The JFTC Closed its Review on the Proposed Integration in Thermal Power Generation Systems Businesses of Mitsubishi Heavy Industries, Ltd. and Hitachi, Ltd.

## (Tentative Translation)

December 12, 2013 Japan Fair Trade Commission

Upon a notification from MH Power Systems, Ltd. (hereinafter "MHPS"), a subsidiary of Mitsubishi Heavy Industries, Ltd. (hereinafter "MHI") and Hitachi, Ltd. (hereinafter "Hitachi") concerning the proposed integration in thermal power generation systems businesses, the Japan Fair Trade Commission (hereinafter "JFTC") had reviewed the planned integration and reached the conclusion that the transaction would not substantially restrain competition in any particular fields of trade. Accordingly, the JFTC has notified MHPS and Hitachi that it will not issue a cease and desist order, resulting in the completion of its review.

Note: To execute the proposed integration, (i) MHI plans to transfer the thermal power generation systems businesses within its corporate group to MHPS, which has been newly established as MHI's subsidiary, in the form of absorption-type company split, and (ii) Hitachi also plans to transfer the same businesses within its corporate group to MHPS in the form of absorption-type company split. The JFTC received a notification by MHPS and Hitachi with respect to the transaction referred in above (ii), pursuant to the provision of Article 15-2(3) of the Antimonopoly Act (hereinafter "AMA").

## I. Outline of the transaction

MHI and Hitachi, both of which manufacture and sell industrial machinery, etc. plan to integrate their thermal power generation systems businesses.

# **I**. Reviewing Process

Receipt of the notification regarding the integration on August 7, 2013 (start of the primary review) Request for reports, etc. by the JFTC on September 6, 2013 (start of the secondary review) Receipt of all requested reports, etc. from MHPS and Hitachi on November 21, 2013 (the due date for a prior notice was set on February 20, 2014) Notification to MHPS and Hitachi that a cease and desist order will not be issued on December 12,

# 2013

# **Ⅲ**. Conclusion

As a result of its review, the JFTC concluded that the transaction would not substantially restrain competition in any particular fields of trade.

#### (Foot Note)

The JFTC has been authorized to conduct reviews on whether business combination plans may be substantially to restrain

competition in particular fields of trade by following procedures prescribed in the AMA. When a notifying corporation submits the notification form to the JFTC and the JFTC receives it, the notifying corporation is prohibited from effecting the planned business combination in question until the expiration of the 30-day waiting period from the date of receipt of the said notification. During the waiting period, concerning the business combination in question, the JFTC will normally either; (1) judge that the said business combination is not problematic in light of the AMA, or; (2) judge that more detailed review is necessary and request submission of the necessary reports, information or materials.

In the case of (1) above, to improve transparency of the review of business combination, the JFTC shall give notification to the effect that it will not issue a cease and desist order.

In the case of (2) above, the period when the JFTC may give notice prior to cease and desist order shall be extended until 120 days after the date of receipt of the notification or 90 days after the date of receipt of all reports etc., whichever is later. In case the JFTC judges in this extended period that the business combination plan in question is not problematic in light of the AMA, it shall give notification to the effect that it will not issue a cease and desist order, same as the case of (1).

The Review result of the Proposed Integration in Thermal Power Generation Systems Business of Mitsubishi Heavy Industries, Ltd. and Hitachi, Ltd.

# I. Parties and corporate groups concerned

Mitsubishi Heavy Industries, Ltd. (hereinafter referred to as "MHI", and a group of combined companies whose ultimate parent company is MHI will be referred to as the "MHI Group") is a company engaged in the manufacture of industrial machinery, etc.

Hitachi, Ltd. (hereinafter referred to as "Hitachi", and a group of combined companies whose ultimate parent company is Hitachi will be referred to as the "Hitachi Group") is a company engaged in the manufacture of machinery, etc.

MH Power Systems, Ltd. is a subsidiary that MHI has newly established to in order to integrate the thermal power generation systems businesses<sup>\*1</sup> of the MHI Group and the Hitachi Group (hereinafter referred to as "the Integration").

Hereinafter the MHI Group and the Hitachi Group will be collectively referred to as "the Parties."

<sup>\*</sup>Note 1: The manufacture and sale business of machinery such as boilers, steam turbines, gas turbines which constitute thermal power plants as well as the design and construction business of thermal power plants are collectively referred to as the thermal power generation systems business.

