

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

## **October 28, 2021**

### **Last regular meeting – October 1, 2021**

Generation for the month of September was 947,179 kWh. We generated 226,154 kWh on peak, at a rate of \$0.1517 per kWh for a total of \$34,307.51. We generated 721,025 kWh off peak, at a rate of \$0.1165 per kWh, for a total of \$83,999.40. Total generation revenue for the month of September was \$118,306.91. Kilowatt hour production for the month of September was about 29% of capacity.

In the days preceding our previous meeting heavy precipitation led to an increase in river flows from 18 to 22 cms. Flow fluctuated between 20 and 24 cms over the next couple of weeks, until October 16<sup>th</sup> when we received well over 50mm of rain. This resulted in an increase in flow from 20 cms to 27 cms and a jump of over 500 kW in output.

Following the completion of the generator maintenance late last month, our staff drained and replaced the oil for the lower bearing in both units. I contacted Drain-All (a certified carrier) to pick up the waste oil from our site, which they did earlier this month.

Staff performed maintenance on the air compressor at the generating station, including a new air filter and oil change.

On October 1<sup>st</sup>, we removed the dock from the boat launch in Metcalfe Park and stored it for the season.

On October 22<sup>nd</sup>, our staff closed the public washroom in Metcalfe GeoHeritage Park for the season and winterized it.

We replaced seals on the unit #1 blade servo. After dismantling a few of the seals were found to have several flat spots and were the likely cause of oil leaks on that unit. We also traced the source of a larger leak which would require dismantling and removing the servo. We planned to do this during the planned outage later in October (discussed below).

We received new danger signs last week for the areas around the Main Dam and Millfall/Earthen Dams. We then did a walk around the dams to confirm locations. Signs will be installed shortly.

Staff started moving garbage cans and picnic tables from the park, into the OGS for winter storage.

On the morning of October 24<sup>th</sup>, we shut down our station for a Hydro One (HONI) maintenance outage, which was slated to last until the afternoon of October 26<sup>th</sup>. We had notification of this for many months and planned annual maintenance for this period. On Monday, October 25<sup>th</sup>, we dropped the headgate for unit #2 to de-water and complete our annual penstock inspection. Merlin and I performed the inspection and noted no irregularities. After completion. Early that afternoon we closed up #2 and began re-filling the penstock. Staff from Canadian Hydro Components were also onsite to assist with removal of the blade servo on unit #1. Once removed, one of the large seals was found to be in very poor condition. New seals were installed and the unit was completely re-assembled by the morning of October 26<sup>th</sup>. The HONI work was completed earlier than expected and we received notification that we would free to restart our units at about 5pm on October 25<sup>th</sup>. Having completed the penstock inspection of unit #2, it was restarted at about 7pm. On October 26<sup>th</sup>, we shut #2 down briefly to perform our regular DC battery testing. The unit was then restarted. Once the blade servo was re-assembled we were able to drop the headgate on unit #1 and drain the penstock for inspection. At the time of finalization of this report the inspection is scheduled for the afternoon of October 26<sup>th</sup>.

The purchase order for the new trashrack cleaner was signed earlier this month. We should have the preliminary design drawings shortly for review.

That's all for this month.

## **Generation Stats**

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

Budget Generation 2018 \$2,306,244  
Actual Generation 2018 \$2,455,780  
Actual Generation 2018 (kWh) 19,960,232

