My story Soh Horie April 21, 2018

Thank you very much for coming hear me today and giving me the opportunity to speak to you. My name is Soh Horie. I am a Hibakusha and atomic bomb survivor, a hibakusha. I am 77 years old.

I am chairman of the plaintiffs group, which includes hibakusha, of the Hiroshima Lawsuit from 2016 which filed a lawsuit to stop the renewed operation of Ikata Nuclear Power Plant.

Ikata Nuclear Plant of Shikoku Electric Power Corporation is 100km from Hiroshima. It is situated on the other coast of the Seto Inland Sea across from Hiroshima. Of all the nuclear plants in Japan, Ikata is the closest nuclear plant to Hiroshima.

I saw simulated data of the release of radioactivity issued by the Japanese Nuclear Regulatory Authority (NRA) and knew that we in Hiroshima will be exposed to 4 mSv /w strong radioactivity should a Fukushima Daiichi—class accident happen at the Ikata

nuclear plant. Exposure to radioactivity over 4mSv a week is the level for voluntary evacuation or mandatory relocation, as at the time of the Chernobyl accident. Thus we know that if it happens at Ikata, there is a possibility that we will have to give up Hiroshima, our beloved home-land.

We should not allow further contamination of our living environment, especially that of the Hiroshima we live in. We should not produce more and more radioactive waste, which will be nothing but a huge legacy of destruction. It is our responsibility for the coming generations to keep Japan and the world a nice living and beautiful place.

As one of hibakusha (A-Bomb survivors) who has, through personal experience, suffered the impact of direct exposure to radioactivity from the A-Bomb, I hope no other people will suffer the same fate. This is the compelling reason that made me decide to take this legal action. We have suffered the impact of radioactivity. That is enough.

Last December Hiroshima high lawsuit decided to stop the nuclear power plant till end of September. It is the big epoch making event in my life. I hope my testimony will give you an opportunity to learn about the atomic bomb and radiation. Peace is something wonderful and we should not take it for granted.

Do you remember what happened when you were five years old?

When I was that age, I was exposed to the A-bomb explosion. I was 3 kilometers from the hypocenter. My elder sister, who was 15 years old, and I were walking on an errand in the neighborhood. Because of food shortages during the war, my sister was suffering from beriberi, (shortage of vitamin B1) and was absent from student mobilization for work duty.

We were walking along the hillside road, when all of a sudden a very bright light flashed. Next came an overwhelming blast of wind with big sound. We were almost blown away. My sister promptly covered me with her body and we lay face down on the road.

After some time, we went home and found that our house was leaning, although it was a large house with thick timbers, unlike present day houses. All the windows and sliding doors had been blown off by the blast. If the nuclear attack was a few minutes later, and if we had been out of the hillside road, we might have been killed by the flash of light and the blast. After a while, many people with badly burned skin hanging from their bodies, came to our house seeking shelter. Soon our broken house was filled with about 20 badly injured people.

I still remember two persons out of the large number of people there. One was a junior high school student. His face was completely burned, and his nostrils were clogged by peeled skin. He was breathing painfully through his mouth. My mother removed the skin out of his nostrils with tweezers. It looked very painful. He must have worn a cap at the time of the blast. The only part of his hair which remained was the part covered by his cap. The other person I remember was a young girl. She was burned and the patterns of her dress were printed on her arms.

Have you ever been burned?

Even small burns hurt very much. I wonder how badly those two children suffered from their burns. As our house was filled with evacuated people, I was playing in the field by the house. Then suddenly rain began to fall and there was a strong wind. It was, as we learned later, the black rain with radioactive particles. I hurried home. Among the laundry

hung out to dry was my father's underwear. It was stained black. My mother washed it many times but the stain did not come off. It was black dust that contained radiation. Many years later my mother and I had a talk and decided to donate the underwear to the Peace Memorial Museum. It is now a rare tangible example that shows the mark of black rain.

There was a shrine of Tenrikyo, one sect of Shintoism which is the Japanese traditional religion, in our neighborhood. As the houses near the shrine were on fire, the kami altar, the object of worship, in the shrine was carried to my house. A priest prayed for wounded people, Tasuke tamae, Kiyome tamae, Tenrio no mikoto. But he was unable to save anybody.

In the evening, my second sister, who had come back from an evacuation site, and I were taken to the villa of our aunt. The sky in the direction toward the center part of Hiroshima City was bright red, even after the sunset. Countless houses must have been on fire.

Dead bodies near our house were cremated in the playground of the elementary school, in which I myself was enrolled later. What I remember is only the revolting smell I had to endure all day long for about 1 month. Imagine what the smell was like if lots of decaying corpses were burned in the playground on a hot summer day with not enough fuel to cremate them properly. The playground was only 100 meters away from our house.