# II. Outline of the case and the provision of applicable laws

In the transaction, the Parties plan to integrate their thermal power generation systems business by (i) MHI's transfer of the thermal power generation systems business within the MHI Group to MH Power Systems, Ltd. (hereinafter MH Power Systems, Ltd. before the integration will be referred to as "MHPS" and the same company after the integration will be referred to as "the Integrated Company.") in the form of absorption-type company split and (ii) Hitachi's transfer of the same business within the Hitachi Group to MHPS in the form of absorption-type company split.

A notification regarding the transaction above (ii) was submitted by MHPS and Hitachi (hereinafter collectively referred to as "the Notifying Companies.").

The provision of applicable law is Article 15-2 of the Antimonopoly Act (hereinafter referred to as the "AMA").

# III. Reviewing process and outline of the review result

1. Reviewing process

Since March 2013, the Parties had voluntarily submitted written opinions and relevant documents to the Japan Fair Trade Commission (hereinafter referred to as the "JFTC") stating that the Parties consider that the Integration will not substantially restrain competition. The JFTC held multiple meetings with the Parties at their request. Thereafter, on August 7, 2013, a notification of a plan regarding the absorption-type company split was submitted by the Notifying Companies pursuant to Article 15-2 of the AMA. Accordingly, the JFTC

accepted the notification and launched a primary review on the same day. The JFTC conducted the primary review considering materials including the above notification and documents that were submitted by the Parties, interviews with customers and competitors, etc. As a result, it was determined that a more detailed review was necessary. Accordingly, on September 6, 2013, the JFTC requested that the Notifying Companies submit reports and other necessary documents, and commenced a secondary review. In addition, the JFTC announced the commencement of the secondary review and began to accept opinions regarding the Integration from third parties.

In the secondary review, the JFTC held multiple meetings with the Parties at their request. In addition, the JFTC conducted a further review of the effects of the Integration on competition considering a series of reports and other documents submitted by the Notifying Companies, the results of interviews with customers and competitors and questionnaire surveys.

As to the JFTC's request to the Notifying Companies, the Notifying Companies completed their obligations in respect of the JFTC's request with the requested reports and necessary documents submitted on November 21, 2013 (the due date for the JFTC's prior notice was set at February 20, 2014).

# 2. Outline of the result of the review

Regarding this case, the JFTC has concluded that the Integration will not substantially restrain competition in the fields of trade regarding "supercritical pressure thermal power plants supply business," "supercritical pressure boilers," "large steam turbines," and "large gas turbine combined cycle power generation plant supply business" (hereinafter, gas turbine combined cycle will be referred to as "GTCC"), in which the Parties compete with each other and in which the Integration seemed to have significant impact on competition. The JFTC has also concluded that the Integration will not substantially restrain competition in respect to any other fields of trade.

Details of the results of the review on the fields of trade regarding "supercritical pressure thermal power plants supply business," "supercritical pressure boilers," "large steam turbines," and "large GTCC power generation plant supply business" are described in IV and V below.

## IV. Particular field of trade

1. Product ranges (including a service: the same will apply hereinafter)

Thermal power plants mainly include steam-power generation plants in which the power of the steam generated by burning fuels such as coal rotates steam turbines to generate power, and GTCC power generation plants in which after gas turbines rotate to generate power by burning gas fuels such as liquefied natural gas (LNG), the power of steam generated by its waste-heat recovery system rotates steam turbines.

## (1) Steam-power generation plants

Steam-power generation plants consist of individual machinery such as boilers and steam turbines, and the performance of the entire power generation plant depends on the performance of boilers and steam turbines, which are central to the plants. When customers order steam-power generation plants, they separately order individual machinery such as boilers and steam turbines (hereinafter referred to as "Separate Orders"), or they order major services as a package including the design of the entire steam-power generation plant and the procurement of various machinery including individual machinery such as boilers and steam turbines (hereinafter referred to as "Package Orders"). In the case of Separate Orders, customers need to coordinate each machinery by themselves, therefore customers who can place Separate Orders are limited to those who have certain knowledge of steam-power generation plants.

