

## Briefings for Local Resident of Ono City about Nuclear Power Generation In the Neutral Position —Practice after the Fukushima Daiichi Nuclear Disaster—

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(Received February 5, 2016)

After the Fukushima nuclear power plant accident, we conducted the briefings about nuclear power generation under neutral position to the local residents. As a result, by describing from a neutral standpoint, the possibility of promoting the understanding and spontaneous learning of residents against nuclear power has been suggested.

**Key Words :** Nuclear Power Generation, Awareness of Nuclear Power Generation, Neutral Position, Local Residents and Women's Society

### 1. Introduction

After Fukushima Daiichi nuclear disaster (Fukushima nuclear power plant accident) in March 2011, we practiced the briefings about the nuclear power generation for local resident and members of women's society in Ono-city, Fukui. Local resident planned these briefings voluntarily, so we cooperated with it in a neutral position titled "Think again about nuclear power generation"

The influence of the Fukushima nuclear power plant accident is so huge that many residents of Fukushima were forced to withdrawal to the outside because of the damage caused by the radiation in the Great East Japan Earthquake, and still less returns to the hometown now. There are 14 nuclear power plants in Fukui, so not a few inhabitant of Fukui prefecture felt that it is not the opposite shore of the fire. In addition, many TV and newspaper reported about the influence on human being by the Fukushima nuclear plant accident. In such a situation, local resident of Ono-City planned briefing to know about a kind of influence or terribleness of the radiation will continue to release on the human body and the natural world in the future. However, the expert opinions and views of nuclear power and radiation are hard to understand, so general public

asked for a neutral and easy-to-understand explanation.

Prior to the briefings, we confirmed to residents a favor and opposition both of thinking, to determine their correctness or good or bad had been described to be a resident rather than us. This study was intended to search for the awareness of the residents to the description about nuclear power generation in a neutral position by questionnaire survey.

### 2. Viewpoint of the Attitude Survey

It cannot be denied what jitters and distrust of nuclear power generation after the Fukushima accident amplified when we look at the contents of the public opinion polls such as an atomic energy culture promotion foundation or the newspaper. Various reasons were thought about it, we have assumed that there is a cause of the understandable difficulty in the way of explanation to residents.

For example, the supporters of the nuclear power generation seem tend to insist on superiority of the probabilistic safety and cost only in the community of the supporters of the nuclear power generation. On the other hand, opponents of the nuclear power generation seem tend to insist on the safety of uncertainty and risk of life only in the community of the opponents of the nuclear power generation.

Like this, we thought that it become hard to catch understanding and awareness of residents for the nuclear power generation only by the explanation in those partial scenes. We realized from the

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experience we participated in the discussion by the past seminar that there is the scene that did not necessarily lead to social consensus from general remarks favor to detailed exposition agreement that Inoue<sup>[1]</sup> insists on. There is much information from the media as a method that residents understand it in conventional progress about the nuclear power generation and lead to a judgment, but this is because the consciousness of inhabitants is not only a case to learn from agreement and the dissenting opinion (both opinions) from an expert of the nuclear power generation through the media after Fukushima accident, and it experienced a thing. On top of that, we practiced a briefing for residents of a ward on October 23, 2011 and done the first questionnaire survey just after the briefing. In addition, we practiced a briefing for the women's society on March 10, 2012 and done the first questionnaire just after the briefing in the same way. Furthermore, we done the second questionnaire survey after about one year from the first investigation to a ward for a women's society on the same day March 16, 2013.

### 3. Explanation Contents and Questionnaire Result of the Nuclear Power Generation

The briefings were done once each to participant residents of a ward (29 people) and women's society (60 people) in Ono-City. First of all, we explained from unit 1 to unit 4 condition after the Fukushima nuclear power plant accident. Next, we explained high radiation that has been considerable attention among people. At the end, we explained the characteristic of the major accident that happened in the past such as Chernobyl accident.

After these briefing, first questionnaire survey to participant done. Table 1 shows the result of this survey. Second questionnaire survey done as well as the first one after one year later as table 2. From Q1, Q1-1, Q2 of the over twice questionnaires, change of the awareness can be confirmed (thick frame part in table 1 and table 2). This change of awareness is considered to be the influence of the easy-to-understand explanation from the neutral position. Also it is possible to watch for a change in the awareness of the effects of radiation.

For the percentage of people who think that it is

necessary to explain the neutral position, comparing first and second questionnaire, residents to think this role is needed is to maintain a high level of interest at 80% from 70%. Almost the same trend was confirmed in the women's society. Looking at the Q1-1, for example, answer percentage that because the role of the neutral position is important changed from 31% (first questionnaire) to 43% (second questionnaire) in the residents. Also it changed to increase from 24% to 31% in the women's society. However, answer percentage that because the easy-to-understand on radiation equitable education is important changed to decrease from 37% (first questionnaire) to 29% (second questionnaire) in the residents. Similarly, it changed to decrease from 51% to 36% in the women's society. But after this briefing, those who think that the description of nuclear experts has become an easy-to-understand was significantly increased from 6% (first questionnaire) to 50% (second questionnaire) in the residents. In the women's society, it also significantly increased from 8% to 33%.

