

First Announcement

2015 IERE – CRIEPI Tokyo Workshop “Advanced Electric Power Management - Thermal Power Generation against Huge Impact by Renewable Energy Penetration -”



May 19 (Tuesday) – May 22 (Friday), 2015

Tokyo, Japan

Organized by:

IERE and CRIEPI

Outline Schedule: *This schedule may be changed.*

Tuesday – 19 May 2015

Registration and Welcome Reception / Cocktail

Wednesday 20 May 2015 – Thursday 21 May 2015

The 2015 IERE – CRIEPI Tokyo Workshop “Advanced Electric Power Management”

Friday 22 May 2015

Technical visits (Optional)

General Theme: Advanced Electric Power Management

- Thermal Power Generation against Huge Impact by Renewable Energy Penetration -

Electric power is indispensable in our lives and for the sustained development of our economy and society. From a rise of concern about an environmental problem and FIT and RPS systems, renewable energy sources (RES) such as photovoltaic and wind power generation have been penetrated to the utility system on large scale. However, since the output fluctuation of the RES is large, effective use of the thermal power generation is required of flexible operation such as frequent DSS. Therefore, it is necessary to develop technologies to achieve both effective use of RES and thermal power generation, power quality, stability and safety of utility system. It is also necessary to develop the coordination system technologies for power demand and supply for the steady supply of the electric power.

This IERE-CRIEPI Tokyo Workshop on “Thermal Power Generation” will handle urgent subjects about the thermal power generation. The changes enabled by these developments have a global significance and will impact generation, transmission & distribution as well as supply. They have the potential to challenge the traditional business models of utilities and attract new players to enter the energy markets.

With this workshop, IERE hopes to contribute to improved understanding and exchange on this strategic topic.

Session Themes:

Plenary Session

>Keynote Lecture

- Mr. Mark McGranaghan (Vice President, Power Delivery & Utilization, EPRI)
- Mr. Friedrich Schulte (Head of Strategy & Technology, Corporate Research & Development, RWE AG)
- Prof. Akihiko Yokoyama (Professor, Department of Advanced Energy, Graduate School of Frontier Sciences, The University of Tokyo)

>Balancing of electric supply and demand (including renewable energy)

Development of a next-generation coordination system for power demand and supply (amount of nuclear power, renewable energy, etc.)

Matter which should be taken into consideration (economic, efficiency, operability, laws and regulations, etc.)

Practical operation method for total cost reduction
etc.

Technical Session

>Advanced technology for thermal power plants

Development of high efficiency power generation

Measure technologies against environmental impacts

Improvement of operation and control technologies to diversify fuel types
etc.

>Diagnostic technique for thermal power equipment

Diagnostic technologies for aging degradation of power plants and facilities

Non destructive inspection technologies

Diagnostic technologies by ICT (Information and Communication Technology)
etc.

>Rationalization of operation and maintenance for thermal power plants

Measure technologies against rationalization of O&M for power plants

Detection technologies for unusual condition of power plants

Measure technologies against daily start and shutdown (one or more times)

Measure technologies against non-rating operation of power plants
etc.

Related Session

>Risk management for power facilities

Measure technologies against natural disasters and cyber attack

Prediction methods for meteorology, earthquake and volcano eruption

Development of comprehensive assessment technologies for the environmental impact
etc.

>Power application technology

Development of battery storage for stationary applications

Heat pumps

New applications

etc.

Exhibition Viewing at Electric Power Historical Museum of TEPCO

Poster Session:

The Poster Session is organized under the framework of IERE's "Young Academy" activity. Although presentations by any participants (at any age) are expected, IERE and CRIEPI especially encourage university students, academic researchers etc. to participate in presentations at Poster Session under the theme of Workshop. Presentations at Poster Session are intended to lead more detailed discussions at the time frames set on both days of Workshop.

Who Should Attend?

The workshop is intended for experts actively involved in the selected themes, from IERE members and non-members, as well as all those interested in the evolution of the electrical power industry and the technology development and business development opportunities associated to this evolution. IERE will invite prominent speakers for keynote speeches.

