

```

\ ### ##### #### # ;
\ # # # # # ;
\ # ##### ##### # ;
\ # # # # # ;
\ ### ##### # # ##### ;

```

IERE E-mail Magazine No. 6 (18 Jan. 2011) Rev. 1
--

\*\* This E-mail Magazine is the revised No. 6.  
Please replace the former No. 6 with this Rev. 1. \*\*

<< IERE New Officers Talk about Remarks >>

In compliance with the IERE statutes and bylaws, 2011-2012 IERE Officers were elected. They talk about their ambition regarding IERE.

> Chair: Mr. Mark S. Dudzinski (GE, USA)

To: IERE MEMBERS and Prospective Members  
The Global Economy and Utility Challenges

The Electric Industry is facing a challenging time. Historically, electric consumption grew every year, the transmission grid was smart, the distribution grid was not smart and generation decisions were made based on economics. Today, it is much more complicated. Environmental and security considerations are a large factor in generation decisions. The "Smart Grid" is expanding to include distribution. Intermittent renewables and distributed generation are more economical and seeing wide scale deployment with utilities adapting to manage their increased penetration. We are facing the mass adoption of plug in vehicles and the grid management issues that will ensue. To complicate matters further, the rate of technology development is accelerating. This adds risk to utilities looking to deploy new technologies.

This changing landscape is playing out against a global economy that is just emerging from recession. China, India and much of Asia continues to have strong growth. Power demand continues to grow as GDP grows. However, the OECD countries have only returned to low growth after a period of negative growth. They generally have large reserve margins. New generation is driven more by policy than need. Due to the recession and a lack of demand growth, utilities in the OECD countries are facing strong economic challenges.

The Technology Challenge:

Against this backdrop, utilities must find, develop and deploy technologies to insure an adequate, reliable electric supply at the lowest possible cost irrespective of their location. They must also meet local goals and mandates. Utilities around the world are faced with technical challenges regardless of their location or electric consumption growth. A few examples:

- \* The upcoming wave of Electric Vehicles and Hybrid electric vehicles will
  - need to be charged in a way that does not decrease grid reliability or
  - significantly expand the need for additional generation.
- \* Larger scale intermittent renewable generation will need to be integrated
  - into the grid.
- \* Distributed Generation, both thermal and intermittent, will need to be
  - integrated into the distribution systems in a way that reliability is
  - ensured and volt/var control is maintained down to the consumer.
- \* Power will be wielded longer and longer distances as large scale renewable
  - generation sources are added.
- \* Supply side and user efficiency will play a larger role in meeting demand.
- \* There is a strong demand for cleaner coal generation including carbon
  - capture and sequestration solutions.
- \* New thermal generation technologies are being developed, and traditional
  - technologies have increasing efficiency, flexibility and reliability.

All of these take technology invention and development. The rate of technology change also requires that we continually evaluate the options that are available to solve utility issues.

The Role of IERE

It is an important time for the IERE. IERE member companies are addressing the critical issues facing the electric industry. More efficient generation, higher grid reliability and efficiency, new renewable generation technologies, "Smart Grid" Technologies, Cleaner Coal and EV integration are just a few of the topics where IERE member companies do research and development. Our member companies share their R&D with other members. This enables a faster and more cost effective deployment of technology. IERE facilitates this through data

exchanges, workshops, working groups and the Technical Issues and Solution Activities program. The IERE program provides value to utilities whether they are in developed or developing countries.

Going forward, IERE is putting in place a mechanism that will allow its members to work jointly on technology solutions. This will expand IERE from an R&D sharing organization to one that also facilitates the joint development of technology.

I would like to thank all the IERE member organizations. You recognize that actively participating in IERE can lower your cost and reduce your company's risk when evaluating and deploying new technologies. Being a member gives you the insight necessary to keep pace with changing technology and solutions to today's problems.

I would also like to encourage additional utilities and organizations that do research and development related to the electric utility industry to join IERE. Sharing research in our industry accelerates the development and deployment of technology. It can lower your cost and reduce the risk you face in deploying technology.

