

**IEEE Working Group on State Estimation Algorithms (<http://www.ece.neu.edu/~abur/ieee/wg.html>)**  
**Power System Operations Subcommittee (<http://ewh.ieee.org/cmte/psoc/>)**  
**Meeting at the 2012 IEEE PES General Meeting**

Venue: Gregory A, Manchester Grand Hyatt, San Diego

Time: 08:00 – 09:00 hrs

Day: Tuesday July 24, 2012

**Minutes**

1. Opening remarks by Mili.
2. Sarma introduced the task force and invited everyone to attend.
3. All the attendees introduced themselves. (21 attendees)
4. Discussions
  - a) Mili made the announcement for the panel on “load modeling in state estimation”.
  - b) Sarma proposed to repeat the panel he organized three years ago in GM 2013 on “Experiences of Identifying Model and Parameter Errors using State Estimation in Control Centers’ with participation from ISOs. Clements will be the co-chair for this panel.
  - c) Atanackovic proposed to arrange a visit to the control center in GM 2013. Sarma and Atanackovic shall coordinate the modalities of this visit and inform the members accordingly.
  - d) Mili introduced a panel organized by PSACE in GM 2012 on challenges in distribution system state estimators and initiates a discussion on DMS applications of SE.
    - i. Atanackovic introduced the DMS experiences in BC Hydro; talk about the integration of smart meters and the real time data to the SE. He mentioned that each phase is modeled separately and by the end of 2012 the DMS will be commissioned. They plan to deploy 15,000 – 20,000 smart meters and they plan to use them mainly to control theft.
    - ii. Mili initiated a discussion on the impacts and benefits of DMS.
    - iii. Atanackovic mentioned the benefit of creating a better base case for voltage VAR support.
    - iv. Vinnakota mentioned the benefit of DMS to load profiles.
    - v. Atanackovic mentioned the plan to use smart meters to improve the load profiles in EMS.
    - vi. Sarma informed the group about the Smart Distribution Working Group (formerly known as Distribution Automation Working Group) and mentioned about the Document on ‘DMS Application Guide’ they are working is working in which different applications related to Distribution Automation will be discussed. A chapter on Distribution State Estimation may be incorporated in that Guide.
    - vii. Mili proposed a panel on distribution system state estimation focusing on the effects of DG, deployment, modeling and observability issues. He proposed to

have 3 presenters from academia and 3 presenters from industry. Raju and Yaman volunteer to organize and co-chair the panel.

- e) Mili talked about the PMU applications in SE, applications of unscented KF and mentioned the recent TPWRS paper by Saklis. He proposed to post the SE papers using UKF.
  - i. Bretas mentioned that application of KF is not new and it cannot be applied to large scale power systems.
  - ii. Mili proposed to include the use of KF in the recent white paper prepared by Panciatici and discusses the possibility of localized application of KF.
- f) Vinnakota mentioned the panel he chairs a panel on innovations in communications in power systems and invited the WG members.
- g) Mili mentioned the PMU deployment and discusses that the model is not good, “R” is changing and the parameters are not reliable. He reads the content from Panciatici’s white paper: Corona effects, issues with HVDC links, issues with large wind farm integration in Europe, modeling classical SE, use of SE during transients.
- h) Mili proposed to enhance the white paper including the DMS applications.
- i) The website will be updated.

**Attendee List**

	<b>Name</b>	<b>Affiliation</b>	<b>E-mail</b>
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