When steam-power generation plants are ordered through Separate Orders, product ranges are defined according to each machinery because machinery such as boilers or steam turbines are procured separately. On the other hand, when steam-power generation plants are ordered through Package Orders, product ranges are defined as business supplying steam-power generation plants (hereinafter referred to as "steam-power generation plants supply business.").

# a. Boilers (in the case of Separate Orders)

Boilers are machinery which converts pressurized water to steam by converting the chemical heat of fuel such as coal and petroleum into heat by combustion. They are categorized into two main types: supercritical pressure boilers which deliver large power and have higher operating pressure than the critical pressure of water (22.064MP), and subcritical pressure boilers which deliver medium and small power and have lower operating pressure than the critical pressure.

Customers considering the procurement of a supercritical pressure boiler will not procure several smaller power subcritical pressure boilers to substitute a supercritical pressure boiler, and customers considering the procurement of a subcritical pressure boiler will not procure a more expensive supercritical pressure boiler as the power obtained by a subcritical pressure boiler is sufficient for them. Supercritical pressure boilers are manufactured with a higher level of technology than subcritical pressure boilers. Accordingly, manufacturers of supercritical pressure boilers are very different from those of subcritical pressure boilers.

Therefore, substitutability between supercritical pressure boilers and subcritical pressure boilers is not recognized either for customers or for suppliers. Consequently, the JFTC defined two product ranges: supercritical pressure boilers and subcritical pressure boilers. However, since the Parties do not compete in the field of trade of subcritical pressure boilers, the JFTC's examination below considers supercritical pressure boilers.

### b. Steam turbines (in the case of Separate Orders)

Steam turbines are machinery which drives generators by converting the thermal energy of steam into rotational energy. They are categorized into two main types: large steam turbines used in combination with supercritical pressure boilers, and medium and small steam turbines used in combination with subcritical pressure boilers.

Medium and small steam turbines are not procured as steam turbines to be used in combination with

supercritical pressure boilers. Similarly, large steam turbines are rarely procured as steam turbines to be used in combination with subcritical pressure boilers.

Large steam turbines are manufactured with a higher level of technology than medium and small steam turbines. Accordingly, manufacturers of large steam turbines are very different from those of medium and small steam turbines.

Therefore, substitutability between large steam turbines and medium and small steam turbines is not recognized either for customers or for suppliers. Consequently, the JFTC defined two product ranges: large steam turbines and medium and small steam turbines. However, since the Parties do not compete in the field of trade of medium and small steam turbines, the JFTC's examination below considers large steam turbines.

# c. Steam-power generation plants supply business (in the case of Package Orders)

When steam-power generation plants are ordered through Package Orders, manufacturers of boilers or steam turbines on which the performance of the entire power generation plant depends engage in steam-power generation plants supply business (hereinafter, companies engaged in plants supply business will be referred to as "plant manufacturers").

Steam-power generation plants are categorized into two main types: supercritical pressure thermal power plants using supercritical pressure boilers and large steam turbines both of which deliver large power, and subcritical pressure thermal power plants using subcritical pressure boilers and medium and small steam turbines both of which deliver medium and small power. Customers considering the procurement of a supercritical pressure thermal power plant will not procure several smaller power subcritical pressure thermal power plants to substitute a supercritical pressure thermal power plant, and customers considering the procurement of a supercritical pressure thermal power plant as the power obtained by a subcritical pressure thermal power plant as the power obtained by a subcritical pressure thermal power plant is sufficient for them.

As described in above a. and b., machinery used in supercritical pressure thermal power plants is manufactured with a higher level of technology than that used in subcritical pressure thermal power plants, and the designs of the entire thermal power plants are largely different from one another. Therefore, the desired capabilities are different in each steam-power generation plants supply business. In addition, manufacturers of boilers or steam turbines engage in steam-power generation plants supply business, and as described in above a. and b., manufacturers of the machinery used in supercritical pressure thermal power plants are different from those of the machinery used in subcritical pressure thermal power plants. Consequently, plant manufacturers engaged in business of supplying supercritical pressure thermal power plants (hereinafter referred to as "supercritical pressure thermal power plants supply business") are very different from those engaged in business of supplying subcritical pressure thermal power plants (hereinafter referred to as "supercritical pressure thermal power plants business") are very different from those engaged in business of supplying subcritical pressure thermal power plants (hereinafter referred to as "supercritical pressure thermal power plants supply business") are very different from those engaged in business of supplying subcritical pressure thermal power plants (hereinafter referred to as "subcritical pressure thermal power plants supply business").