Tentative Program (subject to change)

May 19(Tue): Venue: Shinagawa Prince Hotel (Main Tower, Reception Hall, Level+10)

19:00-21:00 Registration and Welcome Reception / Cocktail

Day 1:

May 20(Wed): Venue: Electric Power Historical Museum of TEPCO Museum Hall (Level +2)

| | |
|-------------|--|
| 08:30-09:00 | Registration * Electric Power Historical Museum of TEPCO is not opened before 8:30.a.m. |
| 09:00-12:00 | Opening session and forenoon Sessions |
| 12:00-13:30 | Lunch (complimentary stand-up meal and beverage are available) |
| 13:30-17:30 | Afternoon Sessions |
| 19:00-21:00 | Dinner hosted by CRIEPI in Tokyo area *Shuttle Bus Service is available between Workshop venue and Dinner venue by way of Shinagawa Prince Hotel. |

Day 2:

May 21(Thu): Venue: Electric Power Historical Museum of TEPCO Museum Hall (Level +2)

| | |
|-------------|--|
| 08:30-09:00 | Registration |
| 09:00-12:30 | Forenoon Sessions and Closing Remarks |
| 12:30-14:00 | Lunch (complimentary stand-up meal and beverage are available) |

Day 3:

May 22(Fri): Technical visits (optional)

J-POWER Isogo Thermal Power Station & CRIEPI Yokosuka Area

| | |
|---------------|--------------------------------------|
| Around 9:00 | Departure from Shinagawa |
| 10:00 - 12:00 | Visit of Isogo Thermal Power Station |
| 12:30 - 13:30 | Lunch |
| 14:00 - 16:00 | Visit of CRIEPI Yokosuka Area |
| Around 17:30 | Arrival at Shinagawa |

- J-POWER Isogo Thermal Power Station : a compact, urban coal thermal power station that has achieved both environmental burden reduction and thermal efficiency improvement at the world's highest level by introducing the latest environment-friendly facilities and adopting USC

- CRIEPI Yokosuka Area : four laboratories and latest experiment facilities
Electric Power Engineering Research Laboratory
High Power Testing Laboratory
Energy Engineering Research Laboratory
Material Science Research Laboratory

Call for Papers

<<Abstract Submission: No later than 6 March, 2015>>

You are kindly invited to submit abstract for the Workshop “Advanced Electric Power Management - Thermal Power Generation against Huge Impact by Renewable Energy Penetration -”;

- S-1 : **Balancing of electric supply and demand (including renewable energy)**
- S-2 : **Advanced technology for thermal power plants**
- S-3 : **Diagnostic technique for thermal power equipment**
- S-4 : **Rationalization of operation and maintenance for thermal power plants**
- S-5 : **Risk management for power facilities**
- S-6 : **Power application technology**

(Session structure may be rearranged depending on available speakers.)

by e-mail to:

Mr. Tetsuo Matsumura (office@iere.dcc.co.jp)

Secretary General, IERE Central Office

2-11-1 Iwado Kita, Komae-shi, Tokyo 201-8511, Japan

Phone: +81-3-5438-1717 Fax: +81-3-3488-5100

As for the **format of abstract and speaker's information**, please refer to “Preparation for Events” on IERE website:

https://www.iere.jp/contents/Information/Preparation_Events/index.html

The official language is English.

Registration

Please submit a registration form (Format1, page 10) to IERE Central Office by email.

Deadline: 17 March 2015

Registration Fee

Please make payment of following fee No later than 17 April 2015 by credit card payment or bank transfer.

Registration fee is;

US\$ **300** (or 36,000 JPY) for IERE members

US\$ **350** (or 42,000 JPY) for non-members

US\$ **175** (or 21,000 JPY) for academia

*IERE member list: <https://www.iere.jp/contents/Membership/Membership.html>

**Payment is applicable only in advance and non-refundable unless otherwise canceled by organizer.

Note

Registration fee will cover attendance for the “Advanced Electric Power Management - Thermal Power Generation against Huge Impact by Renewable Energy Penetration -”, conference package, Welcome Reception/Cocktail(19 May), Lunches(20,21 May) and a Dinner (20 May).

Technical visits (22 May) Fee is US\$60 (or 7,200 JPY)

J-POWER Isogo Thermal Power Station & CRIEPI Yokosuka Area

Note:

Technical visits fees above will cover attendance for the technical visits, a round trip transportation between Shinagawa and the sites and a Lunch.

