

1 Q. Please provide all data and documents used in developing the demand
2 allocation factors of the cost of service study.

3

4

5 A. Demand allocation factors are developed by applying applicable demand
6 losses to forecast or derived rate class coincident peak (CP) demand, at the
7 customer's meter. Please see Pages 2 and 3 attached for the application of
8 losses to initial demand.

9

10 Initial CP demand amounts for NP and the Industrial Customers are obtained
11 from the operating load forecast. Please see response to IC 30 NLH. CP
12 estimates for rural rate classes (Columns (A) and (D)) are derived, based on
13 the application of load research to forecast rate class sales. Please see
14 response to PUB 2 NLH for forecast rate class sales.

15

16 Loss factors are shown on Pages 4 and 5.

Newfoundland and Labrador Hydro
Demand Allocation Factors

	Load Served @ Secondary	Secondary Loss Multiplier	Input to Secondary	Load Served @ Primary	Load Through Primary	Primary Loss Multiplier	Input to Primary	Load Served @ Transm.	Load Through Transm.	Transm. Loss Multiplier	Input to Transm.	Load Served @ Generation	Input to System
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(J)	(L)	(M)
ISLAND INTERCONNECTED													
Newfoundland Light & Power	-	1.0735	-	-	-	1.0458	-	1,083,584	1,083,584	1.0305	1,116,647		1,116,647
Abitibi Consolidated - Stephenville	-	1.0735	-	-	-	1.0458	-	2,688	2,688	1.0305	2,770		2,770
Abitibi Consolidated - Grand Falls	-	1.0735	-	-	-	1.0458	-	17,920	17,920	1.0305	18,467		18,467
Corner Brook Pulp & Paper Co. Ltd	-	1.0735	-	-	-	1.0458	-	48,384	48,384	1.0305	49,860		49,860
North Atlantic Refining Ltd.	-	1.0735	-	-	-	1.0458	-	27,328	27,328	1.0305	28,162		28,162
Aur Resources	-	1.0735	-	-	-	1.0458	-	8,960	8,960	1.0305	9,233		9,233
Total Industrial								105,280	105,280		108,492		108,492
Interruptible	-	1.0735	-	-	-	1.0458	-	-	-	1.0305	-		-
1.1 Domestic	23,791	1.0735	25,539	-	25,539	1.0458	26,709	-	26,709	1.0305	27,523		27,523
1.12 Domestic All Electric	24,311	1.0735	26,097	-	26,097	1.0458	27,292	-	27,292	1.0305	28,125		28,125
1.3 Special	64	1.0735	69	-	69	1.0458	72	-	72	1.0305	75		75
2.1 General Service 0-10 kW	2,419	1.0735	2,597	-	2,597	1.0458	2,716	-	2,716	1.0305	2,798		2,798
2.2 General Service 10-100 kW	11,425	1.0735	12,264	20	12,284	1.0458	12,847	-	12,847	1.0305	13,239		13,239
2.3 General Service 110-1,000 kVA	5,915	1.0735	6,349	345	6,694	1.0458	7,001	-	7,001	1.0305	7,215		7,215
2.4 General Service Over 1,000 kVA	1,457	1.0735	1,564	143	1,707	1.0458	1,785	-	1,785	1.0305	1,839		1,839
4.1 Street and Area Lighting	714	1.0735	766	-	766	1.0458	802	-	802	1.0305	826		826
Sub-Total Rural	70,095		75,245	508	75,753		79,223	0	79,223		81,640		81,640
Grand Total	70,095		75,245	508	75,753		79,223	1,188,864	1,268,086		1,306,780		1,306,780

