

Plutonium

Summer 2003 No.42



Opinion

Wind Browsing in Europe against Stepping out of N-Power

Interview

Sharing a Common Destiny with Nuclear Power Plants

- Interview with Mayor Iwamoto of Futaba-cho, Fukushima Pref. -

CNFC Report

Swiss Referendum Says No to the Phase-Out of Nuclear Power

- Awaking from the Nightmare of the Chernobyl -

Council for Nuclear Fuel Cycle

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Cover : 33°C/91°F at Bern

Homes with air-conditioners are increasing in Switzerland, where summers used to be thought of as cool. It is also said that the glaciers in the Alps are being melted. We realize here that global warming is progressing.

Wind Browning in Europe against Stepping out of N-Power

In the referendum held in Switzerland on May 18, 66.3% opposed the "Energy without Nuclear" petition, and 58.4% opposed the "Moratorium Plus" petition. The fact that both were rejected greatly surprised the Swiss citizens (See CNFC Report). As a result, the amended Nuclear Energy Law, which had been approved by the national council after 20 years of deliberations, was made public on May 27. In Finland, the national council has already approved in May 2002 the construction of the 5th nuclear power plant, and if the procedure goes smoothly, it will probably start operation around 2010. In Sweden, where a 1980 referendum decided that there would only be 12 nuclear power stations and no further construction, and the diet since decided to shut down all 12 operating nuclear power plants by 2010, the awareness of the general public concerning nuclear power has changed to a large degree. In the 2000 public opinion poll, 83% said that nuclear power was necessary for alleviating global warming, and 77% said they were against the early abolishment of nuclear power plants. Seemingly, they have found that when they try to escape from nuclear power there are no realistic alternatives, and the awareness is growing that nuclear power is an important power source for the prevention of global warming.

In the recent referendum of Switzerland, the reason for rejection of both petitions against nuclear power was based on prior experience and fear of the worsening economy and employment as well as climate changes. However, if there had been distrust and apprehension concerning the safety and cost of nuclear power, these two petitions

would probably not have been rejected. Another big reason is that Switzerland has made up for increasing electric demand by increasing the heat efficiency of nuclear power plants and the people also are aware of countermeasures such as buying power from the major nuclear power producer, France.

Solar power is unsuited to Switzerland because it is a small country, and wind power, which is popular in Germany, has only efficiency of around 15%, so it would require 5 times the capacity of facilities as nuclear power. In addition, although wind power has gone through many improvements, there is still the problem of subharmonic noise, and they must also be constructed on mountains and valleys, which are in the path of the wind - in other words, they must be built within the Alpine landscape, and when considering the solar rays that reflect on the wings like a disco mirror ball, the strong national sentiment toward protecting the environment for tourism must see this as unfitting to the Swiss landscape.

It goes without saying that the choice by the Swiss people is a natural result of considering realistic, concrete measures toward issues such as global warming, but I would like to express my respect for the Swiss people for deliberately saying "No" to the claims of the opposition, of which moral tone appeals to the senses and is easy to agree to.

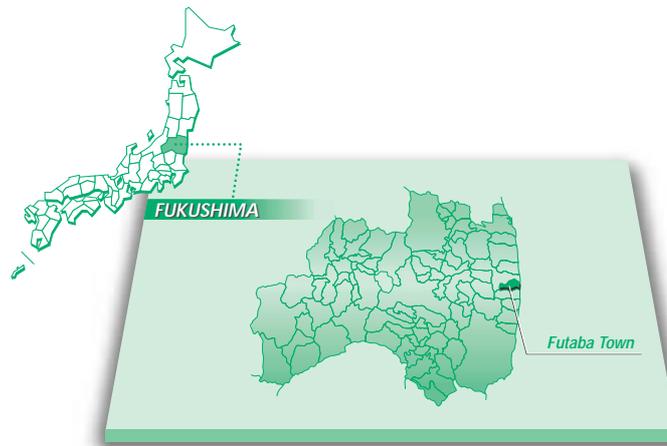
In the energy policy of the Swedish council which, having been triggered by the accident at the Three Mile Island Nuclear Power Plant in the U.S. in 1979, has taken up the goal of shutting down all 12 nuclear power plants, incorporating the result of the nuclear

power referendum in 1980. They tried to make up for this loss by saving on electricity, and through non-fossil fired power and other power sources. The result of such policy was that only one power plant, Barsebäck I was stopped in December 1999. 44% of all power in Sweden is covered with the other 11 power plants (as of 2001). They have begun to see first hand that it is not easy to find a large power source to replace nuclear power that emits little CO₂ gas. Even with regard to the abolishment of the Barsebäck I, it is said that the reason is that they had been getting many demands and complaints from Denmark across the water, which does not have any nuclear power plant. 90% of electricity in Denmark is from thermal power.

