

Summarised Translation of the Complaint, Yokosuka Climate Case¹

Information on the Cover Page²

Jurisdiction: Tokyo District Court in Japan

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Legal counsels to the Plaintiffs: Nobuo Kojima, Akihito Kubota, Tsunehisa Chiba, Shieri Mori, Masahiko Gotou, Osamu Hasegawa, Mie Asaoka

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¹Translated by Y (Grace) Nishikawa, LLM, for the purposes of (legal) research; this is a summary focusing on the legal arguments and excludes repetitive sentences and detailed explanation of evidence presented.

²Tokyo District Court in Japan, Complaint, 27 May 2019, Yokosuka Climate Case 1
<http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2019/20190527_NA_complaint.pdf> accessed 29 October 2021.

Table of Contents

Object of the Complaint.....	3
1 Introduction	4
2 Parties and Related Person	4
3 Backgrounds	5
3.1 Backgrounds concerning the planned construction site	5
3.2 Overview of the EIA procedures.....	5
4 Need for Measures against Coal-Fired Power Generation	7
4.1 Worsening climate change	7
4.2 International framework towards the net zero CO2 emission.....	7
4.3 Coal-fired power generation and global warming.....	8
4.4 Reduction targets in Japan and the coal-fired power generation	9
4.5 Current situations in Japan	11
5 CO2 Emission and Air pollution by the New Units	12
6 Illegality of the Notice of Finalization	13
6.1 Purposes and procedures of the EIA and the authority of the Minister of Trade, Economy and Industry	13
6.2 Faults and illegality of the EIA procedures.....	15
6.3 Illegal simplification of the EIA.....	16
6.4 Faults in considering the measures against greenhouse gas emissions.....	17
6.5 Insufficient consideration concerning the air pollution	18
6.6 Insufficient consideration concerning the hot wastewater	19
6.7 Intermediate conclusion	19
7 Request for the Revocation of the Notice of Finalization	20
7.1 Disposability of the Notice of Finalization	20
7.2 Standing.....	20
8 Conclusion	21

Object of the Complaint

The Plaintiffs seek the following judgment.

1. The Notice of Finalization, dated 30th November 2018 issued by the Minister of Economy, Trade and Industry in accordance with Article 46 (17) (ii) of the Electricity Business Act affirming the environmental impact statement (EIS) by JERA concerning the construction plan of thermal power plants below, shall be revoked.

The name of the plan: Yokosuka Power Plant New Units 1 and 2 Construction Plan

The name of the power plant: Yokosuka Power Plants (tentative name)

Fuel used: Coal

Electric power generated: New Unit 1, 650,000 kW

New Unit 2, 650,000 kW

Type of the motor: Steam power

Starting date of the power supply: New Unit 1 in 2023

New Unit 2 in 2024

Planned construction site: Kurihama 9-9-1, Yokosuka, Kanagawa

2. The court costs shall be borne by the Defendant.

(Complaint, p2)

1 Introduction

The international community is aiming for and working towards the coal phase-out as a part of global warming countermeasures and prevention of air pollution. However, JERA is trying to construct new coal-fired power plants (the New Units).

In order to construct new power plants, the appropriate environmental impact assessment (EIA) must be done based on the Electricity Business Act, yet the State [Japan] issued the Notice of Finalization and ended the EIA procedure even though JERA did not perform appropriate EIA nor give due consideration to environmental conservation.

This lawsuit is instituted by the Plaintiffs, who may suffer (health) damage associated with CO₂ and air pollutant emissions by the New Units, and seeks the revocation of the Notice of Finalization by the Minister of Economy, Trade and Industry. (p5)

2 Parties and Related Person

(1) Plaintiffs

The Plaintiffs are those persons who live close to the planned construction site and may suffer damage from air pollution and global warming (climate change) if the New Units are built. (p5)

(2) Defendant

The Defendant is the State, the legal entity to which the Minister of Economy, Trade and Industry belongs. The Minister of Economy, Trade and Industry is an administrative authority that is competent to regulate and supervise the installation and management of electric facilities based on the Electricity Business Act. He has *jus disponendi* concerning the EIA based on the Environmental Impact Assessment Act and Electricity Business Act. (pp5-6)

(3) The business operator

JERA is a joint-stock company established on 30th April 2015 for the purpose of replacement and construction of thermal power plants. TEPCO Fuel & Power and Chubu Electric Power each have a 50% stock. The New Units were initially planned to be built and operated by TEPCO Fuel & Power. JERA succeeded to the rights and obligations concerning the power generation business at the New Units on 13th September 2016. (p6)

