

1 **Q. The Quarterly Regulatory Report for the Period ending March 31, 2007 (page 6)**  
 2 **states that NP employs a peak load management strategy which includes voltage**  
 3 **optimization and load curtailment in an attempt to reduce peak demand. The peak**  
 4 **load management strategy was implemented on four occasions during the 2006/2007**  
 5 **winter period from December 1st to March 31st. Peak demand for the 2006/2007**  
 6 **winter period occurred on December 29th, 2006. Implementation of the peak load**  
 7 **management strategy on that date reduced peak demand below plan by**  
 8 **approximately 23 MW. Please provide a detailed list of activities undertaken on**  
 9 **each of these four occasions identifying the contribution of each to the reduction in**  
 10 **peak. What was the value of the 23 MW reduction on December 29, 2006 to the**  
 11 **system?**

12  
 13 **A.** Newfoundland Power’s peak load management strategy includes voltage optimization  
 14 procedures, customer load curtailment and Company building load curtailment. Customer  
 15 load curtailment and Company building load curtailment are established strategies for  
 16 reducing peak demand, and as such are included in the calculation of the native peak  
 17 forecast as explained in the response to CA-NP-216.

18  
 19 The actual customer load curtailment and Company building load curtailment achieved  
 20 on the four occasions referred to in the question are provided in Table 1 below.  
 21

**Table 1**  
**2006/2007 Winter Season**  
**Impact of Load Curtailment Activities**

Date	Peak Load Management Period		Customer Load Curtailment (MW)	Curtailment of Load at Company Buildings (MW)
	Start	End		
2007/01/18	08:00	11:00	10.6	1.5
2007/01/18	17:00	18:00	9.7	0.0
2007/01/17	16:45	19:00	10.2	2.3
2006/12/29	16:30	18:30	7.2	1.8

22  
 23  
 24 The application of voltage optimization as a peak load management strategy is under  
 25 investigation by Newfoundland Power. Tests conducted over the past two winter seasons  
 26 indicate that, while system load decreases are achievable, further experience with voltage  
 27 control management is necessary to understand and manage its effects on the power  
 28 system and to assess its long-term value.

29  
 30 Due to the complex nature of the power system’s response to voltage reduction the  
 31 Company is unable to verify the actual amount of load reduction achieved at the time of

1 peak, and is therefore unable to provide an engineering value of load reduction for the  
2 occasions included in Table 1.  
3  
4 The value to consumers of peak load reduction to the system is discussed in the response  
5 to CA-NP-80.