

[English translation issued by Mihama-no-Kai and Green Action / 5 April 2013]

[Notes concerning this translation: The text below describes the basic legal arguments of the plaintiffs and defendant. The verdict is expected the first part of April 2013. (The judge closed the case on 29 January and stated the decision would be handed down the end of March or beginning of April.)]

**The points of issue in the legal case against
Kansai Electric Power Co., Inc. (KEPCO)
by citizens seeking a provisional disposition (injunction)
to stop the operation of Ohi Nuclear Power Plant Unit 3 & 4**

28 October 2012

Hideyuki Koyama

(The points of view below are essentially based on the opinion presented by the plaintiffs, but include some content not yet submitted to the court to date. Therefore, responsibility for the wording of this article should be laid on Hideyuki Koyama, one of the two lead plaintiffs of this legal case.)

On 12 March 2012, when the resumption of operation of Units 3 and 4 at the Ohi nuclear power plant was imminent, 262 citizens and residents of Fukui, Gifu and six other prefectures in the Kansai region initiated a motion at the Osaka district court against the Kansai Electric Power Co., Inc. (KEPCO), the operator of the plant, seeking a provisional disposition against the resumption.

KEPCO submitted a written answer of less than one page in substance before the first court hearing on 24 April 2012. Thereafter, on 17 May, showing their attitude of ignoring the arguments of the plaintiffs, KEPCO submitted only five pages in substance of written legal argument. On 29 June, KEPCO submitted for the first time a written legal argument with tangible contents, thus opening substantive argumentation.

Soon after, despite massive opposition from citizens, KEPCO restarted Unit 3 of Ohi nuclear power plant on 1 July and Unit 4 on 18 July. Full-scale commercial operation of the two units resumed on 3 and 16 August, respectively. Accordingly, the purpose of the court case was shifted to shutting down the operating nuclear power plants.

On 31 August, KEPCO submitted documents supplementing its arguments submitted on 29 June. They mainly focused on the subject of control rod insertion time during an earthquake. In the 5 court hearing on 5 September, the presiding judge asked KEPCO to provide clarification exclusively on this subject, asking five questions. On 3 October, KEPCO submitted its response. The plaintiffs also submitted their opinion on the questions asked by the court.

At the end of the court session on 10 October, the presiding judge brought about a new issue of whether the fracture zone under the Ohi nuclear power plant site is an active earthquake fault or not, showing strong interest on how deliberations on this issue would proceed.

During the 6 hearing, both sides indicated their opinions on the issue newly raised by the presiding judge. The 7 hearing is to take place on 28 November. We do not know if the hearings will be concluded at this session. However, this court case is now in its final stage.

As this legal case took place after the Fukushima accident, the plaintiffs addressed the overall problems concerning the design of nuclear power plants and their operational management. But the essential arguments converge on the problems of control rod insertion time and the fracture zone under the plant site. At this point, the issues concerning control rod insertion are summarized in KEPCO's submission from 3 October and the arguments undertaken during the 10 October court hearing. Below I write an outline of those points of issue.

I. Control Rod Insertion Time

1. Issues of control rod insertion time and of plaintiffs' human rights

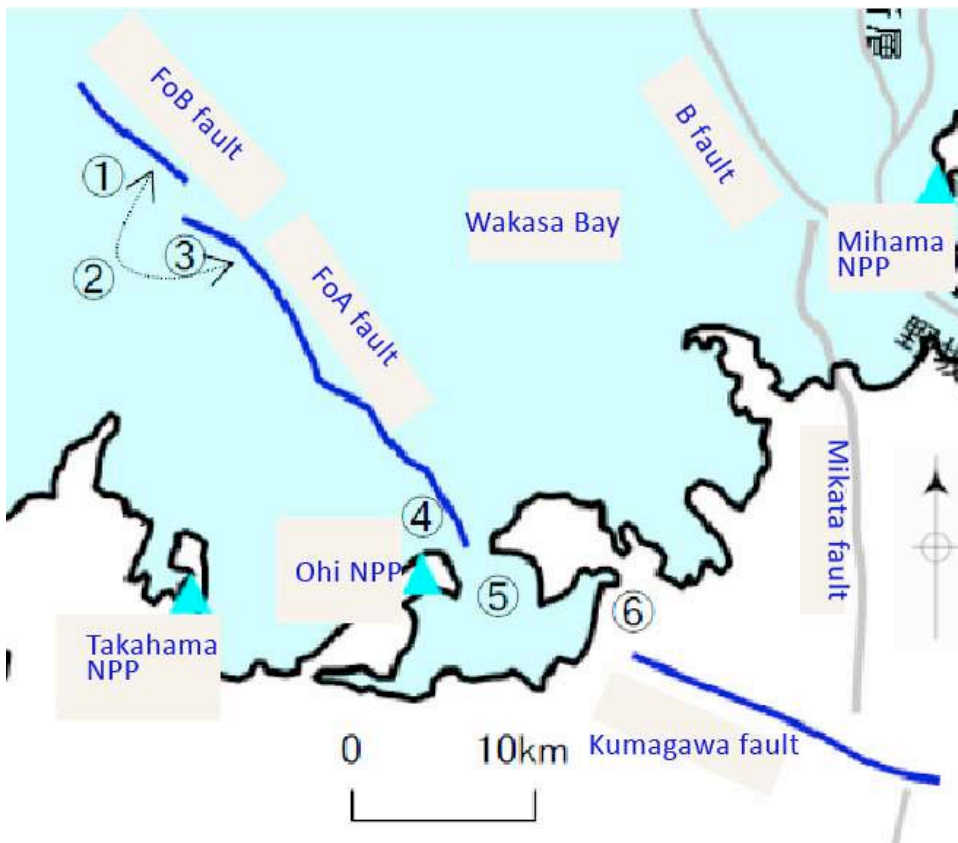
1) The issue of the control rod insertion: three elements

