TABLED DOCUMENT 124-18(2)
TABLED ON OCTOBER 13, 2016
Government of Gouvernement des

Northwest Territories Territoires du Nord-Ouest

MR. DANIEL MCNEELY MLA, SAHTU JUL 1 2 2018

Oral Question 160-18(2) Colville Lake Solar Power Pilot Project

In response to the questions you asked on June 3, 2016 in the Legislative Assembly regarding the Colville Lake solar power pilot project, I am providing the following information.

In 2015 and 2016, the GNWT funded \$1 million over two years to support NTPC in constructing Canada's first hybrid solar (136 kW) diesel plant with batteries in Colville Lake. The GNWT funded \$453K towards utility-scale solar projects in Fort Liard (39 kW) and Wrigley (10 kW). Through the GNWT's funding of the Arctic Energy Alliance, the Community Renewable Energy Program distributed almost \$100K in rebates for communities to invest in seven solar photo voltaic (PV) installations across the NWT.

In fiscal year ending 2017, the GNWT is dedicating \$720K to directly support solar installations and has submitted federal funding proposals for a further \$200K. NTPC, in collaboration with PWS, will be installing a utility-scale solar PV project in Aklavik (40 kW), along with a variable speed generator which will allow higher penetration of renewables. This project is also a pilot of another approach to higher penetration solar. Upon evaluation of both variable speed engines and battery storage systems, a greater understanding of these technologies and their economics will be achieved allowing for improved future planning.

However, lower penetration systems like those utility projects in Fort Simpson (104 kW installed in 2012 and 2013), Wrigley, Fort Liard and Lutsel'Ke (Power Purchase Agreement for 35 kW solar PV generation) have much better economics given they do not require additional storage to facilitate the introduction of solar. As such these types of systems will continue to be the focus until all thermal communities are equipped with lower penetration solar, therefore maximizing the benefits to residents while also minimizing costs. The GNWT funding previously mentioned for 2017 will also support between 80 to 100 kW of solar PV on three government buildings in Inuvik.

.../2

Other communities are currently being considered for solar PV projects; the GNWT is producing an Energy Plan for release later this year which will provide further details of where we will be investing in renewable generation sources.

The GNWT, working with both NTPC on utility-scale projects and Arctic Energy Alliance on smaller installations, dedicates millions of dollars every year to support solar and other renewable energy projects across the NWT. 695 kilowatts of solar PV has been installed to date. The NWT is second only to Ontario on a per capita basis of installed solar PV across Canada.

Please contact my office if you require additional information.

Louis Sebert

Minister Responsible for the

Northwest Territories Power Corporation

c Honourable Robert R. McLeod, Chair, Energy and Climate Change Committee of Cabinet

> Honourable Caroline Cochrane, Minister, Public Works & Services

Mr. Tim Mercer, Clerk, Legislative Assembly

Mr. David Hastings, Legislative Coordinator