

1 Q. **C-166, Replace Compressed Air Piping and Install Air Monitor, \$28,400**

2 Please provide reasons why or why not it would be possible and feasible to delay  
3 the installation of a second compressed air dryer for one year or two?  
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6 A. Currently, if the existing dryer at the Buchans Terminal Station either malfunctions  
7 or has to be taken out of service for a period of time for maintenance, the dryer has  
8 to be by-passed and the remainder of the compressed air system must remain in  
9 operation. This results in a potential for wet compressed air to be supplied to the  
10 air blast circuit breakers. Water vapour present inside the interrupting chamber of  
11 an air blast circuit breaker could potentially cause a pressure increase that may  
12 result in an explosive failure of the breaker. Two such failures have been  
13 experienced by Hydro since 2002 as indicated on page C-168 of the capital proposal  
14 report. Failures of this type not only present a risk to equipment, but also pose a  
15 significant safety risk for employees that may be in the vicinity when a failure  
16 occurs. Therefore, it is important that the installation of a backup air dryer at the  
17 Buchans Terminal Station not be delayed.  
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19 There are no government regulated standards requiring that backup dryers be  
20 installed for this application; however, due to the damaging effects that moisture in  
21 the compressed air system can cause on air blast circuit breakers, Hydro has  
22 adopted the philosophy of installing a backup air dryer in terminal stations  
23 undergoing compressed air system replacements.