3 Backgrounds

3.1 backgrounds concerning the planned construction site

At the planned construction site of the New Units, coal-only thermal power plants (Unit 1 and Unit 2; later converted to heavy oil thermal power generation) were built and started operating in 1960/1962. Additional six heavy oil/crude oil mixed thermal power plants (Units 3-8) were built by 1970. In 1971 and 2017, two coal-fired gas turbine power plants were built. Units 1, 2, 5, and 6 stopped operating at the end of 2000; Units 7 and 8 and the Gas Turbine Unit 2 stopped operating at the end of 2001. Unit 1 was decommissioned on 20th December 2004; Unit 2 was abolished on 27th March 2006. All the power plants stopped operating in April 2010. (p6)

Later, due to the power shorage caused by the 2011 Tohoku Earthquake and Tsunami (Fukushima nuclear power plants were forced to stop operating), Unit 3, Unit 4, and Gas Turbine 2 started operating in 2011 and stopped again at the end of 2013. All power plants stopped operating again in 2014. They were all decommissioned in March 2017. (pp6-7)

3.2 Overview of the EIA procedures

The New Units are planned to be built in the area where the above power plants used to be. Since the New Units both generate 650,000 kW each, they are considered to be ‘class-1 projects’ within the meaning of Article 2 (2) of the Environmental Impact Assessment Act. Accordingly, the EIA procedure was initiated based on the Environmental Impact Assessment Act and Electricity Business Act. In 2016, the procedures to prepare a document on primary environmental impact consideration at the early stage (document on primary environmental impact consideration), a scoping document on environmental impact assessment (scoping document), and a draft environmental impact statement (draft EIS) started. (p7)

The overview of the EIA procedure is shown below.

22nd April 2016: [submission of] **the document on primary environmental impact consideration**

-consideration of the location, scale, etc. during the planning

April-July 2016: the opinions by citizens, the Mayor, the Governor, and the Minister of Environment

20th October 2016: **the scoping document**

-indicating the methods of the EIA and items to be examined

21st October-5th December 2016: the opinions by citizens

24th January 2017: the opinion by the Mayor

22nd March 2017: the opinion by the Governor

31st March 2017: notification, the Minister of Trade, Economy and Industry

-carries out the investigation, prediction, and evaluation of the environmental impact

18th January 2018: **draft EIS**

-shows the outcomes of the investigation, prediction, and evaluation of the environmental impact

-indicates measures for environmental conservation

19th January-5th March 2018: the opinions by citizens

2nd June 2018: the public hearing in Kanagawa Prefecture (for those residing within 3 km of Yokosuka)

13th June: the opinion by the Mayor

8th August: the opinion by the Governor

10th August: the opinion by the Minister of Environment

14th September: the recommendation by the Minister of Trade, Economy and Industry

15th November 2018: **EIS**

30th October 2018: Notice of Finalization by the Minister of Economy, Trade and Industry

(p7)

JERA submitted its EIS to the Minister of Trade, Economy and Industry on 15th November, and the Minister of Trade, Economy and Industry issued the Notice of Finalization without ordering revision based on Article 46 (17) of the Electricity Business Act. The demolition of the old facilities started in May 2017 before the EIA procedure ended. The New Units are announced to be constructed from August 2019. (pp7-8)

4 Need for Measures against Coal-Fired Power Generation

4.1 Worsening climate change

Firstly, climate change is worsening. The concentration of CO₂ in the atmosphere increased from 278 ppm before industrialization to 403 ppm in 2016. Recently, it has been increasing at the rate of 3 ppm/year. It reached 415 ppm in May 2019. According to the Fifth Assessment Report (AR5) by the Intergovernmental Panel on Climate Change (IPCC), the average surface temperature in the world has increased by 1 degree compared to the pre-industrialization period. In Japan, the average surface temperature has increased by 1.19 degrees per 100 years since 1889. (p8)

Secondly, the damage to life, health, and property by climate change, such as landslide due to extreme rainfall, storm surge due to a huge typhoon, heatstroke due to the high temperature, and other disasters caused by abnormal weather, has become real in the recent years. The AR 5 states that the human influence on the climate system and global warming is undoubtful. It further states that it is very likely (probability of 90% or more) that the frequency of excessively hot days has already been increasing, it is almost certain (99% or more) that the frequency will increase towards the end of the century, it is more likely (66% or more) that there are more land areas with increasing [frequency of] heavy rain than the areas where it is decreasing, and the surface temperature is predicted to continue increasing over the 21st century. It is also reported that the heatwave becomes more frequent, the extreme rainfall becomes more intense and frequent, the sea gets warmer and acidified, and the sea level continues to rise. (pp9-10)

