

# Reliability Certification

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# Overview

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1. What is Reliability Certification?
2. Why is Reliability Certification relevant now?
3. What are the benefits of Certification?
4. Case Study – ESKOM
5. Reliability Certification in the US
6. ReliabilityOne™



# What is Reliability Certification?

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...a service provided annually to utilities to assure senior management and external stakeholders that the reported reliability statistics materially reflect the level of electric service reliability that the average customer actually experienced during a given time period.



## Why is Reliability Certification relevant now?

- More than ever, electric utilities both in the US and around the world are being held accountable for the reliability of service they provide to customers
- Mandatory reporting of reliability results is now commonplace
- Some jurisdictions have gone further and provide for rewards and penalties based on the reported performance achieved

Yet,

- The processes and systems used to collect and report reliability performance were typically designed for engineering and operations purposes, not regulatory or financial purposes.

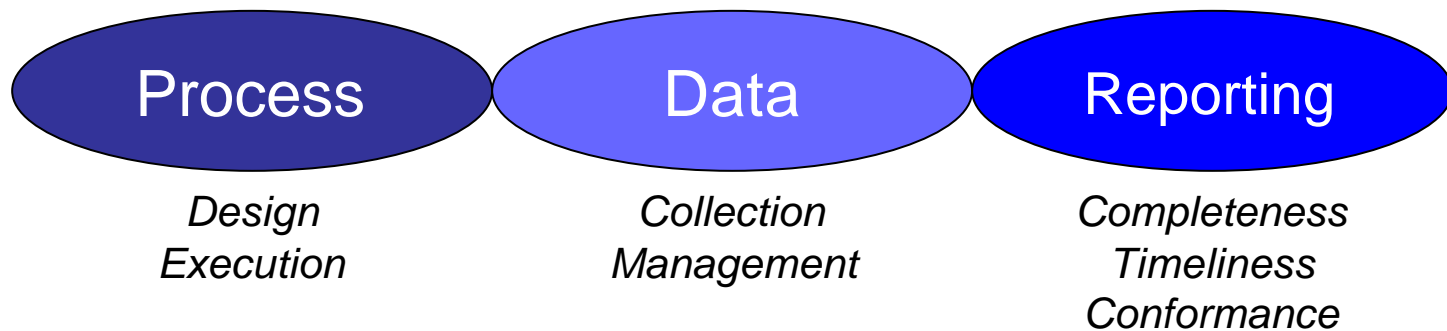
**Reliability Certification provides all stakeholders confidence that the reported reliability results are materially correct.**



# What is Reliability Certification?

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**As part of a certification PA investigates and provides an opinion on:**



## **A Certification involves:**

- Document review
- Data sampling
- Interviews with key employees
- Technology review
- Process mapping & observation



# Reliability reporting requirements are widespread.

## United States

31 US state regulators require electric utilities to report their annual reliability performance

## United Kingdom

In the UK, all electric utilities are required to report annually to Ofgem on their performance in maintaining system security and availability.

## Australia

In Australia, all electric utilities are required to report their reliability performance to state regulators

## South Africa

ESKOM recently underwent a reliability certification by PA Consulting to provide validity to its reporting



## Case Study – ESKOM, South Africa

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Over the last 80 Years ESKOM has established itself as a world class Electricity company.

- Supplying over 95% of South Africa's electricity needs
- Supplying over 50% of the electricity needs of the African Continent.
- 2 nuclear units at Krueberg
- 4 million meters + 3 million more.

In the lead up to its privatization in 2002, ESKOM looked closely at its operations to be best prepared for the new environment and at the same time move towards improving customer service and satisfaction levels; Reliability was one such strategic step.

In 2002 the South African government took its first step in privatizing the distribution infrastructures within the Country. In the lead up to this privatization ESKOM looked closely at its operations to be best prepared for the new environment and at the same time move towards improving customer service and satisfaction levels; Reliability was one such strategic step.



## T&D Benchmarking provided insight:

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- To gain a better understanding of its current service levels, the utility participated in PA's *T&D and Customer Service Benchmarking and Best Practice Surveys*.
- Quickly determined that its reliability performance and measurement strategies were not in line with other international benchmarks for reliability.
- The company engaged PA to further investigate the reasons behind its performance levels and provide guidance to consistently measure, improve service levels and ensure steps were taken to provide consistent service reliability across its service territory.



## PA focused on operations critical to reliability:

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- **Network Configuration & Design:** Including the standards used for specifying, designing, and constructing the components of the system, as well as the physical constraints of/on the system itself
- **Work & Maintenance Practices:** Including activities such as quality control, dispatching of crews, material planning and maintaining system assets
- **Information Systems:** Including the level of integration in support of reliability processes, functionality of the systems and development methods
- **Data Efficacy & Information Management:** Including the way data is entered, managed and categorized for consistency of use in managing the network and in evaluating performance comparisons across regions and outside of Eskom.



