Power Systems Business Strategy
Hitachi IR Day 2011

June 16, 2011

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Vice President and Executive Officer
President & CEO, Power Systems Company
Hitachi, Ltd.
Power Systems Business Strategy

Contents

1. Business Overview
2. Great East Japan Earthquake
3. Market Environment
4. Business Policy and Growth Strategy
5. Thermal Power Business
6. Nuclear Power Business
7. Power Distribution, Renewable Energy and Other Businesses
8. Business Performance Trends and Targets
9. Conclusion
1-1 Business Overview

Thermal Power Business
- Coal-fired thermal power plants
- IGCC

Nuclear Power Business
- Boiling water reactor nuclear power plants (ABWR, ESBWR)
- Preventive maintenance, nuclear fuel cycle, etc.

<Major equipment of nuclear power plants>
- Reactor pressure vessel
- Reactor equipment
- Main Control Room Panel

<Major equipment of coal-fired thermal power plants>
- Steam turbines and power generators (TG)
- Boilers and AQCS
- Gas turbines

FY2010 consolidated revenues ¥813.2 billion

60%

20%

20%

Wind power generation systems
Solar power generation systems
Proton beam therapy system

Hydroelectric power generation systems, drive systems, smart grids, power semiconductors, etc.

Power Distribution, Renewable Energy and Other Businesses

IGCC: Integrated Gasification Combined Cycle
ABWR: Advanced Boiling Water Reactor
ESBWR: Economic and Simplified Boiling Water Reactor

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## 1-2 FY2010 Results

### FY2009-FY2010 Results

<table>
<thead>
<tr>
<th></th>
<th>FY2009 (Actual)</th>
<th>FY2010 (Actual)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>882.1</td>
<td>813.2</td>
<td>92%</td>
</tr>
<tr>
<td>Operating income</td>
<td>22.0</td>
<td>22.0</td>
<td>100%</td>
</tr>
</tbody>
</table>

Revenues declined in thermal power systems due to delays with some projects. Lower sales were recorded for preventative maintenance services for nuclear power generation systems. And the Great East Japan Earthquake lowered sales (¥16.2 billion).

Despite the impact of the Great East Japan Earthquake (¥9.6 billion), operating income was on a par with FY2009 due to better project management, cost cutting, etc.
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Great East Japan Earthquake—Damage and Restoration Status in Power Systems Company

Damage Report

The 6+ earthquake on the Japanese seismic scale damaged buildings and production facilities in the Hitachi district.

Power, water and other lifelines were affected. Hitachi Port was damaged by the tsunami.

Restoration Status

Hitachi district: All except some operations resumed on March 29

Hitachi Port: Resumed loading and shipping gas turbines from wharf 2 on April 3

Most operations have resumed, thanks to urgent restoration work
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3-1 Market Trends in Japan

Market changes caused by the Great East Japan Earthquake

- **Uncertainty in nuclear power market**
  (Shelving of new construction plans, earthquake- and tsunami-proofing of existing plants, etc.)

- **Recovering demand for power infrastructure**
  (Restoration of damaged power generation facilities)

- **Demand for power shortage countermeasures and stable supply**
  (Shorten time for a regular inspection of thermal power plants, restarting of idled thermal power plants, increasing demand for thermal power, renewable energy and distributed power sources, etc.)
3-2 Overseas Market Trends

**World Electricity Generation by Type**

- **World electricity generation is expected to grow by 1.8 times (from 2005 to 2030)**
- **Coal-fired generation will continue to play a significant role in power sector (Replacement demand)**
- **Many countries have indicated they will proceed with nuclear power plans**
- **Increased adoption of renewable energy**

![World Electricity Generation by Type](chart.png)

**Market trends by region**

**Europe**
- Shift in demand for new coal-fired thermal power plants from Western Europe to Eastern Europe
- Considering making CCS systems mandatory
- Some countries are reviewing nuclear power plans
- Accelerated adoption of renewable energy

**Asia, etc.**
- Increased planning of new super critical thermal power generation plants, particularly in China, India and ASEAN nations
- Stricter environmental regulations in China
- Many countries going ahead with nuclear power plans
- Accelerated adoption of renewable energy

**Americas**
- GTCC market expansion due to increased shale gas production
- More stringent environmental regulations in the U.S.
- Promotion of CCS demonstration projects
- Continuation but slowdown in nuclear power plans
- Accelerated adoption of renewable energy