The IPCC's report on the Global Warming of 1.5 °C pointed out the risks of the instability of ice sheets in the South Pole, irreversible effects on the ecology, increase in the frequency and seriousness of the abnormal weather, increased impact on health, water, food, and living, impact on human security, and hindered economic development. (p10)

The damage caused by climate change is clearly seen in Japan as well. There has been serious damage to people and property caused by the unexpected torrential rain, extreme heat exceeding 40 degrees, and the typhoon with an instantaneous wind speed of 40m in 2018. (p10)

4.2 International framework towards the net zero CO₂ emission

The IPCC was established in 1988 to combat global warming and published five assessment reports. The United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992; the Kyoto Protocol was adopted in 1997. The Kyoto Protocol entered into force in 2005. Consequently, energy-saving is promoted, and the transition from thermal power

generation to renewable energy power generation started. Nonetheless, climate change is getting more serious with the increasing emissions of greenhouse gases. (p11)

The IPCC's Fourth Assessment Report (from 2007) indicated that developed countries must reduce the CO₂ emission by 25-40 % (compared with the 1990 level) by 2020 and by 80-95 % by 2050 in order to keep the temperature increase below 2 degrees Celsius. (p11)

Moreover, the Fifth Assessment Report states that

- 1) the seriousness of global warming in the late 21st century is determined by the cumulative emission of CO₂,
- 2) the remaining carbon budget is only a trillion, and
- 3) the world needs to largely reduce the emissions of CO₂ and greenhouse gases; there must be a 40-70% reduction compared with the 2010 level by 2050; the emission needs to be zero or less by 2100. (p11)

Further, the IPCC's report on the Global Warming of 1.5 °C states that the global emissions must be [net] zero by 2050 and our efforts for the next 10 years are especially important in order to prevent the 1.5 °C temperature increase. Developed countries, including Japan, have declared to reduce greenhouse gas emissions by 80% by 2050 in response to those IPCC reports and the agreements made at UNFCCC COP. Recently, some countries set their goals for net-zero emissions by 2050. (pp11-12)

The Paris Agreement was adopted in December 2015 to limit the increase in the global average temperature well below 2, or preferably below 1.5, degrees. To achieve this reduction target, the Paris Agreement obliges the Parties to balance the anthropogenic emissions and removals {Article 4 (1)}, prepare, communicate, and maintain Nationally Determined Contributions (NDCs) {Article 4 (2)}, and implement them with domestic measures. The Paris Agreement entered into force on 4th November 2016, and Japan ratified it on 8th November 2018. There are currently 184 state parties, and the international community agreed to aim for net zero CO₂ emission to minimise the influence on climate change. (pp12-13)

An article published in the Proceedings of the National Academy of Science of the United States of America on 6th August 2021 indicated the possibility of the world reaching the 'tipping point' that leads to the 'Hothouse Earth'. (p13)

4.3 Coal-fired power generation and global warming

The essential way to prevent climate change is to quit coal-fired power generation. Power plants emit a large amount of CO₂ and greenhouse gases by burning fuels. The amounts of emissions vary depending on the fuel utilized (coal, oil, or natural gas). However, the amount

of CO2 emission per one unit of generated power is about twice as much as the emission by natural gas power generation even though the highly efficient facilities are used. (pp13-14)

The United Nations Environment Programme stressed in 2017 the necessity to avoid the construction of new coal-fired power plants without Carbon Capture and Storage and to gradually reduce the use of existing coal-fired power plants. France (by 2021), the UK (by 2015), Italy (by 2050), and Canada (by 2030) declared to achieve zero emission by coal-fired power generation. Japan's policy to continue increasing the number of coal-fired power plants is against the international movements and incompatible with the Paris Agreement. (pp14-15)

4.4 Reduction targets in Japan and the coal-fired power generation

CO2 emission in Japan amounted to 92% of the total greenhouse gas emission (1,307 million tons) in Fiscal Year (FY) 2016, of which energy-derived was 94%, and the CO2 emission by industrial electric power generation accounted for 42% thereof (39% for the total CO2 emission). The proportion of the emission from the energy conversion sector, especially from industrial electricity, has been significantly increasing since 1990. The CO2 emission by coal-fired power generation is more than half of the total emissions by power plants. (pp15-16)

In response to the international movements concerning climate change, the Japanese Government made a cabinet decision aiming for an 80 % reduction in greenhouse gas emissions (the 4th Basic Environmental Plan) on 27th April 2012. This long-term goal was confirmed by the Intended Nationally Determined Contributions (INDCs) in FY 2030 (formulated in 2015) and the Plan for Global Warming Countermeasures (formulated in 2016). In 2013, the Government replaced the FY 2020 reduction target (25% reduction compared with FY 1990) with the reduction target of 3.8% compared with FY 2005. (pp17-18)

