



First Announcement

2019 IERE-PLN Bali Workshop

"Smarter and Cleaner Electricity for Better Life"



Pura Ulun Danu Bratan, Bali, Indonesia

March 11 – 14, 2019 Bali, Indonesia

Organized by IERE and PLN





Smarter and Cleaner Electricity for Better Life

About the theme

The economy is largely built on a reliable supply of cheap electricity. Therefore electricity production is still mostly based on fossil fuels. A challenge is to keep the supply system stable and affordable with the rapid expansion of intermittent renewable energy sources. The power lines, transformers, and control stations that make up our current energy grid are old, increasingly unreliable, and not adequate to handle a significant increase in renewable energy. In addition the utilization electricity for non-power sector such as transportation is still growing significantly.

To move toward a cleaner energy economy, improvements of electrical grid is needed, as well as construct the smart system which can solve the issues arising from the intermittency of renewable electricity sources. Smart appliances respond intelligently to a signal from the grid operator. Variable pricing of electricity might also help, and for this smart meters with a momentary tariff indicator are needed. Modern contingency reserves have to consist of smaller agile power plants that are well distributed across the area to be served. Decentralized generation is beneficial in this respect, since it reduces the dependence on a few distant generators and long power lines.

Despite its smart and clean value to society, electricity has to be affordable. Indeed the use of electrical energy should be directly linked with economic value. To make the integration successful and to ensure prosperity in the future, new technical solutions and business conditions are needed.

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.





Outline Schedule:

Monday	– March 11, 2019	Welcome Reception
Tuesday	– March 12, 2019	2019 IERE-PLN Bali Workshop (Day 1)
		Official Dinner
Wednesday	– March 13, 2019	2019 IERE-PLN Bali Workshop (Day 2)
		Social Event (Optional)
Thursday	– March 14, 2019	Technical Visit (Optional)

General Theme: Smarter and Cleaner Electricity for Better Life

Session 1: Advanced Metering Infrastructure (AMI)

Utilities today are seeking ways to enhance energy efficiency, reduce costs and improve customer service. One strategy is to deploy an advanced metering infrastructure (AMI). However, installation and execution are still challenging. Implementing AMI is a complex undertaking involving multiple technologies. This session will discuss about all content of AMI and its implementation strategy. Potential topics include:

- 1. Smart meter
- 2. Communication protocol and technology
- 3. Meter data management system
- 4. Security issues and challenge
- 5. AMI implementation strategy etc.

Session 2: Distributed Power Generation

Environmentally friendly renewable energy technologies such as photo-voltaic and clean, efficient, fossil-fuels technologies such as micro-turbines and fuel cells are among new generating systems driving the demand for distributed generation of electricity. The smallness of these new distributed generations along with the low voltages at the interface creates a new class of problems which requires innovative approaches to managing and operating the distributed resources. This section will explore about the role of distributed power generation for electrifying community and all related issues. Potential topics include:

- 1. Solar photovoltaic panels (solar farm, PV rooftop)
- 2. Small wind turbines
- 3. Micro gas fired (turbines/engines)
- 4. Fuel cells using by natural gas or biomass
- 5. Reciprocating combustion engines etc.





Session 3: Renewable Energy Grid Integration

To foster sustainable, low-emission development, many countries are establishing ambitious renewable energy (RE) targets for their electricity supply. Because RE especially solar and wind tend to be more variable and uncertain than conventional sources, various technical and economic issues occur in the integration of these resources into a grid. Technical problems arise in the areas of power quality, voltage stability, harmonics, reliability, protection, and control. The session will investigate the possible solutions for those issues and other related challenges. Potential topics include:

- 1. System flexibility
- 2. Storage system and technology
- 3. Stochastic modelling
- 4. Demand side management
- 5. Hybrid system etc.

Session 4: Electric Vehicle (EV) Infrastructure

The development of electric vehicle has been over a hundred years but failure to gain the public acceptance in various stages due to various reasons. Therefore, widespread electric vehicle adoption requires a supportive ecosystem of stakeholders including utilities, government, vehicle OEMs, charging providers, interest group and drivers. With the correct policy and government help and advancement of electric vehicle technology, the prospect of Electric Vehicle will be bright and the focus point of future development. The session will elaborate those issues and the following potential topics:

- 1. Standard and type of charger
- 2. EV business model
- 3. E-mobility concept and model
- 4. EV infrastructure development strategy etc.

Session 5: Advanced Thermal Power Generation

Although the renewable energy has emerging globally yet the energy supply in the world is still mostly produced by thermal power generation. To move toward a cleaner energy economy, improvements of emission reduction technology are needed, as well as construct the smart system overcoming the intermittency of renewable electricity penetration. Additionally to achieve higher efficiency and reliability, modernization of thermal power plants has been conducted through utilization of advance management and digital technology.

