

1 Q. (a) Compare the Bulk Electricity System (BES) reliability indices (SAIFI,  
2 SAIDI and SARI) for the Island Interconnected System in total and by  
3 delivery point to the CEA composite indices on an annual basis for the  
4 period 1992 to 2000.

5  
6 (b) Provide the reliability indices indicated in (a) above for the area  
7 previously designated as the St. Anthony/Roddickton system with  
8 comparison to BES and CAE composite indices for the period 1992 to  
9 2000.

10  
11 (c) Provide reliability indices indicated in (a) above for each of Hydro's  
12 Industrial customers with comparison to BES and CEA composite  
13 indices for the period 1992 to 2000.

14  
15 A. (a) See attached table.

16  
17 (b) See attached table.

18  
19 (c) See attached table.

**System Average Interruption Frequency Index (SAIFI) 1992-2000**  
(Sustained Interruptions per year)

Delivery Point	1992	1993	1994	1995	1996	1997	1998	1999	2000
Bottom Brook (Wheelers)	0	1	0	0	0	1	1	0	1
Bear Cove	2	12	5	5	21	3	6	5	11
Barchoix	2	1	1	5	4	0	7	6	9
Bay D'Espoir (St. Albans)	0	0	1	0	0	0	0	0	1
Bay L'Argent	1	1	5	6	1	3	11	2	3
Buchans	3	1	0	0	0	0	0	0	0
Coney Arm	2	1	1	0	5	0	1	0	1
Come By Chance T1	0	0	0	3	1	2	5	0	0
Come By Chance T2	0	0	0	3	1	1	7	0	0
Cow Head	1	3	5	6	18	0	3	5	1
Conne River	2	1	1	5	4	0	7	6	9
Daniels Harbour	6	3	9	5	24	9	2	4	1
Deer Lake Plant	0	1	1	2	0	0	0	0	0
Deer Lake TL-225	0	1	1	1	0	0	0	0	0
Deer Lake Power	0	0	0	0	0	1	0	0	0
Doyles (Codroy)	4	7	3	0	1	2	8	0	6
English Harbour West	2	1	1	5	4	0	7	6	9
Grandy Brook (Burgeo)	2	1	0	0	0	2	6	0	1
Grand Bay (Port Aux Basques)	23	5	4	2	1	2	8	4	7
Grand Falls F.C. T1	1	2	0	0	0	1	0	0	0
Grand Falls F.C. T2	0	1	0	0	0	4	0	0	0
Glenburnie	4	11	3	2	7	15	9	3	5
Hope Brook T1	3	1	1	2	0	2	2	0	2
Hope Brook T2	3	1	1	2	0	2	2	0	2
Hawkes Bay	2	11	4	5	19	1	2	4	1
Hampden	2	1	1	0	5	0	1	0	1
Howley	0	1	1	0	0	0	1	0	0
Holyrood 38L	6	1	3	3	1	1	5	0	0
Holyrood 39L	7	1	3	4	1	1	4	0	0
Happy Valley Bus 12	-	-	-	-	-	7	1	15	13
Hardwoods	3	2	3	4	1	2	4	0	0
Indian River 363L	0	1	1	0	0	0	1	0	1
Jacksons Arm	2	1	1	0	5	0	1	0	1
Long Harbour	0	4	1	3	1	2	4	0	0
Linton Lake	1	1	6	8	1	3	11	1	1
Main Brook	-	-	-	-	12	4	18	16	27
Massey Drive Bus 4 (DLP)	0	1	0	0	0	0	0	0	0
Massey Drive Bus 2 and 3 (NP)	0	1	0	0	0	0	0	0	0
Monkstown	3	1	5	9	1	3	4	2	3
Oxen Pond	8	2	2	3	1	1	7	0	0
Parsons Pond	4	4	7	4	21	0	2	5	1
Plum Point	2	11	5	9	19	5	4	4	11
Rocky Harbour	4	11	3	2	7	14	9	3	4
Roddickton	-	-	-	-	12	5	18	16	27
St. Anthony	-	-	-	-	36	8	19	15	25
South Brook	2	5	1	0	0	0	0	1	0
Salt Pond	4	2	3	5	1	3	13	3	0
Springdale	0	1	1	0	0	1	0	0	0
Sunnyside - 100L	1	0	0	3	1	2	5	0	0
Sunnyside - 109L	3	0	0	3	1	2	5	0	0
Sunnyside - Rural	4	0	0	3	1	2	5	0	0
Stony Brook (Grand Falls)	0	1	0	0	0	0	0	1	0
Stephenville (ACI)	2	2	2	0	0	1	1	0	1
Stephenville	3	2	1	0	0	0	1	0	3
Western Avalon 64L	0	2	1	4	1	3	5	0	2
Western Avalon 86L	0	1	1	3	1	1	4	0	0
Wiltondale	4	11	3	2	7	15	9	3	4
<b>Total NLH</b>	<b>2.46</b>	<b>2.65</b>	<b>1.96</b>	<b>2.52</b>	<b>4.51</b>	<b>2.45</b>	<b>4.57</b>	<b>2.32</b>	<b>3.48</b>
<b>Total CEA</b>	<b>1.05</b>					<b>1.03</b>	<b>1.38</b>	<b>1.121</b>	<b>N/A</b>

