# Paris Session 2022



## PILOT PROJECT GRID SCALE BESS IN EGAT SYSTEM

### S. Pryngkhunmuang, J. Piphatmongkolporn, W. Aphichato

Question PS1.1

What are the enduring impacts and changes, if any, that the Electricity Supply industry has implemented as a result of lessons learned from the experiences during the COVID-19 lockdown in respect of substation design & operations?

## Wasin Aphichato Electricity Generating Authority of Thailand Thailand

Group Discussion Meeting

© CIGRE 2022

© CIGRE 2021

Question PS1.1 What are the enduring impacts and changes, if any, that the Electricity Supply industry has implemented as a result of lessons learned from the experiences during the COVID-19 lockdown in respect of substation design & operations?

#### Limitation/Obstruction

- Covid-19 Pandemic.
- Shipment block/delay.
- Flood in a nearby construction area.



- Containerized solution for flexible use.
- Typical standard design for civil foundation, containers, etc.
- Prefabricated Power Conditioning System (PCS) with transformer container.
- Fast construction and installation.
- Online FAT due to travel limitation.

**Group Discussion Meeting** 

Question PS1.1 What are the enduring impacts and changes, if any, that the Electricity Supply industry has implemented as a result of lessons learned from the experiences during the COVID-19 lockdown in respect of substation design & operations?

Design methodology

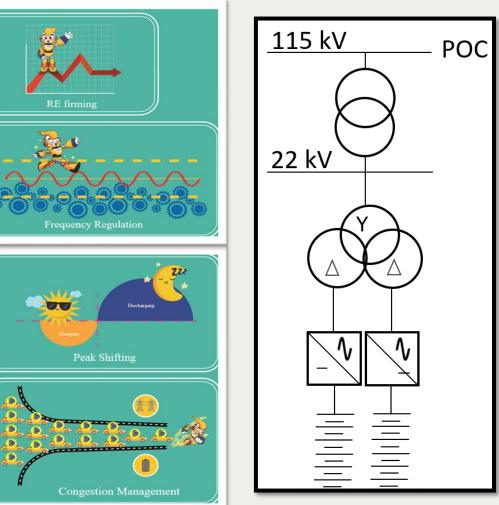
- Performance
- Safety

#### Safety primary concerns: NFPA 855

- Separation distance
- Modular design
- Hierarchical control and monitoring system

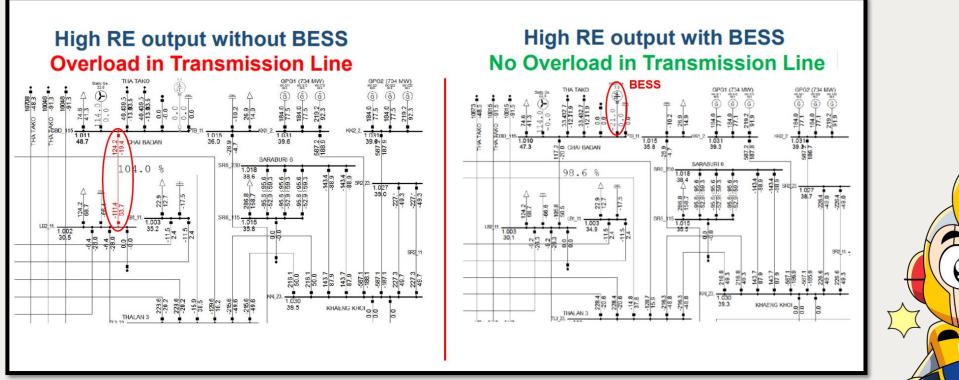
<u>Applications</u>

- RE firming
- Peak shifting
- Frequency Regulation
- Congestion Management Group Discussion Meeting



### PILOT PROJECT GRID SCALE BESS IN EGAT SYSTEM

### **Congestion Management**



**Group Discussion Meeting**