Q. With respect to the diesel units at St. Anthony, Roddickton, and Hawkes Bay:

1. When did each become part of the Island Interconnected system?
2. Provide a chart showing the number of times each unit has been used in each year since it became interconnected, the reason it was used on each occasion and the class of customers in need of emergency or peaking capacity on each occasion.
3. Provide the number of kWh generated by each unit in each year since it was interconnected, the amount of fuel consumed by that unit in that year, the cost of the fuel consumed in that year, the capital costs incurred in relation to that unit in that year and the operating and maintenance costs associated with that unit in that year.
A. 1. The table below shows when the generating plants in question became a part of the Island Interconnected System.

| Generation Source | Available to Island <br> Interconnected <br> System |
| :--- | :--- |
| St. Anthony Diesel Plant | September 7, 1996 |
| Roddickton Diesels | September 7, 1996 |
| Hawke's Bay Diesels | June, 1971 |

2. Records back to 1971 for Hawke's Bay are not readily available thus data since 1992 are used to answer this question. The table shows
the number of times during 1992 through 2000 when each of the plants were operated. Operation for testing is excluded from the table.

| Year | St. Anthony <br> Diesel | Roddickton <br> Diesel | Hawke's Bay <br> Diesel |
| :--- | :---: | :---: | :---: |
| 1992 |  |  | 12 |
| 1993 |  |  | 12 |
| 1994 |  |  | 9 |
| 1995 | 15 | 5 | 18 |
| 1996 | 12 | 5 | 15 |
| 1997 | 11 | 2 | 2 |
| 1998 | 6 | 0 | 5 |
| 1999 |  |  | 6 |

The Hawke's Bay diesels have been used to maintain acceptable voltages to Hydro rural customers during scheduled or forced outages on the Great Northern Peninsula. Prior to the construction of additional lines (1990) on the Great Northern Peninsula, Hawke's Bay diesels were used regularly to maintain acceptable voltage to Hydro rural customers with all available transmission in-service. As well, it was used to supply generation requirements for the entire system on January 2, 1996. It helped meet the peak of 1303 MW on that day. Hawke's Bay diesels were also on for system support prior to 1992. One known case identified from a record peak report is February 3, 1990. On that day it was on to meet a system peak of 1316 MW. On both of these occasions Hawke's Bay diesel served all customer classes. On all occasions since the interconnection of St. Anthony and Roddickton, the Roddickton and St. Anthony diesel plants were used to supply Hydro rural customers during forced and scheduled transmission outages on the Great Northern Peninsula.
3. The table below provides the number of kWh generated by each unit, the amount of fuel consumed by that unit, the cost of the fuel consumed, operating and maintenance costs and capital costs for each year from 1992 to 2000.

Hawkes Bay Diesel

|  | Energy <br> Produced <br> (Gross kWh ) | Fuel Consumed <br> (gallons) | Fuel Cost | O\&M Cost | Capital <br> Cost |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1992 | 192,000 | 12,915 | $\$ 12,811$ | $\$ 92,622$ | $\$ 0.00$ |
| 1993 | 168,000 | 11,531 | $\$ 11,070$ | $\$ 103,796$ | $\$ 0.00$ |
| 1994 | 115,200 | 8,464 | $\$ 8,061$ | $\$ 91,940$ | $\$ 0.00$ |
| 1995 | 600,000 | 38,386 | $\$ 47,656$ | $\$ 97,938$ | $\$ 0.00$ |
| 1996 | 600,000 | 39,011 | $\$ 51,750$ | $\$ 136,628$ | $\$ 0.00$ |
| 1997 | 129,600 | 9,672 | $\$ 12,546$ | $\$ 28,283$ | $\$ 0.00$ |
| 1998 | 115,888 | 8,092 | $\$ 8,915$ | $\$ 69,624$ | $\$ 0.00$ |
| 1999 | 170,056 | 11,492 | $\$ 14,019$ | $\$ 67,358$ | $\$ 0.00$ |
| 2000 | 51,100 | 4,947 | $\$ 7,088$ | $\$ 76,971$ | $\$ 0.00$ |

## St. Anthony Diesel

| Energy <br> Produced <br> (Gross kWh) | Fuel Consumed <br> (gallons) | Fuel Cost |  | O\&M Cost |
| :--- | ---: | ---: | ---: | ---: | | Capital <br> Cost |
| :---: |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
| $1,051,700$ |

## Roddickton Diesel

Energy Produced (Gross kWh) (gallons)
1992
1993
1994
1995

| 1996 | 180,960 | 12,939 | $\$ 15,853$ | $\$ 59,080$ | $\$ 0$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1997 | 66,000 | 5,266 | $\$ 6,963$ | $\$ 19,549$ | $\$ 0$ |
| 1998 | 122,400 | 8,050 | $\$ 10,022$ | $\$ 41,445$ | $\$ 0$ |
| 1999 | 19,800 | 875 | $\$ 969$ | $\$ 9,338$ | $\$ 0$ |
| 2000 | 0 | 0 | $\$ 0$ | $\$ 10,086$ | $\$ 0$ |