Note: CEA reports only 5-year averages for the period up to the end of 1996. Annual statistics are provided for 1997 onwards.

**System Average Interruption Duration Index (SAIDI) 1992-2000**  
(Minutes per year)

Delivery Point	1992	1993	1994	1995	1996	1997	1998	1999	2000
Bottom Brook (Wheelers)	0	23	0	0	0	0	1	0	5
Bear Cove	3	520	144	7066	582	207	414	52	48
Barchoix	2467	4	9	3957	1316	0	3686	135	788
Bay D'Espoir (St. Albans)	0	0	9	0	0	0	0	0	13
Bay L'Argent	195	40	259	135	7	240	67	171	239
Buchans	9	44	0	0	0	0	0	0	0
Coney Arm	0	16	2	0	5	0	115	0	1
Come By Chance T1	0	0	0	82	4	1	21	0	0
Come By Chance T2	0	0	0	82	4	1	25	0	0
Cow Head	13	86	59	1246	324	0	34	637	8
Conne River	138	4	9	431	185	0	181	135	929
Daniels Harbour	80	62	193	6749	554	133	11	540	32
Deer Lake Plant	0	56	37	0	0	0	0	0	0
Deer Lake TL-225	0	56	37	2	0	0	0	0	0
Deer Lake Power	0	0	0	0	0	6	0	0	0
Doyles (Codroy)	288	768	526	0	360	220	210.5	0	1065
English Harbour West	773	4	9	3957	374	0	3686	233	736
Grandy Brook (Burgeo)	5	33	0	0	0	14	69	0	72
Grand Bay (Port Aux Basques)	1240	759	525	10	53	59	229.5	306	252
Grand Falls F.C. T1	0	244	0	0	0	334	0	0	0
Grand Falls F.C. T2	0	16	0	0	0	256	0	0	0
Glenburnie	68	47	8	67	27	261	20	92	265
Hope Brook T1	6	33	1	13	0	6	2	0	73
Hope Brook T2	6	33	1	4	0	6	2	0	73
Hawkes Bay	3	81	16	325	292	93	11	315	32
Hampden	113	16	2	0	5	0	115	0	1
Howley	0	16	2	0	0	0	115	0	0
Holyrood 38L	330	64	1539	116	9	9	185	0	0
Holyrood 39L	0	64	1057	111	9	9	127	0	0
Happy Valley Bus 12	-	-	-	-	-	146	246	771	338
Hardwoods	341	77	1232	78	17	29	154	0	0
Indian River 363L	0	16	2	0	0	0	2	0	4
Jacksons Arm	113	16	2	0	5	0	115	0	1
Long Harbour	0	1084	27	96	11	16	1862	0	0
Linton Lake	54	0	259	85	7	171	67	170	64
Main Brook	-	-	-	-	209	244	98	83	137
Massey Drive Bus 4 (DLP)	0	23	0	0	0	0	0	0	0
Massey Drive Bus 2 and 3 (NP)	0	23	0	0	0	0	0	0	0
Monkstown	178	60	259	340	7	392	54	171	186
Oxen Pond	320	56	974	82	15	35	225	0	0
Parsons Pond	140	124	183	7373	346	0	11	750	93
Plum Point	3	500	181	6960	586	135	122	106	48
Rocky Harbour	79	159	8	129	27	227	20	92	104
Roddickton	-	-	-	-	209	220	100	87	137
St. Anthony	-	-	-	-	228	227	102	82	123
South Brook	942	1185	4	0	0	0	0	79	0
Salt Pond	57	1	6	84	7	170	70	6	0
Springdale	0	16	4	0	0	165	0	0	0
Sunnyside - 100L	0	0	0	0	7	8	52	0	0
Sunnyside - 109L	0	0	0	0	7	8	54	0	0
Sunnyside - Rural	110	0	0	70	7	169	15	0	0
Stony Brook (Grand Falls)	0	16	0	0	0	0	0	0	0
Stephenville (ACI)	6	36	44	0	0	80	1	0	2
Stephenville	31	36	10	0	0	0	1	0	51
Western Avalon 64L	0	64	0	95	9	9	75	0	0
Western Avalon 86L	0	52	0	88	9	9	135	0	0
Wiltondale	68	47	8	67	27	261	20	92	275
<b>Total NLH</b>	<b>155.98</b>	<b>128.46</b>	<b>147.67</b>	<b>770.54</b>	<b>111.04</b>	<b>81.71</b>	<b>230.86</b>	<b>91.16</b>	<b>110.63</b>
<b>Total CEA</b>			<b>66.13</b>			<b>61.25</b>	<b>373.23</b>	<b>81.33</b>	<b>N/A</b>

