Electricity Supply and Demand for this Past Summer (July – August)

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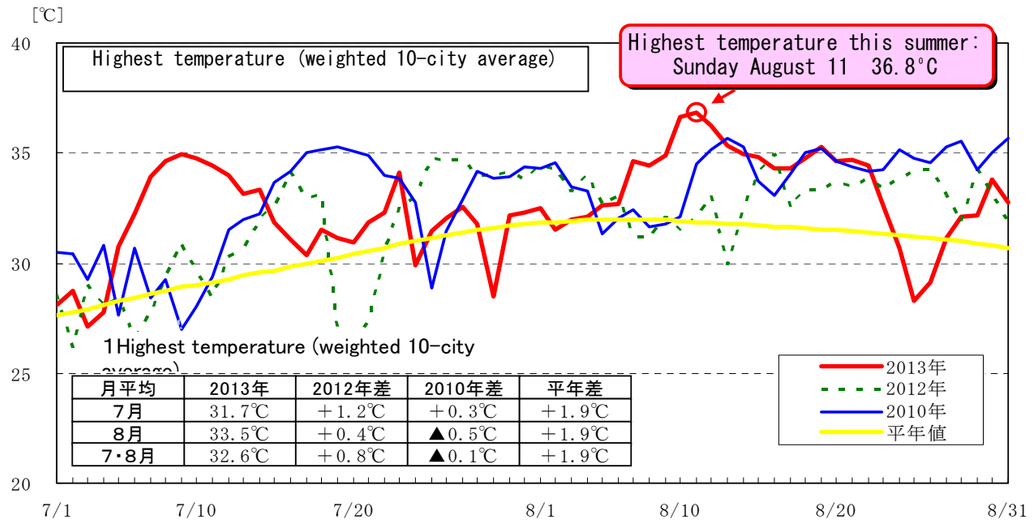
1. Temperature trend

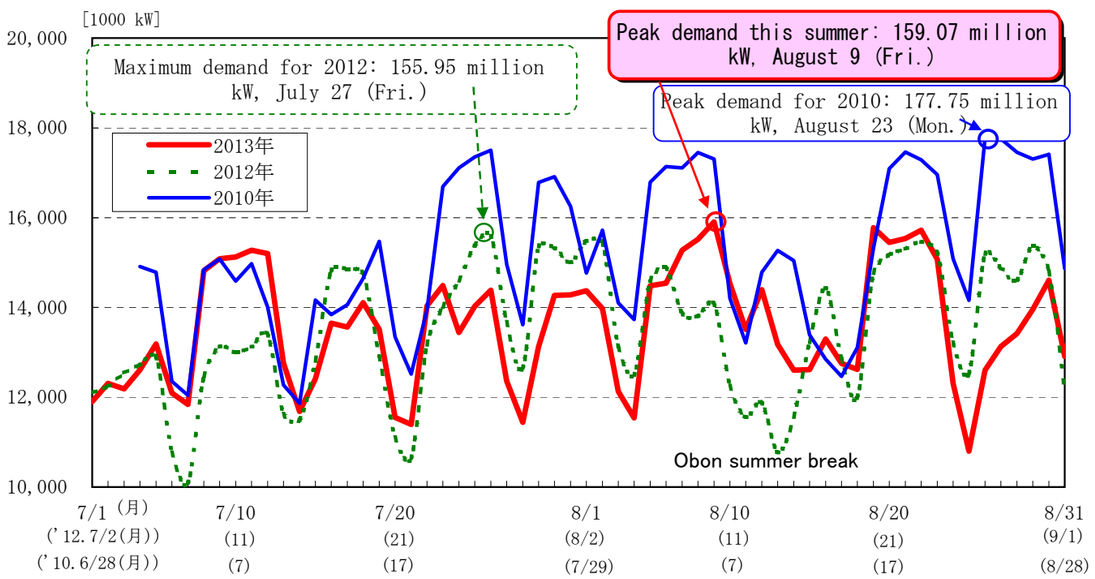
The average highest temperature for July (weighted 10-city average) was 1.2ºC higher than last year at 31.7ºC, and 0.4ºC higher than last year for August at 33.5ºC. The highest temperatures were 0.3ºC higher for July and 0.5ºC lower for August compared to 2010 when record heat was experienced.



月平均	2013年	2012年差	2010年差	平年差
7月	31.7℃	＋1.2℃	＋0.3℃	＋1.9℃
8月	33.5℃	＋0.4℃	▲0.5℃	＋1.9℃
7・8月	32.6℃	＋0.8℃	▲0.1℃	＋1.9℃

2. Combined peak demand of the 10 electric power companies (July – August)

The combined peak demand of the 10 electric power companies was 159.07 million kW recorded at 3 pm on Friday August 9, which was 3.12 million kW (+2.0%) higher than last year. [Reference] Peak demand in the past: 182.69 GW at 3 pm, July 24, 2001.
The highest temperature on Friday August 9 when the highest power output was recorded was 34.9ºC, 0.2ºC higher than last year and 0.3ºC lower than 2010.