CCS: Carbon Dioxide Capture and Storage  
GTCC: Gas Turbine Combined Cycle
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## 4-1 From Recovery to Growth

### Key policies

#### Accelerate global development

<table>
<thead>
<tr>
<th>Thermal power business</th>
<th>Expand business in growth markets (China, India, ASEAN nations, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear power business</td>
<td>Target countries proceeding with new nuclear power plant construction</td>
</tr>
<tr>
<td>Renewable energy, etc.</td>
<td>Sell wind power and solar power generation systems overseas</td>
</tr>
<tr>
<td></td>
<td>Expand particle beam therapy system business</td>
</tr>
</tbody>
</table>

#### Expand services business

- Cooperate with local partners, expand bases

#### Support for restoration and rebuilding efforts following the Great East Japan Earthquake

- Strengthen support over the medium and long terms for Fukushima and existing nuclear power plants
- Restore damaged power generation facilities, shorten regular inspection timeframes, restart idled thermal power generation plants, expand and strengthen supplies of gas turbines for emergency generation and sales of private power generators
4-2 Accelerate Global Development

Globally develop the Power Systems Company

- Increase manufacturing and engineering subsidiaries
- Increase thermal power orders and strengthen sales structure in emerging economies, centered on China, India and ASEAN nations
- Bolster overseas marketing

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas Revenues (Billion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2006</td>
<td>250</td>
</tr>
<tr>
<td>FY2007</td>
<td>32%</td>
</tr>
<tr>
<td>FY2008</td>
<td>39%</td>
</tr>
<tr>
<td>FY2009</td>
<td>39%</td>
</tr>
<tr>
<td>FY2010</td>
<td>39%</td>
</tr>
</tbody>
</table>

[Group total: 47 companies, 23 companies (Japan), 24 companies (Overseas)] (5 JSO for nuclear power)

HEU: Hitachi Europe Ltd.
HAS: Hitachi Asia Ltd.
HAL: Hitachi America, Ltd.
HAUL: Hitachi Australia Pty Ltd.
HCH: Hitachi (China) Ltd.
JSO: Joint Sales Office

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**Production and procurement**

- Strengthen global production framework
  - Strengthen manufacturing bases in Japan as Mother Factories
  - Strengthen overseas manufacturing bases

- Worldwide lowest cost procurement, manage exchange rate fluctuations
  - Establish global procurement offices

**Project management**

- Strengthen overseas project management (HR and organizational structure)
  - Increase enrollees in development program
    - FY2011: 500 people

- Rigorous risk management
  - (Utilize experience in EPC worldwide)

**Services business**

- Expand thermal power global services business
  - Form alliances and cooperate with local partners
  - Utilize M&A and partnership to expand business network

- Nuclear power advanced maintenance
  - (Cooperate with GE and others)
  - Promote integration of global maintenance and services business

**R&D**

- Strengthen global R&D framework
  - Establish cooperative structure between three core regional bases (Japan, Europe and U.S.) and universities in the regions
    - (Promote CCS technology development)

- Promote future technology development by pitching for and participating in national projects
  - Participate in thermal power, nuclear power and renewable energy component testing and demonstration projects

EPC: Engineering, Procurement, Construction
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5-1 Thermal Power Business Basic Policy

<table>
<thead>
<tr>
<th>Revenues</th>
<th>FY2015: ¥650 billion</th>
<th>FY2010: ¥460 billion</th>
<th>Upgrade response to Great East Japan Earthquake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Actively promote global business</td>
</tr>
</tbody>
</table>

**Upgrade response to Great East Japan Earthquake**
- Quickly restart damaged thermal power facilities and idled thermal power plants
- Supply emergency power to address summer power shortages

**Actively develop in global markets**
- Step up global development of highly efficient coal-fired thermal power business
- Expand business by deepening localization in growth markets

**Develop business in strategic products**
- Expand environmental systems (AQCS) business
- Expand gas turbine business
Quickly restart damaged thermal power facilities and idled thermal power plants

- Established a Great East Japan Earthquake Restoration Division
- Restored or quickly restarted plants
  - 11 plants 5,545 MW (As of June 15)

**Work to restore or restart thermal power facilities**

Quick restoration of shipments (Apr. 14 loading and shipment)