My father, who was a navy officer, was exposed to the A-bomb in the office near the hypocenter. He passed away six days later. A few days later two soldiers carried a white box to our house. I remember my mother broke down after the two soldiers saluted and left. At that time I could not understand what had happened to my father.

In those days, everybody in Japan was poor. Especially, after the death of our father, our family had no income and we had to sell whatever we could sell to get food. We ate anything edible, including weeds and sweet potato vines. A pumpkin was precious food. When school served lunch, it was the happiest time for children. Once two boys had a big fight over the number of meat pieces in their soup. The U.S. occupation gave us flour tomato soup, skimmed milk and corn, which is usually fed to farm animals.

Two classmates, the boy and the girl, who had been exposed to the A-bomb closest to the hypocenter, were taken to the Atomic Bomb Casualty Commission (ABCC) several times by American soldiers in a jeep. ABCC changed its name to the Radiation Effects Research Foundation (RERF) which still exists as a joint Japan-U.S. enterprise. At the beginning of

1947, the U.S. began to collect the data for future nuclear wars. In 1949, the USSR (the Soviet Union) succeeded in testing their own Atomic bomb. The ABCC was established in order to investigate contaminated survivors. The data was all brought back to the U.S. The knowledge gained from their research was not used for the medical treatment of Hiroshima A-bomb victims.

I will never forget the fact that the ABCC examined Japanese people like guinea pigs, taking blood samples, but not giving any treatment. The Radiation Effects Research Foundation continues "The Life-span Study on the Effects of Low Level Radiation".

Emperor Hirohito, the Showa emperor, visited Hiroshima on Dec. the 7th

1947. At that time no one wanted to come to Hiroshima. Many people said that for 70 years, no trees and no grass would grow in Hiroshima. They also thought that if you married someone from Hiroshima you would not be able to have children because of exposure to radiation from the atomic bomb. Around 50 thousand people welcomed the Showa emperor. And they were very appreciative that he came to Hiroshima. The Japanese people began to think that it might be safe to live in Hiroshima and also that they would be able to get married and have children. I didn't go to the place where the emperor appeared, but our teacher took us to the road side where we could see the emperor's car pass by.

My mother developed breast cancer at the age of 60. It was found early enough that she only lost her right breast, but she also lost her lymph glands. Because of the cancer she had difficulty using her right arm for the rest of her life.

My elder sister, whose disease, beriberi, saved her life due to her absence from student mobilization, felt guilty because she was the only one among all her friends who survived the A-bomb. About 7,200 students were killed with the A bomb.

My sister took part in the "10 Feet Movement", a movement to raise funds to buy back American color movie film that recorded Hiroshima after the A-bombing. Each person donated 3000 yen for 10 feet of the film. She developed a disorder in the large intestine in her 50s. She passed away at the age of 55 after struggling with colon cancer that spread all over her body. Because in those days morphine was not given to cancer patients as often as today, it was very painful for us to see her at end of her life. My sister and her friend raised 25 million yen with embroidery, which sent about 200 Abomb documentary films to about 40 countries before her death, among which titles are "Give Back the Human Race", "History: Nuclear Frantic Age", Prophecy.

I watched "Give Back the Human Race" last August. I want to ask a question to the man who took made the films: "What did you feel at that time?"

My mother had a hard time after the A-bomb killed my father, but in later life she was happily surrounded by 9 grandchildren. She passed away at the age of 83, 9 months after she collapsed as a result of a cerebral stroke in the course of the Shikoku Pilgrimage. She could not finish hand-copying 1000 sutras for her daughter, but she had peace of mind from hand copying many sutras.

Two years later, my brother retired from his first job and was actively working as president of a food company. He had a full medical checkup in January, but suddenly in September liver cancer was detected. My sister- in- low requested a second opinion from another hospital but there was nothing we could do. His doctor allowed him go home because his doctor knew he could not live a long time.

His wife asked me come to his house because his condition kept getting worse. At midnight he suddenly vomited blood. He passed away in December at the age of 63.

My brother must have suffered the greatest impact of radiation in my family, because he walked around the center part of Hiroshima looking for our father on August the 6th. He must have been sad as a lot of things that he hoped to do, remained to be done.

He wrote an essay at 1946 as follows: "Nowadays, the elementary school has been rebuilt. But the school was like hell at that time. How miserable was the lives of the living people and how horrible the deaths of the dead! The school was more cruel than a field hospital".

As for me, a swollen thyroid gland was detected when I received a physical check-up at my workplace at the age of 55. I saw the best thyroid specialist in Hiroshima. I received treatment for a lump in my thyroid, and I have been taking prescribed thyroid hormone medication since then.