Therefore, substitutability between supercritical pressure thermal power plants supply business and

subcritical pressure thermal power plants supply business is not recognized either for customers or for suppliers. Consequently, the JFTC defined two product ranges: supercritical pressure thermal power plants supply business and subcritical pressure thermal power plants supply business. However, since the Parties do not compete in the field of subcritical pressure thermal power plants supply business, the JFTC's examination below considers supercritical pressure thermal power plants supply business.

# (2) GTCC power generation plants

GTCC power generation plants consist of individual machinery such as gas turbines and steam turbines. The performance of the entire power generation plant depends on that of gas turbines and steam turbines, and of them, gas turbines are core machinery, whose performance is valued.

GTCC power generation plants are always ordered through Package Orders. Manufacturers of gas turbines or those of steam turbines engage in, as plant manufacturers, business of supplying GTCC power generation plants (hereinafter referred to as "GTCC power generation plants supply business").

GTCC power generation plants are categorized into two main types: large GTCC power generation plants using large gas turbines which deliver large power, and medium and small GTCC power generation plants using medium and small gas turbines which deliver medium and small power.

Customers considering the procurement of a large GTCC power generation plant will not procure several smaller power medium and small GTCC power generation plants to substitute a large GTCC power generation plant, and customers considering the procurement of a medium and small GTCC power generation plant will not procure a more expensive large GTCC power generation plant as the power obtained by a medium and small GTCC power generation plant is sufficient for them.

Machinery used in large GTCC power generation plants are manufactured with a higher level of technology than those used in medium and small GTCC power generation plants, and the designs of the entire power generation plant are largely different from one another. Therefore, the desired capabilities are different in each GTCC power generation plants supply business. In addition, manufacturers of gas turbines or steam turbines engage in GTCC power generation plants are different from those of this machinery used in large GTCC power generation plants. Consequently, plant manufacturers engage in large GTCC power generation plants. Consequently, plant manufacturers engage in large GTCC power generation plants. Consequently, plant manufacturers engage in large GTCC power generation plants. Consequently, plant manufacturers engage in large GTCC power generation plants are very different from those engage in medium and small GTCC power generation plants.

Therefore, substitutability between large GTCC power generation plants supply business and medium and small GTCC power generation plants supply business is not recognized either for customers or for suppliers. Consequently, the JFTC defined two product ranges: large GTCC power generation plants supply business and medium and small GTCC power generation plants supply business. However, since the Parties compete in the field of medium and small GTCC power generation plants supply business in a very limited way, the JFTC's examination below considers large GTCC power generation plants supply business.

### 2. Geographic range

(1) Supercritical pressure boilers and large steam turbines

Domestic manufacturers provide products to not only domestic customers but also overseas customers. On the other hand, in selecting suppliers, domestic customers take into consideration past supply records in Japan, the presence of maintenance systems, etc. Accordingly, suppliers which meet the needs of domestic customers are limited to domestic manufacturers or overseas manufacturers forming cooperative relationships with domestic manufacturers.

Therefore, all of Japan (the market for customers in all of Japan) is defined as being the geographic range for these products.

(2) Supercritical pressure thermal power plants supply business and large GTCC power generation plants supply business

Domestic plant manufacturers provide services to not only domestic customers but also overseas customers. On the other hand, in selecting suppliers, domestic customers take into consideration past supply records in Japan, the presence of maintenance systems, etc. Accordingly, suppliers which meet the needs of domestic customers are limited to domestic plant manufacturers.

Therefore, all of Japan (the market for customers in all of Japan) is defined as being the geographic range for these services.

# V. Review concerning substantial restraint of competition

Hereinafter, "supercritical pressure thermal power plants supply business" in the case of supercritical pressure thermal power plants being ordered through Package Orders, "supercritical pressure boilers" and "large steam turbines" in the case of the above-mentioned power generation plants being ordered through Separate Orders, and "large GTCC power generation plants supply business" pertaining to large GTCC power generation plants always ordered through Package Orders, will be reviewed in that order.