Newfoundland and Labrador Hydro
Demand Allocation Factors

LABRADOR INTERCONNECTED

CFB-Goose Bay Boiler	-	1.0789	-	-	-	1.0491	-	-	-	1.1267	-	-
IOCC Firm	-	1.0789	-	-	-	1.0491	-	62,000	62,000	1.1267	69,858	69,858
IOCC Non-Firm	-	1.0789	-	-	-	1.0491	-	-	-	1.1267	-	-
Total Industrial								<u>62,000</u>	<u>62,000</u>		<u>69,858</u>	<u>69,858</u>
1.1 Domestic	1,553	1.0789	1,676	-	1,676	1.0491	1,758	-	1,758	1.1267	1,981	1,981
1.1A Domestic All Electric	55,999	1.0789	60,415	-	60,415	1.0491	63,380	-	63,380	1.1267	71,413	71,413
2.1 General Service 0-10 kW	715	1.0789	771	-	771	1.0491	809	-	809	1.1267	912	912
2.2 General Service 10-100 kW	11,691	1.0789	12,613	-	12,613	1.0491	13,232	-	13,232	1.1267	14,909	14,909
2.3 General Service 110-1,000 kVA	16,650	1.0789	17,963	-	17,963	1.0491	18,845	-	18,845	1.1267	21,233	21,233
2.4 General Service over 1000 kVA	8,817	1.0789	9,513	-	9,513	1.0491	9,979	-	9,979	1.1267	11,244	11,244
4.1 Street and Area Lighting	372	1.0789	401	-	401	1.0491	421	-	421	1.1267	474	474
Sub-Total Jurisdictional	<u>95,797</u>		<u>103,353</u>		<u>103,353</u>		<u>108,425</u>	<u>0</u>	<u>108,425</u>		<u>122,167</u>	<u>122,167</u>
Grand Total	<u>95,797</u>		<u>103,353</u>		<u>103,353</u>		<u>108,425</u>	<u>62,000</u>	<u>170,425</u>		<u>192,025</u>	<u>192,025</u>

ISLAND ISOLATED

1.2 Domestic Diesel	1,310	1.0683	1,400	-	1,400	1.0426	1,460	-	1,460	1.0000	1,460	1,460
2.1 General Service 0-10 kW	138	1.0683	148	-	148	1.0426	154	-	154	1.0000	154	154
2.2 General Service 10-100 kW	161	1.0683	172	-	172	1.0426	179	-	179	1.0000	179	179
2.3 General Service 110-1,000 kVA	121	1.0683	129	-	129	1.0426	135	-	135	1.0000	135	135
4.1 Street and Area Lighting	25	1.0683	27	-	27	1.0426	28	-	28	1.0000	28	28
Total Rural	<u>1,756</u>		<u>1,875</u>		<u>1,875</u>		<u>1,955</u>		<u>1,955</u>		<u>1,955</u>	<u>1,955</u>

LABRADOR ISOLATED

1.2 Domestic Diesel	4,562	1.0514	4,796	-	4,796	1.0323	4,951	-	4,951	1.0000	4,951	4,951
2.1 General Service 0-10 kW	534	1.0514	561	-	561	1.0323	579	-	579	1.0000	579	579
2.2 General Service 10-100 kW	1,598	1.0514	1,681	-	1,681	1.0323	1,735	-	1,735	1.0000	1,735	1,735
2.3 General Service 110-1,000 kVA	150	1.0514	157	-	157	1.0323	162	-	162	1.0000	162	162
2.4 General Service over 1000 kVA	43	1.0514	46	-	46	1.0323	47	-	47	1.0000	47	47
4.1 Street and Area Lighting	80	1.0514	84	-	84	1.0323	87	-	87	1.0000	87	87
Total Rural	<u>6,967</u>		<u>7,325</u>		<u>7,325</u>		<u>7,562</u>		<u>7,562</u>		<u>7,562</u>	<u>7,562</u>

L'ANSE AU LOUP

1.1 Domestic	1,188	1.0912	1,296	-	1,296	1.0565	1,369	-	1,369	1.0000	1,369	1,369
1.12 Domestic All Electric	1,024	1.0912	1,118	-	1,118	1.0565	1,181	-	1,181	1.0000	1,181	1,181
2.1 General Service 0-10 kW	206	1.0912	225	-	225	1.0565	237	-	237	1.0000	237	237
2.2 General Service 10-100 kW	703	1.0912	768	-	768	1.0565	811	-	811	1.0000	811	811
2.3 General Service 110-1,000 kVA	97	1.0912	106	-	106	1.0565	112	-	112	1.0000	112	112
4.1 Street and Area Lighting	26	1.0912	28	-	28	1.0565	30	-	30	1.0000	30	30
Total Rural	<u>3,244</u>		<u>3,540</u>	0	<u>3,540</u>		<u>3,740</u>	0	<u>3,740</u>		<u>3,740</u>	<u>3,740</u>

