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- 1 Q. Further to IC-NLH-162: Please provide a list of dates and durations since 2012 when
- 2 Frequency Converter was not available, and reason for unavailability.

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5 A. Please see IC-NLH-196 Attachment 1.

Corner Brook Frequency Converter Availability 2012- 2015 (to April 29)				
Year	Date/Time	Duration	State/Value	Description
2012	1/6/2012 11:34 1/6/2012 15:23	3 hrs 49 mins	Stop Start	FC shutdown to add oil to T2. (Added oil).
	3/9/2012 12:32 5/18/2012 13:00	1680 hrs 28 mins	Stop Start	Tripped due to failed wall bushing. Worked with CBPP and replaced wall bushings. Completed PM inspection work as well.
	10/2/2012 8:15 10/4/2012 16:09	55 hrs 54 mins	Stop Start	Shutdown to perform Unit PM inspection. Checked T1 & T2, Modified protection circuit.
2013	1/11/2013 7:42 1/11/2013 14:17	6 hrs 35 mins	Stop Start	Tripped. Major system outage on the island.
	8/8/2013 17:38	32 hrs 41 mins	Stop Start	Planned Outage. (Investigate/Repair T2 oil leak, Obtain oil sample from 152T).
	9/23/2013 12:34 9/27/2013 15:51	99 hrs 17 mins	Stop Start	T1 PM, T1 Doble, Investigate T1 Oil Leak, Investigate 252T Alarms. Change Conservator Low Level Trip to Alarm, Replace Filter Clips.
2014	2/5/2014 8:31 2/9/2014 11:15	98 hrs 44 mins		Outage for contractor to inspect frequency converter for the Vibration Monitoring Project. Perform CM work. Problems with 50 cycle end. Poles with loose wedges. Repairs completed unit synced for testing. Tests completed and unit released for service. DLP raising unit to 18-19 MW and no longer taking power from Hydro.
	4/22/2014 7:51 4/24/2014 14:05	30 hrs 13 mins	Stop Start	Unit PM Inspection
	9/22/2014 9:01	889 hrs 53 mins	Stop Start	Modify T2 Protection, T2 Setting Changes, Replace T2 Tap Changer Oil Level Gauge, Replace T2 Low Side Bushings, Top Up T2 Oil, T2 PM, T2 Doble, 152T Doble & Function Test, and unit PM inspection. Unit tripped on energizing, resulting in follow up testing and T2 Internal Inspection (Windings Shifted). Remove T2 & Install Temporary Water Cooled unit from CBPP.
2015	3/25/2015 8:41 3/25/2015 16:05	7 hrs 24 mins	Stop Start	Change Brushes.
	3/31/2015 11:20 3/31/2015 12:43	1 hr 23 mins	Stop Start	Install new emergency stop.
	4/8/2015 8:28 4/10/2015 10:00	49 hrs 32 mins	Stop Start	Install starting motor, Completed PM inspection work, and Condition assessment by Siemens.