Upon sensing an earthquake, PWR control rods drop under their own weight from 4m height into the fuel assembly. There are three issues concerning control rod insertion time.

a. Interaction between three active faults

There are three active faults very close to the Ohi power plant: FoB and FoA and Kumagawa (see the figure below). The current seismic design of the plant is based on an earthquake forecast assessment of 700 gal basic earthquake ground motion which would occur under the Ohi nuclear power plant site if the two active faults FoA and FoB interact. There had been no assessment in the event of the Kumagawa fault interacting together with FoB and FoA. However, on 27 January 2012, following the Fukushima Daiichi accident, the Nuclear and Industrial Safety Agency (NISA) issued an instruction for KEPCO to consider an interaction between the three active faults. In response, on 29 February, KEPCO submitted a seismic analysis (response spectrum) with such a supposition, which it calls a "just in case" analysis because, according to KEPCO, it could not happen.

In the court hearings, the presiding judge did not raise the issue of whether or not the three active faults would interact, but rather asked KEPCO questions on the assumption that this interaction would occur.



b. Assessment criterion value for the control rod insertion time : 2.2 seconds

The assessment criterion value (permissible value) of control rod insertion is set at 2.2 seconds. This figure is in the licensing application for permission to build Ohi Units 3 and 4, and the licensing permit was issued on these grounds. More specifically, in the attached document no. 8 of the licensing application, this value of 2.2 seconds is prescribed as a specification within which control rods should be inserted by the control rod drive mechanism. In the attached document no. 10 for the safety analysis of design basis accidents, the insertion of the control rods within 2.2 seconds is specified as a condition for analysis of any type of accident. This value, having been approved by NISA, cannot be modified without written application and approval by the government.

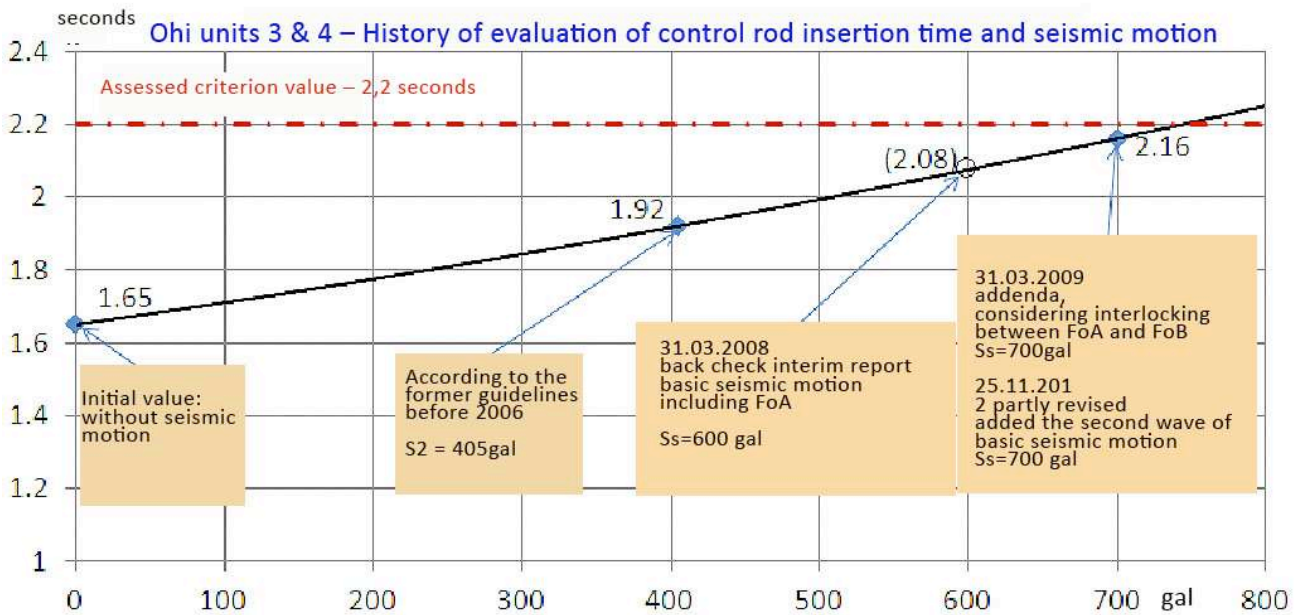
KEPCO, however, insisted in the court case that there is no duty to comply with the 2.2 seconds, because this value is not a “stipulation,” but just an analysis condition.

c. The assessed value (analytic value) of control rod insertion time

The assessed value (analytic value) of control rod insertion time has been changed according to seismic evaluation, 1.65 seconds without seismic motion, 1.92 seconds at 405 gal, 2.1 seconds at 600 gal. The figure is 2.16 seconds at 700 gal (the assessment value for the two faults FoB and FoA interacting), leaving a slim 2% margin vis-a-vis the criterion value of 2.2 seconds. (See the figure below.) It is obvious that the assessment value will exceed 2.2 seconds if the three active faults interact.

Nevertheless KEPCO began to argue that, as a result of more detailed analysis, the actual value at 700 gal would be 1.88 seconds rather than the 2.16 to date. Moreover, KEPCO insists that the

assessed value in the case of an interaction between the three active faults would be 1.83 seconds (less than when the two active faults interact). These very strange values have not been officially reported to nor evaluated by the government. This fact was noted by the judge himself during the 10 October court session.