Swedish authorities say, "Sweden is a country that often conducts an experiment called referendum." The third referendum was that of changing the hitherto left-hand traffic system to right-hand traffic as in other European countries. The result of the referendum was against changing the traffic system, but the government ignored this result and changed to right-hand traffic. The difference between the Swedish and Swiss referendums is that Swiss referendums are legally binding while Swedish referendums are conducted as a reference, to see the opinion of the public, and the results are not necessarily reflected in government.

It will be interesting to see if the Swedish government will continue to put off the nuclear abolishment indefinitely. It may be a good idea to find out the opinion of the general public again.

Executive Editor



Sharing a Common Destiny with Nuclear Power Plants

Interview with Mayor Tadao Iwamoto of Futaba-cho, Fukushima Pref.



Where there are nuclear power plants, there are also people who not only worry about the autonomy of their own city, but the energy issues for the whole country. We visited Futaba-cho, where Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi Nuclear Power Station is located, to interview Mayor T. Iwamoto (June 20).

(Editor)

I Also Think That There Is No Problem of Safety

- Mayor, you must have gone through much with regard to the recent misconduct by TEPCO; what are your feelings about it, and what kind of countermeasure or long term plan do you have?

Mayor Iwamoto: Executives from TEPCO headquarters as well as managers of the Daiichi and Daini (First and Second) Nuclear Power Stations often come to my office, but what I say to them every now and then is that in a large facility like these, it is not possible for there not to be some kind of malfunctions or troubles. There are many different kinds of malfunction, but they must always keep in mind that even a

small malfunction in key area can lead to unexpected accidents. Such key parts must be kept in working order at all times.

Previously, I also felt a sense of imminent danger when there was an accident due to a malfunction in the recirculation pump of the Unit No.3 at the Daini Nuclear Power Station in January 1989. When symptoms of this malfunction were first found, some within the plant said "We must shut down the plant and fix this." But in the end, they decided "It should be okay for now" and continued to operate the plant. It was two days after this that the accident occurred. A broken piece of the pump ended up getting into the reactor vessel, and damaging even the

fuel rods. I believe that that accident was the worst one ever to have happened at Fukushima Nuclear Power Stations.

As to the recent cracks in the shroud surrounding the core, there were 29 in all, which were found on August 29 of last year - at least this is when we found out about it. At this time, both the national government and TEPCO said of one accord, "It is not something that will affect safety." I also believe that this is true. I take particular interest in the pipe work, but an inspection by the Nuclear and Industrial Safety Agency (NISA) has shown that there is nothing significant concerning these either.

I think that the most important problem with this recent incident as well is in the make-up of inspection data concerning airtightness of the containment vessels. I believe that TEPCO can somehow overcome this problem however.

Always Think Positively

I will say again that, despite the



series of data make-ups, safety has now been secured. However, trust between the town and TEPCO that has been developed through the many years of cooperation is also an issue connected to security, and this has been badly damaged. Regarding the relationship with TEPCO, I actually think that "although there have been a few problems within the nuclear power plants, there has been nothing that would seriously affect safety." With regard to the recent problem, various emotions came forward from a group of people for a certain period of time. However, when we consider things in 10 or 20 year time span, the relationship of trust that has been created through these many years is not going to be destroyed so easily.

So, I try to think positively. Thinking forever about the problems makes a person have a negative view so I try to think positively as much as possible. In any case, I actually believe that we must seriously think of how we can cooperate in order to create a more normal situation with regard to nuclear power.

With the present structure of nuclear power plants, the worst accident is that of a leak of radioactive materials from the reactor containment to the surrounding environment, but I believe that Japan's nuclear power plants have the necessary functions to completely contain this. I also believe that at Japanese power plants, it is not possible for such accidents as the Three Mile

Island Nuclear Power Plant in the U.S. or Chernobyl power plant in the USSR to occur. It may not be the time to be saying such things in a loud voice, but if we do not believe this, we cannot continue to be

involved in the future administration for nuclear energy development. I do not want to deal with nuclear energy with a skeptical attitude, so I am rather evaluating the fact that the government and TEPCO are feeling strong remorse with regard to what has happened, and are positively doing their best.