Note: CEA reports only 5-year averages for the period up to the end of 1996. Annual statistics are provided for 1997 onwards.

**System Average Restoration Index (SARI) 1992-2000**  
(Minutes per Interruption per year)

Delivery Point	1992	1993	1994	1995	1996	1997	1998	1999	2000
Bottom Brook (Wheelers)	0.00	23.00	0.00	0.00	0.00	0.00	1.00	0.00	5.00
Bear Cove	1.50	43.33	28.80	1413.20	27.71	69.00	69.00	10.40	4.36
Barachoix	1233.50	4.00	9.00	791.40	329.00	0.00	526.57	22.50	87.56
Bay D'Espoir (St. Albans)	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	13.00
Bay L'Argent	195.00	40.00	51.80	22.50	7.00	80.00	6.09	85.50	79.67
Buchans	3.00	44.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coney Arm	0.00	16.00	2.00	0.00	1.00	0.00	115.00	0.00	1.00
Come By Chance T1	0.00	0.00	0.00	27.33	4.00	0.50	4.20	0.00	0.00
Come By Chance T2	0.00	0.00	0.00	27.33	4.00	1.00	3.57	0.00	0.00
Cow Head	13.00	28.67	11.80	207.67	18.00	0.00	11.33	127.40	8.00
Conne River	69.00	4.00	9.00	86.20	46.25	0.00	25.86	22.50	103.22
Daniels Harbour	13.33	20.67	21.44	1349.80	23.08	14.78	5.50	135.00	32.00
Deer Lake Plant	0.00	56.00	37.00	0.00	0.00	0.00	0.00	0.00	0.00
Deer Lake TL-225	0.00	56.00	37.00	2.00	0.00	0.00	0.00	0.00	0.00
Deer Lake Power	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00
Doyles (Codroy)	72.00	109.71	175.33	0.00	360.00	110.00	26.31	0.00	177.50
English Harbour West	386.50	4.00	9.00	791.40	93.50	0.00	526.57	38.83	81.78
Grandy Brook (Burgeo)	2.50	33.00	0.00	0.00	0.00	7.00	11.50	0.00	72.00
Grand Bay (Port Aux Basques)	53.91	151.80	131.25	5.00	53.00	29.50	28.69	76.50	36.00
Grand Falls F.C. T1	0.00	122.00	0.00	0.00	0.00	334.00	0.00	0.00	0.00
Grand Falls F.C. T2	0.00	16.00	0.00	0.00	0.00	64.00	0.00	0.00	0.00
Glenburnie	17.00	4.27	2.67	33.50	3.86	17.40	2.22	30.67	53.00
Hope Brook T1	2.00	33.00	1.00	6.50	0.00	3.00	1.00	0.00	36.50
Hope Brook T2	2.00	33.00	1.00	2.00	0.00	3.00	1.00	0.00	36.50
Hawkes Bay	1.50	7.36	4.00	65.00	15.37	93.00	5.50	78.75	32.00
Hampden	56.50	16.00	2.00	0.00	1.00	0.00	115.00	0.00	1.00
Howley	0.00	16.00	2.00	0.00	0.00	0.00	115.00	0.00	0.00
Holyrood 38L	55.00	64.00	513.00	38.67	9.00	9.00	37.00	0.00	0.00
