

## PV Distribution System Modeling Workshop – Draft Agenda as of April 30

*This one-day workshop, hosted by Sandia National Laboratories, the Electric Power Research Institute (EPRI), and the National Renewable Energy Laboratory, will cover best practices to facilitate integration of PV into the power system. Topics will include technical and policy updates for current interconnection and screening practices and technical dive into the use of advanced inverters to mitigate system impacts.*

| Start Time      | Title   | Presenter  |
|-----------------|---|--|
| 7:00 AM         | Badging and Registration Opens  |  |
| 8:00 AM         | Welcome, Purpose, and What to Expect  | <i>Sandia and NREL</i>   |
| <b>8:15 AM</b>  | <b>Current Interconnection and Screening Practices (rules of the road)</b>                      |  |
|                 | CA Rule 21 Process  | <i>Tom Bialek, Sempra Energy</i>                                 |
|                 | IEEE1547a and 1547.1a   | <i>Aminul Huque, EPRI</i>  |
|                 | Screening for Feeder Hosting Capacity   | <i>Jeff Smith, EPRI</i>  |
|                 | DG Screening Tool using Rule21 and FERC   | <i>Jean-Sebastien Lacroix, CYME</i>                              |
| 9:50 AM         | Discussion  | <i>All</i>   |
| 10:00 AM        | <b>Networking Break</b>   |  |
| <b>10:15 AM</b> | <b>Advanced Inverters: Capabilities and Functionality (future pathways)</b>                     |  |
|                 | DOE Perspectives  | <i>Guohui Yuan – DOE</i>   |
|                 | Capabilities of Advanced Inverter   | <i>John Berdner-Enphase</i>                                      |
|                 | Purpose of Advanced Inverters- mitigation and grid support                                      | <i>Richard Bravo, SCE</i>  |
|                 | European codes & guidelines for the application of advanced grid support functions of inverters | <i>Roland Bruendlinger, AIT Austrian Institute of Technology</i> |
| 11:50 AM        | Discussion  | <i>All</i>   |
| 12:00 PM        | <b>Lunch Break</b>  |  |
| <b>12:15 PM</b> | <b>Working Lunch</b>  |  |
|                 | Interconnection Standards in California: A Regulatory Approach to a Fast-Changing Grid          | <i>Rachel Peterson, CPUC</i>                                     |
|                 | Effective Grounding   | <i>Taylor Hollis, Schneider-electric</i>                         |
|                 | Transmission Perspective: LVRT and FRT  | <i>Abe Ellis SNL</i>   |
| <b>1:15 PM</b>  | <b>Details for Using Advanced Inverters in DER Applications (deep dive)</b>                     |  |
|                 | Advanced Inverter Setting Specifications  | <i>Jay Johnson, Sandia</i>                                       |
|                 | Communications and control – Autonomous and Central Control                                     | <i>Bill Reaugh, KACO new energy</i>                              |
|                 | Optimization Hosting Capacity with AI Functions   | <i>Jeff Smith-EPRI</i>   |
|                 | Interaction and Coordination with EPS Equipment   | <i>Chase Sun, PG&amp;E</i>                                       |

|                |   |  |
|----------------|---|--|
| 2:50 PM        | Discussion  | <i>All</i>   |
| 3:00 PM        | <b>Networking Break</b>   |  |
| <b>3:15 PM</b> | <b>Modeling Challenges to Consider for Advanced Inverters (implementations)</b> |  |
|                | Data and Models for High Penetration Using AI                                   | <i>Roger Dugan, EPRI</i>   |
|                | Models for DER, AI, CVR, CES, and DA Analysis: BNL Dew Model Server             | <i>Robert Broadwater, EDD</i>  |
|                | Pro-active, high penetration PV studies on distribution systems                 | <i>Jonathan Flinn, SynerGee</i>                                      |
|                | AI Analysis on a Distribution Feeder  | <i>Jeff Smith EPRI<br/>Murali Baggu, NREL</i>                        |
|                | IEEE Test Feeders for AI Analysis   | <i>Jason Fuller, PNNL</i>  |
| 5:15 PM        | Discussion  | <i>All</i>   |
| 5:30 PM        | <b>Break for Dinner</b>   |  |
| <b>7:00 PM</b> | <b>Evening Session on Modeling Software Updates</b>                             |  |
|                | EDD Updates and Perspectives.<br>High Penetration PV Controller Comparisons     | <i>Robert Broadwater, EDD</i>  |
|                | Milsoft Updates and Perspectives  | <i>Wayne Carr, Milsoft</i>   |
|                | CYME Road Map – AI, Energy Storage Devices and PV Impact analysis               | <i>Jean-Sebastien Lacroix, CYME</i>                                  |
|                | IEA-PVPS Task 14 updates  | <i>Roland Bruendlinger, AIT<br/>Austrian Institute of Technology</i> |
| 9:00 PM        | <b>Workshop Closing Ceremony</b>  |  |