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TO PROVIDE AN ANSWER TO THE QUESTION:

BEYOND 2006, COULD SQIs BE USED AS A COST DRIVER FOR ANALYTICAL PURPOSES?

ANSWER:

Yes. Beyond 2006, the analysis underlying the Comparators and Cohorts mechanism can realistically explore the inclusion of SQIs as Cost Drivers.

Discussion: Service quality can be described as extended attributes of electricity service. Service quality can assume several dimensions including power reliability and customer service. Within the context of the proposed Comparators and Cohorts Mechanism, and LDC benchmarking generally, the issue of service quality and direct costs would seem to suggest three related questions:

1. Are the direct costs of LDC services systematically affected by the service quality realized by electricity consumers?
2. If relationships between service quality and direct costs exist, how and to what degree are LDC costs affected by service quality?
3. Presuming that relationships between service quality and direct costs are present, can SQIs be employed to explain differences in LDC costs in a reliable fashion?

Service quality attributes can be in the form of *marketable goods*, where the LDC charges for explicit service options such as enhanced power quality, energy audits of customer facilities, and insurance product offerings to customers in remote areas. Service quality also includes *non-marketable goods*, which are implicit within the transport services (and customer services) provided by the LDCs. Non-marketable service quality includes, for example, the responsiveness of the LDC to customer bill inquiries, the expedition with which new customers are connected, and power reliability.

Service quality is likely to have measurable impact on the direct costs of local distribution service. It is appropriate to explore whether relationships between service quality and direct costs are inherent to electricity distribution services.

At the outset, we suggest the following approach to exploring the possible inclusion of service quality as cost drivers within the Comparators and Cohorts Mechanism beyond 2006:

- Categorize service quality dimensions into marketable and non-marketable goods.
- Define the quantities to measure service quality. Metrics for marketable goods are simply the quantities of the services provided. Metrics for non-marketable service quality are generally referred to as Service Quality Indicators (SQIs). As an example, metrics of power reliability include the widely applied SAIDI, CAIDI, and SAIFI measures. Also, *unserved energy* and the *cost of unserved energy* incurred by consumers are appropriate measures of reliability. Metrics of customer service can be obtained from the analysis of follow-up surveys of customers that have initiated service calls. As with all things regarding the Comparators and Cohorts Mechanism, the quality of the data and information regarding service quality metrics is important.
- Assess the impact of service quality on the direct costs of the LDCs using econometric methods. In the case of power reliability, observed or measured service quality within an annual period is likely to contain considerable random variation. Hence, perhaps a better approach is to assess the impact of observed power reliability over an extended period on the direct costs of the LDCs in a contemporary period.