**Recovery in Power Output (Plan)**

- **Restarted plants**
- **No. of restored plants**
  - Jun. 2011: 11 plants (5,545 MW)
  - Sept.: 19 plants
  - Dec.: 22 plants
  - Mar. 2012: 23 plants

**Emergent Power Supplies to Address Summer Power Shortages**

- Activities to supply gas turbines for emergency power generation
  - 80 MW-class gas turbines for Ohi thermal power plant
  - H-25 gas turbines for Niigata thermal power plant
  - H-25 gas turbines for industrial-use private electric power generators

- Promote environmental countermeasures for power supply
- DeNOx Catalyst for Hitachinaka power plant

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5-3 Actively Develop in Global Markets (1)

Integrated supply of BTG + AQCS ⇒ Optimize entire plants

<table>
<thead>
<tr>
<th>Boilers (B)</th>
<th>Turbines (T)</th>
<th>Generators (G)</th>
<th>DeNOx</th>
<th>Precipitators</th>
<th>Desulfurizers</th>
<th>CCS</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

### Steam turbines and power generators (TG)

**Highly efficient and reliable**

Achieved world’s highest level efficiency with the new No. 2 unit of Isogo Thermal Power Plant for Electric Power Development Co., Ltd.

![Turbines and generators](image)

Low-pressure turbines

*Steam condition: 25MPa 600℃/620℃

### Boilers (B)

**Highly efficient combustion:**

Low Nox/CO₂ emissions, high economical efficiency

Compatible with various coal types:

Applicable to low grade coals

![Boilers (B)](image)

Source: McCoy Reports 2010 (Excluding China and India)

### AQCS

**Integrated system (DeNOx reactor, precipitator, desulfurizer)**

High-performance DeNOx catalyst: In-house development and production system

![AQCS](image)

DeNOx Catalyst Share

**Top share**

Hitachi 26%

Source: Hitachi estimate
5-4 Actively Develop in Global Markets (2)

Step up global development of highly efficient coal-fired thermal power business

Europe, South Africa
- Hitachi Power Europe GmbH
  - Maasvlakte (Under construction) B [1,100 MW]
  - Wilhelmshaven (Under construction) BTG [790 MW]

Asia
- Hitachi Works
- Babcock-Hitachi K.K. Kure Branch
  - Moorburg (Under construction) B [820 MW × 2]
  - Rotterdam (Under construction) BTG [790 MW]
  - TEPCO/Hitachinaka 2 (Under construction) BTG [1,000 MW]
  - South Korea/Yonghung Thermal Power Plant No. 5 and 6 units (Preparing for construction) TG [870 MW × 2]
  - South Korea/Dangjin Thermal Power Plant No. 9 and 10 units (Preparing for construction) B [1,000 MW × 2]

Americas
- Hitachi Power Systems America, Ltd.
  - Keephills-3 (Under commissioning) BTG [495 MW]
  - Duke Energy (Under construction) B [900 MW]

29 plants [24.8 GW]* under Construction mainly in industrialized nations
*: including plants preparing for construction

[FY2010 orders]
- TEPCO/Hitachinaka 2 (Under construction) BTG [1,000 MW]
- South Korea/Yonghung Thermal Power Plant No. 5 and 6 units (Preparing for construction) TG [870 MW × 2]
- South Korea/Dangjin Thermal Power Plant No. 9 and 10 units (Preparing for construction) B [1,000 MW × 2]

Revenues
- ¥460 billion
- ¥650 billion

FY2010 FY2015 target

B: Boilers, TG: Steam turbines and generators

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5-5 Actively Develop in Global Markets (3)

Expand by deepening localization in growth markets

Thermal power market trends
(1) Shift in new construction to emerging markets, especially in Asia

Projected Thermal Generation Facility Capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD</th>
<th>ASEAN</th>
<th>India</th>
<th>China</th>
<th>Other Non-OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3,182</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>4,206</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>5,049</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>5,585</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Source: IEA WEO2010

(2) Rising demand on coal-fired thermal power plants for upgrade and major repair

Aging Thermal Power Plants

Europe, Africa
- 881 GW
- 224 GW

Americas
- 345 GW
- 208 GW

Asia, Near and Middle East, Australia
- 1,518 GW
- 87% 25 years or older
- 41% Under 25 years

Source: UDI

Global business strategy

Emerging markets
- Market super critical thermal power plant
- Expand environmental and GT business
- Enter services business

Industrialized countries
- Expand services business
- Expand environmental business
- Accelerate development of A-USC and IGCC
- Public-private package proposals

Worldwide total (25 years or older: 41%)

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5-6 Actively Develop in Global Markets (4)

Expand global procurement and production network

- Expand global procurement bases
  - *Global procurement ratio target: 70% (FY2015)
  - Strengthen procurement system
    - Strengthen cooperation in procurement in four regions
    - Conduct IPOs in Asian belt zone (June 2011)
      (Dalian, Shanghai, Singapore, etc.)

