the Board a schedule for the development of the "MAMP Program Development Work Plans" described in section 2.3.1 of exhibit 1.10, register HY25-027.

106. The schedule required by condition 105 must specify the timelines and the rationale for the timelines for the development of:

a) monitoring;

b) thresholds, triggers, actions; and

c) trial mitigations.

107. The schedule required by condition 105 must provide rationale for the proposed timelines.

108. The schedule required by condition 105 and any updates to the schedule must be submitted to the Board and the First Nation of Na-Cho Nyäk Dun.

109. By May 1, 2027, the Licensee must submit an updated version of the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027, to the Board for review and approval in accordance with the Rules.

110. For all updates to the MAMP, the Licensee must:

a) collaborate with the First Nation of Na-Cho Nyäk Dun; and

b) provide the updated MAMP to the First Nation of Na-Cho Nyäk Dun.

111. The updated version of the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027 required by condition 109 must include the following:

a) quantitative thresholds, triggers and actions;

b) methodology for the development of thresholds, triggers and actions;

c) a mechanism for the continuous review of thresholds, triggers and actions;

d) workplans for filling information gaps, where gaps exist;

for the following VESECs:

e) fish and fish habitat, including ramping;

f) wetlands;

g) erosion and sedimentation;

h) aquatic furbearers; and

i) water quality.

112. The Licensee must collect quantitative information on flooding events, develop predictions using this information and use this information to inform the development of MAMP thresholds, triggers and actions.

113. The Licensee must consider information from water elevation monitoring, erosion and sedimentation monitoring, ice monitoring, flooding events and trial mitigations in the development of thresholds, triggers and actions when updating the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027.

114. When updating the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027, the Licensee must use the data obtained from:

    a) the wetland monitoring program to correlate the results of aquatic furbearer monitoring to identify relationships between water elevations, inundation and beaver and muskrat populations, to inform MAMP monitoring, thresholds, triggers and actions related to aquatic furbearers;

    b) the bathymetric survey required by condition 122 to inform MAMP monitoring, thresholds, triggers and actions related to:

        i) erosion and sedimentation; and
        ii) ramping;

    c) the aerial survey required by condition 123 to inform MAMP monitoring, thresholds, triggers and actions related to:

        i) erosion and sedimentation; and
        ii) ramping.

115. Subject to conditions 4, 6, 7, 8, 9, 10 and 13, each year, the Licensee must implement the trial mitigations listed in table 7.1-1 of exhibit 1.10, register HY25-027.

116. On the date that the Licensee makes the decision not to follow one or more of the trial mitigations referenced in condition 115, the Licensee must notify the Board, the First Nation of Na-Cho Nyäk Dun and the Inspector in writing and must provide a rationale for why the Licensee could not follow the trial mitigation.

117. In the updated version of the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027 required by condition 109, the Licensee must include the monitoring methodology, quantitative

monitoring metrics and monitoring frequency for the trial mitigations and the following VESECs:

a) resident fish;

b) wetlands;

c) aquatic furbearers;

d) erosion and sedimentation; and

e) water quality.

118. In the updated version of the document entitled *Mayo Generating Station DRAFT - Monitoring and Adaptive Management Plan*, exhibit 1.10, register HY25-027 required by condition 109, the Licensee must include:

a) for the trial mitigation program:

i. implementation dates;
ii. metrics for measuring the success of each trial mitigation; and
iii. lessons learned from implementation of trial mitigations;

b) for the resident fish program:

i. a requirement to obtain fish population data from an index netting program in Mayo Lake; and
ii. a requirement to obtain fish population data from an index netting program in Wareham Lake;

c) for the wetland monitoring program:

i. a single wetland monitoring plan that includes the *Wetland Vegetation Monitoring Program Details* (Table 5.4-1, exhibit 1.10) and the *Roop Lakes Wetland Backwater Effects Monitoring* (Table 5.4-2, exhibit 1.10);

ii. a requirement to complete vegetation mapping, species assemblage inventory and pond wetted areas mapping in 2026, 2028 and 2030; and

iii. a requirement to check staff gauges twice a year to ensure equipment is in place and operational;

d) for the erosion and sedimentation program, a requirement to use the results of the bathymetric survey required by condition 122 and the aerial survey required by condition 123 in the development of the program;

e) for the water quality program, a requirement to include:

i. a geographic scope which includes upstream of Mayo Lake Control Structure, Upper Mayo River, Lower Mayo River and the Minto Bridge upstream of the confluence of the Minto Creek;

ii. a comparison of water quality data collected upstream and downstream of the Mayo Lake Control Structure;

iii. a comparison of water quality data collected upstream and downstream of the Wareham Dam;

iv. a comparison of water quality data collected upstream of the Minto Bridge and upstream of the Wareham Dam; and

v. establish a relationship between turbidity and total suspended solids results.