While heretofore, supercritical pressure thermal power plants and large GTCC power generation plants have been directly ordered by large-scale customers such as general electricity utilities,<sup>\*2</sup> since general electricity utilities are now required to call for tenders for procurement of thermal power supply (hereinafter referred to as "IPP tender")<sup>\*3</sup> when, henceforth, they newly build, etc., thermal power supplies with a capacity of one or more MW by themselves, and since these power generation plants would be ordered within the framework of only IPP tender system, the JFTC's examination below takes into consideration IPP tender.

# <sup>\*</sup>Note 2: 10 companies including Tokyo Electric Power Co., Inc. and Kansai Electric Power Co., Inc.

<sup>\*</sup>Note 3: In September, 2012, Agency for Natural Resources and Energy developed and announced "Guidelines on Application of New Tendering Systems of Thermal Power Supply" (revised on May 17, 2013) in which in principle, general electricity utilities are required to call for tenders for all thermal power supplies in case they newly or additionally build, or replace thermal power supplies with a capacity of one or more MW by themselves. IPP tender means a tender conducted in accordance with these guidelines. See the flowchart in 1. (3) below for IPP tender and procurement of power generation plants.

- 1. Supercritical pressure thermal power plants supply business
  - (1) Outline of plant manufacturers engaged in supercritical pressure thermal power plants supply business

As noted in above IV-1(1)c., manufacturers of supercritical pressure boilers or large steam turbines, on which the performance of the entire power generation plant depends, engage in supercritical pressure thermal power plants supply business as plant manufacturers. While plant manufacturers set out to get orders for supercritical pressure thermal power plants supply business using their machinery in the case of manufacturing them, both of the Parties manufacture supercritical pressure boilers and large steam turbines.

On the other hand, when manufacturers which produce either supercritical pressure boilers or large steam turbines by themselves set out to get orders for supercritical pressure thermal power plants supply business as plant manufacturers, they need to gain cooperation of the manufacturers which produce machinery that they do not produce according to each project. Cooperating manufacturers are not always the same, and can be replaced depending on projects. In addition, cooperating manufacturers include not only domestic manufacturers but also major overseas manufacturers.

### (2) Competitive situation

For the past decade, there have been only a few cases in which supercritical pressure thermal power plants are ordered through the Package Orders (the cases in which orders have been placed with respect to supercritical pressure thermal power plants supply business). In the past, there had been active competition among the MHI Group, the Hitachi Group, and Company A. However, Company B has recently entered the market.

Although the Integration will result in the decrease of one competitive unit, each company has excess capacities. Therefore, it is considered that competition continues to be active between the Integrated Company and Company A, a major competitor, and that Company B, a new entrant, and it will function as a competitive constraint on the Integrated Company.

As supercritical pressure thermal power plants designed by each plant manufacturer have their own features and are different from each other, supercritical pressure thermal power plants supply is considered as a service for which coordinated conduct with competitors is unlikely to occur.

# (3) Influences of IPP tender on competition

In IPP tender, multiple companies make bids, aiming for power supply to general electricity utilities who will make orders, and companies winning a bid in IPP tender order supercritical pressure thermal power plants supply business to plant manufacturers.

The companies participating in IPP tender request that plant manufacturers provide a preliminary estimate amount. However, even if multiple companies participate in the same IPP tender, the sizes of supercritical pressure thermal power plants which they plan to build, and the plant manufacturers which they request to provide a preliminary estimate amount can be different.

When plant manufacturers provide an expensive preliminary estimate amount to companies participating in IPP tender and such companies lose competitiveness, it is possible that they give up making a bid in IPP tender due to unprofitability or that they cannot win even if they participate in IPP tender. As a result, in such cases, plant manufacturers cannot supply such companies with supercritical pressure thermal power plants.

Thus, the IPP tender makes the form of competition more complicated than ever before, which is considered to act as a certain constraint on the Integrated Company's unilateral conduct and its coordinated conduct with competitors.



# [Flowchart of IPP tender and procurement of power generation plants]

<sup>\*</sup>Note 4: Wholesale electricity utilities mean companies permitted by the Minister of Economy, Trade and Industry, which supply power to general electricity utilities, and whose power-generating facilities deliver over 2,000 MW of power in all.

<sup>\*</sup>Note 5: Wholesale suppliers mean companies, which supply power to general electricity utilities, and whose power supply contract period is 10 years or more and whose power supply is over one MW, or whose power supply contract period is five years or more and whose power supply is over 100 MW (in general, also referred to as Independent Power Producer).