From the results of the questionnaire, many people think that it is necessary to explain about the nuclear power generation in a neutral position to understand easily. Awareness of the radiation has seems to be continued till now and the explanation about the Fukushima disaster condition make their anxiety easing. In addition, people are believed to want to give a description or information there is no deviation from a third-party neutral position. Against nuclear problem, residents themselves can feel the sense of trying to show judgment and responsibility.

### 4. Conclusion

In this study, we practiced the briefings for local resident of Ono-City about nuclear power generation in the neutral position and it explored the evaluation seen from the residents. The results are consistent with Sawa<sup>[2]</sup> shows that a citizen has both essentially considerable sensibility and reason under discussion with commentators that sense of balance. Also it consistent with Takeda<sup>[3]</sup> shows that debate on nuclear power has not been widely discussed in public point of view.

Table 1 1st questionnaire and result

Question	Items	Ward residents			Women's society		
		Total	Num.	%	Total	Nim.	%
Q1. In neutral position, do you think we need people to demystify for discussion by the government and the government further nuclear power businesses and professionals?	<b>1. I think that it is necessary</b>	n=29	22	75	n=34	29	85
	2. I do not think that it is necessary		1	3		0	0
	3. Neutral		3	10		2	5
	4. No answer		3	10		3	5
Q1-1 Question to whom answered "I think that it is necessary" in Q1.  What is the reason you think that it is necessary? (all that apply)	1. Because it can't be discussed without the understanding of the description contents	n=22	8	27	n=29	10	34
	2. Because it becomes uneasiness and the distrust without the understanding of the description contents		14	48		17	58
	3. Because it is hard to understand the difference of the opposite opinion and favor		7	24		11	37
	4. Because I feel that the progress of the discussion is insufficient only by moderator		1	3		1	3
	<b>5. Because I think that the role of the neutral position and fairness are important</b>		9	31		7	24
	6. Because I think that the opinion of the true intention of both groups are hard to appear		3	10		5	17
	7. Because I think that I want to know the process of the discussion of both groups		4	13		3	10
	8. Because I think that the plain fair education is important about a radiation		11	37		15	51
	9. Because I feel that the difference in foreign (Germany France) electric bill is incomprehensible		0	0		1	3
	10. Others		0	0		0	0
	11. None		0	0		0	0
	12. I do not understand it		0	0		1	3
Q2. Is it easy to understand the description of the expert?	1. Plain	n=29	2	6	n=34	3	8
	2. Incomprehensible		21	72		24	70
	3. Neutral		2	6		5	14
	4. No answer		4	13		2	5

Note: Thick frame  express the main discussion part in this paper

Table 2 2nd questionnaire and result

Question	Items	Ward residents			Women's society		
		Total	Num.	%	Total	Num.	%
Q1. In neutral position, do you think we need people to demystify for discussion by the government and the government further nuclear power businesses and professionals?	<b>1. I think that it is necessary</b>	n=10	5	50	n=50	17	34
	<b>2. I think that it is slightly necessary</b>		2	20		19	38
	3. Neutral		1	10		7	14
	4. I do not think so much necessary		2	20		5	10
	5. I do not think that it is necessary		0	0		2	4
Q1-1 Question to whom answered "I think that it is necessary" in Q1.  What is the reason you think that it is necessary? (all that apply)	1. Because it becomes uneasiness and the distrust when I do not understand explanation contents	n=7	2	29	n=36	10	28
	2. Because I cannot discuss it when I do not understand explanation contents		1	14		2	6
	3. Because the difference in opposite both opinions is incomprehensible agreement		2	29		4	11
	<b>4. Because the role of the fair viewpoint thinks that it is important the neutrality of the third party</b>		3	43		11	31
	5. Because I think that the role that makes sure of each conclusion, and can explain a fact to the nation is important		4	57		11	31
	<b>6. Because I think that the plain fair education is important about a radiation</b>		2	29		13	36
	7. Because oneself wants to join a discussion about the energy		0	0		0	0
	8. Because I think that I want to know the process (progress) of agreeable opposite both discussions		2	29		4	11
	9. Others		0	0		0	0
Q2 After group study, do you think that the explanation by nuclear experts became plain?	<b>1. I think so</b>	n=10	0	0	n=54	1	2
	<b>2. I think a little bit so</b>		5	50		17	31
	3. Neutral		2	20		17	31
	4. I do not think too much so		2	20		13	24
	5. I do not think so		1	10		6	11

Note: Thick frame  express the main discussion part in this paper

Furthermore, Kitazawa [4] shows the final judgment of the energy is choice of the nations is the same thing. In other words, we can guess that the residents are awareness for judgement based on the fact information in the neutral position. But it has a limit to show a judgment of the awareness by only from this questionnaire survey exactly. However, it is thought that the inhabitants might notice the change that is going to arrest the consciousness that is going to make the decision in own consciousness with a tendency as an example by performing the opinion of both groups without deflection from the consciousness of the neutral viewpoint by the briefing session to inhabitants at the same time. From this and others, the briefing about the future nuclear power generation considers it that the

awareness of residents promotes autonomous how to catch by practicing the opinion of both groups without being partial at the same time.

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