In July 2015, the Ministry of Economy, Trade and Industry declared that coal and nuclear power were the baseload power sources. It further made energy supply plans for FY 2030 where the coal-fired power generation amounts to 26% and submitted an INDC with a 26% reduction target of greenhouse gas emissions compared to FY 2013 based on those plans. (p18)

Following the adoption of the Paris Agreement, the government decided in May 2016 to aim for an 80% reduction in greenhouse gas emissions by 2050 and formulated the Plan for Global Warming Countermeasures as well as the FY 2030 target of 26% reduction. On 8th November, Japan reported its NDC in accordance with Article 4 (2) of the Paris Agreement. In June 2018, the Cabinet decided on the Basic Energy Plan that incorporated the long-term

prediction of energy supply made by the Ministry of Economy, Trade and Industry in June 2015. (p18)

The Plan for Global Warming Countermeasures has an issue of omitting to indicate how the 2030 and 2050 reduction targets would be achieved. CO₂, which accounts for 92% of [the total] greenhouse gas in Japan, stays in the atmosphere for a long time, and its cumulative amount proportionally influences the increase in the average temperature. Considering this, the FY 2030 reduction target of 26% is clearly too low, and the measures planned/taken to achieve the goal are insufficient. Even though the FY 2030 and 2050 reduction targets themselves are low, the reduction in CO₂ emissions is still essential to achieve them since the emission by coal-fired power generation amounts to more than half of the total CO₂ emission by the power generation sector in Japan. (pp18-19)

The proportion of the coal-fired power generation in Japan expanded under the national policy of reducing the dependence on oil after the oil crisis. After the 2011 Tohoku Earthquake and Tsunami, the energy liberalisation and the temporary power shortage due to the shutdown of the nuclear power plants led to the planning of the construction of new coal-fired power plants. (p20)

The number of coal-fired power plants before the Fukushima Daiichi nuclear disaster was 100 (= 4.2million kW). According to the long-term energy supply prediction by the Ministry of Economy, Trade and Industry, the proportion of coal-fired power in the energy mix should be 26% in FY 2030 while the amount of coal-fired power already amounted to 32% in FY 2016. Additionally, 50 construction plans of coal-fired power plants were made after the Tohoku Earthquake and Tsunami; 13 of which were abolished; 12 coal-fired power plants started operating; 25 power plants are currently (in May 2019) under construction or going through the EIA. (p20)

According to the investigation by NPO Kiko Network, the installed capacity of the existing coal-fired power plants in FY 2017 was 4.4 million kW. If all the 25 additional power plants are built, the installed capacity in FY 2030 will largely exceed the current capacity, and the proportion of coal-fired power generation will exceed 26% in the predicted energy mix in FY 2030. It will seriously hinder the achievement of the FY 2050 target (the 80% reduction). (pp21-22)

Additionally, from the perspective of the electric power supply, construction of new power plants is not needed thanks to the energy-saving effort by citizens and business operators and increasing use of renewable energy. (p22)

Considering the reduction targets, there is no room to allow for the construction of new power plants. (p22)

4.5 Current situations in Japan

In June 2002, a basic energy policy was adopted with the objective to contribute towards local and global environmental conservation. It also requires energy policies to be compatible with the measures against climate change. The Kyoto Protocol entered into force in 2005, and the reduction in greenhouse gas emissions became an international obligation. Subsequently, it became an urgent matter to reduce the CO₂ emission from the power generation sector, especially the emission by the coal-fired power generation, which amounts to more than one-third of the total CO₂ emission. (p22)

In Japan, the CO₂ emission has been left to the voluntary self-regulation of the electric power industry. According to the Low Carbon Society Implementation Plan in Electric Power Business (電気事業における低炭素社会実行計画), electric power companies indicated that they would aim for the emission intensity of 0.37kg/kWh. (p22)

On the other hand, Japan is obliged under the Paris Agreement to implement policy measures and exercise its regulative authority to achieve its CO₂ reduction targets. Article 5 of the Basic Act on the Environment [also known as Basic Environmental Law] also stresses the active promotion of environmental conservation through international cooperation. Consequently, the State must restrict the CO₂ emission by regulating the business that prevents it from achieving the reduction targets. (p23)

As the increase in the number of coal-fired power plants makes it extremely difficult to realise the targets, the State must regulate and gradually abolish coal-fired power plants by appropriately exercising its authority. (p23)

5 CO2 Emission and Air pollution by the New Units

The New Units are not equipped with CCS, and their operation results in huge emissions of CO2. According to the EIS, this amount can be 7.26 million tons per year. (p23)

