



Consumer Data in the Power Sector: Availability, Accuracy, Access, and Privacy

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A few realities that need to align:

- Consumers are the ultimate node of any electricity system
- Data is exploding across the system (even before we have a "Smart Grid")
 - Prompts the Q: are discoms harnessing the data they already have?
- CONSUMER DATA is a unique subset of data
 - Obvious need (older) billing to cash
 - New need consumer efficiency, procurement optimization, prosumer, EV charging schedules etc.
 - ToD and Much More





Study Motivation:

Are utilities ready?

- Do you harness the data you already have (pre Smart Grid)?
- How do you keep data secure?
- How do consumers (or relevant others) see the data?





Study Objectives:

- Understanding <u>nature</u> of existing data, its <u>utilization</u> and <u>potential</u>
- Identifying <u>additional uses</u> of power sector data beyond today's basic needs for billing, operations, system monitoring etc.
- How do we improve of <u>privacy</u>, <u>ownership and rights</u> associated with power consumption data
- What are the <u>risks and possible implications</u> of errors, failures, etc.?





What happens if consumer data gets leaked?

- Is the utility liable?
- Is there a safety risk to the consumer?
 - Even without a smart meter, simple digital meters can give historical patterns with safety issues (is the house empty?)
- Profiling risks?
 - Strong measure of wealth, usage, etc.
 - On the other hand, discom may have a right to know (is a consumer running a commercial business at home, or an EV tariff for running a shop?





We have a short survey we request everyone to help with (just 4 Qs)

https://www.surveymonkey.com/r/HKHQ2PM





We will shortly release drafts on...

- 1. Best practices for utilities
 - How to handle privacy issues
 - This isn't rocket science other enterprises do this all the time (handling consumer data)
- 2. What consumer needs/rights/etc. could be for accessing their data

(contact us separately for discussions on those)





Thank You

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