DANOVO ENERGY SOLUTIONS
A QUANTA SERVICES COMPANY

IMPROVE RISK ASSESSMENT WITH KNOWLEDGE OF ASSET CRITICALITY

ACRA™ ASSET CRITICALITY ASSESSMENT

In today's electric power grid, ensuring that investments correspond with the underlying risk of failure is a fundamental tenet of the line of sight principle advocated by the ISO 55000 standard. A crucial aspect of risk assessment involves understanding the criticality, significance, or, in industry parlance, the consequence of asset failure. Despite the absence of a standardized method for its computation, relying solely on simple estimates of the consequence of failure often leads to misguided asset investment decisions. Consequently, funds are allocated to the wrong assets, while those in dire need of investment are neglected, resulting in a serious misalignment of resources. Enter ACrA.

Danovo Energy Solution's ACrA solution is crafted to offer you a precise, quantitative grasp of the criticality, or consequence of failure, associated with an electric grid asset. When coupled with the asset's condition (probability of failure), this insight can significantly enhance the investment process, guaranteeing that resources are allocated where they are most urgently required.

The ACrA solution transcends conventional approaches by redefining how we perceive asset criticality. It introduces a fresh perspective that delves into the broader ramifications of asset failure on the power system. Through rigorous quantification, these impacts are meticulously assessed and integrated into the ultimate measure: the asset criticality score.

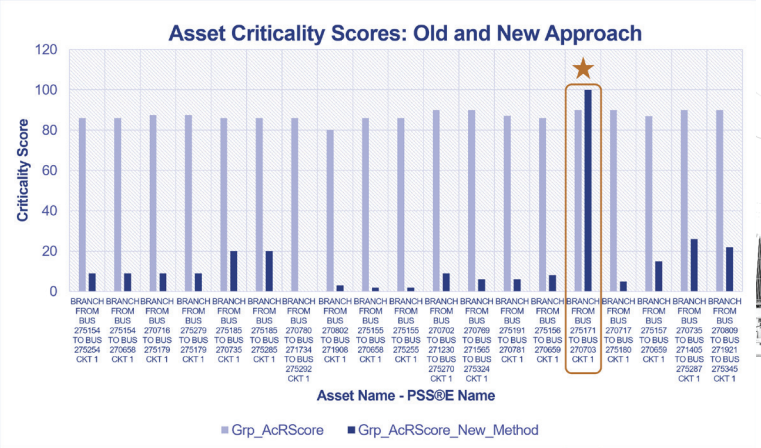
OVERVIEW

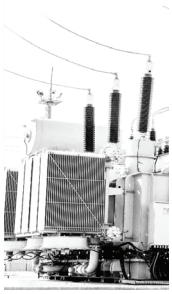
ACrA represents a comprehensive solution that surpasses mere nameplate ratings, such as voltage and kVA. It takes into consideration the network's topology, the asset's location, and grid dispatch conditions, including load and generation dynamics.

ACrA sharpens the focus on assets of paramount importance from a system-wide perspective. Effectively prioritizing assets based on their systemic impacts is crucial for robust risk management and strategic asset investment. The ACrA solution empowers utility asset managers to fulfill their roles more effectively, enhancing their ability to allocate resources where they are most needed.

THE ASSESSMENT

- **Involves** power and energy industry advisors.
- **Assesses** regional and intra-service territory dependencies.
- **Conducts** extensive load flow and contingency analyses studies utilizing advanced tools like TARA.
- **Conducts** comprehensive market simulations to examine redispatch costs.
- **Undertakes** stability studies employing advanced frequency and time domain simulations to study stability impacts.





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