

Energy Emergency Response of Thailand

Dr. Sarawut Kaewtathip
Acting Director of Policy and Strategy Management Office

Energy Emergency Incidents in the past

Energy Emergency Response Exercise

Lesson Learn & Next Step

Energy Emergency Incident 2008 - 2013

Total 58 times
Most of them are “Supply Side = Natural Gas”

Electricity generating system 17 Times

Fuel Supply system 22 Times

Electricity Transmission System 10 Times

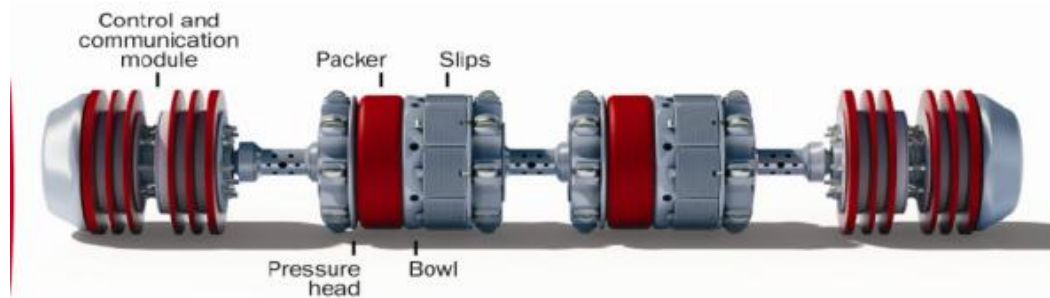
Equipment 9 Times



- **There have been no “brownouts” or “blackouts”**

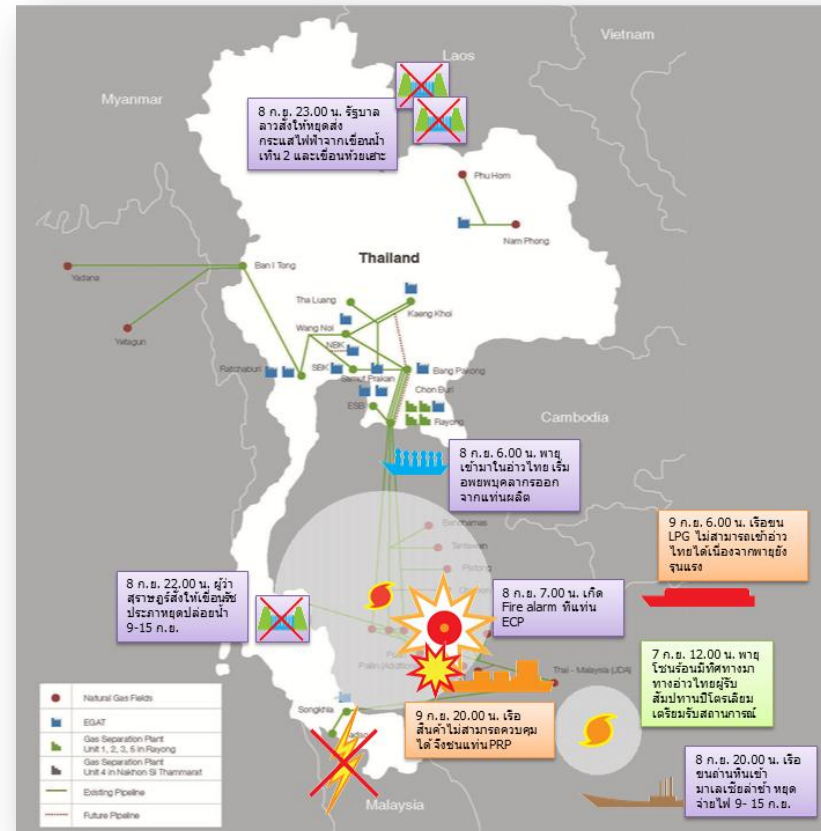
1st : 18 Febuary 2010

- **Venue & Participant** : Ministry of Energy / 50 participants
- **Scenario**: Based on actual incident
 - Shut down of the Yadana field due to scheduled maintenance
- **Approach** – The use of Smart plug that reduced the shutdown period by 6 days
- **Incident management** : Test with PTT and EGAT



