Q. Provide details, showing the calculations of interest coverage for the years 1992 to 2000 and forecast for 2001 and 2002. Follow the format used in JCR, Schedule IX in calculating interest expense. Provide separate calculations for interest coverage on regulated and non-regulated assets.

A. The attached schedule shows the calculation of Hydro's interest coverage (excluding subsidiaries) but including non-regulated sales for the years 1992 to 2000 and forecast for 2001 and 2002, following the format used in JCR, Schedule IX to calculate interest which is different than the normal calculation of interest coverage as approved by the Board.

The calculation of regulated interest coverage is based on the definition of gross interest as historically defined and margin as per the cost of service.

Q. (a) Provide copies of reports completed by Hydro recommending the implementation of Reliability Centered Maintenance (RCM) pilot projects.

(b) Provide information regarding the results and current status of these pilot projects.

A. (a) In 1997, Transmission and Rural Operations initiated a review of its maintenance philosophy. Attached is an internal memo outlining the findings and recommendations of the review completed by the Maintenance Specialist and Senior Electrical Engineer.

(b) RCM Pilot Projects

In 1997, Newfoundland and Labrador Hydro initiated an investigation of the applicability of reliability centered maintenance in the Transmission and Rural Operations Division.

<u>Phase 1 of the project included:</u>

- An overview of the experience of other utilities with RCM and the benefits achieved.
- A high level review of Transmission and Rural Operation's current maintenance practices and of the maintenance support information systems.
- An estimation of the internal resources required for the pilot projects.
- A plan and timetables for the implementation of the three pilots.
- Criteria for pilot system selection.

- Interviews of maintenance craft personnel and maintenance engineering staff.

Three systems, one in each of generation, transmission and distribution areas of Transmission and Rural Operations, were selected to be pilot projects.

The systems recommended and chosen for pilot studies were:

- Generation: Rigolet isolated diesel generating plant
- Distribution: L'Anse-au-Loup on the south coast of Labrador
- Transmission: Come by Chance terminal station and adjoining transmission lines.

<u>Phase 2 of the project encompasses performance of the pilot studies:</u>

The goals of the pilot projects were:

- Prove the concept of RCM.
- Acquire in-house expertise and capabilities.
- Assess the viability of applying the RCM approach to other systems in Transmission and Rural Operations.

The strategies and key findings identified from the Pilot's RCM analysis were used to select proposed maintenance tactics. An analysis of the comparison of the current maintenance effort and the proposed RCM maintenance effort identified the benefits. (It is important to note that the actual benefits may somewhat differ, since individual regions are not always performing maintenance using the same intervals).

The overall results of the review indicated that the RCM concept is applicable to the systems reviewed in the pilots and that this process can also be applied to the other systems in Transmission and Rural Operations.

The pilots were started in 1997 and completed in 1998. The results of the pilots suggested an implementation time frame of three to five years with a payback of around 1.2 to 2.1 years.

Q. Using the current forecast, expand JCR, Schedule XIV to provide estimates of the Rate Stabilization Plan balances for year-end 2003 and year-end 2004.

A. The estimates of the Rate Stabilization Plans are as follows:

Year	Balance	Retail	Industrial
		($ millions)	
2003	84.7	62.0	22.7
2004	54.8	37.0	17.8

Q. (a) Provide the utility common equity ratio for 2002 assuming a 75% dividend payout (KCM, pages 23-24);

(b) Provide a comparison of the dividends paid from 1995 to 2000 and forecast for 2001 to 2002 with the dividends that would have been paid in each year if the 75% payout target was applied.

(c) Provide the estimated impact on revenue requirement for 2002 of financing the $70 million dividend payout as shown in the projected statement of cash flows (JCR, Schedule XIII).

A. (a) Please see schedule below.

Based on 75% Dividend Payout	2002 (000's)	%
Total Debt at end of year	1,316,147	81.50%
Employee Future Benefits	25,123	1.56%
Total Equity at end of	273,632	16.94%
	1,614,902	100.00%

(b) Please see attached schedule.