119. Once a year, the Licensee must monitor beaver and muskrat abundance and distribution on Mayo Lake, Roop lakes, and upper Mayo River, as well as in reference areas as described in *Aquatic Mammal Monitoring Program Details*, Table 5.5-2 of exhibit 1.10, register HY25-027.

120. The Licensee must identify and monitor areas prone to erosion from the operation of the Mayo Generating Station.

121. The geographic scope of the erosion monitoring required by condition 120 must include:

a) upstream of the Mayo Lake Control Structure;

b) Upper Mayo River; and

c) Lower Mayo River.

122. When no ice is present, but no later than September 1, 2026, the Licensee must conduct a bathymetric survey of Mayo Lake, Wareham Lake, reaches of the Upper Mayo River and reaches of the Lower Mayo River.

123. When no ice is present, but no later than September 1, 2026, the Licensee must conduct an aerial survey of Mayo Lake, Wareham Lake, reaches of the Upper Mayo River and reaches of the Lower Mayo River.

124. The Licensee must monitor turbidity upstream and downstream of the Mayo Lake Control Structure.

125. The Licensee must work with the First Nation of Na-Cho Nyäk Dun to develop a “Past, Current, Future Land and Water Use Study” and submit the completed study to the Board.

126. The MAMP annual reporting must include the following information:

a) monitoring activities conducted that year and the results;

b) evaluation on how monitoring activities are meeting the program objectives;

c) evaluation on how thresholds, triggers and actions are meeting the program objectives;

d) instances where a threshold is exceeded;

e) development of new thresholds or triggers or changes to existing ones;

f) development of new actions or mitigations or changes to existing ones;

g) development of new monitoring plans or changes to existing ones;

h) changes to the MAMP schedule required by condition 105;

i) until condition 125 has been completed, progress on the completion of a “Past, Current, Future Land and Water Use Study”;

j) plain language summaries related to the VESECs listed in condition 111;

k) for each VESEC listed in condition 111, identify areas where consensus is reached with the First Nation of Na-Cho Nyäk Dun and where consensus is not reached;

l) evaluation of the most recent version of the Ramping Protocol, including any observations of fish stranding;

m) summary of the results and learnings from the trial mitigations;

n) justification for why certain trial mitigations were not implemented, if that was the case;

o) resident fish data collected, as well as a comparison of data to historically available data;

p) wetland data collected, as well as an assessment of wetland health based on available data;

q) aquatic furbearer data collected, as well as an assessment of aquatic furbearer population health based on data collected to date and available traditional knowledge;

r) flooding data collected and any actions or mitigation measures taken as a result of flooding;

s) bathymetric survey data collected, as well as a comparative analysis between survey results and available historical data;

t) aerial survey data collected, as well as a comparative analysis between survey results and available historical data;

u) erosion and sedimentation monitoring data collected and any actions or mitigations taken as a result of erosion and sedimentation;

v) water quality data collected, as well as a comparison of data to historically available data; and

w) updates related to plans to improve fish passage.

PART F REPORTING

127. The Licensee must upload electronic copies of all reports and deliverables required by this Licence to the Board's online registry, Waterline. Electronic copies may only be submitted in a format approved by the Board.

128. When water elevation, flow data, or snowpack data are reported in the quarterly or annual reports, the Licensee must specify for each data location, if applicable, the:

a) coordinates;

b) Licensee station name;

c) Water Survey of Canada station name;

d) Government of Yukon station name; or

e) any calculations used to report the data.

129. When water elevation data is provided to the Board the Licensee must:

a) provide data in masl and specify whether datum is local or geodetic;

b) provide any calculations or reference system used to convert elevation datum; and

c) provide water elevation data for Mayo Lake and Wareham Lake in geodetic datum.

130. By May 1, 2027, the Licensee must provide a list identifying all permits required to operate the Mayo Generating Station during the term of this Licence.

131. By May 1, 2027, the Licensee must provide copies of all valid permits required to operate the Mayo Generating Station during the term of this Licence.

132. If the permits referenced in condition 130 have not been issued, the Licensee must report annually to the Board on the status of the outstanding permits.