The chart provided by JERA is unclear about the annual capacity factor, the annual amount of power generation, and the annual amount of emission as it gives the wrong perception that all the existing Units are operating [see the Figure provided on page 25 of the original complaint]. As some of the Units were abolished and the remaining Units haven't been used either as explained earlier, the amount of the current CO2 emission should be indicated as zero. (pp23-24)

The annual emission by the New Units is approximately 0.64% of the energy-derived CO2 emission in Japan in FY 2016 and roughly 1/5000 of the energy-derived CO2 emission in the world. This amount is also 10% of the CO2 emission in Kanagawa Prefecture and is equivalent to the emission by 1.5 million ordinary households. This amount of CO2 emission will certainly accelerate global warming and cause serious damage. (pp24-25)

Moreover, the annual emissions of air pollutants (with the maximum utilization factor) amount to 58m³/hour for SO_x, 66m³/hour for NO_x, and 22Kg/hour for dust and soot respectively. This chart is similarly unclear about when exactly the 'current' situation refers to. (p26)

Needless to say, Sulfur oxides, dust, and soot cause respiratory diseases. Nitrogen oxides also causes respiratory diseases when inhaled. NO_x, dust, and soot produce PM 2.5 that can worsen respiratory diseases, cardiovascular diseases, and lung cancer. PM 2.5 can be dispersed and pollute remote places. Moreover, NO_x causes acid rain and ozone. (p27)

Since the New Units are planned to operate for a long time, the large impact on the environment will be inflicted for a long time as well. Hence, the level of environmental impact in the future is serious. (p27)

6 Illegality of the Notice of Finalization

6.1 Purposes and procedures of the EIA and the authority of the Minister of Trade, Economy and Industry

The Environmental Impact Assessment Act obliges business operators of certain industries to investigate, predict, and evaluate the environmental impact of their business operation before the operation. The EIA aims to promote appropriate consideration from the perspective of environmental conservation. Business operators must formulate better business plans by investigating, predicting, and evaluating the environmental impact and by making the outcomes public and gathering opinions from the general public and local public bodies. (p27)

The EIA Act applies to large-scale power plants, yet the authority to supervise and instruct during the process of the EIA has been vested with the State before the enactment of the EIA Act. The Electricity Business Act, whose purpose is to realise environmental conservation, sets out an exceptional circumstance where the State can intervene on the basis of Article 46 (2) and others. Accordingly, the Electricity Business Act gives the Minister of Trade, Economy and Industry the following authority;

the authority of the Minister of Trade, Economy and Industry to make recommendations concerning the scoping document { Article 46 (8)},
the authority to make recommendations concerning the draft EIA { Article 46(14)},
the authority to order revision of the EIA { Article 46(17)}.

To effectuate the exercise of authority, the Electricity Business Act establishes procedural rules, such as submission of the scoping document, draft EIS, and EIS to the Minister of Trade, Economy and Industry, and hearing opinions by Governor(s), Mayor(s). (pp27-28)

The New Units fall under the scope of the Class 1 project as they are thermal power plants with 150,000 kW or more. (p28)

Firstly, business operators must prepare a document on primary environmental impact consideration at the early stage (document on primary environmental impact consideration) to determine the aspects where necessary consideration should be taken with regard to environmental conservation in the area where the project is implemented at the planning stage. The outcomes of the consideration are stated in the document on primary environmental impact consideration. The Ministry of Environment and the Competent Minister can state their opinions. Additionally, business operators must try to seek opinions from the perspective of environmental conservation in general and by the relevant administrative bodies regarding the

(draft) document on primary environmental impact consideration { Article 3 (2) and others of the EIA Act}. (pp28-29)

Secondly, the business operators must prepare and provide a scoping document on environmental impact assessment (scoping document) for the public notices and general inspections and hold briefing sessions. They submit the document to the relevant municipality/prefecture and report it to the Minister of Economy, Trade and Industry. The Minister of Economy, Trade and Industry makes recommendations on the scoping document by paying attention to the opinions of citizens and views/responses by the business operators and by taking into account the opinions of Governors, which are based on the opinions of Mayors. The business operators select the items to be considered in the EIA based on the recommendation(s) by taking into account the opinions of the Governors and paying attention to the opinions of citizens { Article 5 and others of the EIA Act and Article 46(4) and others of the Electricity Business Act}. (p29)

Thirdly, the business operators prepare and state the outcomes of the EIA and measures for environmental conservation on a draft environmental impact statement (draft EIS) by carrying out the EIA [based on the scoping document]. (p29)

Finally, the business operators prepare an environmental impact statement (EIS) by considering the recommendations and opinions described above and report it to the Minister of Economy, Trade and Industry {Article 14 and others of the EIA Act and Article 46(9) and others of the Electricity Business Act}. (p29)

