## Aggregation of Revised Electricity Supply Plans for FY 2018

September 4, 2018

Organization for Cross-regional Coordination of Transmission Operators, JAPAN



- In aggregation of electricity supply plans, the Organization has concluded that reserve margin at 17:00 in August FY 2021 cannot achieve the 8% criterion of a stable electricity supply; therefore, the Organization continuously and carefully evaluates mid-to-long term supply-demand balance; the new plan to restart some nuclear power plants will change the situation, and the accompanying supply-demand balance.
- Currently, the Kansai Electric Power Company, Inc. and Kyushu Electric Power Company, Inc. have submitted the revised electricity supply plans due to resuming operation of the nuclear power plants in their regional service areas. According to the submission of the plans, the Organization also has published the projected report based on the revised data.

This document summarizes the new supply-demand balance evaluation both in short and mid-to-long term.

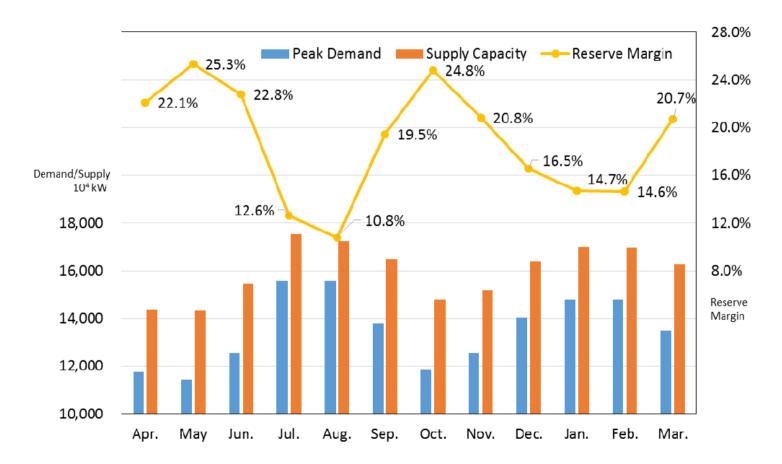
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Aggregation of Electricity Supply Plans Fiscal Year 2018

http://www.occto.or.jp/en/information disclosure/supply plan/181126 aggregation supplyplan.html



Figure below shows the new projection of monthly supply capacity and peak demand (at time of the least reserve margin) for FY 2018 in nationwide\*. The least reserve margin is improved to 10.8% in August and projected to secure 8% throughout the year.





<sup>\*</sup> Nationwide data is the sum of regional data at the least reserve margin.

Figure below shows the new projection of annual supply capacity and peak demand (at 15:00 in August) from FY 2018 to 2027 in nationwide. The least reserve margin during the period is 10.8% in FY2019 and projected to secure 8% throughout the period.

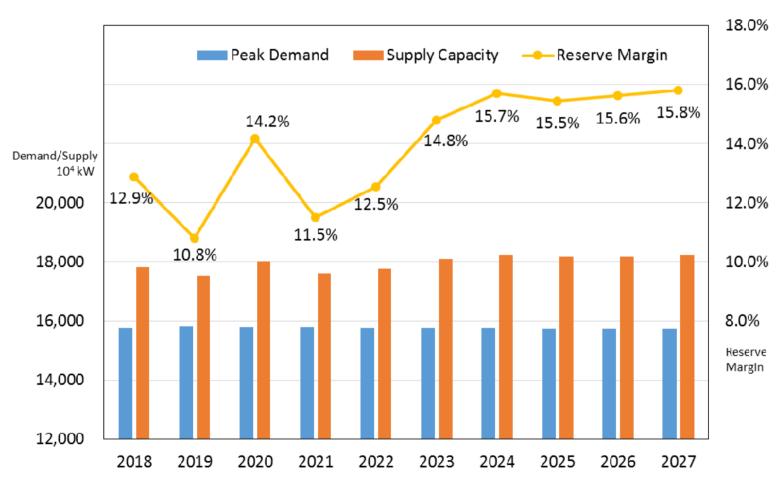




Table below shows the new projection of annual supply capacity and peak demand (at 15:00 in August) from FY 2018 to 2027 in each regional service area. The new data have generally brought improvement to the reserve margin of the areas of submitting revised plans for the projected period.

## Reserve Margin for Each Regional Service Area (at 15:00 in August)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Hokkaido	26.9%	23.5%	41.3%	40.0%	41.6%	41.8%	41.7%	42.0%	41.6%	52.5%
Tohoku	14.9%	13.3%	19.0%	16.8%	17.7%	18.7%	19.6%	20.7%	21.2%	24.3%
Tokyo	6.5%	6.8%	8.8%	5.7%	4.8%	9.3%	14.6%	14.7%	14.7%	13.6%
50Hz areas Total	9.3%	9.0%	12.6%	9.8%	9.4%	13.0%	17.1%	17.4%	17.5%	17.9%
Chubu	8.3%	8.1%	6.3%	6.2%	9.7%	7.3%	4.4%	4.7%	5.1%	5.3%
Hokuriku	12.2%	14.0%	12.5%	12.2%	12.3%	12.3%	12.4%	11.4%	11.5%	11.6%
Kansai	20.4%	19.5%	18.3%	11.7%	14.6%	17.6%	17.3%	14.6%	16.0%	16.3%
Chugoku	21.9%	10.5%	18.2%	16.7%	18.5%	22.0%	22.1%	22.3%	22.5%	22.1%
Shikoku	9.5%	6.7%	13.3%	3.6%	1.1%	10.8%	11.1%	11.3%	11.8%	12.1%
Kyushu	16.8%	6.5%	21.8%	23.0%	24.6%	25.1%	19.7%	20.0%	18.3%	18.4%
60Hz areas Total	15.3%	11.8%	14.9%	12.3%	14.5%	15.9%	14.0%	13.3%	13.6%	13.8%
Interconnected	12.6%	10.5%	13.8%	11.2%	12.2%	14.6%	15.4%	15.2%	15.3%	15.6%
Okinawa	41.6%	40.2%	48.1%	47.5%	46.8%	38.4%	45.5%	44.5%	43.3%	34.9%
Nationwide	12.9%	10.8%	14.2%	11.5%	12.5%	14.8%	15.7%	15.5%	15.6%	15.8%