Credit Card payment (payment in USD only)

If you prefer using your credit card for the payment of registration fee, please contact to the following URL.

https://www.iere.jp/Payment/Tokyo_Workshop_2015.html

Bank Information (payment in USD and JPY)

Bank Information

| | |
|----------------------|---|
| Name of the Bank: | The Bank of Tokyo-Mitsubishi UFJ, Ltd. |
| Name of the Branch: | Seijo branch |
| Name of the account: | IERE |
| Account Number: | 1204581 |
| Bank address: | 15-1 Seijo 6-chome, Setagaya-ku, Tokyo, 157-0066 JAPAN |
| SWIFT code: | <input type="text" value="B"/> <input type="text" value="O"/> <input type="text" value="T"/> <input type="text" value="K"/> <input type="text" value=""/> <input type="text" value="J"/> <input type="text" value="P"/> <input type="text" value=""/> <input type="text" value="J"/> <input type="text" value="T"/> |

* Remittance charge, Lifting charge, Correspondent charge and other charges should be paid by participants

VISA (Please do not forget!)

For participants from some countries needing a VISA to enter Japan, please consult with travel agent in your country for the details.

If you need an Invitation Letter, please contact IERE Central Office.

Submission Items & Deadlines

For Participants including speakers

| Items | Format No. | Deadline | Submit To: |
|-----------------------------|------------|---------------|--|
| Registration Form (Page 10) | 1 | 17 March 2015 | Mr. Tetsuo Matsumura office@iere.dcc.co.jp |
| Registration Fee | — | 17 April 2015 | Please, refer to p.6 of this Announcement |
| Technical visits Fee | — | 17 April 2015 | Ditto |

For Speakers

| Items | Format No. | Deadline | Submit To: |
|--|------------|---------------|--|
| Abstract | 2 | 6 March 2015 | Mr. Tetsuo Matsumura office@iere.dcc.co.jp |
| Speaker's Information | 3 | 17 March 2015 | |
| Copyright Permission | 4 | 17 April 2015 | |
| Presentation Slides (Power Point file) | — | 17 April 2015 | |

The formats (No.1 to 4) can be **DOWNLOADED** from
https://www.iere.jp/contents/Information/Preparation_Events/index.html

Language

The official language is English.

For Exhibitors & Sponsors:

Exhibition at the conference site is available.

Exhibition Fee is;

US\$ **600** for IERE members

US\$ **700** for non-members

*Exhibition fee includes registration for two persons.

For further details, please contact IERE Central Office **by 31 March. 2015**. Please refer to;

https://www.iere.jp/contents/Information/Preparation_Events/index.html

And kind of sponsorship is also welcome. For further details, please contact IERE Central Office.

Information

Venue

Welcome Reception: **Shinagawa Prince Hotel (Main Tower, Reception Hall, Level +10)**

Location is;

4-10-30, Takanawa, Minato Ku, Tokyo, Japan

+81 3-3449-9844

URL :<http://www.princehotels.com/en/shinagawa/>

*Two minute walk from the Shinagawa Station (Takanawa Exit).

Workshop: **Electric Power Historical Museum of TEPCO**

Location is;