Newfoundland and Labrador Hydro
Demand Losses

ISLAND INTERCONNECTED

Voltage Level of Service	Voltage Level Sales (kW)	Cumulative kW (Incl. Losses)	Voltage Level Losses (Demand)				Simple Loss Multiplier	Cumulative Loss Multiplier
			% Basis	Adjustment Factor	Adjusted %			
(A)	(B)	(C)	(D)	(E)	(F)		(G)	(H)
Input to System	-	1,306,780	0.00%	1.000000	0.00%		1.0000	1.0000
Transmission	1,188,864	1,268,086	2.96%	1.000000	2.96%		1.0305	1.0305
Primary Distribution	508	75,753	4.38%	1.000000	4.38%		1.0458	1.0777
Secondary	70,095	70,095	6.84%	1.000000	6.84%		1.0735	1.1569
Total	<u>1,259,466</u>							
<i>Total to Check Against --></i>	1,259,466	1,347,500	3.62%					
<i>Less Compens. & losses-></i>		3,693						
<i>Less NP Dem. Cr. & losses -></i>		37,027						
<i>Adjusted Total --></i>		1,306,780						
<i>Zero-Check --></i>	-	-						

LABRADOR INTERCONNECTED

Voltage Level of Service	Voltage Level Sales (kW)	Cumulative kW (Incl. Losses)	Voltage Level Losses (Demand)				Simple Loss Multiplier	Cumulative Loss Multiplier
			% Basis	Adjustment Factor	Adjusted %			
(A)	(B)	(C)	(D)	(E)	(F)		(G)	(H)
Input to System	-	192,025	0.00%	1.000000	0.00%		1.0000	1.0000
Transmission	62,000	170,425	11.25%	1.000000	11.25%		1.1267	1.1267
Primary Distribution	-	103,353	4.68%	1.000000	4.68%		1.0491	1.1820
Secondary	95,797	95,797	7.31%	1.000000	7.31%		1.0789	1.2753
Total	<u>157,797</u>	7.3102%						
<i>Total to Check Against --></i>	157,797	192,025	17.82%					
<i>Zero-Check --></i>	-	-	0.00%					

ISLAND ISOLATED

Voltage Level of Service	Voltage Level Sales (kW)	Cumulative kW (Incl. Losses)	Voltage Level Losses (Demand)				Simple Loss Multiplier	Cumulative Loss Multiplier
			% Basis	Adjustment Factor	Adjusted %			
(A)	(B)	(C)	(D)	(E)	(F)		(G)	(H)
Input to System	-	1,955	0.00%	1.000000	0.00%		1.0000	1.0000
Transmission	-	1,955	0.00%	1.000000	0.00%		1.0000	1.0000
Primary Distribution	-	1,875	4.09%	1.000000	4.09%		1.0426	1.0426
Secondary	1,756	1,756	6.39%	1.000000	6.39%		1.0683	1.1138
Total	<u>1,756</u>							
<i>Total to Check Against --></i>	1,756	1,955	10.22%					
<i>Zero-Check --></i>	-	-	0.00%					

Newfoundland and Labrador Hydro
Demand Losses

LABRADOR ISOLATED

Voltage Level of Service	Voltage Level Sales (kW)	Cumulative kW (Incl. Losses)	Voltage Level Losses (Demand)			Simple Loss Multiplier	Cumulative Loss Multiplier
			% Basis	Adjustment Factor	Adjusted %		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Input to System	-	7,562	0.00%	1.000000	0.00%	1.0000	1.0000
Transmission	-	7,562	0.00%	1.000000	0.00%	1.0000	1.0000
Primary Distribution	-	7,325	3.13%	1.000000	3.13%	1.0323	1.0323
Secondary	6,967	6,967	4.89%	1.000000	4.89%	1.0514	1.0854
Total	<u>6,967</u>						
<i>Total to Check Against --></i>	6,967	7,562	7.87%				
<i>Zero-Check --></i>	-	-	0.00%				

L'ANSE AU LOUP

Voltage Level of Service	Voltage Level Sales (kW)	Cumulative kW (Incl. Losses)	Voltage Level Losses (Demand)			Simple Loss Multiplier	Cumulative Loss Multiplier
			% Basis	Adjustment Factor	Adjusted %		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Input to System	-	3,740	0.00%	1.000000	0.00%	1.0000	1.0000
Transmission	-	3,740	0.00%	1.000000	0.00%	1.0000	1.0000
Primary Distribution	-	3,540	5.35%	1.000000	5.35%	1.0565	1.0565
Secondary	3,244	3,244	8.36%	1.000000	8.36%	1.0912	1.1529
Total	<u>3,244</u>						
<i>Total to Check Against --></i>	3,244	3,740	13.26%				
<i>Zero-Check --></i>	-	-	0.00%				