2) The issue of plaintiffs' human rights

It is an undeniable fact that 2.2 seconds is prescribed as a requirement in the licensing application for the plants. Probably anticipating this, KEPCO defends itself bringing forward another argument that there would be no harm to the plaintiffs caused by radiation even if the insertion time were to exceed 2.2 seconds, hence that plaintiffs have no standing. The grounds for the plaintiffs to demand the shutting down of the plant is personal human rights. They are based on the fact that the insertion of the control rods could be delayed during an earthquake, and that as a result there might be a catastrophic accident which could result in plaintiffs receiving radiation damage. KEPCO is trying to deny the basis for this concern. The point at issue thus boils down to whether or not fuel damage etc. occur when the control rod insertion time exceeds 2.2 seconds.

I describe these issues in detail below.

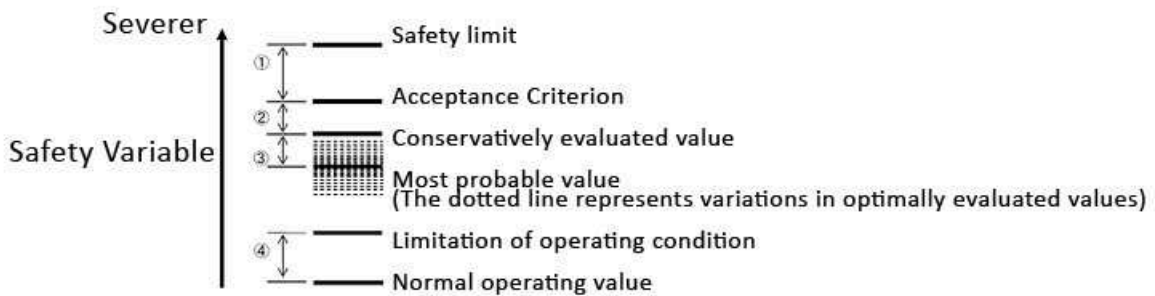
2. The contention over control rod insertion time of 2.2 seconds

1) The argument of KEPCO

On 5 September, the presiding judge demanded KEPCO provide proof clarifying whether or not a provision concerning control rod insertion time exists or not in the license permit of the Ohi plants. The answer from KEPCO was that no such provision exists. KEPCO mentioned the following points as to why, answering at the same time the court's related questions.

KEPCO's arguments:

1. The control rod insertion time of 2.2 seconds is only an analysis condition for safety analysis, and not a standard under the license.
2. The licensing standard for safety analysis in the case of accident etc. is prescribed by the evaluation criteria for making assessments stipulated in the Review Guide for Safety Evaluation. It is shown in the figure below as “acceptance criterion”. Since the shortest time which satisfies this is around 11 seconds, this would mean in this sense the 11 seconds insertion time would be the standard.
3. Regarding where the 2.2 seconds figure would fit in, this figure is not of a nature that would fit into any of these categories. The 11 seconds insertion time corresponds to an “acceptance criterion” of the minimum critical heat flux ratio (minimum DNBR) =1.54. Accordingly, 2.2 seconds would be equivalent to DNBR=1.72 and corresponds to the “conservatively evaluated value” in the figure. It means that a “licensing margin” exists between them (② in the figure below).



Definition of safety margins for control rod insertion

- ① Safety Margin
- ② Licensing margin
- ③ Analytical Margin Margin for setting analytical conditions (initial condition, boundary condition parameter, model, etc.)
- ④ Operating Margin

Safety Margins of reactor emergency shutdown by rod insertion (reference) 16.March 2009
Document submitted by Committee on examination of reactor safety of Nuclear Safety Commission

4. Previously KEPCO told the presiding judge that the plant could not operate if the assumed insertion time exceeds 2.2 seconds. When asked about this point, KEPCO answered in written document on 3rd October that this is a regulation concerning the driving mechanism of control materials (attached document no. 8 and 10 of the licensing application) stipulated in Article 24 of the “Ministerial Ordinance of Establishing Technical Standards for Nuclear Power Generation Equipment” (ministerial ordinance no. 62, 1965; hereinafter “Technical Standards”), and that under this regulation, it is a violation of the Technical Standards if the insertion time is longer than 2.2 seconds at the time of accident etc., and the possibility arises that use of the nuclear power plant facility may be restricted under Article 40 of Electric Utilities Industry Law.
5. At the same time, however, KEPCO asserts that it is Article 5, rather than Article 24, of the Technical Standards that should be applied for emergency situations such as an earthquake. According to KEPCO, Article 5 accepts control rod insertion time longer than 2.2 seconds

under seismic motion if the safety of the fuel can be confirmed by transient analysis etc. (JEAG4601-1991, Technical Guidelines for a seismic design of nuclear power plants supplement).

6. KEPCO argues that it has been confirmed by experimentation that the fuel rods could be inserted “at around 2.2 seconds” at 1560 gal, and therefore, there is no problem even if the three active faults move together (resulting in approximately 1000 gal of seismic motion).

2) The plaintiffs’ counterarguments

Below I describe the counterarguments against the arguments of KEPCO indicated above.

a. Stipulation of control rod insertion time according to the Technical Standards, Article 24

KEPCO recognizes that it is a violation of the construction permit if the insertion time is longer than 2.2 seconds according to Article 24 of the Technical Standards. The Technical Standards Article 24 states, “Control rod driving mechanism must be established with consideration of the following points,” and provides as point no. 1, “It must be able to drive the control rods at suitable speed with regards to the characteristics of the reactor.”

