

LOL-HECO-IR-15

Ref: (HECO Application)

Question(s):

Who should we ask questions about how this project will improve the “Mean Time Between Failures” (MTBF) and the “Mean Time to Repair” (MTTR) for each transmission line in the project area, in the Pukele Service Area, in the Downtown Service Area, and for the island as a whole?

HECO Response:

HECO does not calculate Mean Time Between Failures and Mean Time to Repair for transmission and subtransmission lines. These are two of the indices used to measure the reliability of a utility’s system. HECO utilizes the indices in its Annual Service Reliability Reports filed with the Commission. (The latest copy was filed on September 21, 2004, as revised on September 29, 2004.) The three indices included in this report are:

1. AVERAGE SERVICE AVAILABILITY INDEX (ASA) - Total customer hours actually served as a percentage of total customer hours possible during the year. This indicates the extent to which electrical service was available to all customers. This index has been commonly referred to as the “Index of Reliability.” A customer-hour is calculated by multiplying the number of customers who are affected by the length of time they are affected.
2. SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIF) - The number of customer interruptions per customer served during the year. This index indicates the average number of interruptions experienced by all customers serviced on the system.
3. CUSTOMER AVERAGE INTERRUPTION DURATION INDEX (CAID) - The interruption duration per customer interrupted during the year. This index indicates the

average duration of an interruption for those customers affected by a sustained interruption.

These indices are calculated on a system wide basis and are not calculated for individual areas or transmission lines.