# (4) Entry pressure

As described in above (2), since not only Company B has entered the market but also other companies are considering to enter the market of supercritical pressure thermal power plants supply business, the JFTC recognizes that there is entry pressure to a certain degree.

#### (5) Competitive pressure from customers

In ordering supercritical pressure thermal power plants, customers select a plant manufacturer to which they give the right of first negotiation (priority on negotiation) by means such as competitive quotes and further negotiate a price with such plant manufacturer, and conclude a contract with it at a price both agree on.

It is large-scale customers that order supercritical pressure thermal power plants, and these customers are capable to calculate prices appropriate for them of thermal power plants they order based on information such as the past procurements and estimate amounts of other manufacturers, and negotiate a price with plant manufacturers to make a price appropriate for them.

Only a few supercritical pressure thermal power plants have been ordered in recent years. Therefore, plant manufacturers negotiate a price, considering of the insistence of customers to a certain degree to get limited orders in Japan, and it seems that in the case of customers making requests to lower prices based on reasonable grounds, plant manufactures accept such requests.

In addition, it is considered that customers will negotiate prices more severely as they place more emphasis on costs than ever before in the procurement of supercritical pressure thermal power plants because of IPP tender.

Accordingly, the JFTC recognizes that there is robust competitive pressure from customers.

# (6) Assessment under the AMA

Although the Integration will result in the decrease of one competitive unit in supercritical pressure thermal power plants supply business, the JFTC recognizes that the Integration will not substantially restrain competition in the field of supercritical pressure thermal power plants supply business through the Integrated Company's unilateral conduct and its coordinated conduct with competitors, for the following reasons: (i) competition continues to be active among the Integrated Company and the major competitor or the competitor acting as a competitive constraint; (ii) there is entry pressure to a certain degree; (iii) there is robust competitive pressure from customers; and (iv) IPP tender makes competition active.

# 2. Supercritical pressure boilers

### (1) Competitive situation

For the past decade, there have been only a few cases in which supercritical pressure thermal power plants are ordered through Separate Order and supercritical pressure boilers are ordered separately from other machinery. In the past, there has been active competition among the MHI Group, the Hitachi Group, and Company C.

Although the Integration will result in the decrease of one competitive unit, it is considered that each

company has excess capacities, and that competition continues to be active between the Integrated Company and Company C, a major competitor.

Moreover, as supercritical pressure boilers designed by each manufacturer have their own features and are different from each other, supercritical pressure boilers are considered to be products for which coordinated conduct with competitors is unlikely to occur.

In addition, although the Integration will result in competition between two companies in Separate Orders, naturally customers who have the ability to place Separate Orders (as described in above IV-1(1), the ability to coordinate each machinery) can choose Package Orders instead of Separate Orders. It is considered that this will function as a certain competitive constraint on the Integrated Company's unilateral conduct and its coordinated conduct with competitors.

Finally, IPP tender acts as a competitive constraint on the Integrated Company's unilateral conduct and its coordinated conduct with competitors in this case as well as in the case of supercritical pressure thermal power plants supply business as described in above 1(3).

## (2) Competitive pressure from customers

The JFTC recognizes that there is robust competitive pressure from customers in this case as well as in the case of supercritical pressure thermal power plants supply business as described in above 1(5).

### (3) Assessment under the AMA

Although the Integration will result in the decrease of one competitive unit in the field of trade of supercritical pressure boilers, the JFTC recognizes that the Integration will not substantially restrain competition in the field of trade of supercritical pressure boilers through the Integrated Company's unilateral conduct and its coordinated conduct with competitors, for the following reasons: (i) competition continues to be active between the Integrated Company and the major competitor; (ii) there is robust competitive pressure from customers; and (iii) IPP tender makes competition active.

#### 3. Large steam turbines

## (1) Competitive situation

For the past decade, there have been only a few cases in which supercritical pressure thermal power plants are ordered through Separate Order and large steam turbines are ordered separately from other machinery. In the past, there has been active competition among the MHI Group, the Hitachi Group, Company D, and Company E.

Although the Integration will result in the decrease of one competitive unit, it is considered that each company has excess capacities, and that competition continues to be active among the Integrated Company, and Company D and Company E, major competitors.

