



ASEAN POWER SYSTEM OPERATORS WORKSHOP 2019

VARIABLE RENEWABLE ENERGY (VRE) SOURCE INTEGRATION

12 – 14 NOVEMBER 2019 PARKROYAL PENANG RESORT

ABOUT

SCOPE

The objectives of this three-day workshop are:

- To facilitate closer rapport amongst the Grid System Operators in the region
- To trigger a potentially powerful collaboration that will foster future strategic alliances in areas of common interests.
- To share on technicality needs and to prepare grid for high RE penetration
- To share experience on major disturbances

DELIVERABLES

At the end of three-day session, we hope to achieve:

- ❖ A general understanding on each Power utility's Grid System operational philosophy and management.
- Identification of potential areas of collaboration and synergies in trainings, exchange programs, consultation and sharing of facilities.
- Charting the next steps towards developing an effective strategic alliance for ASEAN Grid System Operators.

WHO SHOULD ATTEND

It is expected that all ASEAN countries' power system operators will participate and contribute to this workshop, namely from Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam

This workshop is primarily designed for:

- Control Room Power System Operators/ Controllers
- Control Room Energy Management System (EMS)/SCADA personnel
- Short-term operation planners

DATE & VENUE

12-14 November 2019 at the Park Royal Penang, Malaysia.

PARTICIPATION & ACCOMODATION

There will be no fees for workshop participation.

Accommodations for participants at the hotel where workshop is being held or nearby hotels can be arranged upon request at participants cost.

PROGRAMME AT A GLANCE

12 NOVEMBER 2019

- Speaker 1: Variable Renewable Energy (VRE) Source Integration
- Presentation Session 1: Malaysia (TNB, SESB & SEB)
- Presentation Session 2: Brunei, Cambodia & Indonesia

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- Presentation Session 3: Laos, Myanmar & Philippines
 Presentation Session 4: Singapore, Thailand & Vietnam
- Presentation Session 5: Operation and Performance of H-Class Single Shaft CCGT
- Grand Dinner

14 NOVEMBER 2019

- Speaker 2: VRE Forecast Management
- Speaker 3: Wide Area Monitoring Protection and Control (WAMPAC)
- Speaker 4: VRE Integration into SCADA/EMS Architecture & Control

ASEAN OPERATORS WORKSHOP 2019 REGISTRATION FORM

| PARTICIPANT DE | <u>TAILS</u> | | |
|----------------|--------------|------|--|
| NAME | : | | |
| COMPANY | : | | |
| ADDRESS | : | | |
| | | | |
| | | | |
| COUNTRY | <u>:</u> | | |
| POSITION | <u>:</u> | | |
| PHONE NO. | <u>:</u> | | |
| EMAIL | : | | |
| | | | |

FLIGHT DETAILS

Airport transfer will be provided for Flight details received by 28 October 2019

| | Date | |
|-----------|---------------------------|--|
| ARRIVAL | Flight No. | |
| | Estimated Time of Arrival | |
| | Date | |
| DEPARTURE | Flight No. | |
| | Estimated Time of Arrival | |

| Accompanying Person (if any): | |
|-------------------------------|--|
| | |

HOTEL INFORMATION

Please indicate your preference in the table below and include a copy of your passport (photo page) to facilitate check-in. The Organizing Committee will send you the booking confirmation from the hotel. You may also do your booking through online.

| | Hotels | Price |
|---|---|--------------------------|
| 1 | Parkroyal Penang Resort (Program venue) | RM443.00 (single/double) |
| 2 | Holiday Inn Resort Penang (Walking Distance – 500meters) | Please book online |
| 3 | Holiday Inn Penang Feringgi Tower(Walking Distance –200m) | Please book online |

If you have any inquiry please contact Mr. Kennedy A/L Soloman (+6019-3348004/kennedys@gso.org.my) OR Mr. Dharma (dharmak@tnb.com.my)

Day 1: TUESDAY 12th November 2019

| 8:30 | Registration |
|-------|---|
| 9:00 | Welcoming Remarks |
| 9:15 | Opening Remarks |
| 9:30 | Introduction Session |
| 10:30 | Group Photo |
| 10:40 | NETWORKING BREAK |
| 11:00 | Key Note Speaker 1 Topic: VRE Source Integration |
| 12:30 | Q&A Session |
| 12:45 | BUSINESS LUNCH |
| 14:00 | Presentation Session 1 Malaysia (Malaysia, SESB & SEB) |
| 15:00 | TEA BREAK |
| 15:20 | Presentation Session 2 |
| 15:40 | Brunei |
| 16:10 | Cambodia |
| 16:30 | Indonesia |
| 17:00 | Free & Easy |

Day 2: WEDNESDAY 13th November 2019

| 9:00 | Presentation Session 3 |
|-------|---|
| 9:10 | Laos |
| 9:30 | Myanmar |
| 9:50 | Philippines |
| 10:10 | NETWORKING BREAK |
| 10:30 | Presentation Session 4 |
| 10:40 | Singapore |
| 11:00 | Thailand |
| 11:20 | Vietnam |
| 11:40 | Q&A Session |
| 12:30 | BUSINESS LUNCH |
| 14:00 | Presentation Session 5 : Operation and Performance of H-Class Single Shaft CCGT |
| 17:00 | Free & Easy |
| 20:00 | OFFICIAL DINNER |

Day 3: WEDNESDAY 14th November 2019

| 9:00 | Keynote Speaker 2 Topic: VRE Forecast Management |
|-------|--|
| 10:30 | TEA BREAK |
| 10:50 | Keynote Speaker 3 Topic: Wide Area Monitoring Protection System (WAMPS) |
| 12:20 | Q&A Session |
| 12:30 | BUSINESS LUNCH |
| 14:00 | Keynote Speaker 4 Topic: VRE Integration into SCADA/EMS Architecture & Control |
| 15:30 | TEA BREAK |
| 15:50 | Roundtable Discussion |
| 16:30 | Closing Remarks |