# **IZUMI**

UCCJ Tohoku District Nuclear Disaster Relief Task Force "IZUMI" Newsletter No. 12

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# Staring at the Beginning of the End of Nuclear Power (Contribution)

#### Hironori Shinohara

UCCJ Tohoku District Nuclear Disaster Relief Task Force "IZUMI" Advisor

Eight years have passed since the Fukushima nuclear accident. Even now, more than 40,000 people have been displaced from Fukushima Prefecture and evacuated outside or within the prefecture.

Despite this reality, there is still a movement to restart the nuclear power plant, and the safety review by the Nuclear Regulatory Commission (NRC) toward the restart of the Onagawa Nuclear Power Plant Unit 2 has reached the final stage. In response to this movement, Miyagi Prefecture is making an ordinance to decide whether or not to restart the Onagawa Nuclear Power Plant by a prefectural vote. In response to this direct request, the governor of the Prefecture, Murai, clarified the view that "Japan, an island country, has few resources, and has developed nuclear policy as a national policy, making it an important baseload power source". However, this national policy has been broken everywhere since the accident of the Fukushima nuclear power plant, and the era of nuclear cleanup has started.

54 nuclear power plants were operating in Japan at the time of the Great East Japan Earthquake. Currently, 19 are decommissioned and only nine are in operation. According to the government's basic energy plan, the nuclear power plant in FY2030 will cover 20 to 22% of energy, but it is just a pipe dream. How to dispose of the radioactive waste that has been produced up to now and the waste from the decommissioning furnace will arise as an inevitable problem.

The operation of the nuclear power plant started in Japan from the 1966 Tokai nuclear power plant, which means that the nuclear power plant has also produced electricity since then, but at the same time has also produced a large amount of radioactive material (death ash). That is unavoidable as long as we use uranium fission. The radioactivity generated by the nuclear power plant in the past 50 years is 1.2 million times more radioactive material than Hiroshima atomic bomb scattered (estimated to be about 3000 Curies). Radioactivity will decrease over time, so there are currently around 800,000 shots, but it is preserved as spent nuclear fuel, reprocessed high-level and medium/low-level waste, and low-level waste in drums at nuclear power plants nationwide, domestic and overseas reprocessing plants, and various nuclear facilities. Besides, if the decommissioning progress, this radioactivity will take various forms and increase in quantity.

A newspaper in August 2018 reported that the Environmental Technology Center in Ningyo-Pass in Okayama Prefecture would begin test-burying low-level waste in drums on its grounds. In 1955, when the development of nuclear power began in Japan, a uranium deposit outcrop was discovered at Ningyo-Pass, and a research facility for the beginning of the nuclear fuel cycle of

uranium mining, refining, conversion, and enrichment was created. However, it is reported that the facility is also finishing its role and that it will begin a test study to bury waste drums contaminated with uranium powder on the premises. The heading is "Acceleration of disposal flow on-site".

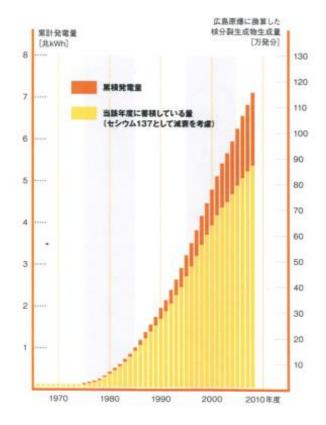


Fig1.
Cumulative power generation and fission product accumulation by nuclear power in Japan from around 1970 to around 2010

Left vertical axis:
Cumulative power generation
[Trillion kWh]

Right vertical axis:
Fission product production converted to
Hiroshima atomic bomb
[10,000 shots]

The term "intermediate storage of radioactive waste" is used everywhere, but it is extremely difficult to find a place to accept the final disposal site for dangerous radioactive materials. Therefore, the flow of on-site disposal at nuclear facilities will increase.