Annual Reports

133. The Licensee must submit annual reports to the Board.

134. The initial annual report must include the information required by condition 135 beginning on the Effective Date of this Licence until December 31, 2026, and must be submitted to the Board on or before May 1, 2027. Subsequent reports must be submitted to the Board on or before May 1 of the year following the year being reported.

135. Annual reports must include the following information:

a) monthly mean, monthly maximum, monthly minimum of the mean daily flows of:
   i. Mayo Lake Control Structure;
   ii. Spillway;
   iii. Mayo A Powerhouse;
   iv. Mayo B Powerhouse;
   v. Mayo Lake Tributary;
   vi. Compliance Point 1;
   vii. Compliance Point 2; and
   viii. Compliance Point 3;

b) monthly maximum and monthly minimum flows of:
   i. Compliance Point 1;
   ii. Compliance Point 2; and
   iii. Compliance Point 3;

c) monthly maximum flows of the Spillway;

d) monthly mean, monthly maximum, monthly minimum of the mean daily water elevation of:
   i. Mayo Lake;
   ii. Wareham Lake; and
   iii. Mayo Lake Tributary;

e) monthly maximum and monthly minimum water elevation of:
   i. Mayo Lake;
   ii. Wareham Lake; and
   iii. Roop Lakes;

f) daily water elevation of Roop Lakes;

g) peak seasonal snow water equivalent at Edwards Lake;

h) daily maximum, daily minimum, monthly maximum and monthly minimum snow depth at Edwards Lake;

i) any updates to the Ramping Protocol per condition 34;

j) results of activities conducted in relation to the Ramping Protocol;

k) any updates to the Spill Response Plan per condition 43;

l) reporting of all spills per condition 47;

m) results of activities conducted in relation to the Spill Response Plan;

n) any updates to the OMS Plan per condition 52;

o) results of activities conducted in relation to the OMS Plan;

p) evaluation of the OMS Plan per condition 54;

q) report on all maintenance activities on the Mayo Generating Station;

r) any updates to the EPP per condition 61;

s) results of activities conducted in relation to the EPP;

t) evaluation of the EPP per condition 63;

u) dam safety reporting per condition 151;

v) any updates to the Flow Monitoring Protocol per condition 77;

w) results of activities conducted in relation to the Flow Monitoring Protocol;

x) any updates to the water level response plan per condition 90;

y) results of activities conducted in relation to the water level response plan;

z) evaluation of the water level response plan per condition 94;

aa) any updates to the Winter Operating Guidelines per condition 97;

bb) results of activities conducted in relation to the Winter Operating Guidelines;

cc) any updates to the Ice Management Guidelines per condition 98;

dd) results of activities conducted in relation to the Ice Management Guidelines;

ee) waste rock seepage reporting per condition 102;

ff) comparative analysis of water quality results required per condition 103;

gg) any updates to the MAMP per condition 109;

hh) MAMP reporting per condition 126;

ii) information on permits per conditions 130 and 131; and

jj) responses to any enforcement actions.

Quarterly Reports

136. The Licensee must submit quarterly reports to the Board.

137. The quarterly reports must cover the periods ending March 31, June 30, September 30 and December 31 of each year and be submitted to the Board within 30 days of the end of each reporting period.

138. Quarterly reports must include the following information:

a) mean daily flows of:
   i. Mayo Lake Control Structure;
   ii. Spillway;
   iii. Mayo A Powerhouse;
   iv. Mayo B Powerhouse;
   v. Mayo Lake Tributary;
   vi. Compliance Point 1;
   vii. Compliance Point 2; and
   viii. Compliance Point 3;

b) monthly maximum and minimum flows of:
   i. Compliance Point 1;
   ii. Compliance Point 2; and
   iii. Compliance Point 3;

c) monthly maximum flows of the Spillway;

d) mean daily water elevation of:
   i. Mayo Lake;
   ii. Wareham Lake; and
   iii. Mayo Lake Tributary;

e) monthly maximum and minimum water elevation of:
   i. Mayo Lake;
   ii. Wareham Lake; and
   iii. Roop Lakes;

f) daily water elevation of Roop Lakes;

g) peak seasonal snow water equivalent at Edwards Lake; and

h) daily maximum, daily minimum, monthly maximum, and monthly minimum snow depth at Edwards Lake.

Dam Safety Reports

139. Each year, the Licensee must request that the EOR conduct a Dam Safety Inspection of the Mayo Generating Station.

140. By July 1, 2026, the Licensee must submit to the Board the name of the EOR and the employer of the EOR.

141. If there is a change to the EOR, the Licensee must notify the Board in writing within 30 days of the change and provide the name of the new EOR and the employer of the EOR.

