



Committee E44 on Solar, Geothermal and Other Alternative Energy Sources

- Formed in 1978
- Meets once a year during November Committee Week
- Current membership of approximately 70
- Jurisdiction over 49 standards
- Published in the Annual Book of ASTM Standards, Volume 12.02
- 3 technical subcommittees: PV, solar thermal, geothermal
- Chairman: George Kelly, BP Solar
- Vice-chair: Liang Ji, UL
- Secretary: Carl Osterwald, NREL
- Membership: \$75 per year
- Includes voting rights and 1 free volume (CD-ROM or print)
- <<http://www.astm.org>>



Technical Subcommittee E44.09 on Photovoltaic Electric Power Conversion

- Current membership: 30
- 23 active standards
- Chairman: Carl Osterwald, NREL
- PV metrology:
 - Reference cell calibration
 - Solar simulation
 - Spectral responsivity/diode calibration
 - Cell/Module/Array power measurement
 - Multijunctions
- Individual elements of module qualification tests
- System testing:
 - Wet insulation integrity
 - Concentrator module/system performance rating



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- Why is E44.09 relevant or needed? Overlap with TC82 WG2?
 - Adopted before any alternatives
 - Testing laboratory accreditations
 - Law
 - No other equivalents
 - Equipment procurements
- Highlights:
 - E1036: module/array performance
 - E1038: spectral responsivity measurement/calibration
 - E1125: primary reference cell calibration
 - E2236: multijunction cell/module measurements
 - E2481: module hot spot endurance
 - E2527: concentrator outdoor performance rating
- No participation means no maintenance, and standards die