3. Nationwide and regional supply-demand balance of electricity

The supply capacity upon combined peak demand of the 10 electric power companies was 173.68 million kW, and the usage rate was 92%.
By region, the combined peak demand of the 3 companies in eastern Japan was 67.81 million kW recorded at 3 pm on August 9 (Fri.), and the usage rate reached 90% of the supply capacity of 75.22 million kW.
The combined peak demand of the 6 companies in central and western Japan was 92.33 million kW recorded at 3 pm on August 22 (Thu.), and the usage rate reached 95% of the supply capacity of 96.80 million kW.

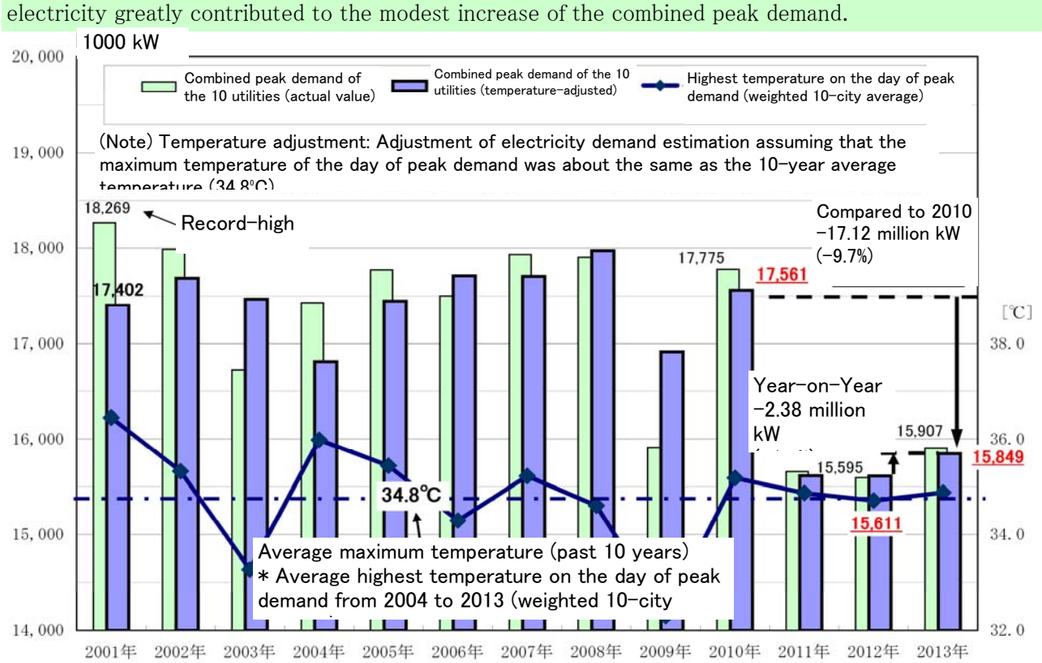
(unit: 1000 kW, %)

	Combined peak demand for the 10 companies	Reference: Combined peak demand for the 3 eastern Japan companies	Reference: Combined peak demand for the 6 central and western Japan companies
Peak demand	15,907	6,781	9,233
Date and time recorded		3 pm August 9	3 pm August 22
Total supply capacity	17,368	7,522	9,680
Reserve capacity	1,462 (9.2)	741 (10.9)	447 (4.8)
Usage rate	92	90	95

Each value is rounded, so their sum may not add up to the total.

4. Trend of combined peak demand of the 10 electric power companies

The combined peak power of the 10 electric power companies this summer compensated by the average maximum temperature (34.8ºC) of the past 10 years was 158.49 million kW, the highest since the Great East Japan Earthquake and 2.38 million kW (+1.5%) higher than last year.
This is 17.12 million kW lower (-9.7%) than 2010 before the earthquake, higher only than 2011 and 2012 when electricity saving was called for nationwide. It is assumed that the customers' effort to save electricity greatly contributed to the modest increase of the combined peak demand.



5. Peak demand and the electricity generated/purchased by each company

The peak demand was higher than the previous year for all companies except Hokkaido, Tohoku and Hokuriku, recording the highest since the earthquake disaster.
The electricity generated/purchased by the 10 electric power companies measured 169.247 billion kWh, up 0.9% from last year and down 9.2% from 2010.

