Electricity Supply-Demand Outlook & Measures for the Summer of FY2013

April 2013

Agency for Natural Resources and Energy
Ministry of Economy, Trade and Industry
1. Electricity Supply and Demand Outlook for the Summer of FY 2013

(i) In consideration of the risk of having an extremely hot summer as experienced in FY 2010, as well as the recent economic growth and the expected effects of power saving at workplaces and homes etc., it is expected that all utilities will be able to secure a reserve margin of at least 3%, which is deemed necessary for stable supply of electricity.

(ii) However, in the service areas of nine utilities,\(^*1\) the electricity supply-demand balance could become tight\(^*2\) in the event of a large-scale power supply failure etc..


*2: If a power supply failure equivalent to the largest in the past five years (-6.44 million kW) occurs during a peak demand period in the 2013 summer season in central and western Japan, the reserve margin in these regions will become 2.1%, even when utilities perform supply-demand adjustment contract and receive additional supply from eastern Japan through frequency conversion facilities (FC).

Outlook for this summer*

* The outlook presumes an extremely hot summer as experienced in FY 2010 and takes into account the recent economic outlook and the expected effects of power saving based on the results in last summer.

>August

<table>
<thead>
<tr>
<th>(In 10,000 kW)</th>
<th>East 3</th>
<th>Hokkaido</th>
<th>Tohoku</th>
<th>Tokyo</th>
<th>Central/ West</th>
<th>Chubu</th>
<th>Kansai</th>
<th>Hokuriku</th>
<th>Chugoku</th>
<th>Shikoku</th>
<th>Kyushu</th>
<th>Total of 9 companies</th>
<th>Okinawa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply capacity</td>
<td>7,857</td>
<td>524</td>
<td>1,520</td>
<td>5,813</td>
<td>9,827</td>
<td>2,817</td>
<td>2,932</td>
<td>574</td>
<td>1,250</td>
<td>595</td>
<td>1,659</td>
<td>17,684</td>
<td>238</td>
</tr>
<tr>
<td>Peak demand</td>
<td>7,365</td>
<td>474</td>
<td>1,441</td>
<td>5,450</td>
<td>9,279</td>
<td>2,585</td>
<td>2,845</td>
<td>546</td>
<td>1,131</td>
<td>562</td>
<td>1,610</td>
<td>16,644</td>
<td>156</td>
</tr>
<tr>
<td>Supply-Demand</td>
<td>492</td>
<td>50</td>
<td>79</td>
<td>363</td>
<td>548</td>
<td>232</td>
<td>87</td>
<td>28</td>
<td>119</td>
<td>33</td>
<td>49</td>
<td>1,040</td>
<td>83</td>
</tr>
<tr>
<td>(Reserve margin)</td>
<td>6.7%</td>
<td>10.5%</td>
<td>5.5%</td>
<td>6.7%</td>
<td>5.9%</td>
<td>9.0%</td>
<td>3.0%</td>
<td>5.2%</td>
<td>10.5%</td>
<td>5.9%</td>
<td>3.1%</td>
<td>6.2%</td>
<td>53.1%</td>
</tr>
</tbody>
</table>
2. Electricity Supply and Demand Measures for the Summer of FY 2013 (i)

> In consideration of the supply and demand outlook, the following measures will be implemented in the service areas of the nine utilities.

(i) Power conservation will be requested in a manner ensuring that expected power-saving efforts are made without undue stress and with minimum effects on people’s lives and economic activities. Without setting numerical targets, the government will present the expected reduction amount in power consumption in each service area as guidelines for power conservation and promote power conservation. The expected reduction in power consumption included in the supply and demand outlook will be shown for each service area as guidelines for power conservation.

(ii) In case of a tight electricity supply-demand balance due to a large-scale power supply failure etc., measures will be taken from both supply and demand viewpoints.

(i) Request for power conservation without numerical targets

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Hokkaido</th>
<th>Tohoku</th>
<th>Tokyo</th>
<th>Chubu</th>
<th>Kansai</th>
<th>Hokuriku</th>
<th>Chugoku</th>
<th>Shikoku</th>
<th>Kyushu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Request for power conservation without numerical targets</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Expected power conservation for summer in FY 2013 (compared to FY 2010)</strong></td>
<td>-6.3%</td>
<td>-3.8%</td>
<td>-10.5%</td>
<td>-4.0%</td>
<td>-8.7%</td>
<td>-4.0%</td>
<td>-3.6%</td>
<td>-5.2%</td>
<td>-8.5%</td>
</tr>
</tbody>
</table>

*Due consideration should be given to the stricken areas, vulnerable people (e.g. the elderly and infants) and harm to health (e.g. heatstroke).
(ii) Readiness for tight supply-demand balance

In case of a tight electricity supply-demand balance due to a large-scale power supply failure etc., measures will be taken from both supply and demand viewpoints.

(i) Utilities will enhance maintenance of their power facilities to minimize the risk of unscheduled outages at their power plants.

(ii) Utilities will be ready for additional electricity purchases from companies that have self-generation plants in case of a tight electricity supply-demand balance. To foster the use of self-power generation, the government will support companies that expand their self-generation facilities and sell excess electricity to utilities, in the form of subsidies for facility and fuel expenses.

(iii) The government will develop a new mechanism that allows wide-ranging suppliers to participate in the electric power exchange in order to realize flexible power procurement across a wider area.

(iv) Utilities will promote demand-side efforts, such as expanding supply-demand adjustment contracts and using aggregators,*1 negawatt trading,*2 and other demand response measures.

(v) If a tight supply-demand balance is predicted despite the above measures, the government will issue a “tight supply warning” and an “emergency announcement e-mail” to call for further efforts to save electricity.

*1: An aggregator centrally controls the electricity demand of previously contracted power consumers and reduces their power consumption for air conditioning, lighting and so on through remote operations or manual control.

*2: In this scheme, an amount of electricity saved by power consumers (called “negawatt” power) is theoretically regarded as an amount of supply, and electricity conserved through demand-side load reductions is purchased through auctions etc. when a tight supply-demand balance is expected.