The Minister of Economy, Trade and Industry evaluates the EIS and can order revision of the EIS within 30 days if it is particularly necessary and appropriate to secure the due consideration of environmental conservation. {Electricity Business Act Articles 46 (17)(i), 61(10)} (pp29-30)

On the other hand, when the Minister of Economy, Trade and Industry thinks there is no need for revision, the Minister notifies it to the business operator (Notice of Finalization). {Article 46(17)(ii) Electricity Business Act}. When the Minister of Economy, Trade and Industry issues a Notice of Finalization, a copy is sent to the Minister of Environment. The Governor(s), Mayor(s), and the relevant persons receive the documents with the copy and summary of the EIS and the revision order. {Article 46(18)} The business operator makes the EIS available for public inspection {Article 27 EIA Act; Article 46(19) Electricity Business Act} The EIA procedures end here. (p30)

When the project is implemented, the business operator must maintain and operate the facilities by making the appropriate consideration stated in the confirmed EIS { Article 38(1) EIA Act; Article 46(20) Electricity Business Act}. (p30)

The Minister of Economy, Trade and Industry is closely involved in the determination of the environmental conservation measures by checking the content of the data, analysis, and evaluation [of the EIA] provided by the business operator and expressing its opinions on the appropriateness thereof. (p30)

The Electricity Business Act aims to realise the appropriate consideration to environmental conservation by recognising the authority of the Minister of Economy, Trade and Industry. The EIS, which includes the content of environmental conservation, is finalised through the assessment of the EIS and the Notice of Finalization. (pp30-31)

The technical standards set by the Electricity Business Act require that an industrial electric facility shall not harm the human body nor damage property { Article 2(1) Electricity Business Act}. The standards also demand [the business operators] to prevent the health and physical damage from the installation and operation of power plants. While the Electricity Business Act does not provide specific regulations concerning the construction of power plants, the Minister of Trade, Economy and Industry is responsible for the prevention of health and physical damage associated with the power generation by determining the EIS and exercising his regulative authority. Consequently, the Minister of Trade, Economy and Industry must carefully consider the construction and operation of the New Units by taking into account the relevant scientific views, international and national discussions concerning environmental measures, reduction targets, environmentally necessary conservation measures, and potential damage to human and property. If there is a mistake or omission in the investigation, prediction, and evaluation of the EIA or if the consideration of environmental conservation is insufficient, the Minister of Trade, Economy and Industry should appropriately exercise his regulative authority, and the issue of the notice of finalization is not permissible. (p31)

6.2 Faults and illegality of the EIA procedures

In the EIA, it is essential to

1. follow the legally prescribed procedures,
2. predict the environmental impact based on the collected data,
3. rationally evaluate the environmental impact by taking into account the opinions by the Governor and Mayor, and
4. decide on the environmental conservation measures to take.

If one of the elements is lacking, the EIA procedure cannot continue. The relevant disposition authority must correct the inappropriate procedures, investigation, prediction or evaluation, by exercising its authority. If it overlooks the fault, the administrative disposition concerned shall be illegal. Additionally, appropriate disposition, such as rejection, must be given when there is a substantive error. (pp31-32)

If the results of the EIA are finalised despite the fact that the important information affecting the EIA is not collected, this decision is illegal as there has been no appropriate investigation, prediction, evaluation, nor consideration for environmental conservation measures.

See Tokyo District Court, Judgment, June 9, 2011; 59 Shoumugeppou (6) 1482. (p32)

If the Minister of Trade, Economy and Industry omits to correct the business operator and finalises the EIS with inappropriate and irrational content, the notice of finalization must be revoked. Since the EIA on hand has multiple faults, the Notice of Finalization issued by the Minister of Trade, Economy and Industry is illegal. (p32)

6.3 Illegal simplification of the EIA

TEPCO Fuel & Power carried out its EIA by omitting certain investigations and arguing that the construction of the New Units is an ‘improved replacement’. The Minister of Environment permits the rationalization of the EIA methods (=simplification of the procedure) for replacement plans if the environmental impact is limited and other criteria are met. The Guidelines for the Rationalization of the Environmental Impact Assessment Procedures Concerning the Replacement of Thermal Power Plants (Replacement Guidelines) is adopted in March 2012. The Replacement Guidelines states that the simplified procedures are only applicable when the replaced power plants will have lower amounts of greenhouse gases emission, air pollutant emission, water pollutant emission, and hot wastewater discharge heat and when the environmental impact is limited to the location where the original power plants were. TEPCO Fuel & Power carried out the simplified procedures according to the Replacement Guidelines. (p33)

However, the construction plan on hand is not an improvement replacement. In 2001, 70% of the power generation facilities were not utilized, and by 2014, all the power plants stopped working for an indefinite period. Only Unit 3, Unit8, and Gas turbine 2 were temporarily operating after the 2011 Tohoku Earthquake and Tsunami. This means that it was

