## LEGISLATIVE RETURN

SUBMITTED BY: Hon. John Streicker, Minister responsible for the Yukon Developmen Corporation and the Yukon Energy Corporation

1.	On April 18 2023, Geraldine Van Bibber, Member for Porter Creek North		
	asked the following question during the Oral Question Period at page(s) [page numbers] of <i>Hansard</i>		
		question - WQ No. 38 and 39	
	☐ gave notice of the following mo	gave notice of the following motion for the production of papers – MPP No. #	
	E: Power Outages		
OR			
2.	This legislative return relates to a matter outstanding from discussion with [MLA] date] related to:		
	Bill No. #	☐ Second Reading ☐ Third Reading	
		☐ Committee of the Whole: [Vote]	
	Motion No. #	RE: [subject]	
	at page(s) [page numbers] of Hansa	rd.	
- TI			

The response is as follows:

With respect to Yukon Energy Corporation announcing a new record for demand of 117.1 megawatts of electricity:

A new system generation peak of 118.5 megawatts was recorded on December 20, 2022. Before this, a record was set on December 19, 2022, of 117.1 megawatts. The following questions have been answered based on the peak demand of 118.5 megawatts.

> (1) how much additional dependable capacity was left available on the Yukon grid when the demand reached its peak;

Approximately 12 megawatts were left available when demand reached its peak on December 20, 2022.

> (2) how much of the 117.1 [118.5 MW] megawatts was generated by renewable sources other than hydro, for example solar or wind;

Zero megawatts of electricity were generated from solar or wind during peak demand on December 20, 2022.

> (3) how much of the 117.1 [118.5 MW] megawatts was generated by rented diesel generators;

Approximately 17 megawatts of electricity were generated by rented diesel generators during peak demand on December 20, 2022.

> (4) how much of the 117.1 [118.5 MW] megawatts was generated by Yukon Energy Corporation-owned diesel generators;

Approximately 17 megawatts of electricity were generated by Yukon Energy-owned diesel

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generators during peak demand on December 20, 2022.

(5) how much of the 117.1 [118.5 MW] megawatts was generated using LNG; and

Approximately 12 megawatts of electricity were generated using LNG during peak demand on December 20, 2022.

(6) did any additional electricity generation come from ATCO, if so how much?

Yes, approximately five megawatts were imported from ATCO Electric Yukon's Fish Lake hydro facility and their standby diesel generators during peak demand.

With respect to the series of power outages that occurred in December 2022:

(1) what caused the December 19, 2022 outage, and what factors contributed to the prolonged inability of utilities to restore power;

The outage on December 19<sup>th</sup> in Whitehorse was the result of an overloaded breaker at the Takhini substation that tripped because of protection settings.

During the outage, after Yukon Energy reset the transformer's settings, ATCO then had to complete the remaining restoration in cold temperatures. Power was restored in 4 hours. Yukon Energy offered its assistance to ATCO to expedite restoration.

(2) what caused the outage in Pelly Crossing and what factors contributed to the prolonged inability of utilities to restore power;

Yukon Energy cannot comment on this as Pelly Crossing is served by ATCO and they were responsible for restoring power.

(3) what caused the outage in Dawson City and what factors contributed to the prolonged inability of utilities to restore power; and

The outage on December 22 and 23, 2022 in Dawson City was the result of a damaged power line, a section of which failed in the cold temperatures (around -45° Celsius). Cold temperatures impacted restoration times, requiring restoration to happen section-by-second given the high demand on the system at the time.

(4) are utilities liable for any damage caused to private property or government infrastructure as a result of the outages, for example the Pelly Pool?

According to Yukon Energy Corporation and The Yukon Electrical Company Limited's Terms and Conditions of Service:

"The Company shall not be liable for any loss, injury, damage, expense, charge, cost or liability of any kind, whether of direct, indirect, special or consequential nature, arising out of or in any way connected with the provision of Service by the Company to its Customers including any failure, defect, fluctuation, reduction or interruption in the provision of Service by the Company to its Customers."

The Terms and Conditions of Service are approved by the Yukon Utilities Board.

Date Signature