NISA’s interpretation states, “Point no. 1, ‘It must be able to drive the control rods at suitable speed with regards to the specification of the reactor’ means that control rods must be inserted into the reactor core with enough speed to prevent damage of fuel and coolant pressure boundaries in the reactor during emergency shutdown. The control rod insertion time at the emergency shutdown must satisfy the time set up in evaluations of anticipated operational occurrences and accidents, as described in attached documents no. 8 and 10 of the licensing application.”

In attached document no. 8, specifications of control rod drive mechanism including control rod insertion time of 2.2 seconds are provided according to “design guidance for adaptation” based on guidelines for design safety criteria. It means that 2.2 seconds is the insertion time that is stipulated as a specification of control rod driving mechanism on the basis of guidelines for design safety criteria. Also in document no. 10, 2.2 seconds are provided as a common condition for safety analysis for all kinds of design basis accidents.

b. The government recognizes prohibition of operation of nuclear power plant when the insertion time exceeds 2.2 seconds

The plaintiffs, together with other nationwide organizations, have met with government officials and repeatedly addressed questions regarding this point. The Nuclear and Industrial Safety Agency is negative towards KEPCO’s argument. It recognizes that KEPCO must adhere to 2.2 seconds insertion time since it is written in the licensing application, that KEPCO received the licensing permit for the plant on this basis, and that KEPCO cannot change the value without submitting an application for permission for the change and the change is accepted.

The government also clearly states in a written response to an administrative litigation we are undertaking that it contravenes Technical Standards if 2.2 seconds insertion time is exceeded.

c. Ignoring safety margins should not be allowed

KEPCO asserts that 11 seconds of insertion time corresponds with minimum critical heat flux ratio (minimum DNBR) =1.54 as an acceptance criterion, and 2.2 seconds corresponds with DNBR=1.72, as a conservatively evaluated value. The difference between these values is 10% as a licensing margin, a safety margin. Safety margins should be in place to cover unpredictable events. The important security feature of assuring that the insertion of control rods have sufficient safety margins is essential. That is why an extra criterion such as the conservatively evaluated value was established besides the acceptance criterion.

The “11 seconds theory” was born around 2002 when there was a tendency to shorten safety margins. We must recognize that such attitudes caused the accident at Fukushima. To ignore safety margins after Fukushima without reflection on this point is unacceptable.

d. “11 seconds theory” is just a result of analysis trying to shorten the safety margins

This argument is a result of trying to encroach upon the safety margin by insisting that it is safe even when the control rod insertion time is assumed to be 11 seconds. Sensitivity analyses were performed for the purpose of shortening the safety margin. These analyses looked to see how the response (output) altered when the parameter of the insertion time is changed. The insertion time was thus gradually prolonged from 2.2 seconds to 11 seconds.

The “accident” used for these analyses was damage to the steam generator tube. In the analyses, only the parameter of control rod insertion time was changed, maintaining the other conditions of the safety analysis. These analyses have nothing to do with reality.

Why would the insertion time be prolonged from 2.2 seconds to 11 seconds? Nobody gave a reason for it. If the cause is an earthquake, it must be one of an enormous magnitude. Steam generator tube degradation can cause more than a fracture of one tube. In February 1991 the guillotine rupture of a steam generator tube in Mihama Unit 2 suddenly occurred just because of metal fatigue without any seismic motion. If an earthquake attacks a plant when there is degradation or metal fatigue of tubes, it is possible that several tubes can rupture. Also, this test assumes only a single failure; all other facilities such as the diesel generator or secondary system of water supply are supposed to fully function even in the event of station blackout. But the Fukushima accident showed that such an assumption is not valid.

Hence the theory that 11 seconds insertion time is still safe is merely fiction without reality.

e. 2.2 seconds is not applicable for earthquake?

KEPCO is trying to underestimate the impact of an earthquake on the plant by putting it under a separate category from accidents. But no one can accept such an argument after the Fukushima accident. The presiding judge cast doubt on KEPCO’s argument that the repercussions of an earthquake would be smaller than other kinds of accidents.

In spite of the fact that 2.2 seconds are stipulated as a specification of the control rod driving mechanism, KEPCO insisted that the value is not applicable for earthquakes. But the specification stipulates the functioning and efficiency of the control rod driving mechanism which is required to function when a reactor trip signal occurs, whether it be as a result of an earthquake or due to other accidents.

KEPCO insists that exceeding 2.2 seconds is allowable by referring to JEAG4601-1991

(Technical Guidelines for a seismic design of nuclear power plants supplement, 1991), a commercial standard issued by the Japan Electric Association. Certainly it is written, “The insertion time is based on the evaluation of the current safety analysis. There is no definite criterion during specific accidents such as with earthquakes. However, this value is set up as an assessment standard for now. In the case that, by any possibility, this value is exceeded during an earthquake, it can be judged that the dynamic function of control rods under seismic condition is maintained, if safety of cooling of fuel elements etc. can be verified by transient analysis or other analysis.” First we must know that this assertion underestimates the impact of an earthquake by regarding earthquakes as not an accident. This is no longer valid after the Fukushima accident. It is unacceptable to make such assertions after Fukushima. Actually the newly formed Nuclear Regulation Authority (NRA) is currently examining how to take external incidents into account. Secondly, there is no official rule about what kind of conditions should be set up for the transient analysis, a time-domain analysis.