‘normal’ that there was no adverse impact from the operation of power plants in the area. Considering this background, the replacement [=the construction of the New Units] does not ‘reduce’ the environmental burden. Thus, there is no room to allow for the simplification of the EIA. (pp34-36)

TEPCO Fuel & Power argues that its plan fulfils the requirements for the application of the simplified procedures as the amount of CO₂ emission will be reduced compared to the period when the existing power plants were working. The current amount of emissions here is calculated on the basis of the emissions by Unit 3, Unit 8, and Gas turbine 2. However, at the time when the EIA was carried out, all the power plants were not operating, and the emissions by the existing power plants should not have been included in the estimation. Even if it was acceptable to include them, it should have been limited to Unit 3 and Unit 4. (p36)

Moreover, the amount of CO₂ emission by the New Units (=7.26 million tons) is larger than the total amount of CO₂ emission by Unit 3 and Unit 4. While the purpose of the simplified EIA procedures is to quickly allow for the construction of environmentally less burdensome power plants to replace the power plants with more adverse effects, it is obvious that the plan on hand does not reduce greenhouse gas emissions. Carrying out the simplified EIA by ignoring the above is a serious fault of misrepresenting the fact. (pp36-37)

In short, the simplification of the EIA is not permitted for the construction plan of the New Units, and there is a serious fault in this EIA as it has been carried out according to the simplified procedures. (p37)

6.4 Faults in considering the measures against greenhouse gas emissions

The EIS for the New Units states that the annual amount of CO₂ emission will be 7.26 million tons and the CO₂ emission factor will be 0.749kg-CO₂. As a response to this, the EIS only suggests insufficient countermeasures, such as the adoption of the ultra-supercritical coal power generation facilities, adequate maintenance and management of the facilities, maintenance of the power generation efficiency, compliance with the benchmark index of the Energy Saving Act by 2030, and effort to supply the electricity to the retail companies that participate in the Voluntary Framework [of the self-regulation of the electric power industry]. (p37)

JERA self-evaluates that all the possible measures are taken, yet the evaluation and consideration of the content of the countermeasures concerning the greenhouse gas emissions are remarkably insufficient. (p37)

Coal-fired power generation results in more than twice as much CO₂ emission as the emission by natural gas-fired power generation while it is essential to reduce the CO₂ emission to achieve the climate goals. Choosing coal as the fuel by ignoring its adverse effects on the environment is irrational and indicates that there was no appropriate consideration to the environment. (pp37-38)

It is essential for business operators to consider alternatives, including the choice of the fuel type, when preparing a document on primary environmental impact consideration. The choice of the fuel type is the most important factor as the amount of greenhouse gas emissions is almost wholly dependent on it when the CCS technology is not industrialized. (p38)

The revision of the EIA Act in 2011 aims to promote environmental consideration in the early stage of construction. Thus, the objective is interpreted as requiring business operators to consider different fuel types and include the outcomes of the consideration in the document. (pp38-39)

To sum up, the omission of JERA to carry out the comparative consideration with the use of natural gas that emits less than half amount of Co₂ than coal is against the objectives of the EIA Act {Articles 3 (2), 14 (1)(vii)(b)} requiring environmental consideration. Therefore, there is a serious fault in the EIA procedures in question. (p39)

6.5 Insufficient consideration concerning the air pollution

The omission of JERA to consider alternative fuel types is similarly problematic in the evaluation of air pollutants. The New Units, which utilize coal, will emit a huge amount of air pollutants, including Sox, NO_x, dust, and soot, much more than natural gas-fired power plants. Additionally, coal-fired power generation causes the emission of heavy metals, such as mercury while natural gas-fired power generation emits almost no heavy metal. (p39)

Moreover, JERA omitted to perform the EIA concerning PM_{2.5} and photochemical oxidants. PM 2.5 is not included in the assessment items in the Guidelines. However, it became clear that PM 2.5 causes respiratory diseases, cardiovascular diseases, and lung cancer. Accordingly, in September 2009, environmental standards were set to keep the PM_{2.5} level below the annual average of 15 µg/m³ and the daily average of 35 µg/m³. Even though no fixed methods of predicting the production, emission, and spread of PM 2.5 are established, JERA should still have evaluated its environmental impact by using methods proposed by academia or utilized overseas. The environmental standard for photochemical oxidants is set at 0.06 ppm or below per hour. Since photochemical oxidants are produced by NO_x and volatile organic compounds through photochemical reaction and the New Units emit a large amount of

NOx, the assessment of environmental impact was necessary. Additionally, the environmental standards for PM 2.5 and photochemical oxidants are not achieved around the planned construction site and in many other regions. (p40)

6.6 Insufficient consideration concerning the hot wastewater

It is presumed that the New Units will cause a large amount of hot wastewater, yet the investigation, prediction, and evaluation of its impact is extremely insufficient. (p40)

6.7 Intermediate conclusion

The following faults were identified.

