

Order No. 150/20

**INTERIM EX PARTE ORDER APPROVING SIX NEW LIGHT EMITTING DIODE
("LED") ROADWAY LIGHTING RATES**

December 24, 2020

BEFORE: Robert Gabor, Q.C., Chair
Marilyn Kapitany, B.Sc., (Hon), M.Sc., Vice Chair
Hugh Grant, Ph.D., Member
Shawn McCutcheon, Member
Larry Ring, Q.C., Member

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1.0 Executive Summary

By this Order, the Manitoba Public Utilities Board (“Board”) immediately approves, on an interim ex parte basis, six new 300 watt and higher intensity Light Emitting Diode (“LED”) roadway lighting rates as proposed by Manitoba Hydro, effective December 1, 2020. These new lower LED rates are to be charged to customers in their first electricity bills following the conversion of their 1000 watt High Pressure Sodium street lights to more energy efficient LED street lights in and after December 2020.

Manitoba Hydro has calculated the proposed new rates in the same manner, using the same cost basis, as the current Board-approved LED rates for 250 watt and lower intensity LED lights.

The rates approved in this Order apply to roadway lighting installed by agreement by Manitoba Hydro for public authorities and are available throughout the Province of Manitoba.

2.0 Procedural History

By Application dated December 17, 2020, Manitoba Hydro applied to the Board pursuant to *The Crown Corporations Governance and Accountability Act* for interim and ex parte approval of six new LED roadway lighting rates in Manitoba Hydro's Outdoor Lighting – Tariff 2020-80, effective December 1, 2020.

The Board approved interim rates in Manitoba Hydro's Outdoor Lighting Rate Tariff for the Area & Roadway Lighting customer class, in Orders 79/14 and 85/17, specifically to incorporate new rates for LED roadway lights that ranged from 10 watts to 250 watts. Those interim rates were finalized by the Board in Order 59/18. Those rate changes were required to support Manitoba Hydro's conversion of existing High Pressure Sodium street lights (ranging from 70 watt to 400 watt) to the more energy efficient LED street lights.

3.0 Submissions

By this Application, Manitoba Hydro proposes to add six new roadway lighting rates to Manitoba Hydro's Outdoor Lighting Rate – Tariff 2020-80 for the following:

- 300 watt LED street light on a 60 foot pole;
- 300 watt LED street light where 2 lights are on a 100 foot pole;
- 300 watt LED street light where 4 lights are on a 100 foot pole
- 400 watt LED street light;
- 500 watt LED street light;
- 600 watt LED street light.

In 2014, Manitoba Hydro began replacing High Pressure Sodium street lighting with higher energy efficiency LED street lighting. Manitoba Hydro began converting High Pressure Sodium street lights, with wattages of 70 to 400 watts, to LED street lights with wattages of 10 to 250 watts. Technology has advanced such that higher wattage LED street lights are now capable of replacing 1000 watt High Pressure Sodium street lights. Manitoba Hydro began replacing 1000 watt High Pressure Sodium street lights in December of 2020.

Accordingly, Manitoba Hydro seeks Board approval on an interim, ex parte basis for new rates for the higher wattage LED street lights.

Manitoba Hydro derived the proposed six new LED street light rates by first determining the annual kilowatt-hour savings expected to be achieved by converting High Pressure Sodium street lighting to the more efficient LED street lighting. Manitoba Hydro then determined the monthly cost savings using the Area & Roadway Lighting class' energy charge from Manitoba Hydro's 2013 Prospective Cost of Service Study, updated to reflect the rate increases implemented for the Area & Roadway Lighting class since September 1, 2012. The monthly energy-related cost savings were then deducted from the existing 1000 watt High Pressure Sodium street light rates to determine the proposed LED street light rates.

Manitoba Hydro submits that since its application constitutes an update to an existing tariff and that the proposed rates have been calculated in a manner consistent with the approach used to calculate current Board-approved LED lighting rates, approval by the Board of the new rates on an interim, ex parte basis is necessary and will ensure that the rates are implemented in time for customers to benefit from the installation of any new LED lights in December 2020. Manitoba Hydro will seek final approval of the interim rates from the Board at the next public General Rate Application.

In addition, Manitoba Hydro requests that these new and lower LED rates be implemented such that they would be charged to customers on their first electricity bills following the conversion of the High Pressure Sodium street lights to LED street lights.

4.0 Board Findings

The Board accepts that with the continued advancement of technology, higher wattage LED street lights, ranging from 300 watts to 600 watts, are now capable of replacing existing 1000 watt High Pressure Sodium street lights. In converting 1000 watt High Pressure Sodium street lights to higher energy efficiency LED street lights, Manitoba Hydro requires approval of new rates for LED street lights that are 300 watts and higher in intensity.

