

# **Operations Report to Directors - Mississippi River Power Corp.**

## **August 21, 2020**

### **Last regular meeting – June 29, 2020**

Generation for the month of June was 1,191,635 KWh. We generated 305,405 KWh on peak, at a rate of \$0.1515 per KWh for a total of \$46,268.87. We generated 886,230 KWh off peak, at a rate of \$0.1163 per KWh, for a total of \$103,068.57. Total generation revenue for the month of June was \$149,337.44.

Generation for the month of July was 148,882 KWh. We generated 37,931 KWh on peak, at a rate of \$0.1515 per KWh for a total of \$5,746.53. We generated 110,951 KWh off peak, at a rate of \$0.1163 per KWh, for a total of \$12,903.63. Total generation revenue for the month of July was \$18,650.16.

At the time of our last meeting, the flow in the river was measuring just under 8 cms in Appleton. With that flow we were generating close to 800 KW. About a week later, with flows continuing to drop due to nearly no precipitation, we had to shut the station down. Over the next month, the station was mostly offline, with a few short periods of generation. Significant rainfall in the first few days of August boosted flows in the system and enabled us to restart. We were able to generate close to 1000 KW on August 2<sup>nd</sup> when we restarted and additional rain on August 4<sup>th</sup>, allowed us to increase output to around 1500 KW. Since then, we've been running at between 1200 and 1700 KW, with a brief period of generation over 2000 KW (August 11 and 12). The flow earlier this week was measured at around 13 cms, which is over the average for this time of year (10 cms). With that flow we are generating just under about 1500 KW.

In early July, a representative from Freco Fluid Power was onsite to install pressure gauges on all four accumulators on the Hydraulic Pressure Unit.

We met with representatives from Brandt Tractor Ltd. last month and again a couple of weeks ago, to continue discussions on a replacement unit for the Hawk.

After having issues with one of our headpond sensors, we ordered two new ones (a replacement and a spare). We'll be replacing the sensor shortly.

We had an issue with the grinder pump on our sewage tank in the basement of the plant. We've ordered new parts and hope to have the pump repaired shortly.

In mid-July our staff installed the dock at the boat launch in Metcalfe GeoHeritage Park.

Last month our call-out function on the SCADA stopped working. Geoff from Gedawin Novo came to the station and resolved the issue.

There was a significant hydraulic leak from a valve block on top of unit #1 last month. We took that block off and brought it to CHC to be machined to the o-rings had a more snug fit. Once it was machined, we replaced the o-rings, re-installed the block and restarted the unit. The unit operated leak-free.

During the last week of July we lowered the head gates for penstock #1. On July 31<sup>st</sup>, Crane Rental and ODS Marine were onsite to assist with installation of our tailrace gates. Once the gates were installed, we set up pumps and pumped out the remaining water in the draft tube. The following week, we started to open up the runner chest so that the turbine could be accessed. The blades will be removed and Canadian Hydro Components will be replacing some clips, pins and bolts inside the turbine hub, that failed in

December on the other unit. We will also have dye penetrant testing done on the blades. In addition, while the penstock is de-watered we plan to do some touch-up painting, where debris has chipped the paint inside the penstock. We did an inspection last week and noted several small areas that will require touch-ups, but no large areas.

There was a power outage in the area on August 11<sup>th</sup>, which shut the plant down. We were able to restart when power was restored. We also had to shut down for an hour the next morning to allow Hydro One to complete some switching on their lines (related to the outage the previous night).

That's all for this month.

## **Generation Stats**

**\*This section shows annual figures\***

Budget Generation 2016 \$2,424,651

Actual Generation 2016 \$1,918,603

Actual Generation 2016 (KWh) 15,715,881

Budget Generation 2017 \$2,355,095

Actual Generation 2017 \$3,899,139

Actual Generation 2017 (KWh) 31,939,350

Budget Generation 2018 \$2,306,244

Actual Generation 2018 \$2,455,780

Actual Generation 2018 (KWh) 19,960,232

Budget Generation 2019 \$2,411,009

Actual Generation 2019 \$3,007,133

Actual Generation 2019 (KWh) 24,327,543

**This section shows figures representing the period of January 1 – July 31 (2019 vs 2020)**

<b>2019</b>		<b>2020</b>	
Budget Generation	\$1,750,393	Budget Generation	\$1,759,047
Actual Generation	\$2,322,774	Actual Generation	\$2,018,923
Actual Generation	18,817,133 KWh	Actual Generation	16,245,316 KWh

**NOTE:** The projected (or budgeted) revenue/KWh output is often well above or below the actual totals. As a run-of-river station we must base our projections on AVERAGE flows. Verified flow data exists on our system from 1919 to the present. We use data from 1960 to the present in our projections, as regulation of the system has changed significantly over the past 100 years.

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Scott Newton, General Manager

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