- Expand global production network
  - Expand functions at China (Dalian) manufacturing facility
    - Bolster gas turbine production bases, as well as steam turbine parts
      [Site expansion] Sanshilibao Harbor Industrial Zone
  - Expand production functions at China (Dalian) manufacturing facility
  - Establish new Chinese DeNOx catalyst production subsidiary (June 2011)
    - Respond to rapid market expansion for DeNOx catalysts spurred by tougher environmental regulations
    - [Target] Capture a 30% share in China
    - [Location] Hangzhou, Zhejiang
  - Established Indian manufacturing joint ventures (Aug. and Sept. 2010)
    - Enter Indian coal-fired thermal power market

- Bolster sales, lower costs
- Increase orders

Sales force in India
Technological capability
[Track record, reliability]

BGR-E
HPE
Hitachi

Manufacturing joint ventures
Supply products
Supply power generation facilities (EPC)

Indian market

BGR-B
BGR-T

Dalian Hitachi Machinery & Equipment Co., Ltd.

IPO: International Procurement Office  DHME: Dalian Hitachi Machinery & Equipment Co., Ltd.  EPC: Engineering Procurement Construction

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5-7 Actively Develop in Global Markets (5)

Expand global services business

- Utilize extensive overseas network to expand business field
- Expand services business through investment in facilities, cooperation with local partners, and M&As
- Make more high-value-added product and technology proposals

Hitachi Power Europe GmbH (HPE)

Hitachi/Babcock-Hitachi K.K. (BHK)

Hitachi Power Systems America, Ltd.

Dalian Hitachi Machinery & Equipment Co., Ltd.

Babcock-Hitachi Dongfang Boiler Co., Ltd.

Babcock-Hitachi (Philippines) Inc. (BHPI)

BGR-T

BGR-B

Clyde Babcock-Hitachi (Australia) Pty., Ltd. (CBH)

Hitachi Canadian Industries Ltd.

Mechanical Dynamics & Analysis, Ltd.

<Europe, Africa> Enter new markets, spearheaded by HPE

<Near and Middle East, East Asia, Southeast Asia> Expand target fields, spearheaded by Hitachi, BHK and BHPI

<Australia> Expand business, spearheaded by CBH

<North America, South America> Utilize cooperation among three entities to expand business

<Services Business Revenues>

FY2010: Approx. ¥100 billion

FY2015: Approx. ¥150 billion

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**5-8 Expand AQCS Business**

**Expand business, centered on DeNOx systems and catalysts**

- **DeNOx system delivery track record**
  Unit: GW

  - Europe: 18
  - China: 34
  - Japan: 26
  - South Korea, Taiwan: 22

  Total: 131GW  
  Global share 26% (No.1)

  Source: Hitachi estimate

- **Market trends**
  - Tougher environmental regulations in the Americas, Europe and China
  - Expanding market for AQCS due to these tougher regulations

- **Main orders in recent years**
  - Concluded comprehensive supply agreement for DeNOx catalysts with U.S. electricity company (April 2010)
  - Received first DeNOx systems order from Polish power company (August 2010)

**Step up development of CCS technologies**

- **Step up the pace of joint demonstration projects with European and American customers, quickly develop commercial systems**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pilot test</th>
<th>Demonstration test</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
| 2015 | -          | Canada Saskatchewan Power Corporation
       | Comprehensive Collaborative Agreement on Low-Carbon Energy Technologies (2010-2012) |
| 2020 | -          | Germany Vattenfall Oxy-combustion burner test |

  **Chemical absorption**
  Develop CO₂ absorption liquid (H3-1)

  Conducted trials in U.S. Department of Energy (DOE) project*(Feb. 2010, May 2011)

  Confirmed approx. 30% improvement in energy consumption compared with conventional absorption liquid.