Tohoku Electric Power Co., Inc. decided to decommission the Onagawa nuclear power plant No. 1 in October last year as a large amount of investment was required for safety work and it would not be profitable. Announced that the cost of decommissioning will be 41.9 billion yen. The amount they have accumulated so far is less than 12.3 billion yen, and they are going to collect the electricity charges step by step.

In 2018, the Reactor Regulation Law was revised, and it was obliged to publish an implementation policy for the abolition of major commercial nuclear facilities such as nuclear power plants and nuclear fuel cycle facilities in Japan. A trial calculation announced by each company at the end of last year revealed that low-level waste generated will be 521,000 tons, and the cost will be 12.80 trillion yen. It is a negative heritage that all Japanese has to bear.

The development of nuclear power started as a national policy with the myth that if the nuclear fuel cycle is completed, inexhaustible energy can be obtained, but the most important fast breeder reactor, "Monju" was decommissioned. Although the construction would be completed in

February 2009, it has not been moved due to repeated postponement, and construction costs have increased from 760 billion yen to 3,37 billion yen. The government has shown a fast reactor development policy to paste the failure of "Monju", but Yoshiaki Oka, Chairman of the Atomic Energy Commission, has disagreed that it is "budget and personnel waste". Also, Toshikazu Tanaka, Chairman of the Nuclear Regulatory Commission, said in a lecture at the beginning of March: "If a reprocessing plant goes into full operation, Japan's plutonium ownership will increase further. There is no way to hide the dream nuclear fuel cycle breakdown.

Even after experiencing the Fukushima nuclear accident, politics has not been able to shift its policy to denuclearization, but many people have been looking closely at the actual situation of the tragedy brought about by the nuclear power plant over the past eight years. 70% of Japanese are opposed to restarting.

# Report on social gathering for recreational participants

Friendship program for Izumi's recreation program participants so far held at Joban Church in Iwaki City on January 18 (Fri) and Fukushima Church in Fukushima City on January 19 (Sat). A total of 13 parents and children from 9 families participated in the 2 days.

It was a long time since we met again, the first time we met, and we were able to spend time slowly, relaxing, having something delicious, and spending time without worrying about time.

It was a fun time, but there was something worried about.

We heard that participants cannot talk about the negative effects of radiation on their health and that it is difficult to talk to anyone about anxiety and worries in everyday life. In areas affected by the nuclear accident (here in Fukushima Prefecture), instead of accumulating mutual opinions, dialogues, and examinations, there is a repressive situation that requires self-regulation even if it expresses opinions or raises anxiety as impeding "reconstruction", such as "This level of dose is OK", "You still care about?" and it is fixed.

Through the last two days, participants were able to share what they usually conceal. "Izumi" would like to continue to establish such a place for the future.



Fukushima Church in Fukushima City

## Friendship exchange meeting participants' impressions

#### Participate in social gathering

Thank you very much for the social gathering on Saturday. Thank you very much for the meals and the setting of the venue that you spent all your time with.

It has been three years since the child no longer participated in recreation, but in addition to being unable to take the child to a place where the dose is low and resting the body, there is also no place to open up his troubles. I was very happy that I was able to talk with mothers at a meeting like today, and I was able to reunite with those who supported me, and I think it will be a support for the future.

Last year, there was a class on the theme of the Great East Japan Earthquake, and a child was injured in an exchange with a teacher during that class. Radiation education at school is basically "safe", so he made a statement that was not in line with it, and the teacher denied him.

I was wondering if I could go talk to my teacher, but I told my children that each person had different ways of thinking about radiation and that the teacher who refused to speak first was wrong because of different ideas. But it remained indigestible in me. Because I thought that what I was doing was good would lead to my child's remarks. I was worried about what I should have done ... what I should do from now on. I told that to a mother who participated today. She listened seriously and told me what she was doing.

I am grateful to have time to talk about my problems in Fukushima, where I cannot easily talk about radiation issues, and I felt so much easier.

