



Box 2250, Yellowknife, NT X1A 2P7 • Tel: (867) 669-3301 • Fax: (867) 669-3316

November 6, 2023

Tyree Mullaney
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4922 48th Street
P.O. Box 2130
Yellowknife, NT X1A 2P6

Dear Ms. Mullaney

**Re: Jackfish Generating Facility Water Licence MV2019L1-0001
Monthly SNP Submission, October 2023**

Enclosed please find the monthly SNP report for the Jackfish Lake generating facilities. Operations from October 1, 2023 – October 31, 2023 are included in this submission.

Monitoring data for water temperature and flow at locations SNP00-1a,b,c,d and SNP-00-2a,b,c has been collected in accordance with Annex A, parts A & B of the water licence. The total circulation of water at the Jackfish facility was within the limits of the water licence during the last month.

There were no reportable spills at the Jackfish facility during the reported period.

I can be reached at (867) 669-3301 or via email at ehendry@ntpc.com if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Eileen Hendry". The signature is written in a cursive, flowing style.

Eileen Hendry, C.E.T.
Manager, System Control

Jackfish WL MV2019L1-0001 Surveillance Network Program Monthly Data Monitoring

October, 2023

Water Circulated for Plant Cooling

	Cat Plant Water Used (m ³)	EMD Plant Water Used (m ³)	K Plant Water Used (m ³)	Total Water Used (m ³)
2023-10-01	2,627	8,911	5,676	17,214
2023-10-02	2,667	8,876	5,681	17,224
2023-10-03	2,848	8,841	5,682	17,371
2023-10-04	2,370	8,852	7,197	18,420
2023-10-05	2,307	8,890	8,145	19,342
2023-10-06	2,334	8,897	8,177	19,408
2023-10-07	2,403	8,897	8,198	19,498
2023-10-08	2,407	8,889	8,215	19,512
2023-10-09	2,398	8,894	8,230	19,522
2023-10-10	2,396	8,892	8,248	19,536
2023-10-11	2,397	8,902	8,254	19,553
2023-10-12	2,398	8,902	8,260	19,559
2023-10-13	2,402	8,906	8,263	19,571
2023-10-14	2,396	8,905	8,263	19,564
2023-10-15	2,390	8,901	8,264	19,554
2023-10-16	2,383	8,899	8,267	19,550
2023-10-17	2,384	8,901	8,268	19,553
2023-10-18	2,384	8,882	8,264	19,530
2023-10-19	2,387	8,870	8,261	19,517
2023-10-20	2,369	8,887	8,261	19,516
2023-10-21	2,501	8,900	8,258	19,660
2023-10-22	2,776	8,884	8,247	19,906
2023-10-23	2,854	8,865	8,237	19,955
2023-10-24	2,826	8,864	8,238	19,928
2023-10-25	2,728	8,864	8,237	19,828
2023-10-26	2,770	8,868	8,235	19,873
2023-10-27	2,795	8,876	8,235	19,906
2023-10-28	2,723	8,874	8,235	19,832
2023-10-29	2,714	8,872	8,232	19,817
2023-10-30	2,769	8,871	8,230	19,869
2023-10-31	2,677	8,870	8,229	19,775
Total	78,780	275,400	246,687	600,866