1. The EIA procedures were wrongfully simplified.
2. The evaluation and consideration of the content of the countermeasures concerning greenhouse gases were insufficient.
3. The consideration of alternative fuel types was lacking.
4. The consideration concerning air pollution was insufficient.
5. The consideration concerning the host wastewater was insufficient.

The Notice of Finalization by the Minister of Trade, Economy and Industry, which disregarded those serious faults, must be revoked. (pp40-41)

7 Request for the Revocation of the Notice of Finalization

7.1 Disposability of the Notice of Finalization

The objective of the Electricity Business Act is to prevent human and physical damage resulting from electric facilities for business use as explained above. The Minister of Trade, Economy and Industry has various regulative authorities to realise this objective. Although the operation of power plants is not based on permits nor licenses, there is a presumption that [business operators of] large-scale power plants ensure the realisation of due environmental consideration and prevention of health and property damage through the EIA. (p41)

Article 48(1) of the Electricity Business Act obliges [business operators] to notify the Minister of Trade, Economy and Industry [of the construction plan]. Moreover, Article 66 of the Implementation Regulation requires to state the environmental conservation measures to be taken and to attach the document explaining those measures to the notification. Furthermore, Articles 48(4), 48(3)(i), and 47(3)(iii) allow the Minister of Trade, Economy and Industry to order a change or discontinuation of the construction plan within 30 days of the notification when the plan does not conform to the EIS that is affirmed [by the Minister of Trade, Economy and Industry through the Notice of Finalization]. The business operator can only start the construction after this 30-day period. Thus, the EIS and the Notice of Finalization are necessary conditions for legally starting the construction. (pp41-42)

7.2 Standing

A person who has legal interest(s) under Article 9 (1) of the Administrative Case Litigation Act refers to a person whose right or legally protected interest is violated or is likely to be violated by disposition. If the purpose of administrative regulation that prescribed the disposition is interpreted in the way to define the interests of undefined persons as not merely the public interests but also as legally protected interests of individuals, those interests can be protected by law. Subsequently, the person whose interest is (likely to be) violated by the disposition has standing for the action for the revocation. (Supreme Court, Judgment, 7th December, 1942; 59 Minshu (10) 2645) (pp42-43)

The Electricity Business Act aims to protect not only the interests of the consumers but also the public safety and environmental conservation (Article 1). Moreover, a person that installs electric facilities for business use must maintain the electric facilities for business use to ensure that they conform to the technical standards established by order of the competent ministry and that there is no damage to health nor property {Articles 39(1) and 39(2) the Electricity Business Act}. The Ordinance on Technical Standards specifies the regulations

imposed by the Air Pollution Control Act and Act on Special Measures against Dioxins, which aim to protect the life, health, and living environment of the neighbouring residents as individual interests. (p43)

Furthermore, the EIA Act aims at securing the appropriate consideration for environmental conservation and contributing to the healthy and cultural life of people in the future (Article 1 EIA Act). The Electricity Business Act and the EIA Act try to realise the conservation of the environment and due consideration through the EIA. That is also said to be aiming for protecting the individual interests of the residents whose health and living environment are likely to be damaged. Therefore, the residents who are affected by the environmental impact by this specific business have standing in the revocation of the Notice of Finalization made pursuant to Article 46 (17) (ii) of the Electricity Business Act. (p43)

Certainly, persons who live within the area that is environmentally affected have standing. In addition, standing is given to persons who do not reside in the relevant areas. Air pollution, especially by PM 2.5, and global warming affect a wide range of areas. Global warming can even cause worldwide damage. Since the objective of the EIA is interpreted to protect the individual interests of the residents whose environment is affected by the business, those persons who live close to the planned construction site and also the Plaintiffs who reside outside the relevant areas have standing for the revocation of the Notice of Finalization. (pp43-44)

If the illegal Notice of Finalization is revoked and the EIS is annulled, the new EIA procedures will be carried out and the business operator will maintain and manage its facilities based on the new EIS. As this leads to a change in the content of the impact or damage inflicted [on the Plaintiffs], the Plaintiffs have the interest in requesting revocation of the Notice of Finalization. (p44)

8 Conclusion

In conclusion, the Plaintiffs request the revocation of the Notice of Finalization issued by the Minister of Economy, Trade and Industry to JERA on 30th November 2018. (p44)