Potential topics include:

- 1. Thermal power plant flexibility
- 2. Status of emission reduction technology (eg. Carbon capture storage, Clean coal technology etc.)
- 3. Asset management on power generation
- 4. Artificial intelligence and Data analytics of thermal power plants.
- 5. Other green thermal power plants recent issues (eg. Geothermal, Bio mass to energy etc.)





Program

Program may be subject to change according to the registration of speakers and participants.

March 11, 2019

Welcome Reception

Registration and Welcome Reception in the evening

March 12, 2019

Plenary Session Opening Address: IERE Chair Welcome Speech: TBD Keynote Speech: TBD

Session 1 - Advanced Metering Infrastructure (AMI) Session 2 - Distributed Power Generation Session 3 - Renewable Energy Grid Integration

Poster Session

To be determined

Exhibition

Exhibitors are required to register, pay the participation fee, and contact IERE Central Office.

Official dinner

March 13, 2019

Session 4 - Electric Vehicle (EV) Infrastructure Session 5 - Advanced Thermal Power Generation

Social Event (Optional)

The Kecak Fire Dance at Pura Uluwatu Temple and Seaside Dinner

Poster Session

To be determined

Exhibition

Exhibitors are required to register, pay the participation fee, and contact IERE Central Office.

March 14, 2019

Technical Visit (Optional)

Visiting Pesanggaran Engine Gas Power Plant (tentative) and lunch

- The maximum number of participants is up to 70
- Admission will be allotted in order of application.





Call for Papers

<<Abstract Submission: No later than <u>December 7, 2018</u>>>

You are kindly invited to submit abstracts for the Oral Session or Poster Session for the 2019 Bali Workshop by e-mail by December 7, 2018

to: <u>register (at) iere.jp</u> [Please substitute " (at) " with "@"] 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 the abstract**, please refer to "Events" page on IERE website.

https://www.iere.jp/events/workshop/2019-bali/forspeakers.html

- Abstract is uploaded to IERE's website and opened to the public after the workshop.
- The medium of communication is English.

<< Presentation files Submission: No later than <u>February 28, 2019</u>>>

You are kindly requested to submit presentation files (Powerpoint) of the Oral Session and Poster Session for the 2019 IERE - PLN Bali Workshop by email by <u>February 28, 2019.</u>

- Presentation file will be uploaded to IERE website and opened to all participants before the Workshop.
- The medium of communication is English.





Exhibition

The conference will be accompanied by an exhibition, which gives exhibitors the opportunity to present their companies and/or products.

Exhibitors are required to register, pay the participation fee, and contact IERE Central Office.

Registration

(a) On-line Registration

URL: https://www.iere.jp/cgi-bin/event_form/19WS/event_form_entry.cgi

or

(b) Please submit a registration form (Format 1) to IERE Central Office by e-mail. *Deadline: February 11, 2019*

Registration Fee

Please make payment of following fee <u>No later than February 11, 2019</u> by credit card payment or bank transfer.

The Registration fee will cover attendance at both workshop days (include lunches & refreshments at coffee breaks), welcome reception on March 11, official dinner on March 12 and conference package:

IERE members:	US\$ 350
Non-members:	US\$ 525
Academic participants:	US\$ 260

Recommended options

Social Event (optional):	US\$ 60
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The Kecak Fire Dance at Pura Uluwatu Temple and Seaside Dinner on March 13

Technical Visit(optional):	US\$ 45
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Visiting Pesanggaran Engine Gas Power Plant (tentative) on March 14

*The maximum number of participants is up to 70.

** This offer is on a first-come-first-served basis.





Payment

On-line Credit Card Payment and Bank Transfer are available. *Deadline: February 11, 2019*

(a) On-line Credit Card Payment

If you prefer using your credit card for the payment of registration fee, please contact to this URL: <u>https://www.iere.jp/Payment/paypal_19WS.html</u>

(b) Bank Transfer *

Name of the Bank:
Name of the Branch:
Name of the account:
Account Number:
Bank address:
SWIFT code:

MUFG Bank, Ltd. Seijo branch IERE 0068198 15-1 Seijo 6-chome, Setagaya-ku, Tokyo, 157-0066 JAPAN BOTKAD JP JT

* Remittance charge, Lifting charge, Correspondent charge and other charges should be paid <u>by</u> <u>participants.</u>

VISA

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

If you need an Invitation Letter^{*}, please refer to 'Invitation Letter for VISA' on Page 13.

* PT. PLN may be able to issue an invitation letter for participants who need to apply for Visa. It may take a few weeks to complete the procedures in PT. PLN, so please submit the form as soon as possible.

Disclaimer: PT. PLN reserves the right to fulfill or decline, at PT. PLN's discretion, requests for letters of invitation for visa application support purpose.