(c) It is estimated that the revenue requirement would be reduced by $1.7 million if the $70 million dividend were eliminated.

Year	Net Regulated Operating Income (000'S)	75% of Net Regulated Op Income (000'S)	Dividends Paid During Year - ex Recall and CFLCo (000'S)	As a % of Net Reg Op Income
1995	22,829	17,122	14,500	64%
1996	20,693	15,520	9,688	47%
1997	31,351	23,513	12,357	39%
1998	24,847	18,635	10,489	42%
1999	13,015	9,761	1,309	10%
2000	5,829	4,372	10,026	172%
2001	13,727	10,295	11,976	87%
2002	9,610	7,208	70,147	730%
	141,901	106,426	140,492	

Q. Provide a copy of Hydro's financial plan to achieve the 80/20 short-term target for debt/equity (WEW, page 14, line 20). If no such plan exists in writing, provide details of Hydro's current intentions.

A. It is Hydro's intention to move towards an 80:20 debt/equity ratio over a reasonable period of time. A key factor in moving towards an 80:20 debt/equity ratio is achieving an appropriate return on equity in rates, comparable to investor owned utilities as well as a stable dividend policy. Once Hydro has received further direction from the PUB regarding an appropriate return on equity and further discussions have taken place with the shareholder regarding Hydro's role and confirmation of a stable dividend policy, Hydro will be in a position to better assess its plan to achieve an 80/20 short term target for its debt/equity.

Q. (a) Provide a report on the cost benefit analysis performed to justify the purchase of the J.D. Edwards suite of products (WEW, page 19, lines 17-20).

(b) Compare actual to forecast costs regarding this purchase.

A. (a) Please find attached the business case which was used in the decision to purchase the JDE suite of products.

(b) The table below outlines the budget and actual costs for the purchase and installation of the JDE suite of products.

	Budget	Actual
Total Capital	**$13,520,000**	**$12,829,520**
Less CF(L)Co	**2,528,000**	**2,022,228**
Total Hydro	**10,992,000**	**10,807,292**
	Difference	**184,708**

Q. For the budget item identified below, answer the following question:

Budget Item	Amount	Description
B-15	$158,000	Install Intake Stop logs – Paradise River

This plant has been in service for a number of years. What makes installation of stop logs necessary now?

A. During the construction and commissioning in 1988 of the Paradise River power plant, stop logs and stop log installation and removal equipment was not procured due to budget restraints. However, provision was made so that stop logs could be installed when necessary. We have experienced wicket gate slippage caused by debris, where one or more wicket gates remain partially open upon unit shutdown resulting in having to close the intake gate. The intake gate provides the only means of shutting down the unit when this occurs. Since it is very important to maintain the integrity of the intake gate, they should be inspected on a regular interval. Without the stop logs any inspection (including diving inspection) of the intake gate guide is unsafe. As the plant is getting older, Hydro must have means available to safely perform inspections and if necessary repair as required.

Q. For the budget item identified below, provide the following information:

Budget Item	Amount	Description
B-20	$225,000	Upgrade Oil Systems for Fire Protection on Unit No. 3 - Holyrood

Provide a copy of the insurer's recommendation requiring installation of the containment dykes and the upgrade of sprinkler piping.

A. Please refer to the attached.

Q. For the budget Item identified below, provide the following information:

Budget Item	Amount	Description
B-18	$177,000	Purchase Track Machine – Cat Arm

(a) Provide the number of enclosed track machines that Hydro has on the island and the normal location of each vehicle.

(b) Provide instances where lack of such a vehicle resulted in a lengthening of any outage(s) of the Cat Arm facility and the cost of the extended outage(s).

A. (a) Following is the list of the enclosed track vehicles (Muskeg, Nodwell, Tereveh and LMC) on the island and their normal locations.

