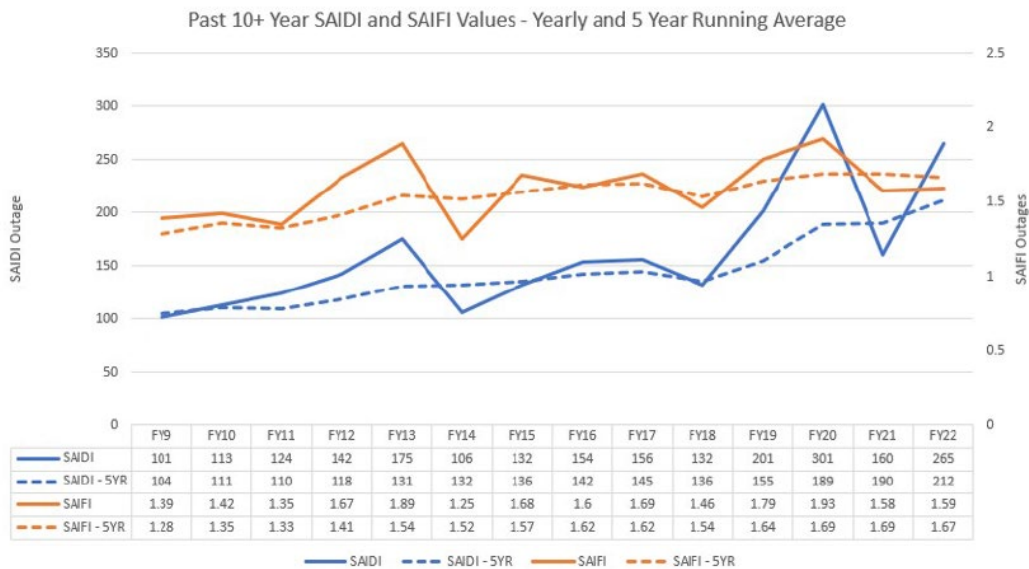


REFERENCE:

Tab 07, page 15-16, Figure 7.8 and Figure 7.9.

PREAMBLE TO IR (IF ANY):

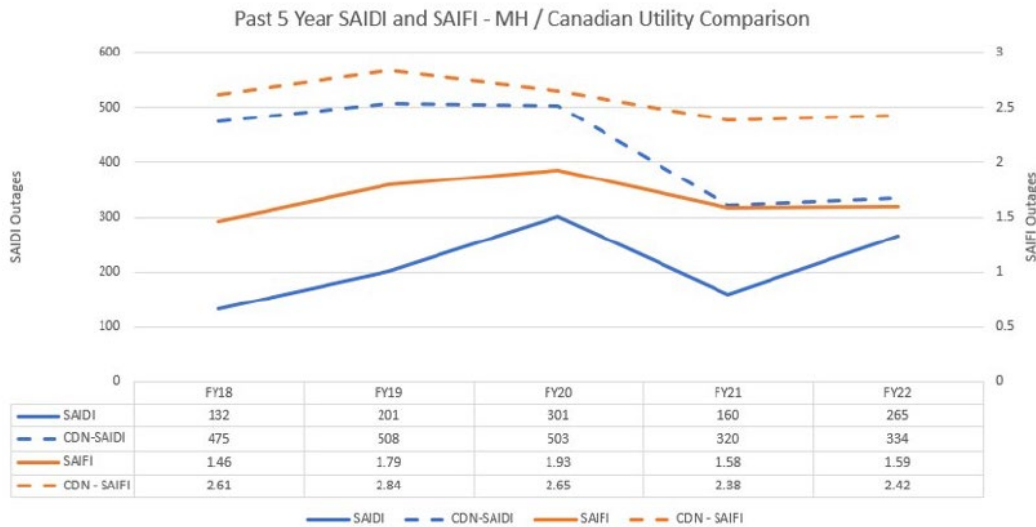
Figure 7.8 5-Year Historic Average of SAIDI and SAIFI Values



Benchmarking of SAIFI and SAIDI values to Canadian utilities is available through Electricity Canada. As can be seen in Figure 7.9 below, Manitoba Hydro’s distribution performance (shown with a solid line) has historically been better than the Canadian average.