[VISA information]

Considering a participation on a Workshop/Conference can be decided as business purpose, visitors from NON-ASEAN countries are recommended to obtain VOA (VISA On Arrival) at the arrival airport.

The outline of VOA is as follows.

- This VOA can be obtained by visitor from 68 countries
- Expiration date of the applicant's passport must be at least 6 months at the date of entry.
- At least one blank visa page
- Round-trip airplane ticket
- Visa on Arrival fee (USD 35: Cash in US dollars only)

For more information: <u>http://www.imigrasi.go.id/index.php/en/public-services/visit-visa</u>





Conference Venue & Accommodations

Conference Venue

Ayodya Resort Bali, Bali

Location: Jalan Pantai Mengiat, P.O.Box 46 Nusa Dua 80363, Bali, Indonesia, Website: <u>http://www.ayodyaresortbali.com/</u>











Map URL: <u>https://goo.gl/maps/TgY6kwdCjsw</u>

Accommodations

Ayodya Resort Bali, Bali

Location: Jalan Pantai Mengiat, P.O.Box 46 Nusa Dua 80363, Bali, Indonesia, Website: <u>http://www.ayodyaresortbali.com/</u>

Ayodya Resort Bali gives special rates for conference participants as indicated below.

Website: https://bit.ly/2y8HihG

*The reservation of accommodation is based on availability. ** Please be sure to read cancellation policy on the website before application.





Submission Items & Deadlines

For Participants [including speakers and exhibitors]

Items	Format No.	Deadline	То:
Registration Form	1	February 11, 2019	register(at)iere.jp [Please substitute (at) with @]
VISA Form (If necessary)	5	February 11, 2019 (It takes a few weeks to issue)	Ditto
Registration Fee	_	February 11, 2019	Please refer to Page 6
Social Event Fee [optional]	—	February 11, 2019	Ditto
Technical Visits Fee [optional]	_	February 11, 2019	Ditto

The formats (No.1 and 5) can be downloaded from

URL: https://www.iere.jp/events/workshop/2019-bali/register.html

For Speakers

Items	Format No.	Deadline	То:
Abstract	2	December 7, 2018	
Speaker's Information	3	February 11, 2019	register(at)iere.jp
Copyright Permission	4	February 11, 2019	[Please substitute (at) with @.]
Presentation Slides (<u>PowerPoint file</u>)	_	February 28, 2019	

The formats (No.2 to 4) can be downloaded from

URL: <u>https://www.iere.jp/events/workshop/2019-bali/forspeakers.html</u>

Speakers are kindly requested to submit their Speaker's Information and Copyright Permission **February 11, 2019** and their Presentation Slides (PowerPoint file) **by February 28, 2019**.





REGISTRATION FORM

Format 1

2019 IERE-PLN Bali Workshop March 11 – 14, 2019, Bali, Indonesia

Please type 🗵 at appropriate boxes, then send this form **February 11, 2019**

via email to: IERE Central Office: register(at)iere.jp [Please substitute (at) with @] / Fax: +81-3-3488-5100

1. Name	□ Prof. □ Dr. □ Mr. □ Ms. □ Other, Please specify:		
	First Name		Family Name
2. Position, Department			
3.Company/Organization			
4. Address	Zip Code Country/Region		
5. Contact Information	E-mail		
	Phone Number		
	Fax Number		
6. I will contribute to a presentation	□ Yes <u>Title:</u> □ No		
7. Registration Fee	[Participants including speakers and exhibitors should pay registration fees.]		
[March 11-14]	 □ USD 350 : IERE Member □ USD 525 : Non-IERE Member □ USD 260 : Academia Note: When participation is canceled irrespective of the reason after February 11, 2019, Registration Fee might be charged or not be reimbursed. 		
8. Welcome Reception attendance [March 11] not Mandatory	[For reservations, please let us know your attendance.] □ Yes (Included in Registration Fee) Number of Accompanying Person if you have: person(s) (free) □ No		
9. Official Dinner attendance [March 12] not Mandatory	[For reservations, please let us know your attendance.] □ Yes (Included in Registration Fee) Number of Accompanying Person if you have: person(s) (add USD 60 per person) □ No		
10. Social Event (Optional) [March 13] The Kecak Fire Dance and Seaside Dinner	 Yes (USD 60) Number of Accompanying Person if you have: person(s) (add USD 60 per person) No 		





