Review of: "Mathematical Assessment of the Reliability in a Complex Deregulated Power System"

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Potential competing interests: No potential competing interests to declare.

This paper delves into the critical challenge of maintaining a dependable power supply in deregulated power systems. It places a strong emphasis on the strategic placement of Flexible AC Transmission System (FACTS) devices, guided by Genetic Algorithm-driven analysis, as a means to enhance overall system reliability.

One key aspect explored in the paper is the intricate relationship between Distributed Generation (DG) and system reliability. The authors calculate a rate to assess the performance of these systems, shedding light on the broader impact of DGs in enhancing overall power system dependability.

Sequential simulations emerge as a valuable tool in this quest for reliability. By using these simulations, the paper demonstrates the effectiveness of its proposed approach.

In summary, this paper makes a compelling case for the strategic deployment of FACTS devices and DGs in deregulated power systems. It highlights how these technologies can significantly enhance reliability and align with the evolving standards and objectives of power network restructuring.