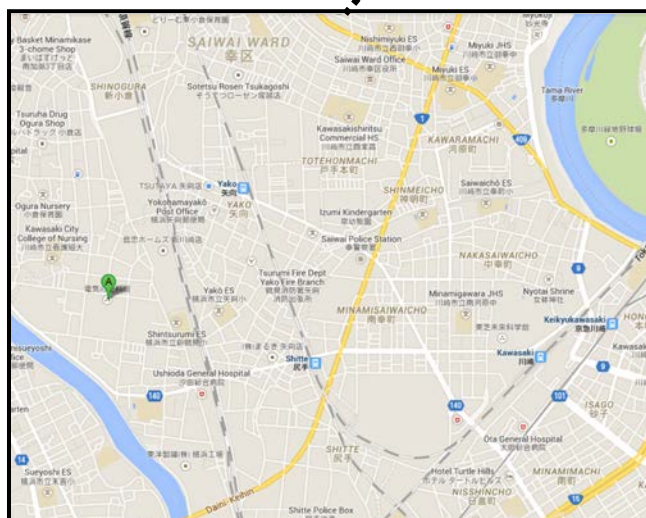
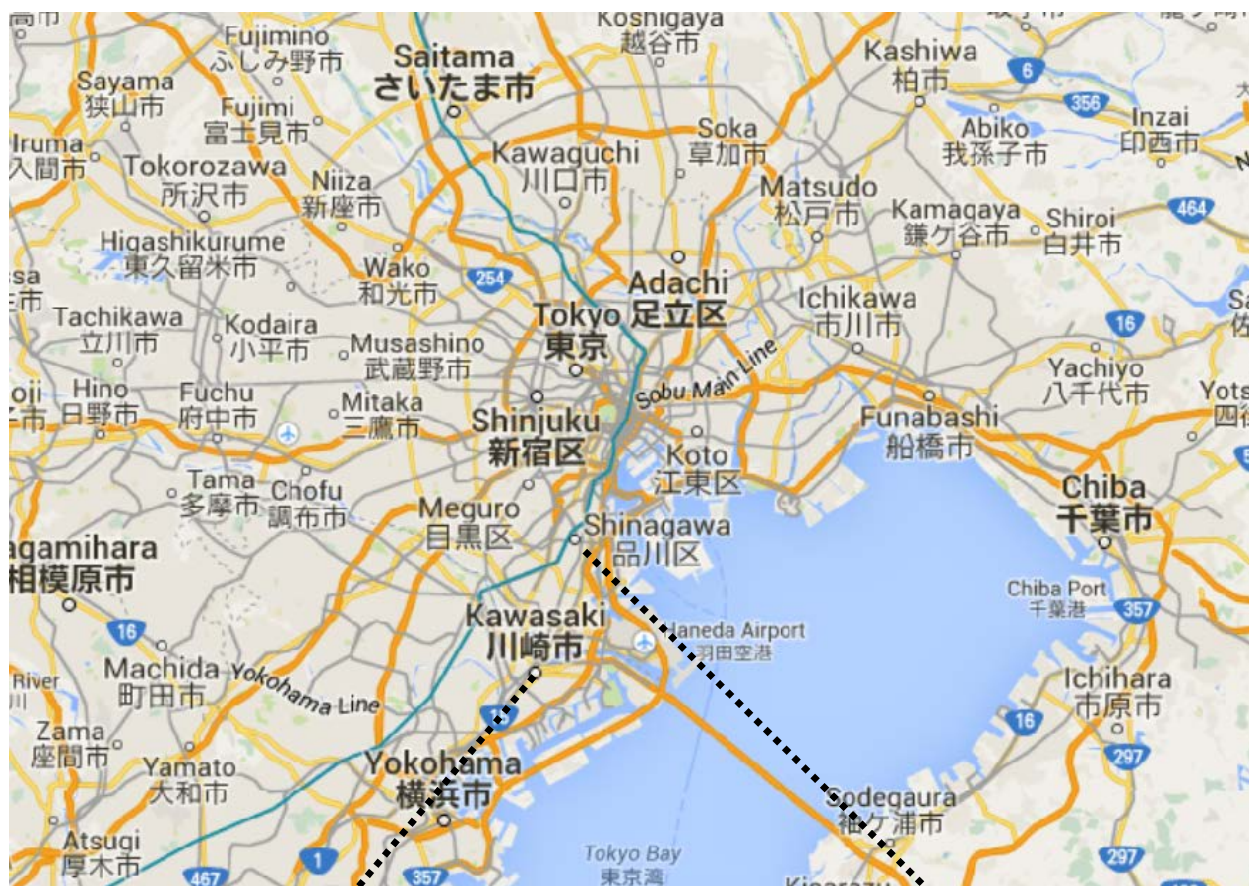
4-1, Egasaki, Tsurumi Ku, Yokohama, Japan

URL :<http://www.tepco.co.jp/en/shiryokan/guide/index-e.html>

*This Museum is located about 2 km west from JR Kawasaki Station.

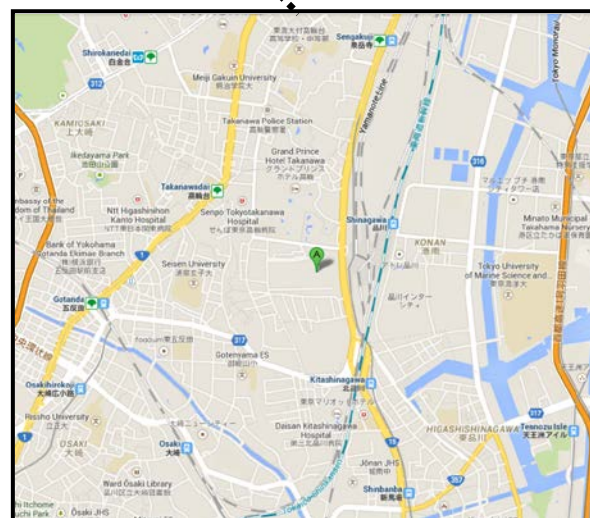
*Shuttle Bus Service arranged by CRIEPI is available between **Workshop venue** and **Shinagawa Prince Hotel**.