(unit: 1000 kW, 1 million kWh, %)

Company	Peak demand						Electricity generated/purchase		
		Usage rate	Date & time recorded		Y-on-Y	from 2010	(July & Aug. total)	Y-on-Y	from 2010
Hokkaido	450	83	8/7	3pm	97.0	88.8	5,319	99.4	90.9
Tohoku	1,322	88	8/19	3pm	96.9	84.9	13,983	97.9	86.6
Tokyo	＊5,093	92	8/9	3pm	100.3	84.9	53,452	100.5	86.7
Chubu	＊2,623	96	8/22	3pm	105.9	96.8	25,290	101.3	95.2
Hokuriku	526	95	8/19	3pm	100.0	91.8	5,388	99.1	92.3
Kansai	＊2,816	96	8/22	3pm	105.0	91.0	28,931	101.4	91.5
Chugoku	＊1,112	96	8/22	3pm	102.5	92.6	11,795	100.6	93.9
Shikoku	＊549	95	8/22	3pm	104.5	92.1	5,664	102.3	92.6
Kyushu	＊1,634	96	8/20	5pm	107.4	93.4	17,623	103.9	96.5
Okinawa	＊152	73	8/8	8pm	102.1	102.4	1,803	103.4	101.5
東3社合成	6,781	90	8/9	15時	98.8	85.8	72,754	99.9	87.0
中西6社合成	＊9,233	95	8/22	15時	105.9	94.1	94,690	101.6	93.8
10社合成	＊15,907	92	8/9	15時	102.0	89.5	169,247	100.9	90.8

＊ Highest since the earthquake disaster (Note) The values for generated/purchased electricity are from the July-confirmed and August-bulletin

6. Efforts for securing supply capacity

【Securing supply capacity】

○ Adjusting the timing of repair and periodic inspection of thermal power plants

・Except when impossible for plant security reasons, repairs in summer were avoided.
Also, the timing of periodic inspections was adjusted by applying the disaster regulations.

○ Restarting the thermal power plants hit by the Great East Japan Earthquake

・All the affected thermal power stations were restored (13.6 million kW), the severely-hit Haramachi Thermal Power Station Units 1 and 2 (1 million kW each) of Tohoku Electric being the last to be restored in April 2013.

＜Status of recovery of Haramachi Thermal Power Station of Tohoku Electric＞


Before recovery


Before recovery


Coal unloader After


Coal conveyor After recovery

○ New construction and expansion of thermal power plants

・To secure supply capacity, construction work was accelerated where possible to start operating as soon as possible.
In addition, the electricity generated during test operation by plants approaching the start of operation was also used.

・As the output of gas turbine combined cycle plants drops during summertime, intake air coolers were installed to lessen the drop in output.

○ Continuing to use thermal power plants that had been shutdown for long periods, and emergency power supplies

・Continuing to use thermal power plants that were restarted after the earthquake disaster following a long shutdown (2.8 million kW).

・Continuing to use emergency power supplies installed after the earthquake disaster (3.4 million kW).

＜Thermal power stations restarted after the earthquake disaster following long-term shutdo


Yokosuka Thermal Power Station, Tokyo Electric (sequentially restarted in April 2011)


ew Unit 2 of Karita Thermal Power Station, Kyushu Electric (restarted in June 2012

○ Other

・Adjusting the timing of repair of hydroelectric power stations

・Purchasing additional thermal power fuels

・Conducting power interchange between the general electric power companies based on the supply-demand situation of each company, and also receiving electricity from private electric power facilities, PPSs and other electricity producers, and purchasing electricity through the mar

【Measures for stable operation】

○ Checking the integrity of facilities by inspecting them before the summer

・Based on the operational and facilities status of each thermal power plant, inspections and repairs were conducted as appropriate before the summer.
In particular, those plants that were restarted after long-term shutdown were meticulously inspected and repaired as they have more risk due to aging.

○ Detecting early signs of trouble by strengthening patrols

・Signs of trouble are detected at an early stage by increasing the frequency of facility patrols and strengthening the monitoring of operation data.

○ Early repair using nighttime and non-work days

・Minor troubles are repaired as appropriate during nighttime and on non-work days when the demand for electricity is low.

・Building a system and securing materials and equipment for quick recovery in the event of a trouble

【Efforts on the demand side】

○ Improving electricity tariff menus

・Diversifying and improving electricity tariff menus to promote electricity saving and peak shifting

○ Measures for the tight supply-demand balance

・To prevent tightening of the supply-demand balance, measures are taken such as increasing the number of contracts which provide tariff discounts for agreeing to have the power cut off when an electricity shortage is imminent, and using demand response and aggregators.

○ Disseminating information to customers

・Keeping customers informed through various means such as calling for electricity saving on the web page and distributing brochures and flyers about electricity saving, as well as disseminating information on the supply-demand situation such as "electricity forecast"