

## IEEE CONTROLS SYSTEM SOCIETY – TECHNICAL COMMITTEE ON SMART GRIDS

Minutes of Meeting Held at the 2013 IEEE ACC; 18 June 2013 (Draft)

Marriot Renaissance Downtown Hotel, Washington DC, Congressional Room C

### Meeting Synopsis:

- **Well-attended, ‘High Energy’ meeting;** with active participation. Highlights include:
- **Subcommittees Established:** Four CSS-TCSG subcommittees are being organically established for urgent topics:
  - 1-Integration of Renewable Energy
  - 2-Storage Devices and Associated Controls
  - 3-Microgrids
  - 4-Smart Buildings
- **Smart Grid Vision in final stages of review:** Participants urged to internalize and offer comments.
- **TC-SG may use its unique expertise and perspective to offer, as appropriate,** centralized guidance and perspective to users world-wide.
- **TC-SG website being established**
- **Thanks given to co-chair Dr. Tariq Samad** for his work as co-chair as he leaves this position; Professor Jakob Stoustrup is the new Co-Chair.

### Meeting Content:

#### Convening:

- Prof. Massoud Amin convened the meeting at approximately 3:40 PM. EDT in Meeting Room Congressional C. Slight delay was occasioned by the hotel staff's heroic efforts in arranging the room after an uncoordinated prior event.
- Approximately 20 active participants introduced themselves, there were a few comings-and-goings due to travel schedules.
- Notes from the prior meeting were distributed and reviewed.

#### Agenda Items Discussed

1. **Welcome/Introductions/Update** since our meeting at the CDC in December 2012  
Professor Amin, Dr. Samad, and other members discussed recent Committee events.
2. **Report from the TAB** (ExCom and BoG)

##### 2a.Wikipedia project

Wikipedia has become a de-factor point of reference for many in the Smart Grid community; particularly younger researchers. Such individuals often use Wikipedia a first-point-of-learning. It was thus solicited that TC-SG members – knowledgeable “Sentinals” - review and correct such Smart Grid items, to help provide more authoritative content. In particular, Wikipedia articles and aspects of Renewables and Sensors need analysis, validation and revision.

##### 2a.Websites project

It was noted that IEEE CSS has approved funding for websites of each of its approximately 19 Committees. However, 11 of these – including we of the TS-SG – do not have websites. **It was requested that by the end of June, high-resolution photos of members be sent for website preparation.**

## **2c. Special Event Funding for High-Visibility Projects**

CSS has approximately US \$20k in the budget for HIGH Visibility activities. This does not include travel, but may involve small honoraria for speakers.

On a separate, but related matter, there are numerous awards for significant accomplishment. We should consider nominating Smart Grid academic colleagues or industry persons of particular merit for these

### **3. Session at the ACC**

A variety of well-received presentations by, and of interest to, TC-SG colleagues, have and are taking place over the past few days. Among them, one of particular interest was by Prof. Qing-Chang Zhong, University of Sheffield: "Workshop on Smart Grid Integration", based on his research monograph recently published by IEEE-Wiley. On Wednesday night, Prof. Pramod Khargonekar and Dr. Aranya Chakraborty are arranging a highly-anticipated tutorial session on "Wide-Area Control of Power Systems."

### **4. Develop technical areas that our community can contribute to and that the TC-SG will cover**

A variety of topics were discussed, in particular TC-SG subcommittees. (noted below)

### **5. Increase CSS' leadership role and visibility in smart grid education, RD&D:**

Items may include

- Development of TC-SG website (note above)
- High-visibility events, publications and activities (funding now available)
- Development and delivery of CSS-focused webinar series as a vehicle to give virtual seminars on Smart Grids
- Participate in the organization of pertinent activities, including special issues/sections in the upcoming IEEE journals and in the IEEE workshops/conferences.
- Column on TC-SG for CSM

### **6. Open Discussion: Opportunities and Challenges**

The Floor was opened by the Chair for Discussions. Items discussed included

- **Collaboration and LinkedIn** – Dr. Samad has a Virtual Collaboration Board. There are six members who are LinkedIn to CSS. It was noted that the LinkedIn group open to everyone on the TC-SG roster. Everyone is urged to participate further, and have a Smart Grid subgroup
- **CSS and PES Collaboration and Coordination** – Questions were asked regarding CSS and PES interfacing. It was noted that PES is organized in a 'Working Groups' structure. The PES main thrust is to create sessions. In some cases, a PES paper can only be four pages long. In general, there can be productive contributions by individuals through both IEEE streams.
- **CSS TS-SG Newsletter** – Articles of from 800 – 1,200 words on topics are solicited for this widely-read publication.
- **Smart Grid Vision Project for Control Systems** – Under Dr. Anaswamy's leadership, the IEEE Smart Grid Vision for Control Systems (SGV-CS) has been promulgated in near-final format. It includes a Roadmap. Our challenge, opportunity and responsibility is to now 'take chunks of it and operationalize it'. In addition, we may wish to validate and iteratively optimize certain portions in pilot projects.

- **Subcommittees Established** – It was noted that the TC-SG is about three years old. After discussion, it was agreed that Subcommittees should be established for (tentative working titles)
  - 1-Integration of Renewable Energy
  - 2-Storage Devices and Associated Controls
  - 3-Microgrids
  - 4-Smart Buildings

The Chair charged subcommittee participants to in the next few weeks to kindl :

- a) Give a short working title
- b) Describe in 3-5 lines the need for the subcommittee, and what it plans to do
- c) Review the SGV-CS Vision Document and expand/comment on appropriate points

- **TC-SG As Trusted Advisor** – It was noted that, in addition to numerous international initiatives there may be increased funding from the US DOE for projects; but the approval process per-se is often dependant on State Public Utilities Commissions and similar governmental and civic entities. We should indicate our point-of-view based on engineering trajectories, and, when appropriate, recommend pilot projects.
- **One Day Symposium for Leadership** – Many governmental, civic, media, and even engineering leaders have only a relatively vague idea of Smart Grid benefits and implications. The intrinsic dynamism and adaptability of Smart Grid may be a metaphor; a ‘motor-for’; and a leading indicator for; how we can enable societal and technical benefits. Prof. Amin stressed – to wide concurrence – that Smart Grid is more than a technology question; it needs – and will provide – other foundational underpinnings of markets, policies, and social activities.

Prof. Amin noted that Leadership may be defined as “Getting committed people to act for causes that advance progress”; he expect us all to be leaders and empower other leaders.

#### 7. **TC Co-chair transition**

Thanks were expressed to Dr. Tariq Samad for his indefatigable work as co-chair. A new c0chair is being selected. Professor Jakob Stoustrup is the new Co-Chair.

#### 8. **Fall 2013 Meeting**

The Fall 2013 meeting of the CSS TC-SG will be held at the 52nd IEEE Conference on Decision and Control, Florence, Italy, 10-13 December 2013 (Tuesday – Friday). The meeting will probably be on Wednesday, 11 December, although it may possibly be held on Thursday, 12 December 2013.

#### **Meeting Closing:**

- Professor Amin closed the meeting at approximately 5:15 PM EDT. Several groups stayed behind for informal information exchange and socializing

*Preliminary draft notes respectfully submitted:  
Hy Chantz, 19 January 2013*