  *Experiment conducted by North Dakota University, with joint investment by DOE, North American electricity utilities and other parties

CCS: Carbon Dioxide Capture and Storage
### 5-9 Expand Gas Turbine Business

<table>
<thead>
<tr>
<th>H-25</th>
<th>H-80</th>
</tr>
</thead>
</table>
| - Top-class performance in heavy-duty gas turbines  
- Expand market by handling different types of fuel (Coke gas, etc.)  
First co-generation power generation facility began operating in China (in December 2010)  
- Capture demand for distributed power sources in growth markets (such as China, the Middle East, etc.)  
- Increase production capacity (Completed summer 2010)  
- Order target: At least 30 units/year | - Hitachi developed the H-80 80MW-class gas turbine, the world's largest capacity two-shaft, heavy-duty type gas turbine, in a short time.  
- Expand business by opening up new markets  
Enter market for blast furnace gas burning facilities  
- Replacing gas turbines of Unit 1 at Shin-Oita thermal power plant at Kyushu Electric Power Co., Inc. (6 gas turbines)  
[3 of the 6 turbines are operating]  
4th turbine: Jan. 2010  
2nd turbine: Jul. 2010  
6th turbine: Mar. 2011  
- Received order to replace gas turbines of Unit 1 at Yanai power plant at Chugoku Electric Power Co., Inc. (in June 2010) (6 gas turbines) |

### Market Share

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>47%</td>
</tr>
<tr>
<td>Company B</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Large GTCC**

- Develop and strengthen business by employing highly efficient GT with high operating efficiency in collaboration with GE

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**GTCC**: Gas Turbine Combined Cycle  
**GT**: Gas Turbine

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6-1 Nuclear Power Business Basic Policy

Raise the safety of nuclear power generation as an effective source of energy for curbing CO₂ emissions to meet continuing global demand.

<table>
<thead>
<tr>
<th>Revenues</th>
<th>FY2020: ¥360 billion</th>
<th>Lend support for countermeasures at the Fukushima Daiichi nuclear power station and other existing nuclear power plants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY2010: ¥180 billion</td>
<td>Step up development of overseas business</td>
</tr>
</tbody>
</table>

Support Fukushima countermeasures and offer services for the nuclear power sector in Japan

- Propose medium- to long-term countermeasure plans at joint Japan/U.S. projects
- Actively help to bring the Fukushima Daiichi nuclear power station incident to an end.
- Promote work for mothballing facilities over the medium term and eventual reactor decommissioning
- Promote safety measure (at new and existing facilities) to revive the appeal of nuclear power
- Actively offer interim storage facilities (such as storage vessels for spent fuel, etc.)

Step up development of overseas business

- Develop globally under the “One Team” framework with GE
- Focus on expanding sales to countries moving forward with plans to construct new nuclear power facilities
6-2 Support Fukushima Countermeasures and Offer Services for the Nuclear Power Sector in Japan

**Countermeasure support system**

- **Fukushima Project Supervisory Office**
- **Japan-U.S. joint specialist team; medium- to long-term countermeasures**

**Countermeasure support system**

- **Hitachi-GE Nuclear Energy, Ltd.**
  - **Fukushima Power Plant Technology Dept.**
  - **Fukushima Power Plant Engineering Dept.**

**Basic plans**

- **Bechtel**
- **Exelon**
- **GEH**
- **Hitachi-GE/HPSA**

**Individual projects**

**Medium- to long-term projects**

**Medium- to long-term countermeasures**

- Install perpetual cooling system
- Enclose reactor, extract and transfer fuel
- Treat seawater, dispose of waste fluid

**Horizontal development, etc.**

- Propose countermeasures and promote increased safety of nuclear power plants
- Start producing storage vessels for spent fuel for spent nuclear fuel and plan output increase

*50 containment vessels has been delivered to Recyclable-Fuel Storage Company

<Strengthen support system>

- Provide a Hitachi Group response
- More than 2,200 people are working on this project, including cooperating companies (Includes a total of approx. 1,200 local secondees)
- Offer short-term and medium- to long-term countermeasures through the newly established organization
- Hitachi and Mitsubishi Heavy Industries have begun discussions on joint supportive measures

Continuing to transport cooling system modules and other equipment to the site
6-3 Step up development of overseas business

Continue to promote nuclear power business under the “One Team” framework with GE

- Target countries proceeding with plans to construct new nuclear power plants
- Established Vietnam Nuclear Power Project Promotion Office (January)
- Promote global maintenance and service businesses
  - Expand sales of outstanding Hitachi technology (WJP*, etc.)
- Continue development to improve safety (ESBWR, etc.)

