1 2 3 4 5	Q.	Please provide in Excel file format, if applicable, any other data or information Newfoundland Power may have that will assist the Board in assessing which industries and/or end uses are best position to convert from oil (or other non-electric fuel) to electricity, using either electric resistance or heat pumps.
6	A.	Commercial customers are surveyed periodically to understand their usage of various
7		heating systems and fuels. Survey results for the Island Interconnected System indicated
8 9		61% of Rate 2.4 customers do not have electricity as a primary source of heat. The percentage of commercial customers by heat source can be found in Attachment A to this
10		response.
11		response.
12		Based on 2018 weather adjusted energy sales, the biggest opportunity for conversion
13		from oil, or other fuel sources, to electricity for Rate 2.4 customers exists within
14		buildings related to education, fishing, manufacturing and health services. The percent of
15		energy sales and customers with non-electric heat can be found in Attachment B.
16		Attachments A and D are available in Everyl format on Navyfoundland Davyer's atmended
17 18		Attachments A and B are available in Excel format on Newfoundland Power's stranded website at https://ftp.nfpower.nf.ca .
19		website at <u>inteps://itp.inpower.in.ca</u> .
20		For more information on how Island Interconnected commercial customers use energy,
21		please see Attachment C provided in response to Information Request PUB-NP-014.

Survey Results – Commercial Heating Sources by Percent of Rate Class and Sector

Island Interconnected System Heating Source by Percent of Commercial Rate Class

Heating Source	Rate 2.1	Rate 2.3	Rate 2.4
Electricity	75.6%	87.4%	38.6%
Fuel Oil/Diesel	17.7%	7.7%	45.7%
Bottled Propane	0.7%	2.0%	-
Wood	2.2%	1.0%	-
Something Else	3.8%	2.0%	15.7%

Island Interconnected System Heating Source by Percent of Commercial Sector

Heating Source	Office	Retail	Grocery	Health	Education	Warehouse	Lodging	Other	Fishing	Manufacturing
Electricity	90.0%	73.9%	67.4%	90.3%	100.0%	76.2%	100.0%	76.8%	50.8%	64.6%
Fuel Oil/Diesel	8.3%	15.9%	17.7%	9.7%	-	19.0%	-	16.1%	49.2%	22.9%
Bottled Propane	-	7.0%	-	-	-	4.8%	-	-	-	6.3%
Wood	-	-	-	-	-	-	-	3.3%	-	6.3%
Something Else	1.6%	3.2%	14.9%	-	-	-	-	3.8%	-	-

Survey Results – Percent of Commercial Energy Sales and Customers with Non-Electric Heat Source by Rate Class

Newfoundland Power Summary of 2018 Commercial and Industrial Customer Data Percent of Energy Sales and Customers with Non-Electric Heat Source - Rate 2.1

	% Of Weather Adjusted Energy Sales	% of Customers		
Segment	Without Electric Heat	Without Electric Heat		
Communications/Utilities	16.3%	26.7%		
Other Commercial	15.6%	21.9%		
Office	15.6%	15.9%		
Retail	14.9%	9.2%		
Grocery/Restaurant	9.7%	3.9%		
Industrial - Manufacturing	4.9%	3.7%		
Non-Buildings	4.8%	4.2%		
Education	3.9%	1.5%		
Warehouse	3.8%	1.7%		
Unspecified	3.3%	4.3%		
Lodging/Hospitality	2.7%	3.2%		
Health Services	2.3%	1.2%		
Industrial - Fishing	1.7%	2.2%		
Mining	0.5%	0.2%		

Newfoundland Power Summary of 2018 Commercial and Industrial Customer Data Percent of Energy Sales and Customers with Non-Electric Heat Source Rate 2.3

	% Of Weather Adjusted Energy Sales	% of Customers
Segment	Without Electric Heat	Without Electric Heat
Other Commercial	15.4%	17.6%
Office	14.1%	15.6%
Grocery/Restaurant	10.3%	6.4%
Education	10.1%	11.7%
Health Services	9.4%	3.9%
Industrial - Fishing	8.4%	8.8%
Industrial - Manufacturing	7.1%	10.0%
Retail	6.9%	7.7%
Communications/Utilities	6.8%	5.7%
Warehouse	3.9%	3.6%
Lodging/Hospitality	3.7%	2.9%
Non-Buildings	2.2%	4.0%
Mining	1.3%	1.9%
Unspecified	0.4%	0.5%

Newfoundland Power Summary of 2018 Commercial and Industrial Customer Data Percent of Energy Sales and Customers with Non-Electric Heat Source - Rate 2.4

	% Of Weather Adjusted Energy Sales	% of Customers		
Segment	Without Electric Heat	Without Electric Heat		
Education	43.4%	6.7%		
Industrial - Fishing	13.6%	33.1%		
Industrial - Manufacturing	10.7%	20.1%		
Health Services	10.6%	10.0%		
Communications/Utilities	10.0%	10.0%		
Non-Buildings	4.0%	6.7%		
Mining	3.2%	3.3%		
Retail	2.5%	3.3%		
Other Commercial	1.1%	3.3%		
Office	0.9%	3.3%		
Unspecified	0.0%	0.0%		
Grocery/Restaurant	0.0%	0.0%		
Warehouse	0.0%	0.0%		
Lodging/Hospitality	0.0%	0.0%		