*Currently, Electric Power Historical Museum of TEPCO is closed for the time being. Shuttle Bus Service of TEPCO in the URL above is **not available** between Workshop venue and Kawasaki Station.



Map URL: <http://goo.gl/maps/i46YX>

Electric Power Historical Museum of TEPCO





Map URL: <http://goo.gl/maps/Jbt1t>

Shinagawa Prince Hotel (Main Tower)

*Shuttle Bus Service arranged by CRIEPI is available between **Workshop venue** and **Shinagawa Prince Hotel**.

Accommodations (Hotels situated near the venues)

HOTELS NEAR SHINAGAWA STATION

| HOTEL | | Rates* <i>The rate will be changed.</i> | TRAIN |
|--|---|--|----------------------|
| Shinagawa Prince Hotel <u>*Shuttle Bus Service is available between Workshop venue and Shinagawa Prince Hotel (arranged by CRIEPI)</u> 4-10-30 Takanawa Minato Ku Tokyo, Japan +81 3-3449-9844 http://www.princehotels.com/en/shinagawa/ |  | 9,979 JPY - 71,755 JPY *Reference price from the Hotel Website on 3rd Feb | JR Shinagawa Station |
| Grand Prince Hotel Takanawa 3-13-1 Takanawa Minato Ku Tokyo, Japan +81 3-3447-1111 http://www.princehotels.com/en/takanawa/ |  | <i>Please check the Hotel website</i> | JR Shinagawa Station |
| Keikyu EX Inn Shinagawa-Ekimae 3-13-3 Takanawa Minato Ku Tokyo, Japan +81 3-6743-3910 http://www.shinagawa.keikyu-exinn.co.jp/en/index.html |  | <i>Please check the Hotel website</i> | JR Shinagawa Station |

✓ *Please contact to the Hotel listed above and make a reservation by yourself !!*

[Reference]

Narita International Airport

Please refer to;

<http://www.narita-airport.jp/en/index.html>

Airport transfer (between Narita International Airport and Shinagawa station)

<http://www.narita-airport.jp/en/access/train/index.html>

Haneda Airport

Please refer to;

<http://www.haneda-airport.jp/inter/en/>

Airport transfer (between Haneda Airport and Shinagawa station)

<http://www.haneda-airport.jp/inter/en/access/train.html>

REGISTRATION FORM

Format 1

2015 IERE-CRIEPI Tokyo Workshop “Advanced Electric Power Management - Thermal Power Generation against Huge Impact by Renewable Energy Penetration -”, May. 19-22, 2015

Please type ☒ at appropriate boxes, and then return this form by email **NO LATER THAN 17 March 2015** to Mr. Tetsuo Matsumura at Email: office@iere.dcc.co.jp