11. Technical Visit (Optional) [March 14] Visiting Pesanggaran Engine Gas Power Plant	 Yes (USD 45) Number of Accompanying Person if you have: person(s) (add USD45 per person) No * The maximum number of participants is up to 70. ** Admission will be allotted in order of application. 		
12. Payment Amount	Total: USD		
13. Payment Method	Credit Card: <u>https://www.iere.jp/Payment/paypal_19WS.html</u>		
[to be completed by February 11]	Bank Transfer (available only for IERE members) * IERE Central Office will send you the invoice.		
14. Invitation Letter for VISA	 PT. PLN may be able to issue an invitation letter for participants who need to apply for Visa. Disclaimer: PT. PLN reserves the right to fulfill or decline, at PT. PLN's discretion, requests for letters of invitation for visa application support purposes. I need an invitation letter for Visa application. *Please submit the `Format 5' of the 1st Announcement to IERE Central Office by e-mail by Feb. 11, 2019. INo 		
15. Information from IERE	Do you agree with receiving e-mail notice on future activities/IERE E-mail Magazine from IERE Central Office? □ Yes □ No		
16. Personal Data	□ I agree to disclose my personal data for the Participants list of this Workshop.		

Central Office may enclose 'Participants list' in the conference bag to facilitate communication among participants. The list will contain

- 1. Name
- 2. Position, Department
- 3. Company/ Organization etc.4. E-mail address
- 5. Country/Region

of this format.

If you **DON'T** want to open these information, please type ' \checkmark ' at appropriate boxes shown below.

□ 2. Position, Department □ 4. e-mail address





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Invitation Letter for VISA

If participants need an invitation letter, please type 🔀 and fill out the form and send to: IERE Central Office at

Email: register(at)iere.jp [Please substitute (at) with @].

 I need an invitation letter * PT. PLN (Persero) may be able weeks to complete the procedure 				
	reserves the right to fulfill or dec pplication support purposes.	line, at PT. PLN (Persero)'	s discretion, requests for letters of	
Name on passport	First Name:	Middle Name:	Family Name:	
Gender	□ Male □ Fe	male		
Nationality				
Date of birth				
Passport No.				
Occupation				
Company/ Organization etc.				
Expected date of entry				
Duration of stay				
Expected date of departure				
	□ March 11, 2019 We	elcome Reception		
	□ March 12, 2019 IER	E-PLN Bali Worksho	op (Day 1)	
Colloquium Participation	□ March 13, 2019 IERE-PLN Bali Workshop (Day 2)			
	□ March 13, 2019 Soc	cial Event		
	□ March 14, 2019 Tee	chnical Visit		





Australia Canada China France Germany	CS Energy Ltd. Powertech Labs Inc. CEPRI	CSIRO	
China France			
France	CEDDI		
	UEFKI	GPG	NARI
Germany	Enedis	ENGIE	
	EnBW	innogy SE	RWE TI
Hong Kong SAR	CLPRI		
Indonesia	PLN		
Iran	NRI		
Japan	Chubu EPCO	Chugoku EPCO	CRIEPI
	FEPC	Fuji Electric Co., Ltd.	Hitachi
	Hokkaido EPCO	Hokuriku EPCO	IHI
	J-POWER	JAPC	Kansai EPCO
	Kyushu EPCO	MHPS	Mitsubishi Electric
	NGK	Sumitomo Electric	Shikoku EPCO
	Tohoku EPCO	TEPCO	TOSHIBA
Korea	KEPCO	KEPCO E&C	KERI
Malaysia	TNB		
Mexico	INEEL	Prolec GE	
Philippines	APC	MERALCO	
Singapore	SPPG		
South Africa	Eskom	PIESA	
Spain	Gas Natural Fenosa	REE	
Taiwan	TPC		
Thailand	EGAT	EURC*	
U.S.A.	EPRI	SwRI	
*: Academia			





About PT. PLN (Persero)

PLN is the only state-owned enterprise in the power sector and ensures that everyone throughout Indonesia has access to electricity. Initially established by President Soekarno on October 27, 1945, PLN has since made rapid progress and in 2015 was recognized as one of the 500 biggest companies in the world (rank 480, Fortune 500).

As a holding company, PLN has attained AAA rating from PT Pemeringkat Efek Indonesia and BBB-, BB, and Baa3 - from Fitch Ratings, Standard & Poor's, and Moody's - in 2015. PLN business has grown to other business sectors through subsidiaries, associate entities, joint ventures, and special purpose vehicle. Within headquarters in Jakarta, Indonesia PLN's core business remains in electricity supply, especially in power generation, transmission, and distribution.

Nowadays PLN owns and operates 39.562 MW power generation, 48.901 kms transmission lines, 1.028.679 distribution lines, 113.791 MVA substation. Its customer is already exceeding 68 million with more than 25 million using pre-paid meter technology.



About IERE

IERE is an organization for exchanging electricity and energy related cutting-edge technologies and R&D information among its members from the electricity & energy supply industry, equipment provider businesses, academic research, government, etc. This unique platform is of great help for executives, senior managers, engineers, and researchers who are responsible for R&D and solutions. It is a worldwide, non-profit organization, established as "International Electric Research Exchange" in 1968.





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https://www.iere.jp

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