Best Regards

Mark Dudzinski  
Chairman

> Vice Chair: Dr. Rolando Nieva Gomez (IIE, Mexico)

Dear Members,

I would like to express my appreciation to the members of the Board who nominated me to serve as Vice Chair of IERE for the period of January 2011 through December 2012. In this position, I will work with my fellow IERE officers and Board members to accomplish the mission of this noble organization.

> Treasurer: Dr. Denis Faubert (Hydro Quebec, Canada)

Dear Colleagues,

It is with great pleasure that I have accepted the position of Treasurer for the International Electric Research Exchange. The IERE is a world-class organization devoting itself to promoting research, development and technology applications to support the electrical industry. It focuses on solving the real-world problems facing our organisations. Relying on the strength of collaboration among its members throughout the world, it seeks short or long term solutions to our most pressing or toughest issues. Electricity is a high-tech business. Innovation is key to remaining at the leading edge of our trade, providing reliable and cost-effective service to our clients.

The IERE has very competent personnel at its helm. Its operations are streamlined and the expenses of the organisation are well under control. It is worth mentioning the generous support of CRIEPI that assumes a large share of the operations of IERE. As a treasurer, I will ensure that the resources of the members are well-utilized and that all revenues and expenses are well accounted for. As a member of the Board, I will work with my colleagues to provide the best possible support to the leaders of IERE. I encourage you all to join this organisation in a way that we can all benefit of the talent and creativity of your staff.

<< IERE 2011 Events Schedule >>

IERE events schedule 2011 is as follows:

- > Dusseldorf Workshop (May 23rd to 26)
- Local host: RWE, Germany
- Main Theme: "Integration of Renewable Energies"
- Schedule: 5/23: 20th IERE Board Meeting and Registration
- 5/24, 5/25: Workshop,
- 5/26: Technical tour (RWE Coal Innovation Center)

- > Nanjing Workshop (July 24th to 27th)
- Local host: SGEPR1, China

- Main Theme: "Smart Grid and Energy Efficiency"
  - Schedule: 7/24: Registration,
  - 7/25, 7/26: Workshop,
  - 7/27: Technical tour (SGEPRI laboratory)
- > IERE-PIESA TIS-Africa Forum (September; to be fixed)
- Local host: ESKOM and PIESA
  - Main Theme: "Smart Electrification - the Technology Challenge"
- > 11th IERE General Meeting/Latin American Forum (October; to be fixed)
- Local host: IIE (Instituto de Investigaciones Electricas), Mexico
  - Schedule: Day 1: IERE Board Meeting and Registration,
  - Day 2: IERE General Meeting,
  - Day 3: Latin American Forum,
  - Day 4: Latin American Forum and Technical Tour
- > TIS-Asia Conference 2011 (November or December)
- Day 1: Generation Session,
  - Day 2: Network Session,
  - Day 3: Special Session, Technical Tour

<< 2010 Topics >>

>Rome Workshop

2010 IERE-Enel Rome Workshop was held in Rome in April co-hosted by Enel and EDF. Although around 70 people registered to attend the workshop, 23 participants were able to come to Rome due to the volcanic ash from Iceland. Notwithstanding such accidents, it had very active discussions.

[http://www.iere.jp/NonMembers/Activities/Workshop/Italy\\_Workshop/index.html](http://www.iere.jp/NonMembers/Activities/Workshop/Italy_Workshop/index.html)

>The 3rd TIS-Asia Steering Committee/Technical Committees meeting

The meeting was successfully held at Shangri-La Hotel Kuala Lumpur in July co-hosted by TNB. The number of participants were around 80. In order to execute sustainable activities, a new mechanism based on holding a workshop or a seminar was proposed and approved.

[http://www.iere.jp/NonMembers/Activities/TIS\\_Asia/TIS2010/index.html](http://www.iere.jp/NonMembers/Activities/TIS_Asia/TIS2010/index.html)

>19th Board meeting in Montreal

19th Board Meeting was held in November and following items were discussed and approved.