While Manitoba Hydro's December 17, 2020 Application includes, as Attachment 2, a portion of its proposed Outdoor Lighting Tariff 2020-80, that portion of the Tariff also includes other LED rates are not the subject of Manitoba Hydro's Application or this Order. Therefore, this Order will address only the six new LED street light rates that are 300 watts and higher in intensity.

The Board finds that, by using the energy charge from Manitoba Hydro's 2013 Prospective Cost of Service Study escalated by approved rate increases, Manitoba Hydro has calculated the proposed new rates in the same manner, using the same cost basis, as the existing Board-approved LED rates for 250 watt and lower intensity lights.

The Board further finds that the six new LED roadway lighting rates as proposed by Manitoba Hydro, effective December 1, 2020, are in the public interest. Manitoba Hydro charges its customers based on the number of outdoor street lights that the customer uses in the various wattage categories. These outdoor street lights are not metered for purposes of measuring energy consumption, although estimated energy consumption is factored into the fixed monthly rate as explained in Section 3 above. Because LED street lights can provide the same or better illumination using less energy than the equivalent High Pressure Sodium street lights, the cost to the customer is less than for High Pressure Sodium street lights. Accordingly, the rates charged by Manitoba Hydro should reflect the lower costs once LED lights have replaced High Pressure Sodium lights. As Manitoba Hydro has commenced replacement of 1000 watt HPS lighting with LED lighting in December 2020, approval of the LED roadway lighting rates is justified in order for

customers to benefit from lower rates commencing with the electricity bill following such replacements. The following table compares the proposed new lower LED street light monthly rates with the equivalent High Pressure Sodium street light monthly rates:

Proposed New Light Emitting Diode (LED) Rate Name	High Pressure Sodium (HPS) Street Light Equivalent	Monthly High Pressure Sodium Street Light Rate	Proposed Monthly LED Street Light Rate
300 LED 1/60'	1000 HPS 1/60'	\$50.22	\$31.18
300 LED 2/100'	1000 HPS 2/100'	\$60.18	\$41.14
300 LED 4/100'	1000 HPS 4/100'	\$51.60	\$32.56
400 LED	1000 HPS	\$49.07	\$32.43
500 LED	1000 HPS	\$49.07	\$34.59
600 LED	1000 HPS	\$49.07	\$36.30

As to Manitoba Hydro's Application having been made without notice to affected and interested parties, the Board has the authority under Section 45 of *The Public Utilities Board Act* to make an interim ex parte order in special circumstances. In this instance, the Board finds the special circumstances of approving lower rates to affected customers justifies the granting of an interim ex parte order.

Manitoba Hydro is to seek final approval of these interim LED street light rates at the next public hearing of its General Rate Application.

Manitoba Hydro is also to notify its affected customers of the approved new lower rates. These customer notifications are to be included in the next bills Manitoba Hydro sends to customers that include the new rates.

5.0 IT IS THEREFORE ORDERED THAT:

1. Manitoba Hydro's application for six new Light Emitting Diode (LED) rates, BE AND IS HEREBY APPROVED immediately on an interim ex parte basis effective December 1, 2020, for the wattages shown in the attached Schedule "A" such that these lower rates be charged to customers on their first electricity bills following the conversion of the High Pressure Sodium street lights to LED street lights.
2. Manitoba Hydro is to notify its affected customers, who have 1000 watt High Pressure Sodium street lights that are being converted to LED street lights, of the approved new lower rates. These customer notifications are to be included in the next bills Manitoba Hydro sends to customers that include the new rates.
3. This Interim Order shall be in full force and effect until confirmed or otherwise by a further Order of the Board following a public hearing which is to be no later than Manitoba Hydro's next General Rate Application.

Board decisions may be appealed in accordance with the provisions of Section 58 of *The Public Utilities Board Act*, or reviewed in accordance with Section 36 of the Board's Rules of Practice and Procedure. The Board's Rules may be viewed on the Board's website at www.pubmanitoba.ca.

THE PUBLIC UTILITIES BOARD

"Robert Gabor, Q.C."

Chair

"Rachel McMillin, BSc."

Assistant Associate Secretary

Certified a true copy of Order No. 150/20
issued by The Public Utilities Board



Assistant Associate Secretary

SCHEDULE "A" TO ORDER 150/20

Light Emitting Diode (LED) Rates to be added to Manitoba Hydro's Area and Roadway Lighting, Outdoor Lighting Rate Tariff No. 2020-80

Watts	Rate Per Month: Shared Pole/Luminaire	Rate Per Month: Exclusive Pole/Luminaire
300 LED 1/60' (>280-370 W)	-	\$31.18
300 LED 2/100' (>280-370 W)	-	\$41.14
300 LED 4/100' (>280-370 W)	-	\$32.56
400 LED (>370-460 W)	-	\$32.43
500 LED (>460-550 W)	-	\$34.59
600 LED (>550-640 W)	-	\$36.30