

1 Q. The 2004 Capital Budget (B-10) included the replacement of Unit 2 Governor
2 Controls at Cat Arm, a project which was not approved in Board Order P.U.
3 29(2003). Please provide an update on the service record of these controls
4 since the 2004 Capital Budget Application and the current plan for
5 maintaining these controls.

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8 A. Since the 2004 Capital Budget Application there have not been any further
9 card failures on either of the two governors at Cat Arm. The attached table
10 shows the spare card quantities and availability from the manufacturer and
11 reflects the current status. Although some cards are still available from the
12 manufacturer, items 1, 8, 14 and 17 (highlighted) are not. The table shows
13 the number of cards in service in both governors (Units 1 & 2) and the
14 number in inventory. As an example, there are 4 of Item 1 in service but only
15 1 spare in inventory.

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17 The repair services for all cards are available from the manufacturer (VaTech
18 Hydro) until the end of 2004. VaTech Hydro has informed Hydro that all
19 cards can be manufactured on a custom basis; however, the client will have
20 to support the set-up costs, which will make the price high if only one or two
21 are procured. The delivery time would be unacceptable in the case of an in-
22 service failure where no spare is available.

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24 Hydro's current five-year capital budget plan includes a provision for the
25 replacement of one governor at Cat Arm in 2006. The retired governor would
26 be retained for spare parts for the remaining governor and the situation
27 closely monitored as is the case for the exciter on Unit 2. However, pending
28 the results of the ongoing review of the status of the Unit 2 exciter (see PUB-

1 2 NLH), it may be prudent to consider proceeding with the governor
2 replacement at the same time to minimize the outage time for the
3 replacements and the risk of unavailable capacity and energy from the
4 facility. In this event an application for approval would be made to the Board.

Cat Arm Governors --- Spare Card Quantities and Availability

PUB-1 NLH Attachment

Item	Card Type	Description	Quantity in Service	Quantity in Inventory	Inventory Cost	Available Y/N	2004 Cost	Comments
1	EBK-10	Card, needle correction	4	1	267	N		
2	EMS-11	Card, opening limiter	4	2	1194	Y	11,112.92	See Note 2
3	EPR-11	Card, needle position	14	3	2430	Y	2825.25	
4	RXW-11	Card, current converter	20	3	150	Y	592.24	
5	EDT-11	Card, speed measuring	2	1	246	Y	2504.16	
6	EDT-22	Card, speed transmitter	2	1	465	Y	4429.23	
7	EMS-12	Card, speed set point	2	2	1194	Y	11,112.92	See Note 2
8	ESU-11	Card, control & monitoring	2	2	531	N		
9	PBK-10	Card, test & measure	6	1	159	Y	2283.05	
10	RAB-10	Card, needle coincidence	4	1	177	Y	3881.67	
11	RDV-12	Card, speed controller	2	1	1000	Y	3441.58	
12	RIV-10	Card, integrator	4	1	700	Y	5068.37	
13	RPV-10	Card, speed controller	6	2	816	Y	8921.56	
14	RUM-20	Card, damping switchover	24	2	1512	N		
15	RWA-10	Card, multi-prints	4	1	183	Y	1708.27	
16	SPA-10	Card, coupler signal	8	3	981	Y	3881.67	
17	SRA-11	Card, relay	18	3	1005	N		
18	SVA-10	Card, logic	4	1	228	Y	4069.19	
19	RAV-10	Card, summing amplifier	2	1	288	Y	3257.44	
20	ETG-10	Card, deadband	2	1	498	Y	1545.43	
21	TS544U	Power Supply DC/DC converter	2	1	3453	Y		See note 3
22	TS354U	Power Supply auxiliary	4	1	462	Y		See note 3
23	TS355	Power Supply speed measuring	2	2	525	Y		See note 3
24	RFG-10	Function Generator	16	3	1662	Y	4134.83	

- 1) The availability of cards and the prices are as per supplier information.
- 2) The two Item 2 cards are ones which have been repaired and one of the two Item 7 cards is a repaired card.
- 3) VaTech Hydro advises that these power supplies are obsolete; however, replacements may be available from the original manufacturer.