Effective Grounding with Inverter Based Generation

NY - ITWG

10/24/2018

Summary of 8/29 EPRI Presentation and IEEE C62.92.6-2017

Supplemental Ground Sources - Provides no benefit for reducing overvoltages during ground faults unless the island is dominated by line-to-line load

Drawbacks of Supplemental Ground Sources

1. Desensitize utility ground fault detection
2. Subject to overload due to system imbalance
3. Maintain energization of opened phases

8/29 EPRI Presentation: Follow-up

1. Inverter Negative Sequence Impedances
    - Data Collection from Manufacturers
    - Relevance to C62.92.6-2017
2. Additional Transient Modeling
    - NYSERDA PON submission for further study
3. Phase – Phase Load Percentages

Additional Overvoltage Testing

- Hawaii GFOV Testing
- IEEE 1547.1-2018 Testing

Discussion

1. Utility Comments on C62.92.6-2017

2. Next Steps