Holyrood 39L	0.00	64.00	352.33	27.75	9.00	9.00	31.75	0.00	0.00
Happy Valley Bus 12	-	-	-	-	-	20.86	246.00	51.40	26.00
Hardwoods	113.67	38.50	410.67	19.50	17.00	14.50	38.50	0.00	0.00
Indian River 363L	0.00	16.00	2.00	0.00	0.00	0.00	2.00	0.00	4.00
Jacksons Arm	56.50	16.00	2.00	0.00	1.00	0.00	115.00	0.00	1.00
Long Harbour	0.00	271.00	27.00	32.00	11.00	8.00	465.50	0.00	0.00
Linton Lake	54.00	0.00	43.17	10.63	7.00	57.00	6.09	170.00	64.00
Main Brook	-	-	-	-	17.42	61.00	5.44	5.19	5.07
Massey Drive Bus 4 (DLP)	0.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Massey Drive Bus 2 and 3 (NP)	0.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monkstown	59.33	60.00	51.80	37.78	7.00	130.67	13.50	85.50	62.00
Oxen Pond	40.00	28.00	487.00	27.33	15.00	35.00	32.14	0.00	0.00
Parsons Pond	35.00	31.00	26.14	1843.25	16.48	0.00	5.50	150.00	93.00
Plum Point	1.50	45.45	36.20	773.33	30.84	27.00	30.50	26.50	4.36
Rocky Harbour	19.75	14.45	2.67	64.50	3.86	16.21	2.22	30.67	26.00
Roddickton	-	-	-	-	17.42	44.00	5.56	5.44	5.07
St. Anthony	-	-	-	-	6.33	28.38	5.37	5.47	4.92
South Brook	471.00	237.00	4.00	0.00	0.00	0.00	0.00	79.00	0.00
Salt Pond	14.25	0.50	2.00	16.80	7.00	56.67	5.38	2.00	0.00
Springdale	0.00	16.00	4.00	0.00	0.00	165.00	0.00	0.00	0.00
Sunnyside - 100L	0.00	0.00	0.00	0.00	7.00	4.00	10.40	0.00	0.00
Sunnyside - 109L	0.00	0.00	0.00	0.00	7.00	4.00	10.80	0.00	0.00
Sunnyside - Rural	27.50	0.00	0.00	23.33	7.00	84.50	3.00	0.00	0.00
Stony Brook (Grand Falls)	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stephenville (ACI)	3.00	18.00	22.00	0.00	0.00	80.00	1.00	0.00	2.00
Stephenville	10.33	18.00	10.00	0.00	0.00	0.00	1.00	0.00	17.00
Western Avalon 64L	0.00	32.00	0.00	23.75	9.00	3.00	15.00	0.00	0.00
Western Avalon 86L	0.00	52.00	0.00	29.33	9.00	9.00	33.75	0.00	0.00
Wiltondale	17.00	4.27	2.67	33.50	3.86	17.40	2.22	30.67	68.75
<b>Total NLH</b>	<b>63.37</b>	<b>48.41</b>	<b>75.28</b>	<b>305.86</b>	<b>24.63</b>	<b>33.40</b>	<b>50.50</b>	<b>39.27</b>	<b>31.77</b>
<b>Total CEA</b>			<b>63.04</b>			<b>59.47</b>	<b>270.46</b>	<b>72.55</b>	<b>N/A</b>

Note: CEA reports only 5-year averages for the period up to the end of 1996. Annual statistics are provided for 1997 onwards.