Thank you very much.

2019.1.20 40's Mother from Fukushima City

#### Participate in the social gathering

I participated in the social gathering for "Izumi Recreation Program Participants" held in Fukushima City (maybe for the first time). The Fukushima Church in Fukushima City was brand new and very nice. The air in the place where we pray was clean and comfortable.

The exchange party began with self-introduction and enjoyed the conversation I had during lunchtime. When a child went on to school, it became difficult to participate in recreation, and the chances of mother conversation at the retreat decreased. In everyday life, I do not talk about what I do at exchange meetings. It is hard to find someone who can talk to. When I had time like this time, I was able to talk about things I always wanted to know. Although it was scheduled until 13:00, I was able to spend a lot of fun and fulfilling time. I'm thankful to you.

I would like to participate if there is another opportunity in the future.

2019.1.23 40's Mother from Fukushima City

# Report on 13th Parent and child short-term care program in Amami (2019.3.25-29)

Parents of Amami Recreation Participants commented on the situation surrounding "Recreation" (Free description).

We will share it with you once you think about exposure avoidance, refreshment, detox, "recreation" and initiatives.

#### From the participant questionnaire (excerpt)

- ◆ Since there are few recreational camps during the spring and winter holidays, I find it very difficult to find them. Even if it is not the camp, if there is a stay facility like a sharehouse where you can stay free of charge (without a car), I think I can increase the number of times I go to recreation. (Tokyo 40's mother)
- Even if there is some self-pay, I think it is better to have recreation. (Fukushima 50's father)
- ◆ Although there are not many recreations available from Tokyo and Sendai, programs and accommodation often stop providing recreation and will depend on recreation for a long time I am always worried about whether I can continue. Besides, even if it continues to be provided, it will be difficult to participate in our home if the subsidy for transportation expenses is lost or participation fee is high. I am grateful for the continued interest of those who are willing to continue or support them. (Miyagi 30's mother)
- ◆ I would like to cherish this connection and plan for repeaters. (Fukushima 30s mother)
- ◆ I feel anxious about the decrease in recreation. Recently every time I participated, the recreation groups have asked me about the demands of recreation. If I do not appeal to the need for rehabilitation, I think it will be even less. I would like to raise my awareness and convey it to others. (Fukushima 40's mother)
- ◆ Recreational opportunities are decreasing, it is not easy to schedule and I cannot participate. It is a serious situation. The current situation is that few people are participating. (Fukushima 30's mother)





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#### 3/25 (Mon)

Haneda Airport – (aircraft) – Amami Oshima in Kagoshima prefecture– Amami Ocean Exhibition Hall – Welcome dinner at Nase Church – Alternating current.

#### 3/26 (Tue)

Morning Kakeroma Island by the underwater sightseeing boat "Seto" – Play in the sea

Afternoon Play outdoors with local children at Shodon Elementary Junior High School – Osai banyan.

#### 3/27 (Wed)

Morning Canoeing experience at Mangrove Park

Afternoon Play in the sea

Evening Welcome dinner at the Setouchi Church – Alternating current.

#### 3/28 (Thu)

Morning Sharing experience about nuclear accident

Afternoon Free (optional program)

#### 3/29 (Fri)

Shopping – Visit Oshima-Tsumugi – (aircraft) – Haneda Airport – Dissolve



Alternating current at Nase Church



on the boat "Seto" to Kakeroma Island



Setouchi Church in Amami Oshima

# 8 Years When Nothing Has Been Solved and Future

## Nuclear accident far from promise, Reduced support, Health survey to be mere facade, Continued health insecurity

Eight years have passed since the accident at TEPCO's Fukushima Daiichi NPS, and socially far from implementing and resolving essential measures. Rather than minimizing radiation effects on people and ecosystems, they are more likely to endure radiation exposure resulting from accidents and to neglect and ignore the effects of late radiation exposure. The first symbolic matter is the prefectural health survey conducted mainly by Fukushima Prefecture, especially the thyroid examination for Fukushima residents and children under the age of 18 at the time of the accident.

