

## **IEEE PES Multi-Agent Systems (MAS) Working Group**

### **Minutes of Meeting**

*Date:* Monday 26<sup>th</sup> July, 2010

*Venue:* IEEE PES General Meeting in Minneapolis

*Chair:* Dr Stephen McArthur, University of Strathclyde, UK ([s.mcarthur@eee.strath.ac.uk](mailto:s.mcarthur@eee.strath.ac.uk))

#### *Attending:*

S McArthur	University of Strathclyde
M Wishart	Queensland University of Technology
L Lugaric	University of Zagreb
M Cupelli	E.on ERC RWTH AACHEN
Leigh Tesfatsion	Iowa State University
Ivana Kockar	University of Strathclyde
Gregor Verbic	University of Sydney
Milos Pantos	University of Ljubljana
Sukumar Kamalasan	University of West Florida
Raphael Caire	Grenoble Institute of Technology
Zita Vale	Polytechnic of Porto GECAD
Hugo Morais	Polytechnic of Porto GECAD
Zhi Zhou	Argonne National Laboratory
Kai Sun	EPRI
Aranganikkannan Manickam	University of West Florida
Alejandro Montenegro	S&C Electric
Jignesh Solanki	West Virginia University
Saskia Khushalani-Solanki	West Virginia University
Istanihan Gene	Istanbul Technical University
Thomas Tobin	S&C Electric
S N Singh	IIT Kanpur
Steve Widergren	Pacific NW National Lab
Henry Wu	University of Liverpool
Alex Flueek	Illinois Institute of Technology
David Cartes	Florida State University
Sanjeev Srivastava	Florida State University
Reza Arghandeh	Virginia Tech
Pedram Jahangiri	Iowa State University
Ramon Zamora	Mississippi State University

#### *Minutes/Actions:*

1. The Working Group has launched a new website to extend the resources and information available to its members and the wider community (<http://ewh.ieee.org/mu/pes-mas/>). Therefore it was agreed that:
  - These are an initial set of resources and information; and
  - All members were encouraged to suggest new information, links, papers etc. via the feedback section of the web pages.
2. A new **Task Force on “Agent-Based Modeling of Smart Grid Market Operations”** was proposed and agreed. The Co-chairs are: Ivana Kockar (Strathclyde) and Leigh Tesfatsion (Iowa State).
  - This task force will focus on the development and use of agent-based testbeds for studying the restructuring of electric power market operations, with a particular emphasis on smart grid initiatives. In recent years electric power systems around

the world have been massively restructured in an attempt to improve the efficiency and reliability of their operations. In particular, as part of the Smart Grid movement, efforts have been made to more effectively integrate participation by demand, distributed generation and storage. Critics worry that these efforts could produce unintended consequences resulting in lower rather than higher efficiency and reliability. Given these concerns, performance testing of actual and proposed changes is eminently desired but also complex. Agent-based testbeds are particularly suitable for handling this degree of complexity.

3. A new Task Force on “**MAS Design Methods and Tools**” was proposed and agreed. It will be chaired by Dave Cartes (FSU). There will also be a focus on creating test cases for agents, supported by Alex Flueck (IIT).
4. It was agreed that the Working Group would propose one panel session for the 2011 IEEE PES General Meeting from the new TF on Agent-Based Modeling, titled “Agent-Based Modeling of Smart Grid Market Operations”
5. The Multi-Agent Systems Working Group, through Prof Nikos Hatziaargyriou, will work towards an article or special issue for the IEEE PES Power & Energy Magazine. The focus will be the use of MAS to deliver Smart Grid functionality. This is intended to generate greater industrial interest in the Working Group’s activities and promote the platform technologies that we offer.