142. The Licensee must notify the First Nation of Na-Cho Nyäk Dun and Government of Yukon two weeks prior to the EOR conducting the on-site inspection as part of the Dam Safety Inspection.

143. By November 30 of each year, the Licensee must submit to the Board and the Inspector the Dam Safety Inspection report that relates to the current year.

144. The Licensee must request that the EOR include the following in the Dam Safety Inspection reports:

a) a concordance table showing the completion status of recommendations from the latest Dam Safety Review report;

b) a concordance table showing the completion status of recommendations from the *Wareham Dam Seepage and Drainage Assessment,* exhibit 1.28, register HY25-027;

c) a summary of inspection records, an analysis of the inspection results and identification of any gaps;

d) the current emergency level and condition of the Wareham Dam, the Spillway and the Mayo Lake Control Structure at time of Dam Safety Inspection reporting;

e) a time-history summary of the emergency level and condition of the Wareham Dam, the Spillway and the Mayo Lake Control Structure that have occurred over that year;

f) any final report completed during that year by a third-party which contains information about dam safety;

g) verification of whether the following issues have been addressed by the Licensee:

i. piezometer monitoring not consistently maintained;
ii. piezometer monitoring record-keeping not aligned with OMS Plan expectations;
iii. piezometer readings not being assessed against established alarm thresholds in the OMS Plan; and

iv. piezometer readings not being correlated with relevant indicators, such as precipitation data.

145. If the EOR has identified a change in the emergency level of the Wareham Dam, the Spillway, or the Mayo Lake Control Structure, the Licensee must notify the Board, the First Nation of Na-Cho Nyäk Dun and the Inspector in writing within 24 hours.

146. The Licensee must provide the EOR with the results of the bathymetric survey required by condition 122 and request that the EOR the incorporate survey results into the 2026 Dam Safety Inspection.

147. The Licensee must request that the EOR review the *Mayo Lake Control Structure and Wareham Dam Seismic Study*, PDF page no. 238 of exhibit 1.62, register HY25-027, and incorporate the review findings into the 2026 Dam Safety Inspection.

148. The Licensee must conduct a Dam Safety Review of the Mayo Generating Station in 2029, or sooner if recommended as a result of any Dam Safety Inspection.

149. The Dam Safety Review must be carried out by a third-party, qualified, professional engineer, licensed to practice in the Yukon.

150. The Licensee must submit the Dam Safety Review report to the Board by November 30 of the year the Dam Safety Review was conducted.

151. As part of the annual report, the Licensee must provide:

a) for any uncompleted recommendations or studies from the latest Dam Safety Review, proposed completion timelines and rationale;

b) a workplan for any Dam Safety Review recommendations that are outstanding;

c) a list of any draft reports received containing information about dam safety; and

d) outcomes of any third-party dam safety audit.

PART G COMPENSATION

152. By May 28, 2026, the Licensee must provide compensation to the claimant named in exhibit 10.72 of register HY25-027 in the amount referenced in exhibit 10.72.

153. Subject to condition 155, by May 28, 2026, in accordance with the Rules, the Licensee must submit to the Board:

a) the proposed community compensation agreement between the Licensee and the First Nation of Na-Cho Nyäk Dun; and

b) the methodology used to establish community compensation for the First Nation of Na-Cho Nyäk Dun.

154. The Licensee and the First Nation of Na-Cho Nyäk Dun may, by mutual agreement, extend the deadline date set out in condition 153, but no later than August 28, 2026.

155. The Licensee must provide compensation to the First Nation of Na-Cho Nyäk Dun in the manner and by the date determined by the Board.

PART H GENERAL CONDITIONS

Other Laws

156. No condition of this Licence limits applicability of any statutory authority.

157. All activities authorized by this Licence may only occur on property that the Licensee has the right to enter upon and use for that purpose.

158. Where there is a discrepancy between the Application and this Licence, the conditions of this Licence prevail.

Non-Compliance

159. In the event that the Licensee fails to comply with any provision or condition of this Licence, the Board may, subject to the Act, cancel the Licence.

160. Where a Fisheries and Oceans Canada site specific authorization is required and any conditions of that authorization conflict with conditions in this Licence, the conditions of the Fisheries and Oceans Canada site specific authorization shall prevail.