| | | |
|---|---|-------------|
| Name | <input type="checkbox"/> Prof. <input type="checkbox"/> Dr. <input type="checkbox"/> Mr. <input type="checkbox"/> Ms. <input type="checkbox"/> Other, Please specify | |
| | First Name | Family Name |
| Department & Position | | |
| Affiliation | | |
| Address | Zip Code | |
| | Country | |
| Contact Info | Email | |
| | Phone # | |
| I will contribute to a presentation | <input type="checkbox"/> Oral Session <input type="checkbox"/> Poster Session <input type="checkbox"/> No <i>*There is a possibility we ask you to change from Oral Session to Poster Session by the number of presentation.</i> | |
| | Title of Paper : | |
| Dinner attendance | Registration fee covers the reception and the dinner, but for restaurant reservations, please let us know your dinner attendance. (x: I will attend) <input type="checkbox"/> Welcome Cocktail on 19 May. <input type="checkbox"/> Dinner on 20 May. <input type="checkbox"/> None | |
| Accompanying person | If your family accompanies you on dinner, please write her or his name and title (Mr., Ms.). | |
| Registration fee (Participants including speakers should pay) | <input type="checkbox"/> US\$300 (or 36,000 JPY) : IERE Member <input type="checkbox"/> US\$350 (or 42,000 JPY) : Non-Member <input type="checkbox"/> US\$175 (or 21,000 JPY) : Academia <i>*IERE member list: https://www.iere.jp/contents/Membership/Membership.html</i> <i>** Payment is applicable only in advance and non-refundable unless otherwise canceled by organizer.</i> | |
| Technical visits (Optional) | <input type="checkbox"/> Yes (on 22 May.) <input type="checkbox"/> No US\$60 (or 7,200 JPY) / person for “J-POWER Isogo Thermal Power Station & CRIEPI Yokosuka Area” | |
| Guide tour of Museum (Optional) | <input type="checkbox"/> Yes (on 21 May, 14:00 - 15:00,) <input type="checkbox"/> No Free of charge (Number of participants is limited). A specialist guide will show you around the Electric Power Historical Museum of TEPCO , explaining points of interest along the way. <i>*All participants of the Workshop can have a look around the “Electric Power Historical Museum of TEPCO” freely, during the workshop.</i> | |
| Payment amount | Total US\$ _____ (Registration Fee, Technical visits Fee) | |
| Payment method | <input type="checkbox"/> Credit Card <input type="checkbox"/> Bank Transfer (Please full in the followings.) I will remit / have remitted the fee on _____ (date) by the name of _____ (name of remitter) through _____ (name of bank) | |
| Invitation Letter | CRIEPI may be able to issue an invitation letter for participants who need to apply for a Japan Visa. Please mark below if applicable. <input type="checkbox"/> I need an invitation letter for Japan Visa application. Name(s)/Country on Passport(s) of Accompanying Person(s) : _____ <i>Disclaimer: CRIEPI reserves the right to fulfill or decline, at CRIEPI's discretion, requests for letters of invitation for visa application support purposes.</i> | |
| 13. Information from IERE | Do you agree with receiving e-mail notice on future activities and/or IERE E-mail Magazine from IERE Central Office? <input type="checkbox"/> Yes <input type="checkbox"/> No | |

<Credit Card payment>

If you prefer using your credit card for the payment of registration fee, please contact to the following URL.

https://www.iere.jp/Payment/Tokyo_Workshop_2015.html

About CRIEPI

CRIEPI, Central Research Institute of Electric Power Industry, is a private industrial research institute that is funded mainly by the Japanese electric power utility companies in 1951 to support their supply chain.

CRIEPI is also an in-house research institute that conducts research projects and development of various types and sizes of its own initiative to contribute to the electric power industry and society.

CRIEPI contribute to the development of a solid but flexible energy supply and demand structure by appropriately preparing for risks, effectively maintaining facilities, and providing new technologies for the next generation. A stable supply of energy and preserving the environment are issues shared by the entire world, and CRIEPI closely collaborate with a broad range of international and domestic organizations in the same field to resolve these problems.

From the establishment of IERE in 1968, CRIEPI has been continuing to support the IERE activities.

IERE Members List (as of 1 February, 2015)

| | | | |
|--------------|---------------------|--------------------|-------------------|
| Brazil | CEPEL | | |
| Canada | Hydro-Québec | | |
| China | CEPRI | Guangdong Power | NARI |
| | SEPRI | Xi'an TPRI | |
| France | EDF | GDF Suez | |
| Germany | RWE AG | | |
| Hong Kong | CLPRI | NHVS | |
| India | CPRI | NTPC | |
| Indonesia | PT.PLN | | |
| Iran | NRI | | |
| Italy | Enel | | |
| Japan | CEPC | Chubu EPCO | Chugoku EPCO |
| | CRIEPI | Fuji Electric | Hitachi |
| | Hokkaido EPCO | Hokuriku EPCO | IHI |
| | J-POWER | Japan Atomic Power | Kansai EPCO |
| | Kyushu EPCO | Meidensha | MHPS |
| | Mitsubishi Electric | NGK | Sumitomo Electric |
| | Shikoku EPCO | Tohoku EPCO | Tokyo EPCO |
| | Toshiba | | |
| Korea | KEPCO | KEPCO E&C | KERI |
| | KESRI-SNU* | | |
| Malaysia | TNB | | |
| Mexico | IIE | Prolec GE | |
| Philippines | Aboitiz Power Co. | MERALCO | SMC GPHC |
| Singapore | SP PowerGrid | | |
| South Africa | CT LAB | Eskom | PIESA |
| Spain | Gas Natural Fenosa | REE | |
| Taiwan | Taiwan Power | | |
| Thailand | EGAT | PEA | |
| U.S.A. | EPRI | Light the World | |

*: Academia

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