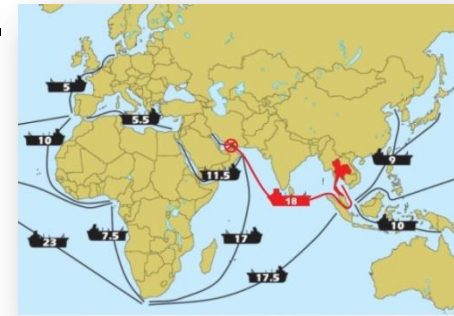
2nd : 10 September 2010

- **Venue and Participant** : EGAT HQ / 500 participants
- **Scenario** :
 - Loss of natural gas supply of the Gulf of Thailand
 - Accident that causes of additional gas supply loss
- **Approach**
 - **Demand Side**
 - ✓ Increase generation of the coal fired power plant
 - ✓ Increase generation of standby generators
 - ✓ Reduce the voltage frequency
 - **Supply Side**
 - ✓ Reduce electricity consumption from large building and factories
 - ✓ Reduce electricity consumption from public sectors

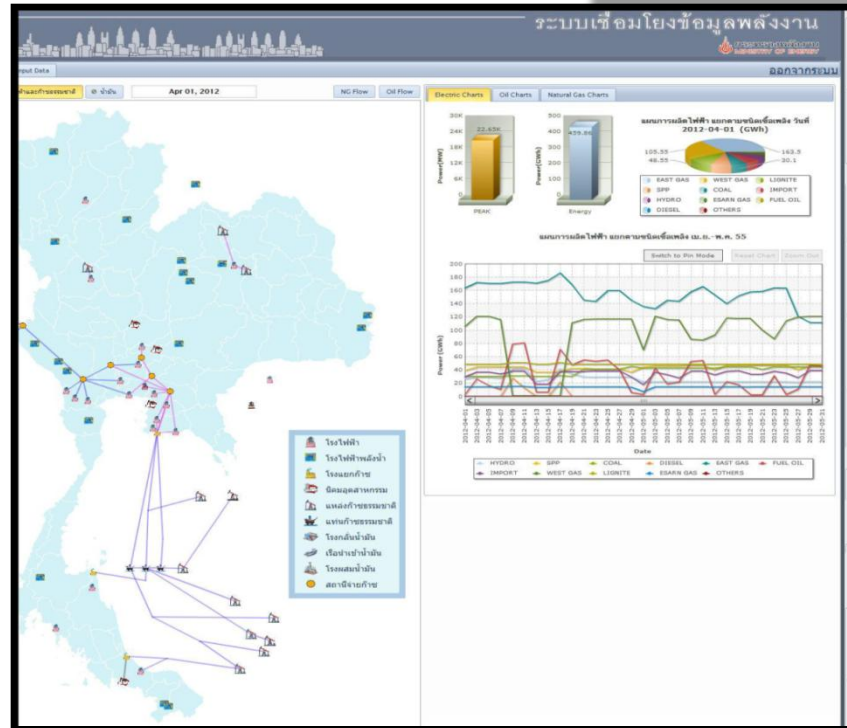


3rd : 4 April 2012

- **Venue and Participant** : Ministry of Energy / 300 participants
- **Scenario**
 - The technical failure of natural gas producing system
 - Strait of Hormuz incident
 - Shut down of Myanmar and Gulf of Thailand field.
 - The explosion of natural gas pipeline
- **Approach**
 - **Demand Side**
 - ✓ Relocation of Electricity load
 - ✓ Campaign on energy conservation
 - ✓ Cooperation with the industry sector to reduce electricity's demand
 - **Supply Side**
 - ✓ Restriction of oil export
 - ✓ Increase the Gulf of Thailand production
 - ✓ Postponement the scheduled maintenance of power plant and natural gas field
 - ✓ Releasing oil stock



