The Importance and Benefits of Standards in the Electric Utility Industry



Canadian Association Electricity canadienne Association de l'électricité

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4.

THE ROLE OF STANDARDS IN UTILITY OPERATIONS

Standards have proven to be instrumental in streamlining utility operations.

MAINTENANCE

Standards and related protocol are used to train staff and to provide guidelines for commissioning and maintaining electricity systems. Standardization facilitates the development of maintenance procedures and greatly reduces the number of different types of devices deployed, thereby reducing the number of procedures that would be required with a greater diversity of technologies.

MANAGEMENT OF ASSETS

Standards allow for more efficient asset management. Standards reduce the number of variations in equipment and designs, and provide for a longer asset life-cycle. Standards and their associated documentation become records for utilities, easily referenced and retained for the life of the asset.

OCCUPATIONAL HEALTH AND SAFETY

Safety standards in the electricity industry provide guidance on common practices. These Live Working Standards are enforced to ensure the well-being of both utility employees and the public in locations where electrical supplies are installed, operated, and maintained. An example of a Live Working Standard is CAN/ULC-S801-14 (Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission, and Distribution).⁶ Specialized safety standards, such as S801, are written by utilities for their own use in collaboration with a standards group. This ensures the standards incorporate the unique requirements of electric utilities. The content is vetted through various utility professionals in order to provide a consistent approach nationwide. The result are standards that mitigate injury, as shown by CEA benchmarking data from 2013 (seen in the chart below).

2013 ALL INJURY/ILLNESS FREQUENCY RATE (INJURIES PER 200,000 HOURS)

2013 LOST TIME INJURY FREQUENCY RATE (LOST TIME INJURIES PER 200,000 HOURS)



IMPROVEMENT SINCE 2009

7.37%

6 ULC Standards. "CAN/ULC-S801-10, Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission, and Distribution," 2010.