LOCATION	NUMBER OF VEHICLES
Bay d'Espoir	5
Bishops Falls	8
Port Saunders	3
Springdale	2
St. Anthony	3
Stephenville	5
Whitbourne	5
Happy Valley	1
Total	**32**

The vehicle budgeted and suitable for Cat Arm application is type LMC (with 32 inch wide track) and there is only one enclosed track machine of this type in the Hydro system which is normally located at Stephenville.

(b) Until 1998 there was a similar track machine or track truck available and stationed at Cat Arm to transport workers and material and groom a trail for the use of individual snowmobiles. This machine experienced maintenance problems and was disposed of at the end of its useful life. Since then, alternate methods using a Go Track to groom the trail in winter months have been used, however this has proven to be ineffective especially in heavy (deep) snow. During this period (when the proper track machine was not available) extended outages have been avoided. Trail grooming has been a difficult task and has increased the travel time to the plant. It is concluded that lack of a suitable track machine at Cat Arm has a potential for extending the unit outages during the winter months.

Q. For the budget item identified below, provide the following information:

Budget Item	*Amount*	*Description*
B-19	$801,000	Purchase and Install Continuous Emission Monitoring

(a) Provide a copy of the health risk assessment that concluded quantification of emissions is required.

(b) Explain why the other monitoring equipment currently in place is not sufficient to calculate emissions.

(c) Detail the benefits that will accrue from enhancement of control of the combustion process.

A. (a) Attached is a copy of "Holyrood Risk Assessment Final Report Summary", November 1999.

(b) The equipment currently installed measure only $S0_2$ emissions. Without an exact SO_X / NO_X emission ratio, the impingement of gaseous NO_X cannot be determined. The actual SO_X / NO_X emission ratio is dependent on:

- The sulphur content of the fuel;
- The nitrogen in the fuel; and
- The excess oxygen present during combustion.

The actual emission ratios for all fuel composites are required to assess the viability of assumptions based on the above report.

(c) Air emissions from the Holyrood Thermal Plant consist of, in part, particulate, NO_x, SO_x and acid aerosols. Continuous emission monitoring will provide the data necessary to control the combustion process and permit management of emissions. The plant currently does not have this capability.

Q. For the budget item identified below, answer the following questions or provide the information as appropriate:

Budget Item	Amount	Description
B-21	$152,000	Purchase and Install Closed Circuit Surveillance System - Holyrood

a) Provide details on resources currently allocated to site security and the annual cost of these resources.

b) Provide details on the plan for future monitoring of the surveillance system.

c) Provide details on the budget estimate.

d) Identify any operating savings or costs related to the purchase of the surveillance system.

A. a) Site security services at Holyrood are contracted out to Shannahan Investigation who provide 24 hour security coverage for seven days per week. The annual cost of this contract service is $85,617.48. The current contract will expire in June 2003.

b) In addition to the services provided by the security contractor, it is planned to install a closed circuit television (CCTV) surveillance system to especially improve the security on the north side of the plant and at the dock where significant vandalism has been experienced. The proposed

monitoring system will consist of four cameras located at various locations and the associated four monitors will be located at the Guardhouse and one monitor at the Control Room.

c) Budgeted amount includes material and installation cost of $113,500 which includes:

Equipment Supply	$74,000
Material Supply (Purchases)	23,000
Construction, Internal Forces	16,500
Engineering, Internal Forces	10,000
Corporate O/H, IDC, Esc., Contingency	28,600
Total	$152,100

d) There are no direct savings identified, however, it is expected that vandalism (broken lights, ground wire theft, etc.) will be reduced or eliminated.

Q. For the budget item identified below, provide the following information:

Budget Item	*Amount*	*Description*
B-26	$496,000	Upgrade TL227 (69kV Berry Hill – Daniels Harbour)

(a) For each outage from 1996 to 2000, provide the following:

(i) date of outage;

(ii) cause of outage;

(iii) duration of outage; and

(iv) number of customers affected.

(b) Provide the SAIDI and SAIFI for each of past five years for substations served through this line.