Moreover, as large steam turbines designed by each manufacturer have their own features and are different from each other, large steam turbines are considered to be products for which coordinated conduct with competitors is unlikely to occur. In addition, the choice of Package Orders by customers and IPP tender act as a competitive constraint on the Integrated Company's unilateral conduct and its coordinated conduct with competitors in this case as well as in the case of supercritical pressure boilers as described in above 2(1).

# (2) Competitive pressure from customers

The JFTC recognizes that there is robust competitive pressure from customers in this case as well as in the case of supercritical pressure thermal power plants supply business as described in above 1(5).

# (3) Assessment under the AMA

Although the Integration will result in the decrease of one competitive unit in the field of trade of large steam turbines, the JFTC recognizes that the Integration will not substantially restrain competition in the field of trade of large steam turbines through the Integrated Company's unilateral conduct and its coordinated conduct with competitors, for the following reasons: (i) competition continues to be active among the Integrated Company and the major competitors; (ii) there is robust competitive pressure from customers; and (iii) IPP tender makes competition active.

# 4. Large GTCC power generation plants supply business

(1) Competitive situation

While there have been just under 30 cases in which large GTCC power generation plants are ordered through Package Orders (the cases in which orders have been placed with respect to large GTCC power generation plants supply business) for the past decade, the market share of each plant manufacturer is shown in the table below. After the Integration, the combined post-integration market share of the Parties will be approximately 70 percent (ranked first) and HHI will increase by about 1,800 to approximately 5,600, which will not meet the safe harbor threshold<sup>\*6</sup> for horizontal business combinations.

\*Note 6: Part IV 1(3) of "Guidelines to Application of the Antimonopoly Act Concerning Review of Business Combination" (May 31, 2004, JFTC)

[Market share of large GTCC power generation plants supply business for the past decade]

	Company name	Market share
1	The MHI Group	Approximately 50%
2	Company F	Approximately 30%
3	The Hitachi Group	Approximately 20%
4	Company G	Approximately 0-5%
Total		100%

\*Based on output capacity

As described in above IV-1(2), while the performance of large gas turbines, the core machinery, is

valued in large GTCC power generation plants, in large GTCC power generation plants supply business, price competition as well as technology development competition to improve the performance of plants is active, and large gas turbine manufacturers compete to develop highly efficient gas turbines.

Plant manufacturers other than the MHI Group do not manufacture large gas turbines by themselves. They construct and supply large GTCC power generation plants that meet customers' needs by procuring large gas turbines from overseas manufacturers. The Hitachi Group is limited in its competitiveness because not only does it not manufacture large gas turbines by itself, but also it has been affected by troubles with machinery it has supplied in the past.

Although the Integration will result in the decrease of one competitive unit, it is considered that each company has excess capacities and that competition will continue to be active between the Integrated Company and Company F, a major competitor which has the advantage of highly efficient large GTCC power generation plants with approximately 30% of market share, etc. And it is considered that Company G will act as a competitive constraint on the Integrated Company with its increasing presence in the market in recent years.

Moreover, as large GTCC power generation plants designed by each plant manufacturer have their own features and are different from each other, large GTCC power generation plants supply is considered to be a service for which coordinated conduct with competitors is unlikely to occur.

In addition, the IPP tender will act as a specific competitive constraint on the Integrated Company's unilateral conduct and its coordinated conduct with competitors in this case as well as in the case of supercritical pressure thermal power plants supply business as noted in above 1(3).

#### (2) Competitive pressure from customers

The JFTC recognizes that there is robust competitive pressure from customers in this case as well as in the case of supercritical pressure thermal power plants supply business as noted in above 1(5).

# (3) Assessment under the AMA

Although the Integration will result in the decrease of one competitive unit in large GTCC power generation plants supply business, the JFTC recognizes that the Integration will not substantially restrain competition in the field of large GTCC power generation plants supply business through the Integrated Company's unilateral conduct and its coordinated conduct with competitors, for the following reasons: (i) with the Hitachi Group having limited competitive ability, competition continues to be active among the Integrated Company and the major competitor or the competitor acting as a competitive constraint; (ii) there is robust competitive pressure from customers; and (iii) IPP tender makes competition active.



# Flowchart of Business Combination Review (Reference)