Correspondence

161. Where any direction, notice, order, or report under this Licence is required to be in writing, it must be given:

a) To the Licensee, if delivered, e-mailed, or mailed by registered mail to the address identified on page 1 of this Licence, and shall be deemed to have been given to the

Licensee on the day it was delivered or e-mailed, or seven (7) days after the day it was mailed as the case may be; or

b) To the Board, if left at, e-mailed, or sent by registered mail to the following postal address or email address, as the case may be:

Yukon Water Board
Suite 106, 419 Range Road
Whitehorse, Yukon Y1A 3V1

Email: ywb@yukonwaterboard.ca

and shall be deemed to have been given to the Board on the day it was left, e-mailed, or seven (7) days after the day it was mailed, as the case may be.

162. The Board or the Licensee may, by notice in writing, change its address for delivery.

SCHEDULE A

OMS UPDATE REQUIREMENTS

The Licensee must update the document entitled *Operations, Maintenance and Surveillance for Mayo Generating Station*, exhibit 1.23, register HY25-027, to include the following:

1. Details of the *Current Spill Mitigation Practice,* exhibit 10.60, register HY25-027.
2. Details of the inspection and maintenance activities for the Wareham Dam and Spillway.
3. Details of the inspection and maintenance activities for the Mayo Lake Control Structure.
4. Details of a periodic gate testing procedure that includes:
   a) annual testing of the gates under full load conditions;
   b) installation of a bulkhead gate to test gates under no load conditions in full range of operation;
   c) survey of the gate guides; and
   d) and calibration of the gate limits.
5. Instructions to operate the gates equally.
6. Procedures for the operation of the Wareham Spillway gates and stoplogs, and Mayo Lake Control Structure valves.
7. Monthly testing of backup power.
8. Annual full load test of backup power.
9. A procedure for the diesel backup generators for the operability of the Spillway gates during power outages.
10. An accurate description of all monitored infrastructure and include a clear action plan for responding to alarm threshold exceedances, including the vibrating wire piezometers at Wareham Dam.
11. Annual survey monitoring of deformation monuments and installation of additional survey pins.
12. Description of the frequency of surveys at the Mayo Lake Control Structure.
13. A site inspection sheet so that the crack along the crest of the Wareham Dam can be adequately monitored.
14. A plan to monitor and document the crack condition and depth along the Wareham Dam crest with vibration wire piezometers and monitoring the water elevation along the crack in reaction to the Wareham Lake water elevation.
15. Checks for potential flood conditions by staff hydrologists.
16. Instructions to remove ice buildup on dissipator during the winter.
17. A monthly maintenance checklist for gates and hoist equipment.
18. Maintenance procedures on gate wheels to ensure they are rolling freely.
19. Maintenance and recording keeping procedures for instrumentation.

20. A table showing the inflow design flood conditions for the Very High Class for the Mayo Lake Control Structure and Wareham Spillway, including flows and water elevations, based on an updated routing study.
21. Details on the use of weather forecasting tools and lake water elevation sensors to monitor inflow into Wareham Lake in real-time.
22. Procedures related to simulations and scenario planning to determine optimal gate operation timing based on varying inflow scenarios, especially the gate opening timing before the inflow design flood event starts.
23. A training schedule for all personnel involved in the management, operations, maintenance and surveillance of the Mayo Generating Station, and a record of training.
24. A requirement that all personnel involved in the management, operations, maintenance and surveillance of the Mayo Generating Station complete dam safety awareness and instrumentation monitoring training.
25. An accessible record of staff training on the OMS Plan.
26. Monitoring and maintenance of physical gaps in the fence at the Mayo Lake Control Structure.

SCHEDULE B

EPP UPDATE REQUIREMENTS

The Licensee must update the document entitled *Mayo Generating Station Emergency Preparedness Plan,* exhibit 1.58, register HY25-027, to include the following:

1. Adaptive management responses to potential failure modes for the Wareham Dam, Spillway and Mayo Lake Control Structure.
2. Details of the persons responsible for determining the emergency level and condition of the Wareham Dam, Spillway and Mayo Lake Control Structure.
3. Reciprocal flood forecasting and related actions.
4. A schedule for tabletop emergency exercises to confirm operators and emergency response personnel are aware of the operating procedures, flood extents and evacuation areas should an actual emergency occur.
5. A formal lessons learned session following each tabletop exercise.
6. An accessible record of staff training on the EPP.
7. Procedures, including use of sirens, on how residents at risk will be informed immediately once a dam emergency event is reported.
8. A consideration of emergency erosion protection measures if flow overtops the Spillway walls, including the use of rocks or concrete blocks.
9. A plan for material placement, such as crane requirements.
10. Details of the flood event that will lead to erosion of the dam.
11. Emergency protection and mitigation procedures for a flood event that will lead to erosion of the dam.
12. Examples of possible scenarios for emergency situations as well as guidance on determining the emergency level that could be used to help define the type of emergency the Mayo Generating Facility is experiencing, including the consideration of the British Columbia Dam Emergency Plan Template.
13. Dam safety signage at the Mayo Lake Control Structure and the Wareham Dam to provide the public with a number to call in case of emergency.
14. The most recent flood inundation maps.

