Attachment

Electric Power Supply and Demand Results for Summer 2012

1. Demand results this summer

（1） Peak load

This summer, despite above-average temperatures on many days in mid- to late-July, temperatures throughout August remained at the annual average level, and no heat wave like in the summer of 2010 occurred.

Also, with national energy conservation targets covering the Chubu Electric Power region, numerous customers cooperated with energy conservation measures to keep peak load down.

As a result, the one-time peak load at generating end was 24,780 MW on Friday, July 27. This was 1,700 MW below the estimated value of 26,480 MW (calculated from the one-time peak load for the FY2010 heat wave by factoring in energy conservation measures).

The highest maximum power three-day average per month this summer was 24,570 MW at generating end in July.

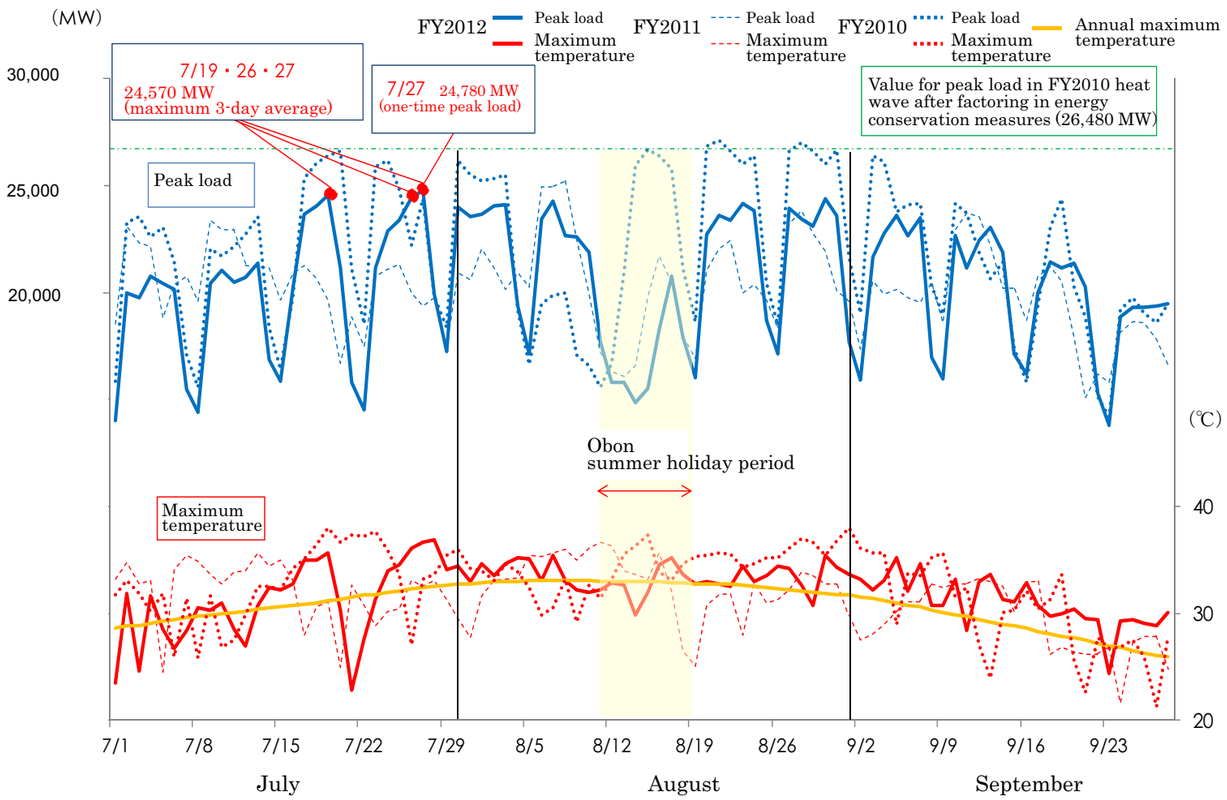
<Summer 2012 one-time peak load (generating end)>