A. (a) The outage information for 1996 to 2000 is given in the following table:

1996 - TL227			
Date of Outage	**Cause of Outage**	**Duration (Min)**	**# of Customers Affected**
02/10/96	Adverse Weather	155	719
03/22/96	Adverse Environment	44	1021
08/10/96	Adverse Weather	181	302
08/30/96	Adverse Weather	7	569
12/22/96	Adverse Weather	1	302
12/22/96	Adverse Weather	1	302
12/22/96	Adverse Weather	1	302
12/22/96	Adverse Weather	86	302
12/23/96	Adverse Weather	2	267
12/23/96	Adverse Weather	3	719
12/23/96	Adverse Weather	1	719
12/23/96	Adverse Weather	42	302
12/31/96	Adverse Weather	2	302
12/31/96	Adverse Weather	2	302
12/31/96	Adverse Weather	1	1021
12/31/96	Adverse Weather	1	1021
12/31/96	Adverse Weather	1	1021
12/31/96	Adverse Weather	44	1021

1997/1998 – TL227			
Date of Outage	**Cause of Outage**	**Duration (Min)**	**# of Customers Affected**
-	-	0	0
There were no sustained outages on TL227 for 1997/1998			
1999 – TL227			
Date of Outage	**Cause of Outage**	**Duration (Min)**	**# of Customers Affected**
10/17/99	Adverse Weather	96	449
10/17/99	Adverse Weather	4	718
10/17/99	Adverse Weather	425	718
2000 – TL227			
Date of Outage	**Cause of Outage**	**Duration (Min)**	**# of Customers Affected**
06/22/00	Defective Equipment	8	449
06/22/00	Defective Equipment	93	269
09/27/00	Defective Equipment	32	304

(b) The SAIDI and SAIFI information for 1996 to 2000 is given in the following table:

DELIVERY POINT STATISTICS 1996 - 2000				
YEAR	**DELIVERY POINT**	**SAIFI SI (1)**	**SAIFI MI (2)**	**SAIDI (Hrs.)**
1996	COW HEAD	18	0	5.4
	PARSONS POND	21	11	5.77
	DANIELS HARBOUR	24	1	9.23
1997	COW HEAD	0	4	0
	PARSONS POND	0	3	0
	DANIELS HARBOUR	9	3	2.22
1998	COW HEAD	3	9	0.57
	PARSONS POND	2	9	0.18
	DANIELS HARBOUR	2	6	0.18
1999	COW HEAD	5	47	10.6
	DANIELS HARBOUR	4	34	9
	PARSONS POND	5	1	12.5
2000	COW HEAD	1	1	0.13
	DANIELS HARBOUR	1	1	0.53
	PARSONS POND	1	0	1.55

(1) SI – sustained interruptions

(2) MI – momentary interruptions

Q. For the budget item identified below, provide the following information:

Budget Item	***Amount***	***Description***
B-35	$981,000	Provide Service Extensions – Central, Northern and Labrador

(a) Provide the 5-year historical expenditures, customer counts and unit extension costs per customer addition (material and labour) by region.

(b) Provide a forecast of the number of customers and methodology used to develop the budgeted amounts.

A. (a) The following table shows the 5-year expenditure per customer addition by region:

Service Extensions - Central , Northern and Labrador

Expenditures - 1996 - 2000

Year	Materials	Labour (Installation)	Total	No. of Customers	Average Per Customer
Central					
1996	183,061	247,151	430,212	177	2,431
1997	175,248	195,560	370,808	171	2,168
1998	181,656	139,535	321,191	134	2,397
1999	234,541	219,107	453,648	172	2,637
2000	208,458	190,401	398,859	207	1,927
Northern					
1996	120,915	182,869	303,784	220	1,381
1997	163,927	165,778	329,705	228	1,446
1998	159,673	146,375	306,048	185	1,654
1999	205,338	211,287	416,625	170	2,451
2000	178,853	202,853	381,706	230	1,660
Labrador					
1996	319,578	151,770	471,348	383	1,231
1997	309,667	241,711	551,378	312	1,767
1998	213,414	222,369	435,783	353	1,235
1999	216,372	162,942	379,314	273	1,389
2000	325,918	256,009	581,927	250	2,328

