## Q. <u>TRANSMISSIONS</u>

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**PUB 42.0** 

Is there evidence that the lines in question are in imminent peril or likely to fail in the next 12 months?

If so, what is the calculated probability of such failure?

If not, what rationale can NP provide for proceeding with this project in 2006?

 A. As noted in the response to PUB 41.0 NP, the evidence with respect to the condition of 110L is outlined in 3.2 110L Transmission Line Rebuild. This evidence, which is outlined in Section 2.0 of the report, consists of the results of a detailed inspection of the components of the line that revealed evidence of substantial deterioration of numerous components; the fact that the line has been de-rated to 30% of its design capacity due to deterioration of the conductor; and, the incidence of unplanned outages on the line.

Design standards for transmission lines are established having regard to local weather conditions. Since the construction of 110L in 1958, the applicable design standards have increased as a result of the severe weather recorded in the area. Given the existing condition of the line, there is a likelihood that the line would fail in a significant way if the weather conditions approached the design parameters.

The proposal to rebuild a portion of 110L is made in the context of Newfoundland Power's transmission line rebuild strategy outlined in 3.1 Transmission Line Rebuild Strategy, and is based on objective assessment of the observed condition of the line. As noted in that report, the important role transmission lines play in providing reliable service to large numbers of customers requires they be rebuilt before they deteriorate to the point that they fail in service.

Newfoundland Power has not calculated the probability of imminent failure of the line. Such a calculation would involve an assessment of a number of variables that are difficult to estimate with any degree of confidence. In Newfoundland Power's judgment, it would not be prudent to schedule major transmission line capital work on the basis of such a calculation.