The figure also demonstrates that the average Canadian utility showed improved SAIFI and SAIDI values in recent years, while Manitoba Hydro’s metrics have been deteriorating. The primary reason for the decline in Manitoba Hydro’s performance trends is failure of aging assets. Per the 2021 Service Continuity Report (Electricity Canada) Manitoba Hydro distribution outages were caused by equipment failure 35% of the time, while the Canadian average is almost half, at 19%.

Figure 7.9 5-Year History SAIDI and SAIFI Canadian Utility Comparison

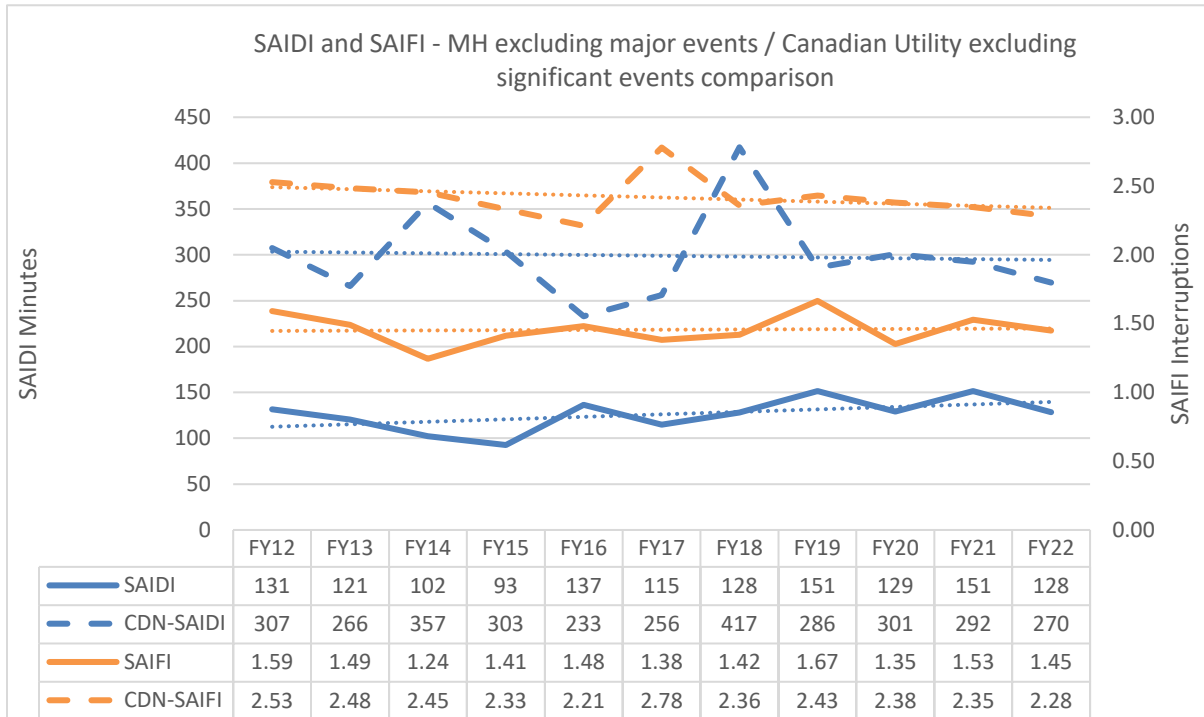


QUESTION:

- a) Please revise Figure 7.8 as follows:
 - i. To exclude major events or event days (e.g. weather and forest fires)
 - ii. Add CDN-SAIDI and CDN-SAIFI
 - iii. Add linear trend lines for SAIDI, SAIFI, CDN-SAIDI and CDN-SAIFI
 - iv. Update the table associated with all the revised Figure 7.8 data
- b) Please explain the reasons for the significant increases in MH SAIDI in each of the years FY20 and FY22.
- c) If known, please explain the reasons for the significant decrease in CDN-SAIDI in FY21 and FY 22.
- d) Referring to the 2021 Service Continuity Report (Electricity Canada), please break out SAIDI and SAIFI values into those caused by equipment failure and those caused by other causes (non-equipment failures) per the following:
 - i. Please provide SAIDI(Equipment) and SAIDI (Other Causes - Not Equipment) for both Canada and MH.
 - ii. Please provide SAIFI(Equipment) and SAIFI (Other Causes - Not Equipment) for both Canada and MH.

