

1 Q. **Reference: Economic and Technical Assessment, page 45 (p. 79 pdf)**

2 Citation:

3 Renewable Energy Penetration: Assuming the purchase of renewable energy at  
4 90% of fuel cost, it was concluded that consideration for renewable penetration  
5 (as per Appendix B) would have very little to no impact on the economic  
6 analysis.

7 a. Please justify the assumption that the purchase price of renewable energy would be at 90%  
8 of fuel cost.

9 b. If the cost of purchasing renewable energy were 50% of fuel cost, what would be the  
10 implications of substantial renewable energy penetration on the economic analysis?

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13 A. a. The assumption that the purchase price of renewable energy would be at 90% of fuel cost is  
14 based on the negotiated power purchase rate in the existing power purchase agreement for  
15 renewable energy with St. Mary's River Energy in Mary's Harbour. It is assumed that any  
16 new project or expansion of existing projects would be at the same rate as the existing  
17 agreement in Mary's Harbour.

18 b. The results of the economic analysis assuming 50% renewable energy penetration at 50% of  
19 fuel cost are presented in Table 1. As indicated, interconnected solutions would have the  
20 lowest lifecycle cost.

**Table 1: Economic Analysis with 50% Renewable Energy Penetration  
at 50% of Fuel Cost (\$ million)**

	<b>Cumulative Net Present Value</b>
Alternative 1	162
Alternative 2	169
Alternative 3a	137
Alternative 3b	139