KEPCO insists that the 11 seconds analyses can be used as equivalent to such rules. But the impact of seismic motion is not considered in the analysis as mentioned above, which means that, in fact, no transient analysis has actually been undertaken for the case of an earthquake.

In the court hearing of 10th October, KEPCO distinguished earthquakes from accidents referring to a part of the commentary from the Review Guide for Safety Evaluation : “The ‘anticipated operational occurrences’ and ‘accidents’ discussed herein are limited to internal events whose causes arise within nuclear reactor facilities. As to natural phenomena or external humanly-induced events, the adequacy of design considerations against them is reviewed separately based on the Review Guide for Safety Evaluation, etc.” It is true that the Guide treats internal events as a cause for emergency situations. But it does not mean that external events such as earthquakes must be treated in different ways. As with internal events, external events are expected to be reviewed on the basis of the Guide, etc. We must understand that earthquakes can cause much more serious situations than a design basis accident, as seen with the Fukushima accident.

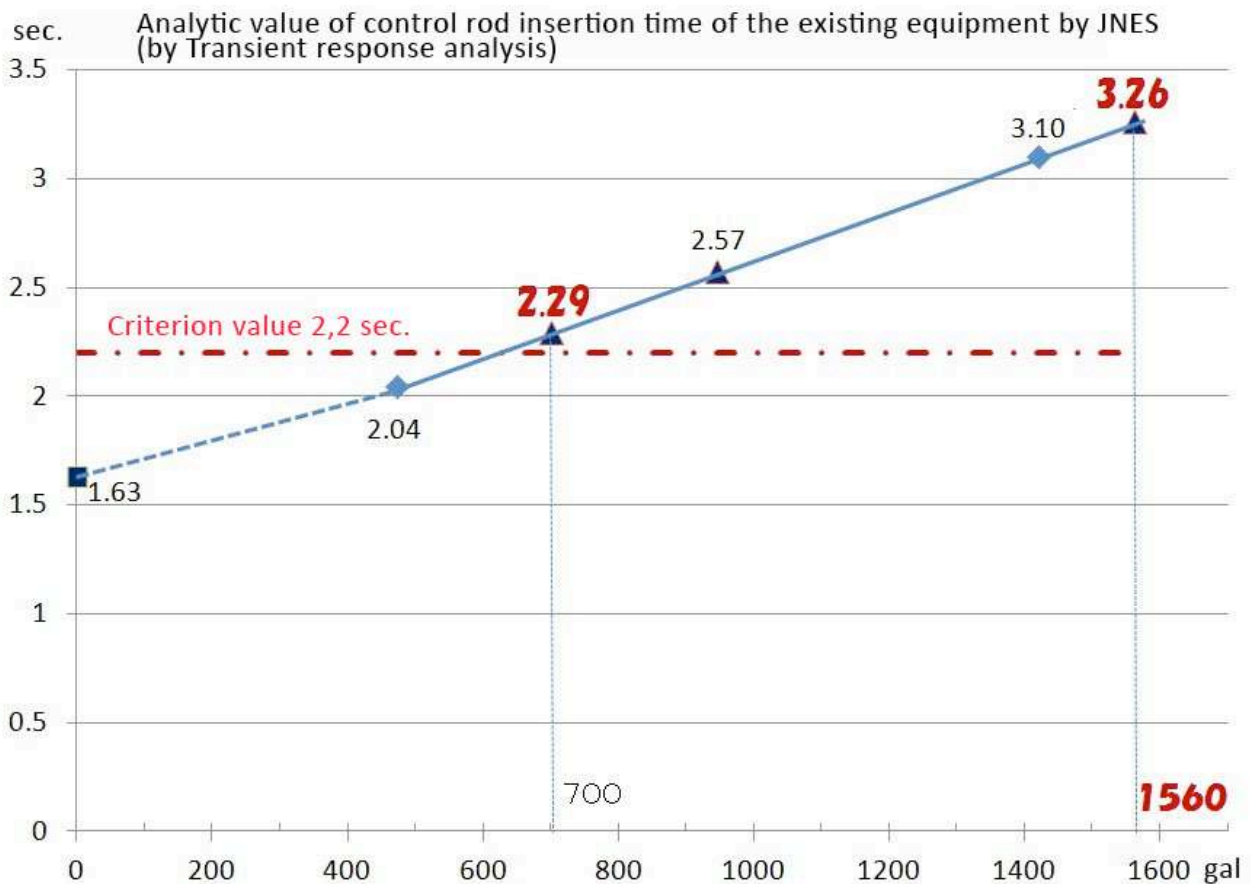
f. The control rods were inserted within “around 2.2 seconds” at 1560 gal?

KEPCO argues that an examination confirmed that the control rods could be inserted within “around 2.2 seconds” even at 1560 gal of seismic motion. It states the result of the examination was reported by the Japan Nuclear Energy Safety Organization (JNES) in 2006. In the report, chapter 5 refers to the results of the examination of the control rod insertion using a testing device, and chapter 6, refers to the results of an analysis obtained by applying the results of the examination to the actual equipment.

The examination assumed the basic seismic ground motion S2 at 473 gal, and measured the actual control rod insertion time at 3.3S2=1561 gal. The result was 2.29 seconds, which substantively exceeds 2.2 seconds. Next, on the basis of the result, and taking the difference between the testing device and the actual equipment into consideration, the insertion time for the actual equipment was calculated using the time history response analysis method. The result was 3.26 seconds at 3.3S2=1561 gal. This value cannot be called “around 2.2 seconds”. The figure below shows the result of the analysis.