According to Fukushima Prefecture, at least 211 people with thyroid cancer (including suspected cancer) have been confirmed since autumn 2011. (From Reference Material 1 released on April 8, 2019, <a href="https://www.pref.fukushima.lg.jp/uploaded/attachment/320491.pdf">https://www.pref.fukushima.lg.jp/uploaded/attachment/320491.pdf</a>)

For example, there is a very serious question of whether the number of 211 thyroid cancer patients represents reality. This is because there are cases in which there are no reports of people who have undergone a prefectural examination but who later became thyroid cancer after a while. That is not one or two. From the viewpoint of scientific analysis and understanding of the actual situation, there are fewer thyroid cancer patients to be reported, but only a smaller number than the actual number is published.

Besides, doctors who had undergone surgery for thyroid cancer previously attended meetings such as prefectural review committees and were able to study based on specific cases. There was no attendance of field doctors in the year, and clinical information disclosure and case sharing were very inadequate.

This means that the surveys and reports that presuppose the scientific verification of the health effects of the nuclear accident are not reliable. As a result, Fukushima Prefecture's thyroid examination, which can be said to be the only large-scale public health survey to confirm the presence or absence of health effects due to radioactivity, is becoming a form.

On the other hand, "radioactivity safety myths" such as "no health damage due to radiation", "safety if exposed to 100mSv or less", "smaller risk of exposure than smoking, drinking, evacuation, and stress" are prevalent.

Amid such circumstances, especially at the end of March, Fukushima Prefecture and others have uniformly discontinued housing support for out-of-area evacuees, even though individual circumstances and situations are insufficient. Over the past few years, even Fukushima citizens who have been victims of the TEPCO nuclear power plant accident and wish to continue evacuation have even been sued for trial.

On January 21, 2019, the Tokyo Shimbun (Newspaper) reported that, at the beginning of the accident, there was an 11-year-old girl in Futaba Town who was exposed to a thyroid equivalent dose of 100 mSv, but the report was covered. Also, a dose survey of tens of thousands of people in Date City, the estimated dose of accumulated exposure for survey subjects was estimated as low as 1/3 and published.

From the very basic/principal stance of radiation protection and avoiding unnecessary exposure, there was originally a situation in which some measures had to be taken, but the information was not shared in real-time and the response was through. It has been repeated that information that was detrimental to the residents was later posted or hidden.

The radioactive material was scattered not only in Fukushima Prefecture but also across the prefectural borders, causing serious pollution in the wide area of East Japan. Anxiety about the health effects of exposure has remained unresolved and persists due to the non-bidirectional and unreliable responses of countries and government agencies.

Izumi hopes that we will continue to provide long-term support projects such as thyroid testing and recreation. We would like to ask for your continued support.

Kenji Hattori (UCCJ Tohoku District Nuclear Disaster Relief Task Force "IZUMI" executive director)



Thyroid echo examination by Dr. Yumiko Mizoguchi

# UCCJ Tohoku District Nuclear Disaster Relief Task Force "IZUMI" 2018 Fiscal Thyroid Echo Inspection Results

Fiscal Year	<b>A1</b>	A2	В	С	Number of inspectors*
2013 - 2017	1,273	1,238	29	0	2,540 (26)
2018	311	282	1	0	594 (66)
Amount	1,584	1,520	30	0	3,134 (92)
Proportion	50.5%	48.5%	1%	0%	

Fig1. Thyroid inspection judgment result cumulative table in Miyagi (December 2013 - March 2019)

<sup>\*</sup> The main targets are children under the age of 18 at the time of the accident. Including adults and post-accident-born persons.