3rd : 4 April 2012

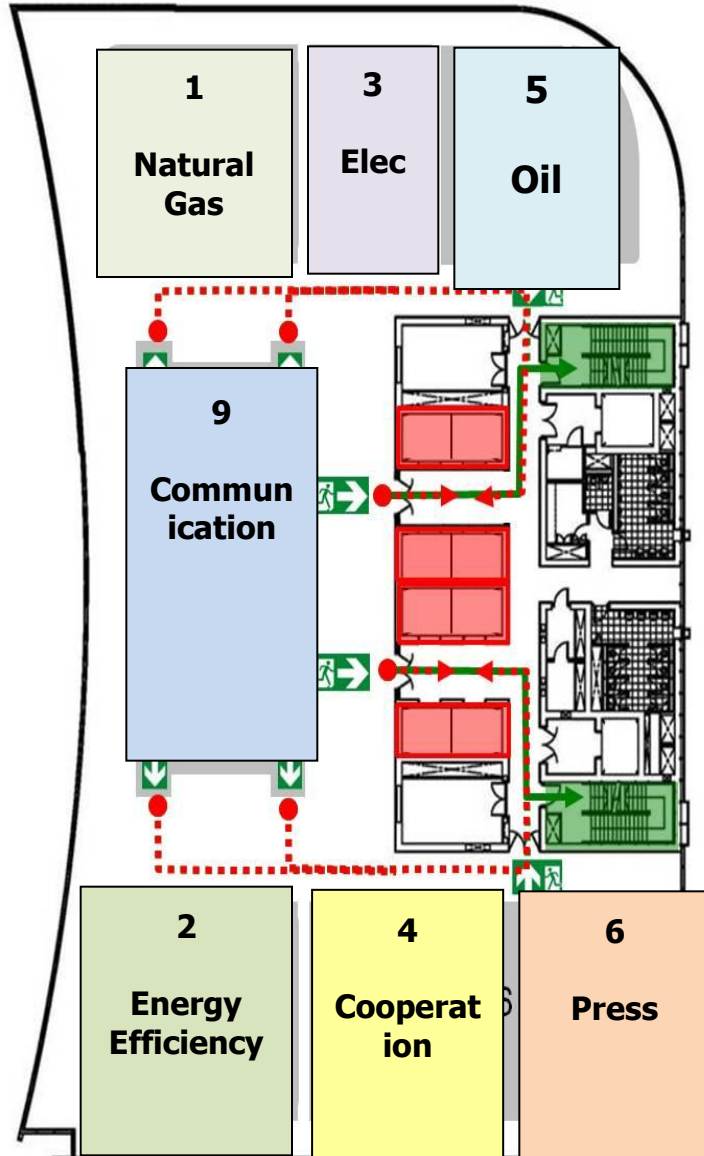


4th : 13 March 2013

- **Venue and Participant** : Ministry of Energy / 300 participants
- **Scenario**
 - Shut down of the Yadana field due to scheduled maintenance
 - Technical problem of gas production in major gas fields in the Gulf of Thailand
 - Technical problem of power plant causing shutdown
- **Approach**
 - **Demand Side**
 - ✓ Cooperation with the industry sector to reduce electricity' emand
 - ✓ Increase generation of standby generators
 - **Supply Side**
 - ✓ Logistical management of oil to power plants
 - ✓ Increase the electricity generation of power plants

• **Communication Strategy System**

- ✓ The conference connecting between "Room to Room" and "MoEN to PTT, EGAT and Regional offices "
- ✓ The communication between MoEN and public



1. The structure and command

- NESO
- Line of Command

2. Communication

- One message
- Timely communication
- Through the people

3. Law

- The legal restriction: Environmental 's permission , Transportations permission
- The contractual agreement

4. Type of fuel switching

- ⇒ Gas dependency
- ⇒ Spec of power plant capacity
- ⇒ Oil or gas pipeline

5. The technology

- Hardware
- Software

Thank You



วิกฤติไฟฟ้าดับที่เกาะสมุย-พะงัน จ.สุราษฎร์ธานี ปี 2555



อุบัติเหตุ
สายเคเบิลใต้ดินระเบิด
4 ธ.ค. 55

ไฟฟ้าบนเกาะดับกว่า 58 ชั่วโมง
พวจ. ออกประกาศให้พื้นที่ทั้งสองเกาะเป็น
"พื้นที่ประสบภัยพิบัติฉุกเฉิน"