It can be noted that the insertion time at 700 gal, the basic seismic ground motion of Ohi nuclear power plant, can be found by linear computation. As the figure shows, the time is 2.29 seconds, exceeding 2.2 seconds. As mentioned below, KEPCO insists that the time calculated by the same response analysis method was 1.88 seconds at 700 gal. These results show that the computation

results using the same analytic method can be completely different depending on how the assumptions are made with regards to the seismic motion or resisting power.

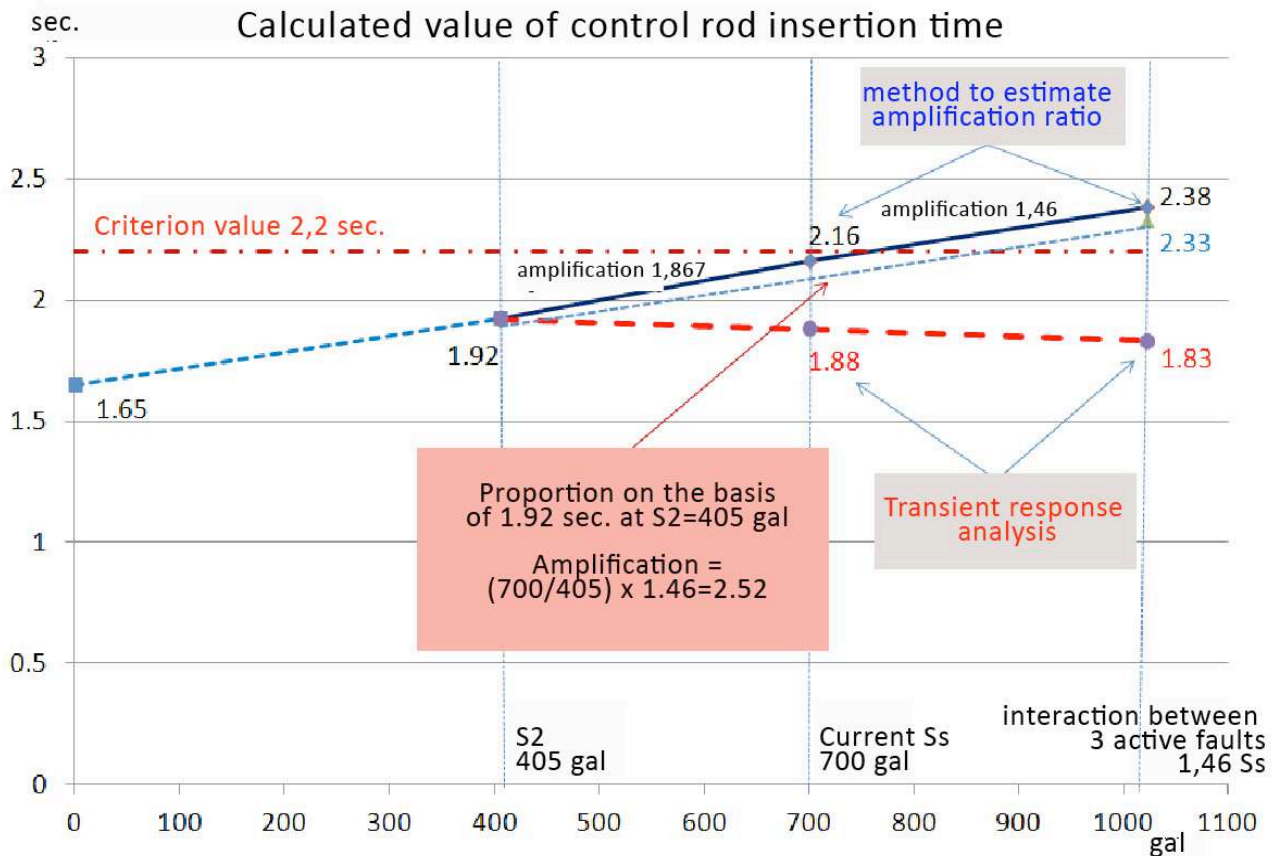


3. Issues around the assessment of control rod insertion time – how it is possible that the insertion time becomes less as the seismic motion grows

The current basic seismic ground motion 700 gal is the assumed value for an earthquake with interaction between FoB and FoA active faults. The control rod insertion time at this motion is assumed to be 2.16 seconds – that is how it was reported to the government, inspected by the government, and approved by NISA. There is a slim 2.2% margin between 2.16 seconds and 2.2 seconds as criterion value. If the interaction between three active faults occurs, it is clear that the insertion time cannot avoid exceeding the criterion value.

1) KEPCO's Argument

According to KEPCO, however, the 2.16 seconds value was found by a simplified method called response magnification. KEPCO states that, when calculated by a more precise method, transient response analysis, it actually becomes 1.88 seconds. Also in a written argument on 3rd October, KEPCO showed for the first time the analyzed value of insertion time while the three active faults interacted, and insisted it would be 1.83 seconds. This is a surprising result – the bigger the seismic motion becomes, the quicker the control rods insertion time (the thick dotted line on the figure below). It is obvious that this is against the physical laws of nature.



2) The plaintiffs' counterarguments

Time history response analysis method is a method whereby the motion equation is reduced with assumption of active resistance at three points at the time the control rods and drive shafts drop down. The power resistance depends of course on the seismic motion, and, directly on the floor's response in the reactor building. That is why the results can be changed depending on how seismic motion and floor resistance response is assumed.