## ESKOM now makes informed choices:

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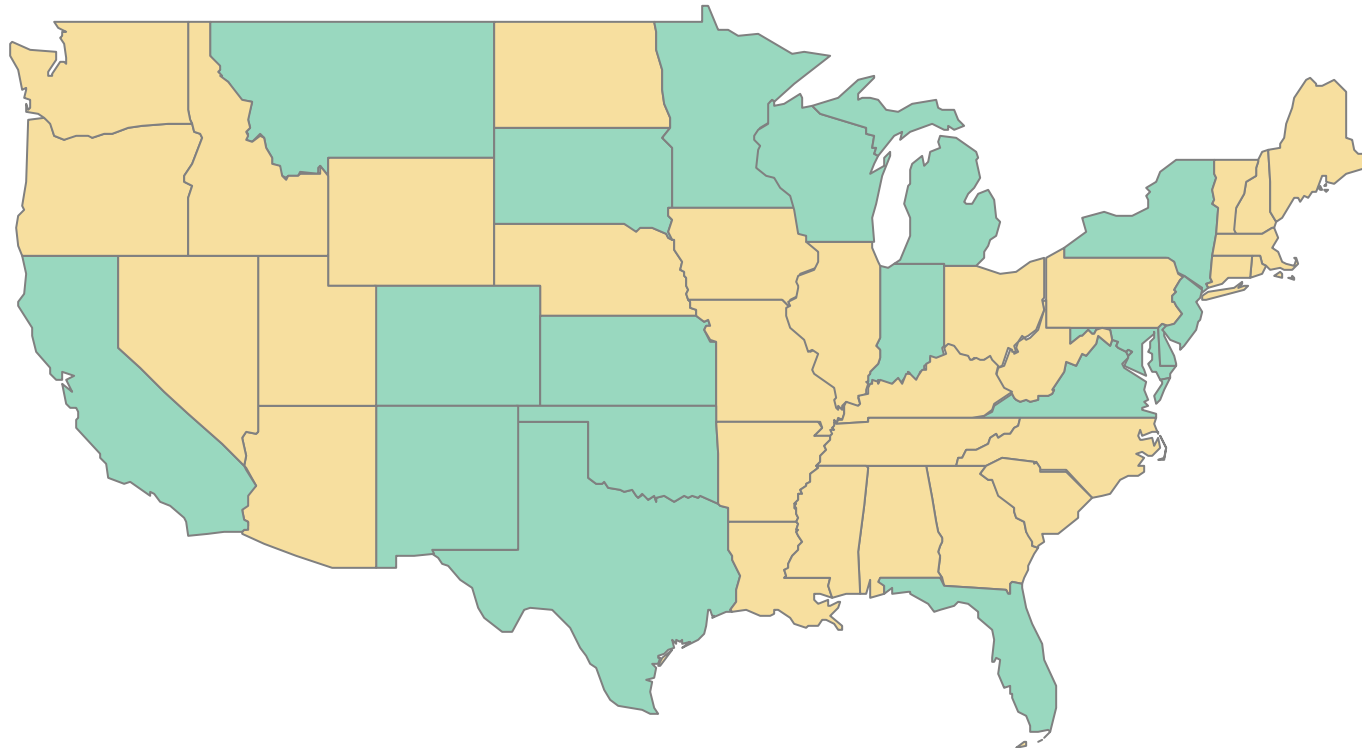
- Through the reliability certification process, the utility gained a deeper understanding of the assets, processes and systems that influence its reliability performance.
- With this understanding, the utility is now able to proactively make choices in how it will design its distribution business to benefit customers.
- In addition, as the recommendations are enacted, the utility will be able to fulfil its current and future customer commitment while objectively demonstrating its performance to regulators, thereby sustaining its leadership role in the development of a new South African electricity market structure.



# Reliability Certification in North America

PA Consulting has conducted reliability certifications in 19 US jurisdictions.

## States where PA has conducted reliability certifications



- New York
- New Jersey
- Maryland
- Delaware
- Florida
- California
- Colorado
- DC
- Texas
- Indiana
- Michigan
- Minnesota
- New Mexico
- Kansas
- Oklahoma
- South Dakota
- Montana
- Virginia
- Wisconsin



# Reliability Certification in North America

Each year, PA Consulting presents the ReliabilityOne™ awards to those utilities that have provided outstanding reliability to their customers.

PA uses a rigorous, quantitatively driven process to identify the very best performer in each region and we then conduct a formal certification of those results:

This year's ReliabilityOne™ winners are:

