



FLORIDA SOLAR ENERGY CENTER

Creating Energy Independence Since 1975

Suggestions for Quality Assurance Methodology

Neelkanth G. Dhere

E-mail: dhere@fsec.ucf.edu

A Research Institute of the University of Central Florida





Quality Assurance Methodology



- ☀ Instead of relying exclusively on PV measurements, we should include physical changes at various interfaces for gauging the modifications that are taking place.
- ☀ Should also apply the principles of Physics of Failure to elucidate failure modes and mechanisms.



High voltage Bias Testing



- ☀ Compare arrays reaching high positive and negative voltages with individual modules biased to high voltages in the hot and humid conditions.
- ☀ Should stress the importance of latitude tilt, periodic cleaning and visual inspection and I-V measurements.
- ☀ This comparison would result in direct correlation and acceleration factors with good statistics.
- ☀ Presentation in the SPIE PV Reliability Conference at San Diego, CA next month.



Questions & Comments