KEPCO did not release any details concerning the above. However, according to physical laws, normally the insertion time increases as seismic motion becomes bigger, because when the control rod guiding thimble or guiding tube of the drive shaft trembles strongly, the control rods and drive shafts will be pressed into these tubes, thus increasing the resistance. The results of time history response analysis method of the same actual equipment under the same assumed seismic motion 700 gal are different comparing KEPCO (1.88 sec.) and JNES (2.29 sec.) results as mentioned above.

Page 27 of the material submitted by NISA for a comprehensive meeting of investigation of the Nuclear Safety Commission on 13 March 2012 states that, on the basis of confirmation of this fact, the JNES test results, there is a linear upward trend. It states, "Concerning the delay in the time of insertion at earthquake input level of 2xSs (1400 gal) in Ohi Units 3 and 4, it is assumed to be increased almost linearly from the evaluation result under Ss." (Ss= 700 gal for Ohi Units 3 and 4). Therefore, also according to the NISA evaluation, it is impossible that the insertion time decreases as seismic motion increases.

At any rate, such abnormal results must be inspected stringently by a government meeting of specialists and cross-checked by JNES if necessary. However, these results have not been

inspected by the government nor have they even been reported to the government. This value is only assumed by KEPCO and not validated otherwise. KEPCO believes this will be accepted by society. Such an attitude only shows how KEPCO gets its own way in the “nuclear village”.

In the court hearing on 10 October, the presiding judge confirmed that these values of insertion time were not inspected or approved by the government. Thus absence of any official justification for “1.88 seconds” was verified.

4. Concerning the concluding remarks of KEPCO

1) Concluding remarks of KEPCO

As a conclusion in their document on 3 October 2012, KEPCO highlighted the following three points.

1st: This provisional disposition order sought by the plaintiffs is an injunction based on the personal human rights of plaintiffs. So the injunction cannot be accepted without clear evidence of an existing risk of human rights infringement .. Concerning control rod insertion time, it has become clear that insertion time within at least around 11 seconds does not cause any danger. Consequently what counts is that the insertion time is less than around 11 seconds, not 2.2 seconds.

2nd: Concerning the control rod insertion time during an earthquake, even if it exceeds 2.2 seconds, it can be acceptable if safety can be confirmed by transient analysis etc. (if it doesn't exceed around 11 seconds). In any respect, the interaction between the three active faults is not required to be taken into consideration for the basic seismic motion, hence there is no problem from the viewpoint of regulation.

3rd: At any rate, control rod insertion time never exceeds 2.2 seconds even in the event of interaction between the three active faults.

2) The plaintiffs' counterarguments

I have already described most of the counterarguments, but here I'd like to mention some supplementary points.

a. About burden of proof

KEPCO referred in the first point above, “Concerning control rod insertion time, it has become clear that insertion time within at least around 11 seconds does not cause any danger.” But KEPCO has never realistically or comprehensively shown that safety can be assured in the case the control rod insertion time is extended to 11 seconds during an earthquake. The plaintiffs already made this point. Therefore, in this situation, according to judicial precedent, the burden of proof to confirm safety must be borne by KEPCO. Without any proof of safety in the real sense, it should be recognized that KEPCO's theory of 11 seconds has failed, and that hence the plaintiffs' argument about moral right infringement through damage by radiation must be acknowledged.

b. Possibility of interaction between active faults

KEPCO referred in the second point above, “In any respect, interaction between three active

faults does not have to be reflected on the basic seismic motion.” But at the council for hearing opinions about earthquake and tsunami on 30 August 2012, NISA released its opinion that it must be considered that the Kumagawa fault is extended to some point into Obama Bay and that there is a duty for the operator (i.e. KEPCO) to report the result of its independent inspection.

Moreover, in the preparatory meeting of specialists for the inspection of the Ohi fracture zone on 23 October 2012, a new corroborative fact about the extension of the Kumagawa fault into Obama Bay was submitted. In relation to this, there is now a discussion on whether or not the Kumagawa fault extends to a point less than 5 km from the south end of the FoA fault. There is a “5 km rule” that deems faults may interact when the distance between them is less than 5 km. Based on this rule, the concept of the three faults interacting is no longer an abstract one, but a serious possibility.

Though we need to wait for the results of further inspections of the extension of the Kumagawa fault, in the present uncertain situation, we must be proactive in examining the impact of an earthquake with the assumption that the three faults would interact.

5. Conclusion

The assessment criterion value of control rod insertion time of Ohi Units 3 and 4 is 2.2 seconds. This value is based on Article 24 of Technical Standards, and also is a specification for the control rod drive mechanism under Guidelines 17 and 18 in the Review Guide for Safety Evaluation as referred to in attached documents no. 8 and 10 of the licensing application, and, at the same time an analytic condition for the safety analysis. No one can change this value without re-analysis and submission of the analysis to the authorities in a written application requesting to change the value. KEPCO has not undertaken any such procedure.

The assessment time of control rod insertion is 2.16 seconds at current basic seismic ground motion and there is a slim 2.2% margin between this value and the criterion value of 2.2 seconds. If the interaction between three active faults occurs, it is obvious that the insertion time exceeds the criterion value. It will be a violation of Technical Standards and therefore the plant cannot be allowed to operate, if the insertion could not take place within 2.2 seconds. It is a matter of course after Fukushima to assume the possibility of all three faults acting together. More over, new proof is now being disclosed about the extension of Kumagawa fault to the FoA fault.