(b) The forecast of the number of customers for 2001 and 2002 is given in NP-108 (a). The method used for budgeting service extensions is primarily historical trend analysis over the previous five years, as well as incorporating information on proposed community development and economic forecasts. Service extension budgets are difficult to forecast and can be greatly impacted by government expenditures and economic growth.

Q. For each project identified below, provide a cost benefit analysis comparing the proposed project with one additional overhaul.

Budget Item	***Amount***	***Description***
B-45	$297,000	Replace 136 kW Diesel Unit No. 279 – Grey River
B-47	$238,000	Replace 75 kW Diesel Unit No. 252 – Petites
B-52	$299,000	Replace 136 kW Diesel Unit No. 266 – William's Harbour
B-53	$318,000	Replace 300 kW Diesel Unit No. 288 – Black Tickle
B-54	$301,000	Replace 250 kW Diesel Unit No. 293 – Rigolet

A. For the project identified, it is not meaningful to complete a cost benefit analysis comparing the proposed project with one additional overhaul. Replacement of the units is based on a number of issues related to the availability of parts, service life, equipment condition versus Original Equipment Manufacturer specifications, operating hours, overhauls, reliability, maintenance history and costs.

All units identified for replacement have at least 5 major overhauls and between 87,000 and 108,000 operating hours. They are considered to be beyond their useful reliable life. The proposed replacements will enhance system reliability. In addition, the new units will offer lower maintenance costs, improved availability of parts, decreased emissions, reduced fuel consumption and lower lube oil consumption.

Q. For the budget items identified below, provide the following information:

Budget Item	***Amount***	***Description***
B-46	$282,000	Replace 136 kW Diesel Unit No. 284 – Harbour Deep
B-57	$515,000	Upgrade Diesel Plant - Harbour Deep

(a) Provide more detailed rationale for the upgrading of the diesel plant building.

(b) Provide a detailed breakdown of the costs associated with the project.

(c) Provide the following for the Harbour Deep system for the period 1996-2000:

(i) energy sold;

(ii) annual peak demand;

(iii) capital expenditures;

(iv) operating costs; and

(v) the number of domestic/commercial customers.

(d) Indicate the viability of extending the life of the existing plant for an additional 2 to 5 years without this capital expenditure.

A. (a) The existing facility consists of two industrial type trailers, one containing the plant equipment (diesel hall) and the other containing the office/storage/washroom. These trailers were salvaged from a construction site and used to replace an older plant in 1981.

The diesel hall is very congested and doesn't meet either area or height requirements for the safe performance of operating and

maintenance activities. With insufficient space to install an adequate lifting device, maintenance workers have utilized building roof beams in an effort to facilitate lifting of heavy engine parts resulting in damage to these beams. Spacing between control panels and trailer walls is limited and not to CSA standards. Hence, performing maintenance and repairs is very difficult.

The plant presently has no fire detection/alarm system which is considered essential for semi-attended operation. Lighting in the engine hall and other areas of the plant is inadequate for the operation and maintenance work being performed. The upgrade will also address environmental concerns in that the existing plant does not provide for adequate spill containment.