- Lithuania (ABWR)
- U.S. (ESBWR)
- India (ESBWR)
- Vietnam (ABWR)

Deepen and develop collaborative relationship

Hitachi President Hiroaki Nakanishi and GE CEO J. Immelt (May 2011)

JSO: Joint Sales Office
Main focus (Reactor Type)

*WJP: Water Jet Peening (Stress-mitigation technology)
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7-1 Power Distribution, Renewable Energy and Other Businesses

Basic Policy

<table>
<thead>
<tr>
<th>Revenues</th>
<th>FY2015: ¥280 billion</th>
<th>FY2010: ¥170 billion</th>
</tr>
</thead>
</table>

- Strengthen power distribution business
- Expand and boost sales in renewable energy business
- Expand and boost sales of particle beam therapy system

Power distribution business
- Strengthen systems integration
- Bolster overseas business development

Renewable energy business
- Expand sales of wind and solar power generation systems
- Promote power stabilization business for supporting growing use of renewable energy
- Aim to establish a world-leading position in adjustable speed pumped hydro generation (Business integration with Mitsubishi Group)

Particle beam therapy system
- Expand and boost sales based on technologies amassed over many years and high operating track record

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Provide solutions from power generation to power transmission and smart grids

- Established new division to harness the Hitachi Group’s collective strengths
- Promote system integration in power distribution systems worldwide
- Strengthen and accelerate STATCOM and HVDC

Strengthen organization

Establish and strengthen

Total coordination
Transmission & Distribution Systems Division
(Established April 2011)

- Power Distribution Engineering Dept.
- Transmission and Grid Solutions Center
- Power Distribution Research Dept.

Enhance cooperation

Expand orders in ¥6 trillion* global market

STATCOM: Static synchronous compensator
HVDC: High Voltage Direct Current

*2010 Hitachi estimate
7-3 Renewable Energy Business

Wind power systems

- FY2015 target: No. 1 share in Japan
- Advantage in windy and hilly regions
  (Efficiency, durability)
- Expand sales of bottom-mounted offshore systems

Solar power systems

- Leading system integrator bused on cutting-edge technologies
- Provide high efficiency systems
- Address customer needs
  (Coordination with storage batteries, etc.)

Output stabilization systems for supporting popularization

- Various storage battery systems (Lead, lithium)
- Coordination and control with existing distributed power supplies (High economic viability)

Economically stabilize output through coordination and control

- Effect of coordination with distributed power systems
  - Reduce volume of secondary batteries introduced
  - Reduce Fuel consumption

Kamisu Wind Power Plant
Wind Power Ibaraki, Ltd.

Ohgishima Solar Power Plant TEPCO

Storage battery systems
Distributed generators

Output: intermittent

Power grid

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Actively Develop Particle Beam Cancer Therapy System

Expand orders based on technologies amassed over many years and high operating track record

University of Tsukuba:
First delivery of a proton beam therapy system
- Stable operations for nearly 10 years (Since 2001)

M.D. Anderson Cancer Center:
Track record in advanced treatments
- Developed spot scanning irradiation technology (Beam scanning system)

Nagoya City:
First application of private-sector finance in Japan to equip a hospital
- Order for installation of an entire proton beam therapy system

Hokkaido University: Japan’s FIRST Program
- Joint development of next-generation molecular-tracking radiotherapy system
  FIRST: Funding Program for World-Leading Innovative R&D on Science and Technology

Mayo Clinic:
Turn-key order for 2 systems from major U.S. general hospital
- Applying spot scanning irradiation technology in all treatment rooms

Spot scanning irradiation technology

- Able to irradiate cancer tumors with complex shapes with higher precision than conventional techniques
- Minimizes impact on normal tissue
- Reduces burden on hospital staff as preparation is not necessary for each patient unlike other systems

Grow Hitachi healthcare division as a key business

- Increase investment to cater to diverse customer needs
- Aggressively develop globally leveraging track record of deliveries in the U.S.
Power Systems Business Strategy