- Review of the membership
- Progress report from Nov. 2009 to Oct. 2010
- Accounting Report for 2009, 2010 and Budget Plan for 2011
- Mid-Term Action Plan for 2010-2012
- Activity Plan for 2011
- Board Election for 2011-2012

>The 10th IERE General Meeting & North American Forum

The 10th GM & Forum was held successfully in HOTEL NELLIGAN, Montreal from Nov. 1st to Nov. 5th. This meeting & forum was co-organized with Hydro-Quebec, and was the memorial event as the 40th anniversary of Hydro-Quebec's Research Institute (IREQ). There were 84 participants from 12 countries (Canada, China, France, Germany, India, Italy, Japan, Mexico, Netherlands, South Africa, UK, USA).

[http://www.iere.jp/NonMembers/Activities/General\\_Meeting/GM10/1st.html](http://www.iere.jp/NonMembers/Activities/General_Meeting/GM10/1st.html)

>The TIS-Asia Clean Coal Technology Workshop 2010

Clean Coal Technology Workshop 2010 was held successfully November 14-15 in Longyou, Zhejiang China, co-hosted with Shanghai Jiao Tong Univ. and Central Research Institute of Electrical Power Industry. It was the first Workshop of new attempts by Generation WG-1 of TIS-Asia Working Groups. There were 80 to 90 participants from China, Taiwan, Korea, Australia and Japan.

[http://www.iere.jp/NonMembers/Activities/TIS\\_Asia/TIS\\_CCTWS/index.html](http://www.iere.jp/NonMembers/Activities/TIS_Asia/TIS_CCTWS/index.html)

<< MERALCO and SIIT newly joined IERE >>

IERE Central Office is pleased to announce that the Manila Electric Company (MERALCO), Philippines and Sirindhorn International Institute of Technology, Thammasat University (SIIT), Thailand have newly joined IERE from the month of January 2011.

MERALCO is the Philippines' largest distributor of electrical power, and an investor-owned electric utility serving roughly a quarter of the estimated 94 million population of the Republic of the Philippines. It was organized as the Manila Electric Railroad and Light Company 107 years ago in 1903 to provide electric light and power and an electric street railway system to Manila and its suburbs.  
<http://www.eralco.com.ph/home.html>

SIIT is an international institute of Thammasat University. A cooperation agreement among Keidanren (Japan), the federation of Thai Industries, and Thammasat University was reached in 1992 to establish bachelor degree programs in engineering at Thammasat University. The "International Institute of Technology (IIT)" was founded in 1994, and His Majesty King Bhumibol Adulyadej of Thailand graciously granted the Institute a new name, "Sirindhorn International Institute of Technology (SIIT)", on June 28, 1996.  
[http://www.siit.tu.ac.th/home\\_en.php](http://www.siit.tu.ac.th/home_en.php)

<< Call for Papers; 2011 IERE-RWE Dusseldorf Workshop >>

IERE-RWE Workshop will be held in Dusseldorf Germany in 23-26 May 2011 co-organized with IERE and RWE, supported by EURELECTRIC and VGB. Main theme is "Integration of Renewable Energies".

**\*\* Abstraction Submission: No later than 11 March, 2011 \*\***

Please see "Event & News" on IERE website for details.  
<http://www.iere.jp/NonMembers/index.html>

=====  
Please send us (mailto:<contribution.emagazine@iere.jp>) your topics to be delivered to IERE members.  
=====

Please notify your colleagues of sending email to <subscribe@iere.jp> for receiving IERE Email Magazine.

To unsubscribe, please email to <unsubscribe.emagazine@iere.jp> with empty mail.

-----  
Publisher: IERE Central office  
mailto: office@iere.dcc.co.jp, website: <http://www.iere.jp/>  
TEL : +81-3-5438-1717, Fax : +81-3-3488-5100  
-----