(b) Specific costs budgeted for the projects identified are as follows:

<u>Replace 136 kW Unit 284 – Harbour Deep</u>	
Material Supply	$150,000
Labour	30,200
Engineering	8,000
Project Management	14,200
Inspection and Commissioning	18,000
Corporate O/H, IDC, Esc., Contingency	<u>61,300</u>
TOTAL (2002)	$281,700
Engineering (2001)	<u>11,000</u>
TOTAL	$292,700

Upgrade Diesel Plant – Harbour Deep	
External Contracts	$290,000
Internal Forces	20,000
Land Survey/Environment	6,000
Engineering, Inspection, Project Mgmt., Commissioning	79,000
Corporate O/H, IDC, Contingency	120,000
TOTAL (2002)	515,000
Engineering (2001)	35,000
TOTAL	$550,000

(c) The following is the information for the Harbour Deep System for the period 1996 – 2000:

Year	Energy Sold (MWh)	Annual Peak Demand (kW)	Capital Expenditures $	Operating Cost $	Customers	
					Domestic	General Service
1996	762	272	--	238,410	74	16
1997	738	273	--	198,255	72	15
1998	732	269	--	267,684	71	15
1999	759	286	--	281,944	71	15
2000	712	257	251,198	336,856	69	14

(d) It is not viable or practical to extend the life of the existing plant for an additional 2 to 5 years. Without the proposed capital expenditures, the current safety, environmental and operational issues cannot be mitigated.

Q. For the budget item identified below, provide the following information:

Budget Item	***Amount***	***Description***
B-58	$828,000	Upgrade Diesel Plant – St. Lewis

(a) Provide more detailed rationale for the upgrading of the diesel plant building.

(b) Provide a detailed breakdown of the costs associated with the project.

(c) Provide the following for the St. Lewis system for the period 1996-2000:

(i) energy sold;

(ii) annual peak demand;

(iii) capital expenditures;

(iv) operating costs; and

(v) the number of domestic/commercial customers.

A. (a) The existing facility is of wooden construction and consists of the original diesel hall with subsequent additions to accommodate a storage room, workshop and an office. It is too small to accommodate the increase in generation capacity since it was first constructed in 1970.

The diesel hall is very congested and lacks floor area for a laydown space during overhaul of engines, and wall space to accommodate upgrading of electrical systems. As well the low ceiling causes heat entrapment and extreme temperatures during the warmer months. This low ceiling, combined with a lack of wall space, prevents the installation of an adequate ventilation system. There is no fire detection system. The upgrade will also address environmental

concerns in that the existing plant does not provide for adequate spill containment.

(b) Specific costs budgeted for this project are as follows:

External Contracts	$400,000
Internal Forces	20,000
Land Surveys/Environment	6,000
Engineering, Inspection, Proj. Mgmt., Commissioning	145,000
Corporate O/H, IDC, Escalation, Contingency	198,000
TOTAL	$769,000
Engineering (2002)	$59,000
TOTAL	$828,000

(c) The following is the information for the St. Lewis system for the period 1996 – 2000.

Year	Energy Sold (MWh)	Annual Peak Demand (kW)	Capital Expenditures $	Operating Cost $	Customers	
					Domestic	General Service
1996	1674	470	162,200	378,742	108	28
1997	1609	496	--	324,423	105	27
1998	1517	456	2,190	435,774	99	27
1999	1587	464	48,275	450,092	104	27
2000	1686	480	6,339	428,095	105	29

Q. For the budget items identified below, provide the following information:

Budget Item	***Amount***	***Description***
B-37	$173,000	Replace Poles – South Brook and King's Point System
B-38	$669,000	Replace Insulators - English Harbour West
B-39	$317,000	Replace Insulators – South Brook Distribution System
B-40	$300,000	Replace Conductor / Poles - Burgeo
B-48	$206,000	Upgrade Distribution Lines – St. Anthony Distribution System
B-49	$556,000	Relocation of Line – Cook's Harbour

Provide the following for each year from 1996 to 2000

(i) SAIDI;

(ii) SAIFI;

(iii) total customer minutes of outage; and

(iv) number of customers served by each distribution feeder.