Jackfish WL MV2019L1-0001 Surveillance Network Program Monthly Data Monitoring

October, 2023

	Intake Water Temperatures			Discharge Water Temperatures			
	SNP 00-1d Cat Plant Intake (°C)	SNP 00-1c EMD Plant Intake (°C)	SNP 00-1a, 1b K Plant Intakes (°C)	Average Intake Temperature (°C)	SNP 00-2c Cat Plant Discharge (°C)	SNP 00-2b EMD Plant Discharge (°C)	SNP-00-2a K Plant Discharge (°C)
2023-10-01	11.8	11.2	11.8	10.0	14.6	21.0	11.3
2023-10-02	11.7	11.0	11.7	9.9	13.6	24.2	11.2
2023-10-03	11.7	11.0	11.7	9.9	17.4	24.2	11.2
2023-10-04	11.6	11.0	11.6	9.8	11.5	26.8	13.6
2023-10-05	11.0	10.4	11.0	9.4	10.5	24.1	14.7
2023-10-06	10.5	9.9	10.5	8.9	10.0	23.7	14.2
2023-10-07	10.1	9.5	10.1	8.6	9.6	23.0	13.8
2023-10-08	10.0	9.3	10.1	8.5	9.4	23.0	13.8
2023-10-09	9.9	9.3	10.0	8.4	9.3	24.2	13.6
2023-10-10	10.0	9.3	10.0	8.5	9.4	24.2	13.7
2023-10-11	10.1	9.4	10.2	8.6	9.5	24.6	13.8
2023-10-12	10.2	9.5	10.2	8.6	9.6	24.5	13.8
2023-10-13	10.1	9.5	10.2	8.6	9.6	24.7	13.8
2023-10-14	10.0	9.4	10.1	8.5	9.5	24.1	13.7
2023-10-15	9.9	9.3	10.0	8.4	9.4	24.2	13.6
2023-10-16	9.8	9.2	9.9	8.3	9.3	23.9	13.4
2023-10-17	9.6	9.0	9.6	8.1	9.1	23.8	13.1
2023-10-18	9.2	8.6	9.3	7.8	8.7	23.5	12.9
2023-10-19	9.1	8.5	9.2	7.8	8.6	23.5	12.8
2023-10-20	8.9	8.4	9.0	7.6	8.4	23.4	12.5
2023-10-21	8.3	7.7	8.3	7.0	9.6	22.3	11.8
2023-10-22	7.1	6.5	7.0	6.0	10.8	21.3	10.5
2023-10-23	6.0	5.4	5.8	5.0	10.7	20.7	9.3
2023-10-24	5.3	4.8	5.4	4.5	9.9	19.9	8.8
2023-10-25	5.0	4.4	5.0	4.2	9.0	19.6	8.4
2023-10-26	4.7	4.1	4.7	3.9	8.4	19.6	8.2
2023-10-27	4.2	3.6	4.2	3.5	7.9	19.7	7.6
2023-10-28	3.8	3.3	3.8	3.2	7.2	19.1	7.3
2023-10-29	3.5	3.0	3.5	3.0	6.8	18.7	7.0
2023-10-30	3.5	3.1	3.3	2.9	8.2	19.2	6.8
2023-10-31	3.5	3.1	3.6	3.0	10.0	19.2	7.0
Total	8.4	7.8	8.4	7.1	9.9	22.5	11.5

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October, 2023

Temperature Change (Discharge - Intake)

	Cat Plant	EMD Plant	K Plant
	Temperature Difference (°C)	Temperature Difference (°C)	Temperature Difference (°C)
2023-10-01	2.8	9.8	-0.5
2023-10-02	1.9	13.1	-0.5
2023-10-03	5.7	13.2	-0.5
2023-10-04	-0.1	15.9	2.0
2023-10-05	-0.5	13.7	3.6
2023-10-06	-0.5	13.8	3.6
2023-10-07	-0.5	13.6	3.6
2023-10-08	-0.5	13.7	3.7
2023-10-09	-0.5	15.0	3.6
2023-10-10	-0.5	15.0	3.7
2023-10-11	-0.5	15.2	3.6
2023-10-12	-0.5	15.1	3.6
2023-10-13	-0.5	15.2	3.6
2023-10-14	-0.5	14.7	3.6
2023-10-15	-0.5	14.9	3.6
2023-10-16	-0.5	14.7	3.5
2023-10-17	-0.5	14.9	3.5
2023-10-18	-0.5	14.9	3.6
2023-10-19	-0.5	15.0	3.6
2023-10-20	-0.5	15.0	3.5
2023-10-21	1.3	14.7	3.5
2023-10-22	3.6	14.8	3.5
2023-10-23	4.7	15.3	3.5
2023-10-24	4.6	15.1	3.5
2023-10-25	4.0	15.2	3.5
2023-10-26	3.7	15.6	3.5
2023-10-27	3.8	16.1	3.4
2023-10-28	3.4	15.8	3.5
2023-10-29	3.2	15.8	3.4
2023-10-30	4.7	16.1	3.5
2023-10-31	6.5	16.1	3.5
Total	1.5	14.7	3.1

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