At the end of 2011, I had an acute stomach pain and was admitted to Hiroshima Red Cross Hospital. I was diagnosed with a lymphatic malignancy. It is possible for this to spread for

all through the body. There is no complete recovery for this cancer. My wife told me the fact that at that time the doctor said, "Your husband will only live for another 2 weeks".

My wife and son decided on a funeral Home. Many relatives came to the hospital one after another. I understood why they became very kind to me at that time.

The pain was relieved by medicine patches that contained morphine, but I was repeatedly in and out of the hospital for half a year until July 2012. Now I am getting back to my regular life. But I still have to see the doctor every 3 months.

People get cancer without being exposed to radiation, but A-bomb survivors are much more likely to contract cancer than others.

I would like you to remember that in Japan there were 164 thousand A- bomb victims and still many people suffer from the after-effects of the A-bomb. (9459 people decreased as of March)

And there are many Hibakusha in the world due to the 2050 nuclear weapons' tests, nuclear waste from power plants, depleted uranium ammunition and many uranium mines.

I took part in the World Nuclear Victims Forum 3 years ago in Hiroshima. There are many place in the world which are contaminated with radioactive material. Where are you from?

After the WW II how many people lost their life from radiation exposure?

According to European Committee on Radiation Risk's trial calculation, 65 million people have lost their lives. On the other hand, according to the International Atomic Energy Agency's (IAEA) trial calculations, only 1 million and 170 thousand people lost their life. IAEA is providing radiation protection standard for hospital and nuclear facilities over the world. Why are there such a large of difference? Because the IAEA does not calculate the effects of internal exposure.

What is internal exposure?

If the radioactive dust comes in our body through the mouth or nose, the dust shoots radiation in every direction continuously. We cannot run away from the dust. It is completely different from external exposure.

Do you know how many people died of the nuclear attacks in Hiroshima?

They say 140 thousand people were dead by the end of 1945. 6,082 Japanese servicemen died. Half of them were sick and wounded soldiers. The rest were new recruits. Hiroshima's population at that time was 360 thousand. 80 thousand people were injured.

Do you know the difference between nuclear weapons and conventional weapons?

US air force bombed Tokyo with 1783 tons of bombshells, which contained coconut oil, zinc and gasoline in March, 1945. Nearly 100,000 people died. Even though all of Tokyo was burned, there were no after effects on the survivors.

On the other hand, only one bomb was dropped on Hiroshima. It not only had a great direct destructive effect, but also long after-effects. For example many kind of cancer and congenital diseases have resulted with internal exposure.

Do you know Sadako's story?

Leukemia is a typical after-effect of radiation.

Do you know that similar weapons to the atomic bomb are still used in wars today?

If you search for depleted uranium ammunition, Iraq, and Syrian, you will find very horrible information.

Depleted uranium is one a radioactive material. Natural uranium contain uranium 235 and uranium 238 which contain only 0.7% in natural uranium. 3~5% enriched uranium is used for nuclear power generation. Mass uranium waste is produced by the enrichment of uranium. That is called depleted uranium. The relative density is 19.

The US military used it at Syria last year. The after effects of depleted uranium ammunition continue forever.

Some 70 million people from all over the world visited Peace Memorial Museum since its opening in 1955. And so, many people must have understood how terrible war is. However, wars and conflicts have not disappeared from the world.

Wars are going on. I think we can't stop wars unless we change our economic industrial systems and make new industries which can be beneficial for humankind. Many countries' armies frequently move all over the world, especially in the Middle East and North-East Asia.

The U.S. needs an enemy to keep up their military-industrial complex that supports the economy of the nation. Without an enemy, much of the 574 billion dollar defense budget in 2017 cannot be justified.

Not only U.S. but also many other countries are producing and exporting weapons. Japan does not export weapons. But Japanese electrical parts are using for weapons in many countries. If your friends or family want to start working in the military industry please talk to them.

The weapons industry will not create a peaceful world. Be part of an industry that will bring peace to your country and the world. Please create peaceful job or industries in your country.

For example!!! Japan exported Shinkansen trains to Taiwan 10 years ago. Japan contracted with India to export Shinkansen technology last December and tried to export train technology to Malaysia, Singapore and USA. It's very big peaceful business.

Japanese car makers use bioplastic as part of car. Japan will not use oil for many materials in future. Toyota which is big car maker succeeded making hydrogen from natural gas and made a bus which runs with hydrogen. Hydrogen and oxygen cause a chemical reaction in the fuel cell and which produces electricity. Electricity can power the bus without creating CO2.

Electricity cannot be stored without storage battery. The manufacture of storage batteries needs much energy. But if wind and solar power generation change to hydrogen, it's easy to store its energy.