*Comparison of St. Anthony/Roddickton/Main Brook Systems to Total NLH System and CEA*

**System Average Interruption Frequency Index (SAIFI) 1992-2000**

(Sustained Interruptions per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
St. Anthony	-	-	-	-	20.00	5.67	18.33	15.67	26.33
<b>Total NLH</b>	<b>2.46</b>	<b>2.65</b>	<b>1.96</b>	<b>2.52</b>	<b>4.51</b>	<b>2.45</b>	<b>4.57</b>	<b>2.32</b>	<b>3.48</b>
<b>Total CEA</b>	<b>1.05</b>					<b>1.03</b>	<b>1.38</b>	<b>1.12</b>	<b>N/A</b>

**System Average Interruption Duration Index (SAIDI) 1992-2000**

(Minutes per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
St. Anthony	-	-	-	-	215.33	230.33	100.00	84.00	132.33
<b>Total NLH</b>	<b>155.98</b>	<b>128.46</b>	<b>147.67</b>	<b>770.54</b>	<b>111.04</b>	<b>81.71</b>	<b>230.86</b>	<b>91.16</b>	<b>110.63</b>
<b>Total CEA</b>	<b>66.13</b>					<b>61.25</b>	<b>373.23</b>	<b>81.33</b>	<b>N/A</b>

**System Average Restoration Index (SARI) 1992-2000**

(Minutes per Interruption per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
St. Anthony	-	-	-	-	10.77	40.65	5.45	5.36	5.03
<b>Total NLH</b>	<b>63.37</b>	<b>48.41</b>	<b>75.28</b>	<b>305.86</b>	<b>24.63</b>	<b>33.40</b>	<b>50.50</b>	<b>39.27</b>	<b>31.77</b>
<b>Total CEA</b>	<b>63.04</b>					<b>59.47</b>	<b>270.46</b>	<b>72.55</b>	<b>N/A</b>

**Comparison of Industrial Delivery Points to Total NLH System and CEA****System Average Interruption Frequency Index (SAIFI) 1992-2000**

(Sustained Interruptions per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
ACI - Grand	0.50	1.50	0.00	0.00	0.00	2.50	0.00	0.00	0.00
ACI - Step	2.00	2.00	2.00	0.00	0.00	1.00	1.00	0.00	1.00
Corner Bro	0.00	0.50	0.00	0.00	0.00	0.50	0.00	0.00	0.00
North Atlan	0.00	0.00	0.00	3.00	1.00	1.50	6.00	0.00	0.00
<b>Total NLH</b>	<b>2.46</b>	<b>2.65</b>	<b>1.96</b>	<b>2.52</b>	<b>4.51</b>	<b>2.45</b>	<b>4.57</b>	<b>2.32</b>	<b>3.48</b>
<b>Total CEA</b>	<b>1.05</b>					<b>1.03</b>	<b>1.38</b>	<b>1.12</b>	<b>N/A</b>

**System Average Interruption Duration Index (SAIDI) 1992-2000**

(Minutes per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
ACI - Grand	0.00	130.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
ACI - Step	6.00	36.00	44.00	0.00	0.00	80.00	1.00	0.00	2.00
Corner Bro	0.00	11.50	0.00	0.00	0.00	3.00	0.00	0.00	0.00
North Atlan	0.00	0.00	0.00	82.00	4.00	1.00	23.00	0.00	0.00
<b>Total NLH</b>	<b>155.98</b>	<b>128.46</b>	<b>147.67</b>	<b>770.54</b>	<b>111.04</b>	<b>81.71</b>	<b>230.86</b>	<b>91.16</b>	<b>110.63</b>
<b>Total CEA</b>	<b>66.13</b>					<b>61.25</b>	<b>373.23</b>	<b>81.33</b>	<b>N/A</b>

**System Average Restoration Index (SARI) 1992-2000**

(Minutes per Interruption per year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
ACI - Grand	0.00	86.67	0.00	0.00	0.00	118.00	0.00	0.00	0.00
ACI - Step	3.00	18.00	22.00	0.00	0.00	80.00	1.00	0.00	2.00
Corner Bro	0.00	23.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00
North Atlan	0.00	0.00	0.00	27.33	4.00	0.67	3.83	0.00	0.00
<b>Total NLH</b>	<b>63.37</b>	<b>48.41</b>	<b>75.28</b>	<b>305.86</b>	<b>24.63</b>	<b>33.40</b>	<b>50.50</b>	<b>39.27</b>	<b>31.77</b>
<b>Total CEA</b>	<b>63.04</b>					<b>59.47</b>	<b>270.46</b>	<b>72.55</b>	<b>N/A</b>

Note: CEA reports only 5-year averages for the period up to the end of 1996. Annual statistics are provided for 1997 onwards.