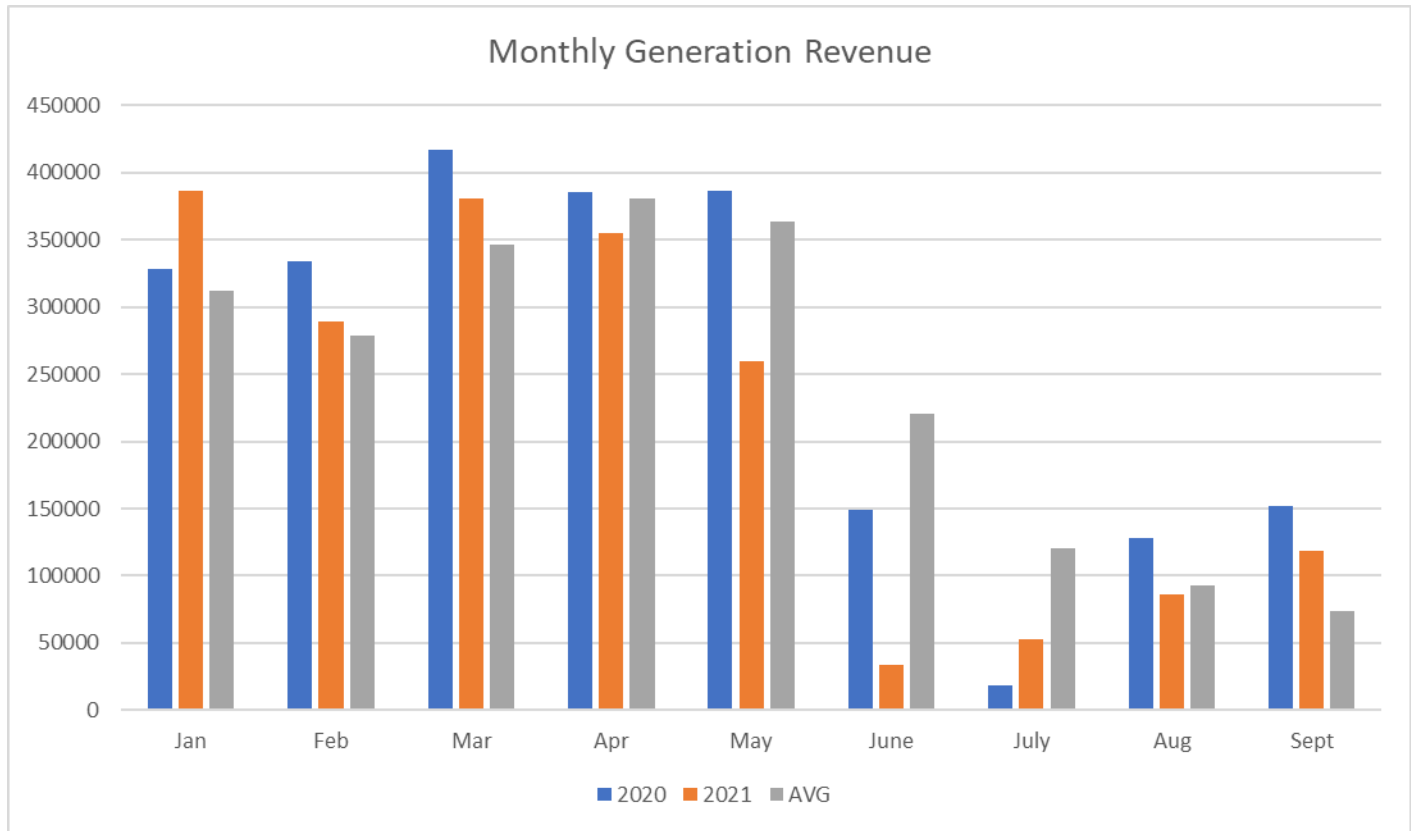
Budget Generation 2019 \$2,411,009  
Actual Generation 2019 \$3,007,133  
Actual Generation 2019 (kWh) 24,327,543

Budget Generation 2020 \$2,422,939  
Actual Generation 2020 \$3,062,511  
Actual Generation 2020 (kWh) 24,649,416

**This section shows figures representing the period of January 1 – September 30 (2020 vs 2021)**

<b>2020</b>		<b>2021</b>	
Budget Generation	\$1,892,308	Budget Generation	\$2,123,911
Actual Generation	\$2,299,061	Actual Generation	\$2,011,062
Actual Generation	18,496,295 kWh	Actual Generation	16,148,793 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.



- AVG = 10 year average of actual monthly revenue.

---

Scott Newton, General Manager

---

---