IEEE Benchmarking
Draft 2008 Results

September 2009

Distribution Reliability Working Group
Benchmarking

- Data is Never exactly the same!
- Two main reasons for differences:
  - Data Collection Process/System Differences
  - Exclusion Criteria Differences (Basis)
- IEEE 1366-2003
  - addresses data basis issues by clearly defining the rules.
  - It **DOES NOT** address the data collection issues
The following slides...

- Show company performance using the IEEE 2.5 Beta method to segregate data into:
  - Day-to-Day operating Indices vs.
  - Performance considering the whole customer experience (All)
- To date more than 135 companies have participated in our benchmarking at sometime.
- Customer density, use of step restoration, computerized reporting system, connected model, level of devices recorded.
  - 99% of utilities use step restoration
  - 99% of utilities use a computerized reporting system
  - 90% of utilities had a connected model
    - 89% can record to the customer level
    - 96% can record to the transformer level
Classification of Respondents

- **Urban, Suburban, Rural**
  - Rural $\leq 50$ cust/mi (31 cust/km)
  - Suburban $> 50$ cust/mi $< 150$ cust/mi
  - Urban $\geq 150$ cust/mi (93 cust/km)

- **2008 Survey**
  - 13 Urban companies
  - 39 Suburban companies
  - 23 Rural companies
  - 1 Unclassified companies
Classification of Respondents

- 69,976,482 customers represented in US & Canada
- Small, Medium, Large
  - Small =≤ 100,000 customers
  - Medium >100,000 and <1,000,000 customers
  - Large ≥= 1M customers
- 2008 Survey
  - 11 Small companies
  - 37 Medium companies
  - 23 Large companies
  - 3 Unclassified size companies

Supporting details available only for a subset of respondents.
Respondents

- **More than 135 Companies** have responded at some time
- **2008 Survey**
  - **77** responded in 2008
    - 76 provided details

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<th>Percentile</th>
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<th>SAIDI All</th>
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# Summary Details by Utility Size

## Small Respondents 2008

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## Large Respondents 2008

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Regions represented by the participants...

Region 0: Spans States or Unknown
Region 1: Northeast
Region 2: Mid-Atlantic
Region 3: Southeast
Region 4: Midwest
Region 5: Southwest
Region 6: South
Region 7: Northwest
Data Review

- Reviewing “All” data, that is the data that includes everything customers experienced can lead to conclusions about how companies handle major events.

- The following slides show data without segmentation.
Day to Day Performance
Large Utilities

Minutes

Int./Year

137 21 55 6 109 105 86 66 84 29 23 17 20 49 53 47 52 15 12 94

SAIDI  CAIDI  SAIFI