A. The following tables include the information for B-37 – Replace Poles – South Brook and King's Point System

B–37 South Brook	**1996**	**1997**	**1998**	**1999**	**2000**
SAIDI	6.54	12.62	20.92	12	16.33
SAIFI	2.77	4.65	8.65	5.01	4.73
Total Customer-Min. of Outage	671,004	1,314,812	2,220,449	1,296,000	1,810,670
No. Customers Served Feeder 1	288	294	309	318	329
Feeder 2	148	152	153	154	157
Feeder 3	292	296	302	309	313
Feeder 4	390	396	401	409	420
Feeder 5	429	431	434	436	452
Feeder 6	19	20	20	20	20
Feeder 7	144	147	150	154	157

B-37 King's Point	**1996**	**1997**	**1998**	**1999**	**2000**
SAIDI	8.76	2.77	1.50	17.27	22.66
SAIFI	4.05	2.18	1.34	6.25	8.48
Total Customer-Min. of Outage	315,468	99,705	54,061	623,792	821,198
No. Customers Served Feeder 1	490	491	492	492	494
Feeder 2	110	108	109	110	110

The following table includes the information for B-38 – Replace Insulators – English Harbour West.

B-38 English Hr. West	1996	1997	1998	1999	2000
SAIDI	23.08	18.60	6.83	30.03	32.30
SAIFI	12.12	12.80	4.34	6.60	15.14
Total Customer-Min. of Outage	1,095,377	860,436	320,464	1,738,737	1,596,912
No. Customers Served Feeder 1	677	683	688	692	697

The table on B-37 South Brook on the previous page includes the information for B-39 Replacement Insulators – South Brook Distribution System.

The following table includes the information for B-40 – Replace Conductor/Poles – Burgeo.

B-40 Burgeo	1996	1997	1998	1999	2000
SAIDI	6.89	1.52	1.92	0.30	14.04
SAIFI	2.08	3.18	1.32	0.48	3.24
Total Customer-Min. of Outage	348,058	76,634	97,019	15,120	705,931
No. Customers Served Feeder 1	80	83	83	83	83
Feeder 2	365	365	365	365	364
Feeder 3	318	317	315	314	312
Feeder 4	79	78	78	78	79

The following table includes the information for B-48 Upgrade Distribution Lines – St. Anthony Distribution System.

B-48 St. Anthony	**1996**	**1997**	**1998**	**1999**	**2000**
SAIDI	14.82	8.72	6.18	5.94	11.62
SAIFI	7.19	4.46	1.56	1.45	5.40
Total Customer Min. of Outage	1,594,615	940,925	647,760	653,061	1,276,776
Feeder 2	427	429	427	577	577
Feeder 3	851	851	851	687	687
Feeder 6	515	519	515	568	568

The following table includes the information for B-49 Relocation of Line – Cook's Harbour.

B-49 Cooks Harbour	**1996**	**1997**	**1998**	**1999**	**2000**
SAIDI	18.22	53.67	11.28	66.50	24.84
SAIFI	7.13	5.10	2.63	8.15	10.96
Total Customer Min. of Outage	243,780	714,900	150,900	889,889	277,169
Feeder 7	223	222	223	223	186

Q. For the budget item identified below, answer the following questions or provide the information as appropriate:

Budget Item	Amount	Description
B-61	$517,000	Purchase Additional Corporate Applications

(a) Provide details on the corporate applications being purchased including the rationale for each purchase.

(b) How do these applications relate to the J.D. Edwards software system that Hydro currently uses for some of its applications?

(c) Provide Hydro's policies and practices with respect to the capitalizing and expensing of expenditures related to software for both internal or external software development including labour, hardware, software, maintenance, consulting, and implementation services, and other costs.

A. (a) The $517,000 for the purchase of Additional Corporate Applications consists of : $117,500 for Short Term Load Forecast Software and $399,100 for Corporate Applications Software.

Short Term Load Forecast Software:

Obtaining accurate forecasts of load expected on the system for the short term (several days ahead) is becoming an increasingly important task as Hydro attempts to optimize thermal unit efficiency and minimize spill events, while maintaining a high degree of reliability on its bulk system. These "day-ahead" load forecasts form the basis for decisions regarding equipment removal for maintenance, as well as

provide the basis for changing the number of thermal units on-line at Holyrood.