Judgment	Content	Explanation	
<b>A1</b>	No nodules or cysts	There are no problems at the moment.	
A2	Nodules less than 5mm, cysts less than 20mm	Small cysts and nodules (lumps) were found.  There is nothing to worry about, but observe the progress.	
В	Nodules more than 5.1mm, cysts more than 20.1mm	Secondary (precision) inspection is recommended.	
С	Immediate secondary inspection is required	A secondary (precision) inspection by a specialist / institution is required.	

Fig2. Explanation about Judgment

No	Date	Region	Number	Doctor
49	2018.4.1	Kawasaki	58	Yumiko Mizoguchi
50	2018.5.13	Ishinomaki	56	Masahiko Terasawa
51	2018.6.24	Zao	58	Masahiko Terasawa
52	2018.7.22	Shiroishi	39	Yumiko Mizoguchi
53	2018.9.1	Shiroishi	35	Masahiko Terasawa
54	2018.9.15	Shibata	38	Atsuko Imagawa / Tomoyuki Yamazaki**
55	2018.10.28	Shibata	59	Masahiko Terasawa
56	2018.11.25	Kakuda	66	Masahiko Terasawa
57	2018.12.9	Ishinomaki	43	Yumiko Mizoguchi
58	2019.2.9-10	Sendai	94	Masahiko Terasawa / Yumiko Mizoguchi
59	2019.3.16	Kurihara	48	Masahiko Terasawa
	2018.4.1-20	ople (including 66 adults)		

Fig3. FY2018 Thyroid inspection result in Miyagi

<sup>\*\*</sup>Dr. Tomoyuki Yamazaki - Participation for medical / health consultation and explanation of inspection results

### May 18 Thyroid Inspection, Exchange Meeting, Future Plans, etc.

#### **Report:** Announcement of lecture video release

Dr. Masamichi Nishio's Lecture "Thinking about Internal Exposure"

The above lecture was held in Sendai City on Sunday, October 21 2018.

Dr. Nishio, Honorary Director of Hokkaido Cancer Center, is a radiation therapist who has faced about 30,000 cancer patients. Based on abundant treatment experience that artificially used local exposure, such as particle sources with exposure and Cs-137 needle sources, it is unrealistic to convert or average the local exposure dose systematically. Also, he explained in detail the mechanism and danger of insoluble cesium and other internal exposure caused by tritium.

Although there were many claims and rumors as if "there was no health damage due to the nuclear accident", sincere lectures based on abundant experience in clinical practice were valuable. Videos are available on the Izumi website. Please have a look.

Lecture video URL <a href="http://tohoku.uccj.jp/izumi/?p=10085">http://tohoku.uccj.jp/izumi/?p=10085</a>

#### Thyroid Inspection (May 18 2019 (Sat) 13:30) in Emmaus

Izumi thyroid inspection report FY2018 and meeting were held.



in Fukushima City around autumn 2018

# **Request for Support**

Recipient financial institution Japan Post Bank

Account number 02270-2-114887

Subscriber name いずみの会 (Izumi no Kai)

Write the membership fee (from 2000 yen) or donation (support) in comment

#### **STAFF**

Steering Committee: Chair Hideharu Fuda (Izumiaisen Church)

Steering committee: Yoshinobu Akashi (Joban Church), Nozomi Suzuki (Kawamata Church)

Takashi Hoshina (Fukushima Church), Hideharu Fuda (Izumiaisen Church)

Manager: Takashi Hoshina (Fukushima Church) Advisor: Hironori Shinohara (Nuclear Engineering)

Staff: Kayoko Aizu, Kinuko Kasamatsu, Kenji Hattori

Accounting cooperation, Hiroe Watanabe

# UCCJ Tohoku District Nuclear Disaster Relief Task Force "IZUMI"

TEL / FAX 022-796-5272

1-13-6 Nishikicho, Aoba-Ku, Sendai, Miyagi, Japan 980-0012

E-mail address: mailto:izumi@tohoku.uccj.jp

URL: <a href="http://tohoku.uccj.jp/izumi/">http://tohoku.uccj.jp/izumi/</a>

