Q. For each of the interconnected systems, provide the forecast marginal cost of energy for the peak and off-peak periods of each month for the years 2001 through 2006. In addition, provide the Loss of Load Hours (LOLH) for the years 2001 through 2006 assuming no new generation is added to the system beyond that already committed. Show the proportion of the LOLH attributable to the peak and off-peak periods of each month for the years 2001 through 2006. Provide an estimate of the levelized cost of the least-cost peaking option. Provide the marginal cost of supply on the Rural Isolated Systems and for L'Anse au Loup.

A. The report Marginal Time of Use (TOU) Costs completed in September 1984 indicated that the seasonality of load affected costs more than the daily loads as the ratio of winter costs to summer costs was 1.5 whereas the ratio of on peak costs to off peak in winter was only 1.1. It is expected that this conclusion would not change significantly for current conditions. Marginal costs addressing the peak and off-peak periods within each month are not currently available.

The short run marginal cost of energy for the Labrador Interconnected System in all periods is tied to Hydro's cost of energy from the Churchill Falls hydroelectric project, which is as follows:

Year	Mills/KWh
2001	2.793
2002	2.645
2003	2.610
2004	2.575
2005	2.554

Please refer to Schedule XII of H.G. Budgell's Prefiled Testimony for the LOLH for the years 2001 through 2006 assuming no new generation is added to the system beyond that already committed.

At the present time, Hydro's generation planning model is not able to identify the LOLH attributable to the peak and off-peak periods in each month. However, the seasonal contributions to the annual LOLH for the Island Interconnected System are available and shown in the following table:

Seasonal Contribution to Annual LOLH (hrs)

	2001	2002	2003	2004	2005	2006
January	0.65183	0.91727	0.57046	0.35363	0.49922	0.69829
February	1.75291	2.37583	1.63272	0.83825	1.47770	1.99253
March	0.12459	0.18731	0.11460	0.06848	0.10028	0.14566
April	0.00115	0.00225	0.00088	0.00035	0.00065	0.00119
May	0.00030	0.00068	0.00018	0.00007	0.00012	0.00029
June	0.00000	0.00005	0.00000	0.00000	0.00000	0.00002
July	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
August	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
September	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
October	0.00006	0.00013	0.00001	0.00002	0.00003	0.00006
November	0.01059	0.01761	0.00290	0.00481	0.00765	0.01196
December	0.31518	0.46396	0.12600	0.18659	0.26597	0.37622
Total	2.85663	3.96508	2.44774	1.45218	2.35162	3.22622

The levelized cost of the least-cost peaking option is estimated to be $101/kW-yr.

The attached table gives the short run marginal cost of supply on the Rural Isolated System based on fuel only. The short run marginal cost of supply for L'Anse au Loup is given for both diesel operation and for purchases under the secondary energy contract from Hydro-Quebec.

Short Run Marginal Cost
Rural Isolated Systems and L'Anse au Loup

	2001	***2002***	***2003***	***2004***	***2005***	***2006***
	$/kWh	$/kWh	$/kWh	$/kWh	$/kWh	$/kWh
Mary's Harbour	0.116	0.112	0.110	0.107	0.111	0.111
St. Lewis	0.140	0.136	0.133	0.129	0.135	0.135
Ramea	0.110	0.108	0.105	0.102	0.106	0.106
Nain	0.116	0.113	0.110	0.107	0.112	0.112
Little Bay Islands	0.130	0.126	0.123	0.120	0.125	0.125
Charlottetown	0.127	0.123	0.120	0.117	0.122	0.122
Black Tickle	0.139	0.136	0.132	0.129	0.134	0.134
Harbour Deep	0.152	0.148	0.145	0.141	0.147	0.147
Rigolet	0.137	0.134	0.131	0.127	0.132	0.132
Makkovik	0.130	0.126	0.123	0.120	0.125	0.125
Postville	0.146	0.143	0.139	0.136	0.141	0.141
Grey River	0.138	0.135	0.132	0.128	0.133	0.133
Davis Inlet	0.140	0.137	0.134	0.131	0.136	0.136
St. Brendans	0.145	0.141	0.138	0.135	0.140	0.140
McCallum	0.148	0.144	0.141	0.138	0.143	0.143
Rencontre East	0.140	0.136	0.133	0.130	0.135	0.135
Petites	0.225	0.220	0.215	0.210	0.218	0.218
Cartwright	0.135	0.132	0.129	0.126	0.131	0.131
William's Harbour	0.199	0.194	0.190	0.186	0.193	0.193
Port Hope Simpson	0.136	0.132	0.130	0.127	0.131	0.132
Norman Bay	0.201	0.196	0.192	0.188	0.194	0.195
Paradise River	0.202	0.197	0.193	0.188	0.195	0.195
Hopedale	0.153	0.149	0.147	0.144	0.148	0.149
Francois	0.175	0.171	0.168	0.165	0.170	0.171
L'Anse au Loup						
- Diesel	0.138	0.135	0.132	0.129	0.134	0.133
- purchase from HQ	0.051	0.049	0.048	0.046	0.048	0.048