July 27 (Fri)
24,780 MW

<Maximum power three-day average per month (generating end>

July	August	September
24,570 MW	24,270 MW	23,380 MW

(Fluctuations in peak load and maximum temperature)



Reference: average maximum temperature in Nagoya (℃)

	July				August				September			
	Early	Mid	Late	Month	Early	Mid	Late	Month	Early	Mid	Late	Month
This year	28.7	32.0	32.8	31.2	33.9	32.9	33.4	33.4	32.9	31.1	28.5	30.8
Difference from previous year	-4.1	-1.1	2.0	-1.0	0.8	-1.0	2.3	0.7	2.4	-0.8	2.3	1.3
Difference from average year	-0.7	1.4	0.4	0.4	0.8	-0.2	1.1	0.6	1.9	2.4	2.2	2.2

（2） Effects of energy conservation measures

After comparing demand results for this summer with those for FY2010, we estimate that during this period 1,550 MW of energy (6.1% of the seasonal average) was conserved. Thus national energy conservation targets were exceeded in our region.

<Average effect of conservation measures for this period **(with FY2010 as baseline)**>

General conservation effect		1,300 MW
Planned adjustment contracts, etc.		250 MW
Total Conservation effect		1,550 MW
Breakdown	Domestic customers	600 MW
	Corporate customers	950 MW

（3） Expansion of planned adjustment contracts

With the whole country facing electricity supply and demand problems, we committed ourselves to boosting our power reserve through planned adjustment contracts. Thanks to cooperation from our customers, we were able to exceed our targets for these contracts.

FY2012	Target value	Contract value
Summer holiday contracts, etc.	400 MW	450 MW （approx. 1,200 contracts）
Private power generation contracts	100 MW	160 MW (approx. 100 contracts)
Total	500 MW	610 MW (approx. 1,300 contracts)

Reference: new demand-side measures

	Details
Using aggregators to control demand	In partnership with Chubu Electrical Safety Services Foundation and Eos Energy Management Co., we are trialing a scheme to control the power use of customers with sub-500 kW high-voltage service.
Conclusion of notification and adjustment contracts	Under “notification and adjustment contracts,” whenever Kansai Electric Power is expecting electricity shortages, high-volume customers are requested to curb demand by shutting down air conditioning and production lines or other measures, thus creating a reserve pool of power that can be transmitted to Kansai Electric. By concluding approximately 50 of these contracts, we have secured 250 MW of reserve power.

2. Electric power supply and demand this summer

（1） Supply-side measures

We put in place the capacity to provide a stable supply by effectively implementing pre-planned supply measures. Lower-than-expected demand also helped to ensure a stable supply in our region throughout the summer period.

Item	Details
Deferring regular inspections of thermal units until after the legally set schedule	・Change in regular inspection schedule for Kawagoe Thermal Power Station Unit No. 3-3 ・Change in regular inspection schedule for Chita Thermal Power Station Unit No. 1
Increasing output of hydroelectric power stations by raising generating efficiency through facility renovation and other improvements	・Changes to approved output capacity (Okuyahagi Daiichi, Okuizumi, Wago） ・Implementation of flexible operation (Yasuoka, Hatanagi-Daini)
Priority inspections of power stations and transmission/ transformation facilities	・Completion of priority inspections before the summer in order to ensure a stable supply

