

Paris Session 2022



Introduction of KJC and equipment measures for operation

C1 – PS3

Question 3.1.2 Modern power system planning should strive to meet adequacy and stability throughout interconnected networks. How can market rules and operational procedures be adapted to increase interaction between neighboring utilities/jurisdictions to enhance dispatch rules and balancing of both capacity deficit areas and capacity surplus areas?

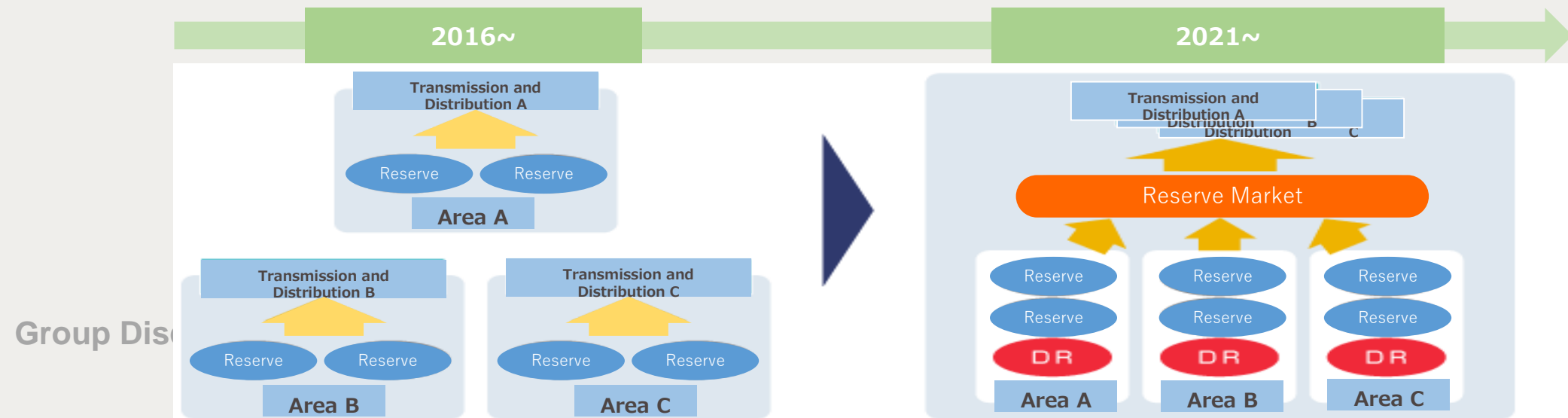
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Kansai Transmission and Distribution

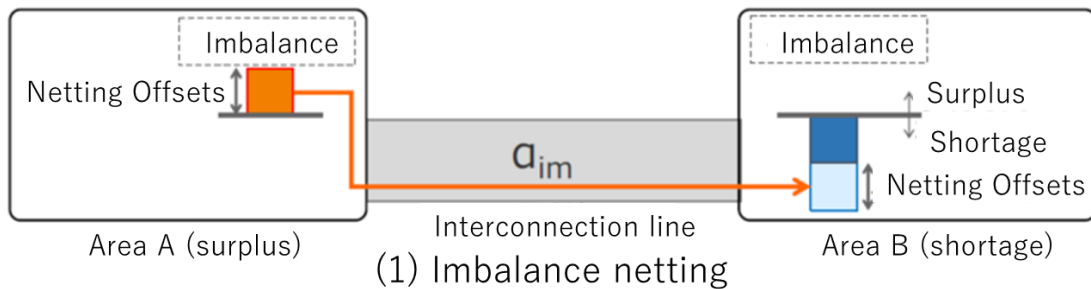
Overview of the reserve market for interconnected operation

- The reserve market was started in Japan in 2021, with the main purpose of enabling the procurement and operation of power reserve across areas through cross-regional interconnection lines.
- After the introduction of the reserve market, power reserve is procured from the entire Japanese market through cross-regional interconnection lines.

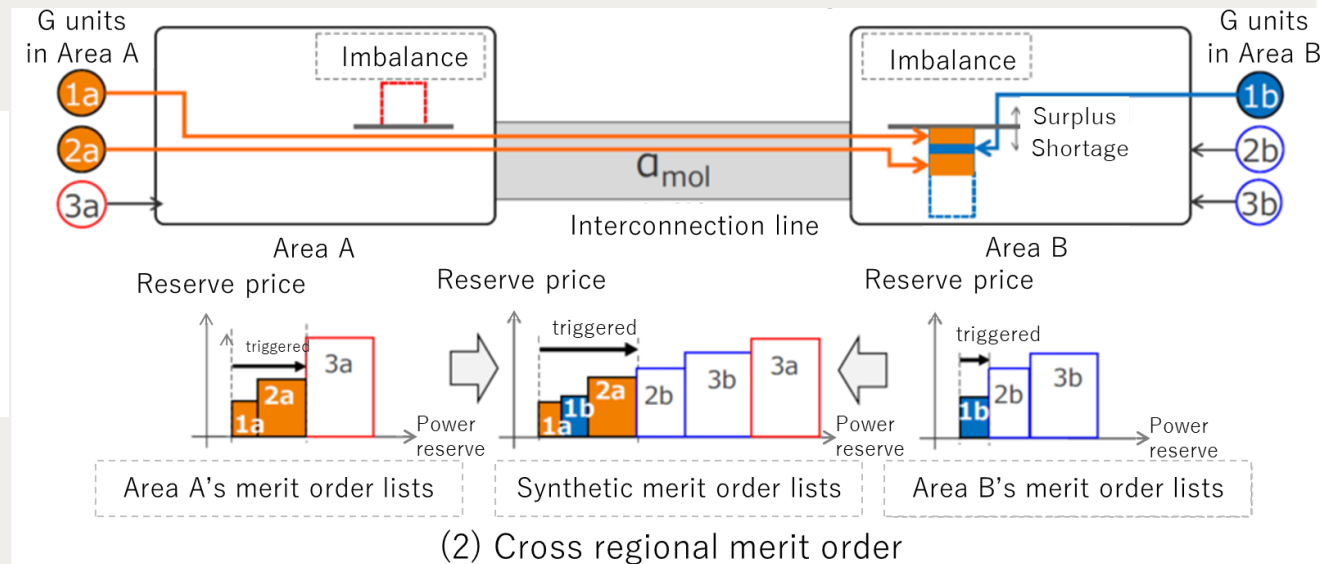


About KJC and its contribution for interconnected operation

- The Keystone Japanese Coordinating (KJC) system has also been introduced.
- Through (1) Imbalance netting, offsets surplus and shortage of reserve, and (2) Cross regional merit order, serving economical reserve throughout interconnection lines, T&D companies can reduce the cost of producing power reserve.



Group Discussion Meeting



(2) Cross regional merit order

Impacts and equipment measures for introducing reserve market

- The power flow is determined by the reserve market, and in the most severe condition, excessive voltage higher than the criterion in our 500-kV system was predicted especially in the southern area.
- To solve the voltage violation, we decided to install additional shunt reactors. This countermeasure will help maintain voltage and procure power reserve more efficiently and reliably.