Benefits that will accrue as a result of this proposal include:

- Improved ability to take advantage of opportunities to optimize thermal unit dispatch at Holyrood.
- Improved decision-making ability regarding equipment removal for maintenance and,
- Improved ability to predict and mitigate system spills.

Corporate Applications:

Though J.D. Edwards is an integrated system providing for the bulk of Hydro computing needs, the Corporate Applications budget provides funds for purchase and implementation of specialty software, add-on modules and 3rd party solutions where these are the only viable options to address business needs.

(b) The Short Term Load Forecast Software is a specialty software package, not related to the JDE Software application system. The remainder of the, Corporate Applications, funds will be used to acquire specialty software, add-on modules and 3rd party solutions that are identified during the year as required to provide additional functionality.

(c) Hydro's policy is to capitalize the costs associated with the acquisition/development and implementation of computer software instances where projected costs exceed $25,000.

Q. For the budget item identified below, provide the following information:

Budget Item	Amount	Description
B-60	$104,000	Acquire Document Management & Imaging System

(a) Provide justification to support purchase of this system.

(b) Provide estimates of capital expenditures for subsequent years for the additional phases of this system.

A. (a) A Document Management System which covers all phases of a document life cycle has been identified as a priority for the Corporation. Currently the Corporation has a records management system, which is antiquated. Additionally Document Solutions were traditionally implemented on a project basis to afford a departmental solution as opposed to a Corporate solution. Imaging solutions were installed in the same fashion. A Corporate Solution is required to provide better control, access and management of the life cycle for all documents.

(b) Once a detailed assessment of the requirements has been completed, future project costs will be identified.

Q. For the Budget item identified below, answer the following questions or provide the information as appropriate:

Budget Item	Amount	Description
B-64	$2,109,000	Replacement of AS-400 Computers

(a) Provide details to support the cost estimate.

(b) Provide details on the impact of deferring the purchase of this item and continuing to utilize the existing equipment.

(c) Is computer capacity being increased as a result of the replacement?

(d) If capacity is being increased, indicate the capacity increments proposed and the reasons for the capacity increases by computer applications.

A. (a) Details of the Cost Estimate are as follows :

Cost estimate AS400 Production Computer	1,700,000
Cost estimate for AS400 Development Computer	300,000
Project Management	3,000
Labor	5,000
Inspection and Commissioning	2,000
Corporate O/H, IDC, ESC., Contingency	95,300
Total	$2,109,000

(b) The impact of deferring the purchase of this item and continuing to utilize the existing equipment would prevent Hydro from taking

advantage of enhancements of the latest software releases. In particular the existing AS400 system cannot adequately support the migration of the JDE financial suite to the upgraded version of the product (One World). In 2002, Hydro will be initiating a One World pilot in order to assess the technology and business implications of moving to One World.

(c) The computer capacity is being increased as a result of this replacement.

(d) The capacity increments proposed are for a 60 % increase in performance on the Production AS400 and 40% increase in the Development AS400. The capacity increases are needed to allow Hydro to migrate to the JD Edwards One World product, which provides a Web based or Client server interface to the computer applications.

Q. Provide the reports on the studies undertaken in 1996, 1998 and 2000 on the distribution system cost classification (JAB, page 2, lines 10-22).

A. The requested reports on the studies undertaken in 1996, 1998, 2000 on the distribution system cost classification are attached.

Q. Provide details of the generation credit for Newfoundland Power in the 2002 Cost of Service (JAB), Schedule II).

A. The credit is calculated as follows:

Newfoundland Power Installed Capacity	MW
Hydraulic	94.0
Gas Turbine	46.9
Diesel	7.0
Total	147.9
Less 18.5% Reserve*	23.1
Capacity Credit	124.8

*Note – expressed as a percent of load and calculated as 147.9 (1 – 1/1.185)

The current estimate of the credit in JAB Schedule II is in error and will be corrected as above.