

Paris Session 2022



Providing training opportunities for replicating
psychological pressure on substation operators

SC C2
PS1-1 / Question 1.2

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1. Question and Our Contribution

< Questions >

Q1.2: The training of a control room operator is essential to enable them to be exposed to situations that rarely occur in real-life. However, in these extra-ordinary events the psychological pressure can affect the decision process of an operator, how can these conditions be replicated on a simulator?

< Answer >

- Training opportunities were very limited for substation operators in Country P, because the training was conducted only during power outages. Hence, we provided substation operator training simulators.
- We also provided training scenarios which are similar to actual faults.

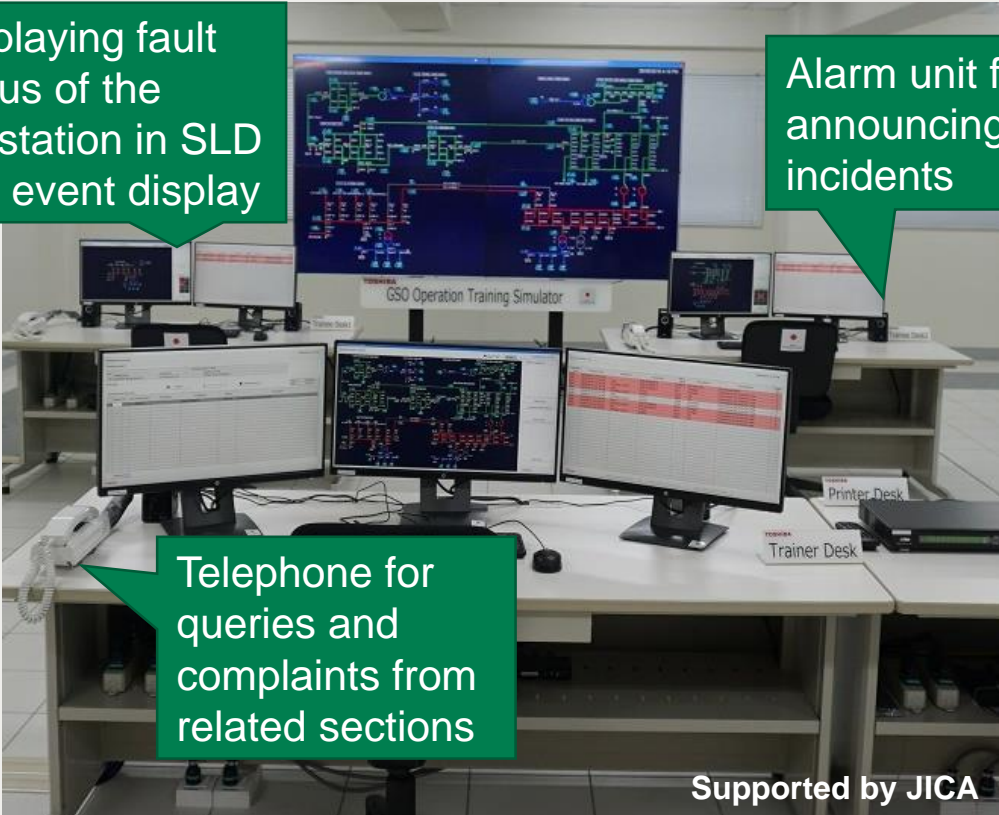
2. Substation operator training simulators

< Training center >

Displaying fault status of the substation in SLD and event display

Alarm unit for announcing incidents

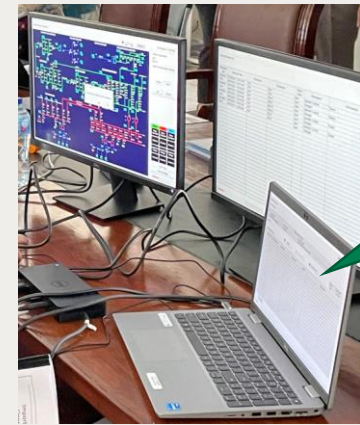
Telephone for queries and complaints from related sections



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Group Discussion Meeting

< Substation >



Total 10K operators can be trained by lectures or self-study in each substation.

System features

- Maximum 200 training cases can be registered.
- Realistic training scenarios will be created by simply choosing the fault points and conditions.

3. Practical training scenarios

- Training scenarios which could occur on the grid and their recommended recovery procedures are provided.
- A training curriculum which covers all operators such as rookies, mid-level and veteran will be provided, to increase training opportunities.

4. Conclusion

- The simulator provides experiences of alarm sounds and major event messages during faults, reduces concerns about misoperation during normal and recovery operations and evaluates operations for rare incidents. Hence, the simulator can reduce psychological pressure.
- RES (Solar PV and Wind power) and HVDC will be added in the simulator so that it can provide realistic training for more complicated system operations in the future.