Carbon fiber is very nice material: strong, light, and does not rust or deteriorate. Two types of carbon fibers were invented by Japanese in 1962 and 1964. Japan now produces about 70% of the carbon fiber in the world. Its demand is increasing in very many fields: for example, reinforcement of old buildings, the airline industry and wind power generation. This building was built 1373 years ago.

Japan is making 47% of the sensors in the world.

What kind of robots are there in your country other than industrial robots? 50% of industrial robots are made in Japan. Japanese companies are making many kinds of robots. One of them can teach foreign languages and can understand emotions. And it is already working as an attendant. I can see it in my town.

There are pet robots that can heal elderly persons. The USA, Denmark and Japan are using them already. I want to buy one someday. Snake robots can move in small pipes and take photos, for example at Fukushima nuclear reactor.

Japan is producing many kind of animation. Many people love it all over the world.

Please invent products which will make people happy.

For example, instant ramen noodles were invented by Momosuke Ando in 1958. He thought that if there are hungry people, the world cannot be peaceful. 80 countries sell some instant ramen noodles today. I add a little vegetable in instant ramen noodles when my wife is absent.

The Sing-along karaoke machine was invented by Daisuke Inoue in 1971. Today there are many people who love karaoke in the world.

Let me introduce other examples of peaceful products: electric rice cooker, blue LED, toilet seat with a warm water shower (Washlet). pictograph. Cooked food sample. Notebook computer.

Do you know the difference between Hiroshima's A-bomb and the one dropped on Nagasaki?

Hiroshima's' A-bomb was made with uranium. Nagasaki's A-bomb was made with plutonium and was 1.5 times stronger than Hiroshima's bomb.

Nuclear power plants produce not only electric power but also plutonium, large amounts of dangerous radioactive waste and hot water. Nuclear weapons and nuclear power plants are two sides of the same coin.

Japan is thinking about nuclear power plants seriously after the Fukushima accident. Fukushima is still a big problem.

- 71 thousand people (2018.3.30.) can't go back to their homes.
- 300 people are living in Hiroshima now.
- 70 trillion yen will necessary to close down and clean-up Fukushima.
- Japanese budget for fiscal year 2017 is 97 trillion yen.

We have 43 nuclear power plants. Our government wants to start nuclear power plants again, and 5 of them have already re-started. We stopped the re-start of Iwate nuclear reactor. Over 50% of the Japanese people don't want to re-start the plants. Which should take precedence: the present economy or the safety of our descendants?

What kind of accidents might occur near nuclear power plants?

We have learned that nuclear power plants leak radiation and extremely high temperature water flows from their outlets even under normal operation.

American statistics scholar, Dr. Jay Gould, published the fact that the rate of mortality from breast cancer in American women living within 100 miles of a nuclear reactor is much higher than in other areas. (The Enemy Within: The High Cost Of Living Near Nuclear Reactors)

There is also data from Japanese nuclear power plants. People's rate of mortality from leukemia who live in the area of Saga where there is nuclear power plant is very high.

Germany has seen an increase in leukemia in children who live within a 5 KM radius of nuclear power plants.

In Canada, near Pickering and Bruce nuclear power plants, genetic defects of children have been noticed as well as an increase in childhood leukemia.

After the Fukushima accident the German government decided to stop nuclear power plant by 2020.

The French government decided to close 17 nuclear power plants, about 30% of their nuclear power plants.

Taiwan government decided to stop till 2025.

The Chinese and India governments want to make many nuclear power plants. But China also produces many solar panels and wind power generators. There are no countries which have dangerous nuclear waste storage space except Finland and Sweden. But they do not use their waste storage space yet.

Russian, French, Chinese and Japanese governments want to export nuclear power plants because building nuclear power plants is very big business. One of the planned nuclear power plants for Turkey's will cost 2 trillion yen.

I got very important information from the British Medical Journal which published a very important report on October 20, 2015. The title is "Risk of Cancer from Occupational Exposure to Ionizing Radiation: a Retrospective Cohort Study of Workers in France, UK and USA ".

The subject of the research is 308 thousand people who worked in the nuclear industry. The conclusion of the research is that there is a direct relationship between the increase in exposure to radiation and the increase of death due to cancer. This is not only high level exposure of radiation but also with low level exposure. There is no safe dose of radiation.

In conclusion let me introduce my mother's short poem:

My mother's short poem

Not knowing that my husband was seriously injured,

I was taking care of refugees. I had a sleepless night.

When I met with a friend after a long absence,

The only thing we talk about was the fate and whereabouts of our acquaintances.

Every household in our neighborhood lost the head of their family.

It happened in a moment on August 6th.

They say A-bomb survivors lost their hair and purple spots emerged.

I look at my skin every morning.

Time passed and red canna flowers bloomed in a continuous chorus of cicadas.

The dead people are going out of my memories.

Let's keep the world beautiful for the next generation.

Thank you for reading the end of my testimony.