SCHEDULE C

HYDROMETRIC STATION LOCATIONS AND MONITORING REQUIREMENTS

Station Description	Quarterly reporting				Annual reporting			
	Water Elevation (masl)	Flow (m^3/s)	SWE (mm)	Snow Depth (cm)	Water Elevation (masl)	Flow (m^3/s)	SWE (mm)	Snow Depth (cm)
Mayo Lake	Md, MMin, MMax	-	-	-	Mm, min, max, MMin, MMax	-	-	-
Wareham Lake	Md, MMin, MMax	-	-	-	Mm, min, max, MMin, MMax	-	-	-
Mayo Lake Control Structure	-	Md	-	-	-	Mm, min, max	-	-
Spillway	-	Md, MMax	-	-	-	Mm, min, max, MMax	-	-
Mayo A Powerhouse	-	Md	-	-	-	Mm, min, max	-	-
Mayo B Powerhouse	-	Md	-	-	-	Mm, min, max	-	-
Mayo Lake Tributary	Md	Md	-	-	Mm, min, max	Mm, min, max	-	-
Roop Lakes	daily, MMin, MMax	-	-	-	daily MMin, MMax	-	-	-
Edwards Lake	-	-	peak	dMin, dMax, MMin, MMax	-	-	peak	dMin, dMax, MMin, MMax

Station Description	Quarterly reporting				Annual reporting			
	Water Elevation (masl)	Flow (m^3/s)	SWE (mm)	Snow Depth (cm)	Water Elevation (masl)	Flow (m^3/s)	SWE (mm)	Snow Depth (cm)
Compliance Point 1	-	Md, MMin, MMax	-	-	-	Md, MMin, MMax	-	-
Compliance Point 2	-	Md, MMin, MMax	-	-	-	Md, MMin, MMax	-	-
Compliance Point 3	-	Md, MMin, MMax	-	-	-	Md, MMin, MMax	-	-

Legend

Code	Description
Md	Daily mean value
Mm	Monthly mean of Md
min	Monthly minimum of Md
max	Monthly maximum of Md
MMin	Monthly minimum
MMax	Monthly maximum
SWE	Snow Water Equivalent
peak	Seasonal peak
dMax	daily maximum
dMin	daily minimum

SCHEDULE D

WATER QUALITY STATION LOCATIONS AND MONITORING REQUIREMENTS

Station	Description
WR-1	Waste rock location labeled “WR-1” in exhibit 1.52, register HY25-027
WR-2	Waste rock location labeled “WR-2” in exhibit 1.52, register HY25-027
WR-3	Waste rock location labeled “WR-3” in exhibit 1.52, register HY25-027
Control	Location labeled “Site C (Control Site)” in exhibit 1.52, register HY25-027

Monitoring Location Parameter[1]	WR-1	WR-2	WR-3	Control
pH[2]	S/F	S/F	S/F	S/F
Temperature[2]	S/F	S/F	S/F	S/F
Specific Conductivity[2]	S/F	S/F	S/F	S/F
Total Suspended Solids	S/F	S/F	S/F	S/F
Alkalinity as $CaCO_3$	S/F	S/F	S/F	S/F
Hardness as $CaCO_3$	S/F	S/F	S/F	S/F
Ammonia	S/F	S/F	S/F	S/F
Nitrate	S/F	S/F	S/F	S/F
Nitrite	S/F	S/F	S/F	S/F
Sulphate	S/F	S/F	S/F	S/F
Total ICP Metals[3]	S/F	S/F	S/F	S/F
Dissolved ICP Metals[3]	S/F	S/F	S/F	S/F

Table Notes:

1. All parameters listed require laboratory analysis.
2. In addition to (1), parameters require field measurement.
3. ICP Metals include: aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, phosphorus, potassium, selenium, silicon, silver, sodium, strontium, sulfur, thallium, tin, titanium, uranium, vanadium, and zinc.

Legend

Key	Frequency
S/F	Twice annually, during spring freshet and fall.