

- 1 **Q. (Reference NLH-NP-013a)**
2 **It is stated "The sample size of SF6 breakers used to derive the 27 year value**
3 **was 44. The sample size of vacuum breakers used to derive the 20-year value**
4 **was four." Does NP believe these sample sizes are statistically significant?**
5 **What minimum sample size is generally needed to establish statistical**
6 **significance?**
7
- 8 A. The average age of failures of Newfoundland Power's vacuum and SF6 breakers was
9 presented for informational purposes to demonstrate the Company's experience with
10 failures of these types of breakers. In Newfoundland Power's *2025 Capital Budget*
11 *Application*, report *2.1 Substation Refurbishment and Modernization, Section 2.2*
12 *Substation Asset Assessment*, it was stated that the Company's experience with vacuum
13 and SF6 breakers is that they require replacement earlier than oil-filled breakers. No
14 projects are being justified based on these average failure ages.