Contents

1. Business Overview
2. Great East Japan Earthquake
3. Market Environment
4. Business Policy and Growth Strategy
5. Thermal Power Business
6. Nuclear Power Business
7. Power Distribution, Renewable Energy and Other Businesses
8. Business Performance Trends and Targets
9. Conclusion
8-1 Business Performance

Overseas revenue ratio

- **FY2006**: Loss, Overseas revenue ratio 32%
- **FY2009**: Revenues 882.1 Billion yen, Overseas revenue ratio 40%
- **FY2010**: Revenues 813.2 Billion yen, Overseas revenue ratio 39%
- **FY2011**: Revenues 810.0 Billion yen, Overseas revenue ratio 41%
- **FY2012 Target**: Operating income ratio 45%
- **FY2015 Target**: Operating income ratio 50%

- **Operating income ratio (%)**
  - FY2009: 2.5%
  - FY2010: 2.7%
  - FY2011: 1.2%
  - FY2012 Target: 3.5%
  - FY2015 Target: 6.0%
8-2 FY2011 Outlook

### FY2010 Results and FY2011 Forecasts

<table>
<thead>
<tr>
<th>FY2010 (Actual)</th>
<th>FY2011 (Forecasts)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>813.2</td>
<td>810.0</td>
</tr>
<tr>
<td>Operating income</td>
<td>22.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Revenues are expected to be on a par with FY2010. Higher sales of thermal power systems overseas and in Japan (due to demand following the Great East Japan Earthquake) should offset fewer nuclear power plant orders due to the Earthquake.

Operating income is expecting operating income to decline 55% in line with lower nuclear power system revenues because of the Great East Japan Earthquake and costs incurred in recovery/reinforcement of production equipments.
Power Systems Business Strategy

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9 Conclusion

The World Market Leader Advancing the Future Global Society with Evolutionary Energy Technologies

Accelerate global business development
Expand services business

FY2015 targets

- Revenues: ¥1.1 trillion
- Overseas revenue ratio: 50%
- Operating income ratio: 6%
Cautionary Statement

Certain statements found in this document may constitute “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such “forward-looking statements” reflect management’s current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as “anticipate,” “believe,” “expect,” “estimate,” “forecast,” “intend,” “plan,” “project” and similar expressions which indicate future events and trends may identify “forward-looking statements.” Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the “forward-looking statements” and from historical trends. Certain “forward-looking statements” are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on “forward-looking statements,” as such statements speak only as of the date of this document.

Factors that could cause actual results to differ materially from those projected or implied in any “forward-looking statement” and from historical trends include, but are not limited to:

- Economic conditions, including consumer spending and plant and equipment investment in Hitachi’s major markets, particularly Japan, Asia, the United States and Europe, as well as levels of demand in the major industrial sectors Hitachi serves, including, without limitation, the information, electronics, automotive, construction and financial sectors;
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- Uncertainty as to general market price levels for equity securities in Japan, declines in which may require Hitachi to write down equity securities that it holds;
- The potential for significant losses on Hitachi’s investments in equity method affiliates;
- Increased commoditization of information technology products and digital media-related products and intensifying price competition for such products, particularly in the Components & Devices and the Digital Media & Consumer Products segments;
- Uncertainty as to Hitachi’s ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- Rapid technological innovation;
- The possibility of cost fluctuations during the lifetime of, or cancellation of, long-term contracts for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
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- Fluctuations in product demand and industry capacity;
- Uncertainty as to Hitachi’s ability to implement measures to reduce the potential negative impact of fluctuations in product demand, exchange rates and/or price of raw materials or shortages of materials, parts and components;
- Uncertainty as to Hitachi’s ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- Uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness and other cost reduction measures;
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- Uncertainty as to the success of alliances upon which Hitachi depends, some of which Hitachi may not control, with other corporations in the design and development of certain key products;
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- Uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity method affiliates have become or may become parties;
- The possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- The possibility of disruption of Hitachi’s operations in Japan by earthquakes, tsunamis or other natural disasters, including the possibility of continuing adverse effects on Hitachi’s operations as a result of the earthquake and tsunami that struck northeastern Japan on March 11, 2011;
- Uncertainty as to Hitachi’s ability to maintain the integrity of its information systems, as well as Hitachi’s ability to protect its confidential information or that of its customers;
- Uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its significant employee benefit related costs; and
- Uncertainty as to Hitachi’s ability to attract and retain skilled personnel.

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