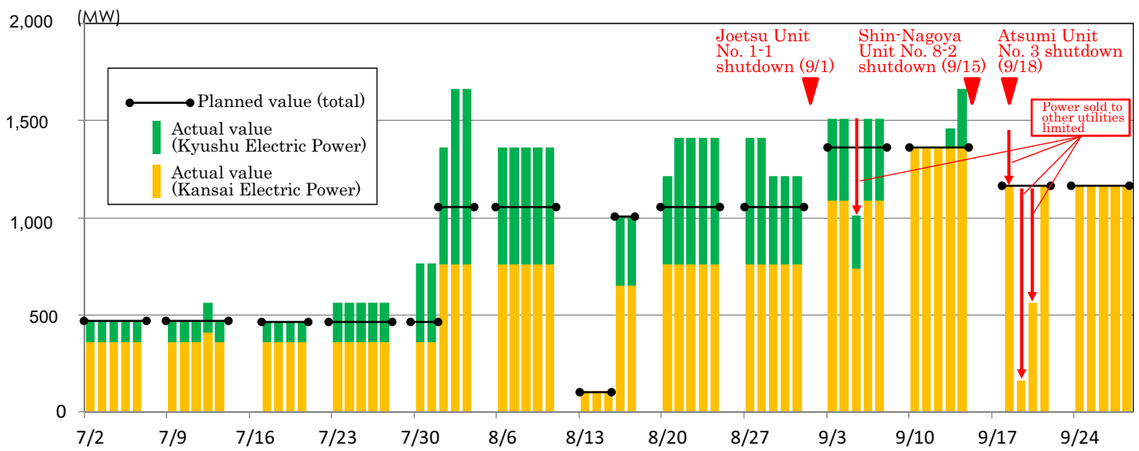
Reference: measures implemented since the start of the fiscal year

Item	Details
Change in regular inspection schedule for thermal units	・Continuing operation of Taketoyo Thermal Power Station Unit No. 2 and other facilities that were scheduled for shutdown in the long-term plan ・Bringing forward regular inspections to the time of year (spring) in which the least burden will be imposed (four units) ・Completing inspections in the shortest time possible (four units)

（2） Power sold to other electric utilities

After requests from Kansai Electric Power and Kyushu Electric Power, which had been facing a severe imbalance in electricity supply and demand, we sold as much surplus power to these utilities as possible without disrupting supply in our region. At peak periods on weekdays we sold up to 1,360 MW to Kansai Electric Power (September) and up to 900 MW to Kyushu Electric Power (August).

However, the unplanned shutdown of a number of thermal power stations in September reduced our surplus. Consequently, in order to ensure a stable supply in our region we limited the sale of electric power to other utilities for a period of four days in total.



Notes:

1. The above graph shows figures for peak periods on weekdays. It does not include weekends and holidays.
2. Figures for power sold to Kansai Electric Power include increased power generation from private power plants [up to 160 MW on weekdays between 08:00 and 22:00].
3. Sale of power on September 5 was limited after the shutdown of Chita Thermal Power Station Unit No. 2 on September 4. (Service was restored the same day.)

3. Unplanned shutdowns at power stations

We endeavor to maintain stable generator operation by conducting inspection and repair of generators even during the summer (at times when there will be no significant effect on supply and demand such as weekends and the Obon holidays). However, there were a number of unplanned shutdowns at thermal power stations in September.

Station	Details	Resumption of service
Joetsu Thermal Power Station Unit No. 1-1 [Rated output: 595 MW] (Shut down September 1, 2012)	○The generator was shut down because of increased vibration in the steam turbine bearings. One of the 96 moving vanes in stage 29 of the 30-stage steam turbine was found to be damaged. ○The maker is now inspecting the vane to determine the cause of the damage. ○Non-destructive inspection revealed no defects in a replacement vane.	Planned for mid-October
Shin-Nagoya Thermal Power Plant Unit No. 8-2 [Rated output: 400 MW] (Shut down September 15, 2012)	○Shut down automatically after an alarm indicated a gas turbine malfunction. White smoke and flames in the gas turbine room were observed via remote monitoring camera. The fire was found to have gone out approximately six hours later. ○Currently the turbine is being opened in order to determine the cause of the fire. ○Inspection of vanes in all 4 gas turbine stages has revealed damage to moving vanes in stages 2, 3 and 4.	Expected before the end of 2012
Atsumi Thermal Power Plant Unit No. 3 [Rated output: 700 MW] (Shut down September 18, 2012)	○A staff member discovered water dripping from the bottom of a boiler during its operation. ○On inspection, an approximately 10 mm-long crack in one evaporator pipe and internal corrosion of the pipe extending for approximately 20 mm were found. ○The leaking pipe was replaced. ○We assume that the cause of the crack was mechanical stress repeatedly exerted on the corroded area inside the pipe during startup and shutdown of the unit.	Completed September 27