RESPONSE:

a) Please see the figure below with major events removed for Manitoba Hydro and Canadian Utilities.



Please note the following:

- Canadian utilities are not consistent in how they calculate major events. 73% of Canadian utilities use IEEE 2.5 beta¹, whereas the remaining 27% of Canadian utilities, including Manitoba Hydro use a different method. Manitoba Hydro defined major event days as categorized as days with > 2,000,000 customer minutes of interruption with a common outage cause, except for the ‘scheduled’ cause. The entire day was excluded for identified major event days.
- The trends suggest that the gap between Manitoba Hydro and Canadian reliability for SAIDI and SAIFI are closing.

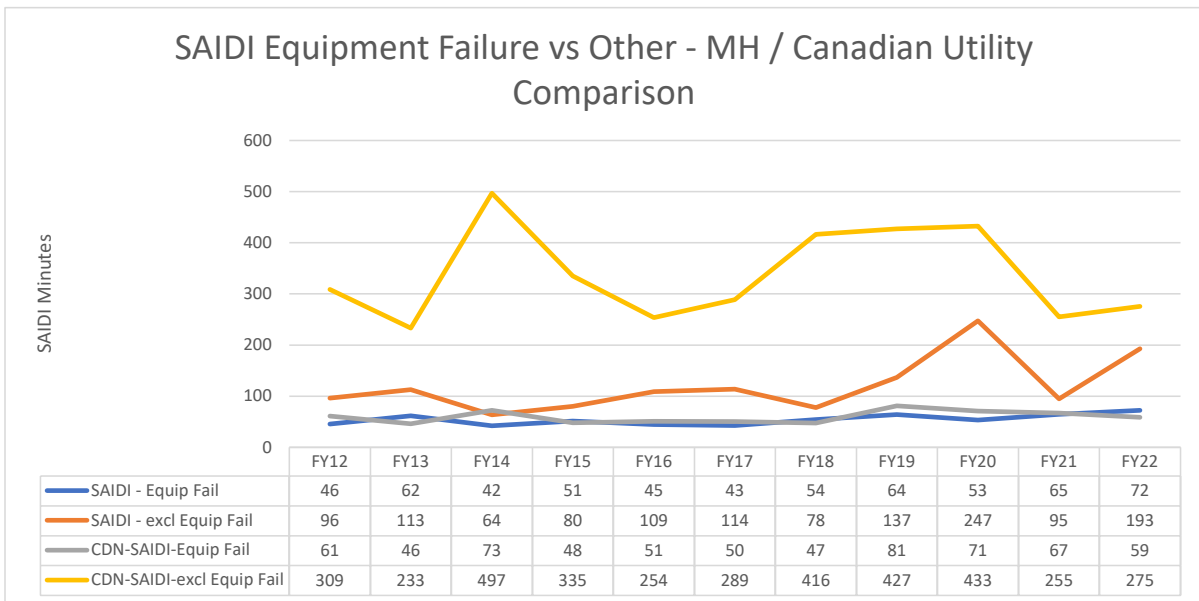
¹ Beta Method is a statistical method used to remove events beyond 2.5 standard deviations – See IEEE Std 1366 for a full detailed explanation of the method.

- By removing major events for Canadian utilities, on average over the past 11 years (FY12 to FY22):
 - Manitoba Hydro has 42% of Canadian SAIDI value
 - Manitoba Hydro has 60% of Canadian SAIFI value

b) Please refer to Figure 7.10 (page 22) of Tab 7 of Application.

c) The reasons for the significant decrease in CDN-SAIDI in FY21 and FY 22 are unknown to Manitoba Hydro.

d) i. The graphs below provide the with SAIDI and SAIFI metrics due to equipment failure, and other causes shown separately. Additionally, please refer to MIPUG/MH I-75 d) for trends in SAIDI and SAIFI for equipment failure for FY12 to FY22.



ii.