**Below 8% Criteria** 



Table below shows the new projection of annual supply capacity and peak demand (at 17:00 in August) from FY 2018 to 2027 in each regional service area. Similarly, the new data have generally brought improvement to the reserve margin of the areas of submitting revised plans for the projected period.

Reserve Margin for Each Regional Service Area (at 17:00 in August)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Hokkaido	25.2%	21.6%	39.0%	37.5%	39.2%	39.4%	39.3%	39.5%	39.2%	50.1%
Tohoku	12.6%	10.3%	15.6%	12.9%	13.5%	14.1%	14.6%	15.4%	15.5%	18.2%
Tokyo	6.7%	7.0%	9.1%	5.9%	5.0%	9.6%	15.0%	15.2%	15.1%	14.1%
50Hz areas Total	8.9%	8.5%	12.1%	9.1%	8.7%	12.3%	16.4%	16.7%	16.7%	17.1%
Chubu	8.1%	7.4%	5.3%	5.0%	8.4%	5.9%	2.9%	3.2%	3.6%	3.8%
Hokuriku	14.7%	15.7%	13.9%	13.2%	13.0%	12.9%	12.8%	11.5%	11.4%	11.3%
Kansai	17.8%	16.6%	15.1%	8.3%	11.1%	14.1%	13.7%	10.9%	12.2%	12.5%
Chugoku	19.8%	9.1%	17.9%	13.9%	14.6%	17.8%	17.7%	17.7%	17.8%	17.3%
Shikoku	9.5%	6.7%	12.8%	2.5%	-0.3%	9.3%	9.3%	9.3%	9.6%	9.7%
Kyushu	8.0%	3.4%	12.9%	13.7%	15.0%	15.4%	10.2%	10.4%	8.8%	8.9%
60Hz areas Total	12.9%	10.1%	12.1%	9.0%	10.9%	12.1%	10.2%	9.4%	9.6%	9.7%
Interconnected	11.1%	9.4%	12.1%	9.0%	9.9%	12.2%	13.0%	12.7%	12.8%	13.0%
Okinawa	38.6%	36.8%	44.6%	43.7%	42.8%	34.1%	41.1%	40.1%	38.9%	30.5%
Nationwide	11.4%	9.6%	12.4%	9.4%	10.2%	12.4%	13.3%	12.9%	13.1%	13.2%

**Below 8% Criteria** 



Table below shows the new projection of annual supply capacity and peak demand (at 17:00 in August) from FY 2018 to 2027 in each regional service area. The reserve margins are equalized by transferring supply capacity through interconnection lines. All areas and years are projected to secure 8% of reserve margin.

Reserve Margin for Each Regional Service Area

(at 17:00 in August, Equalized Reserve Margin through Interconnection Lines)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Hokkaido	21.8%	10.9%	28.3%	28.1%	28.8%	29.0%	28.9%	29.2%	28.9%	39.8%
Tohoku	8.4%	8.5%	11.3%	8.4%	8.7%	11.7%	12.8%	13.0%	13.0%	12.9%
Tokyo	8.4%	8.5%	11.3%	8.4%	8.7%	11.7%	12.8%	13.0%	13.0%	12.9%
Chubu	12.6%	10.0%	11.8%	8.4%	9.7%	11.7%	12.4%	11.6%	11.8%	11.8%
Hokuriku	12.6%	10.0%	11.8%	8.4%	9.7%	11.7%	12.4%	11.6%	11.8%	11.8%
Kansai	12.6%	10.0%	11.8%	8.4%	9.7%	11.7%	12.4%	11.6%	11.8%	11.8%
Chugoku	12.6%	10.0%	11.8%	8.4%	9.7%	11.7%	12.4%	11.6%	11.8%	11.8%
Shikoku	12.6%	10.0%	11.8%	8.4%	9.7%	11.7%	12.4%	11.6%	11.8%	11.8%
Kyushu	12.6%	10.0%	11.8%	9.6%	10.9%	11.7%	12.4%	11.6%	11.8%	11.8%
Interconnected	11.1%	9.4%	12.1%	9.0%	9.9%	12.2%	13.0%	12.7%	12.8%	13.0%
Okinawa	38.6%	36.8%	44.6%	43.7%	42.8%	34.1%	41.1%	40.1%	38.9%	30.5%
Nationwide	11.4%	9.6%	12.4%	9.4%	10.2%	12.4%	13.3%	12.9%	13.1%	13.2%



## Supply-Demand Balance Evaluation for FY 2018 (Short Term)

The criterion of stable supply (i.e., 8% of reserve margin) is secured throughout the areas and the period.

## Supply-Demand Balance Evaluation for FY 2019-2027 (Mid-to-Long Term)

- The criterion of stable supply (i.e., 8% of reserve margin) is secured throughout the areas and the period.
- The Organization will continuously and carefully evaluate mid-to-long term supply-demand balance; the new plan to restart some nuclear power plants will change the situation, and the accompanying supply-demand balance.