Because there is no credible analysis in the event control rod insertion time exceeds 2.2 seconds due to an earthquake, there is no evidence that damage to fuel rods and other emergencies may not occur. A licensing margin must be maintained between the acceptance criterion and conservatively evaluated value, and it should be understood that the plaintiffs may be seriously harmed by radiation if the insertion time exceeds the conservatively evaluated value.

In conclusion, Ohi Units 3 and 4 must be shut down.

II. The problem of fracture zone under the Ohi nuclear power plant site

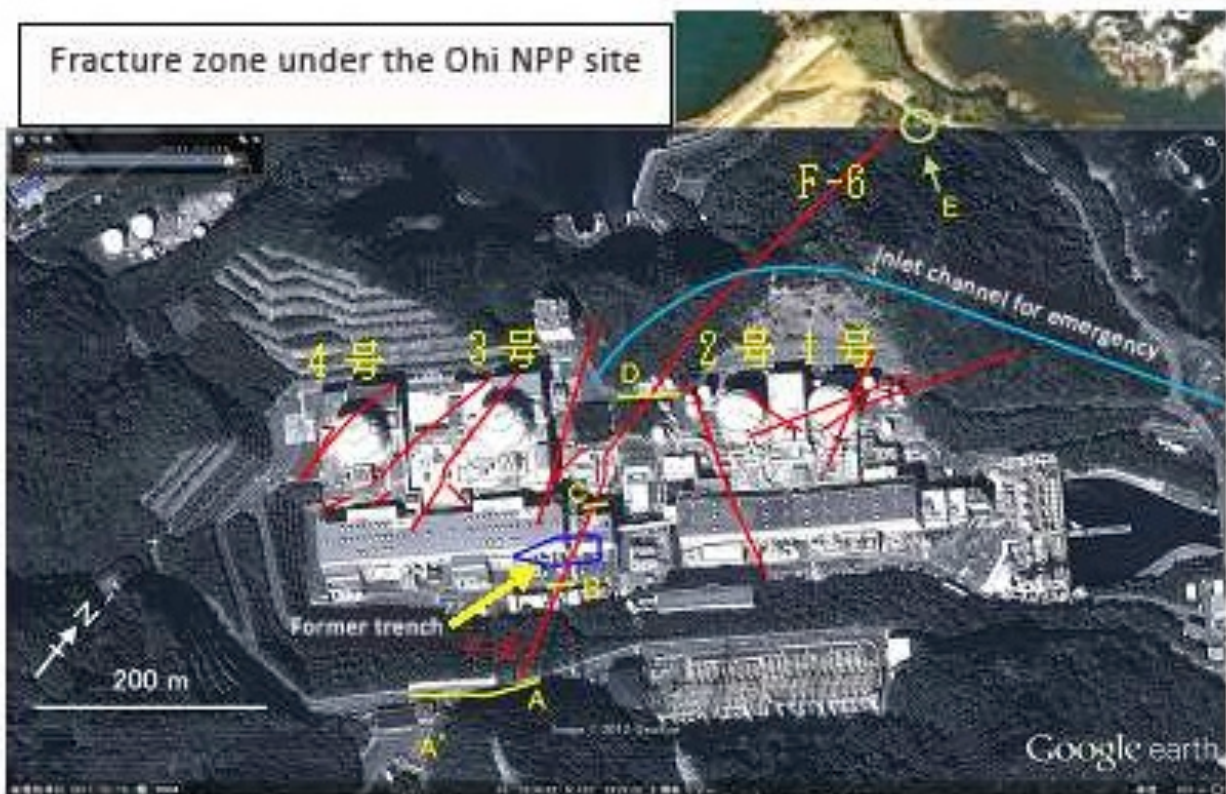
There are many fracture zones (earthquake faults) just under the Ohi nuclear power plant (see the figure below). It was already known at the time when the power station was under construction, but construction was permitted based on the judgment that they were not active faults. Although after 2006, back-checks had been undertaken according to the new guidelines for seismic criteria, the

map of the slope of the longest trench examining fracture zone F-6, specifically that of its north side slope which strongly suggested the presence of an active fault, was not submitted for this back-check. A site investigation is to be undertaken over again.

The F-6 runs across the emergency intake channel (blue line on the figure below), a critical facility that requires class-S earthquake resistance. This intake channel is a pipe through which sea water runs. The pipe is used to cool important equipment in times of both normal operation and emergencies. Hence, if the possibility that F-6 is an active fault cannot be eliminated, the operation of the plant is not allowable according to the "Guidance" of seismic design review guidelines.

The newly-formed Nuclear Regulation Authority (NRA) has set up an inquiry panel of experts for the investigation of the fracture zone under the plant site. The panel will hold a preparation meeting on 23 October and the site investigation on 2 November 2012. The results of the investigation will be examined in a meeting on 4 November.

The presiding judge is very interested in the progress of the affair. So the plaintiffs are going to base their arguments on the upcoming results of the investigation to yet again insist on the shutdown of the plant.



Original Japanese text: http://greenaction-japan.org/internal/121030_stop_the_operation_of_Ohi_jp.pdf

This translation is issued by:

Green Action

Suite 103, 22-75 Tanaka Sekiden-cho Sakyo-ku Kyoto 606-8203 Japan
Tel: 075-701-7223 Fax 075-702-1952 E-mail: info@greenaction-japan.org

Osaka Citizens Against the Mihama, Oi and Takahama Nuclear Power Plants (Mihama-no-Kai)

Seiko Building 3rd Floor 4-3-3 Nishi Tenma Kita-ku Osaka 530-0047 Japan
Tel: 06-6367-6580 Fax: 06-6367-6581 E-mail: mihama@jca.apc.org