Naturally I Will Cooperate with National Nuclear Energy Policy

- With nuclear energy, there is also a problem with how the mass media prepares their articles when something happens. They tend to focus only on one area and do not consider the whole. Nuclear power development is a part of the whole Japanese energy policy. Mayor Iwamoto, you have in various instances said over and over, "we must look at the whole when thinking about nuclear energy policy" but, looking at the government or administration from the view of a local government, what in your opinion is the path by which Japanese energy policy and nuclear energy policy can go forward smoothly?

Mayor Iwamoto: The other day, there was a general meeting of the All Japan Council of Local Governments with Nuclear Power Stations (Zengenkyo), which is organized by the Mayors of Cities and Villages all over Japan where there are nuclear power plants. I spoke at the executive meeting held before the general meeting regarding the taxation of spent fuels, which was the idea of Mayor M. Saikawa of

Kashiwazaki City, Niigata Prefecture, where Kashiwazaki-Kariwa Nuclear Power Station of TEPCO is located. This was also being attempted in Sendai City, Kagoshima Prefecture, and the okay was given by Kagoshima Prefecture for taxation. In other words, the matter of how to deal with the city's financial administration is important, but more important is the question of what is necessary in order to really put into action Japan's present nuclear fuel cycle, nuclear fuel and nuclear energy policies, especially with regard to the reprocessing and final disposal of high level radioactive waste. If these cannot go through as planned, in the end, nuclear power itself must also be stopped. We must especially stress this and give the order to the government. I believe that we must deal quite strictly with the government on this point. That is what I said at the executive meeting.

Just yesterday, I spoke with the LDP Top Five (Secretary General, Chairman of the Policy Research Council, General Council Chairman, Chairman of the Upper House and Secretary General of the Upper House) about reprocessing and final disposal of high level waste because I believe that this is the most important thing. In Japan, despite the fact and knowledge that we were not ready for the nuclear fuel cycle structure, we still started operations with a small reprocessing facility in Tokaimura, which of course is not enough at all. In the end, we have been dependent on overseas reprocessing. Now, at last they are working positively and intensively on this in Rokkasho-mura, but because of the lack of preparation, it is like going off at half. I believe we are now paying the price for such actions. For example, in the issue of expanding the above nuclear power facility, Governor Sato of Fukushima Prefecture is giving the delay in dealing with final disposal and reprocessing



problems as reason for reexamining of the national nuclear energy policy. I believe that we must dispel with such problems.

Although there may be some disadvantages because of the delay, it is important to build it all up one at a time and then put it in the right place within Japan's nuclear energy policy. I strongly feel that we should do everything we can to assist in this as the local government locating nuclear power plants.

I Want to Supply Electricity to the Metropolitan Area and to the Nation

- In this state of affairs surrounding nuclear energy, there are not many mayors who clearly say that nuclear energy is "important" from the view of securing a stable supply of energy. Hearing your opinion, those of us who are involved in providing energy are relieved and feel that you have been true to your reputation.

We hear that Fukushima Prefecture will be holding a "Hearing the Voice of the Residents of Fukushima Prefecture" at the Governor's suggestion and that you will also be attending. At the present situation is looking very difficult



with power supply by TEPCO being less than demand this summer in the metropolitan areas. What do you think of such power supply? I assume that there are various adjustments between Fukushima Prefecture and Cities and Towns where nuclear power plants are located.

Mayor Iwamoto: The problem at hand among Fukushima's nuclear plants is the Unit No.6 within the Daiichi Nuclear Power Station. As you know, on June 1, Mr. Norihiko Sasaki, Chairman of the NISA, Agency of Natural Resources and Energy of the Ministry of Economy, Trade and Industry (METI) came here and made a declaration of safety. Through this, we have now settled on the opinion of allowing the restart of plant operations. On June 9, where I also gave my point of view, the prefectural assembly decided that operations would be resumed.

Although this is supposed to reflect public opinion, the representative body of the Prefecture's residents being the prefectural assembly and the city's representative body being the municipal assembly. The Governor of our Prefecture is not satisfied with this and

wants to hear opinions from the various groups of citizens in the Prefecture. He has said that he would like to make the decision after hearing directly from the citizens. On July 3, I will also participate as one of these citizens in the "Hearing the Voice of the Residents of Fukushima Prefecture" meeting. I personally felt strongly that operations should be restarted according to plan by June 25 or 26 at the latest. However, due to the meeting on July 3, operations will be delayed. I am very disappointed in this result. However, the Governor has scheduled this, so we cannot say any more than that.

I believe that it is necessary to look honestly and positively at the metropolitan area's power shortage and energy shortage. For example, when there is a power shortage and electricity can only be used in fifteen stories of a thirty story building in Tokyo, we are not in the state of mind to be able to sit by and watch this happen. Our family members, relatives have gone over from Futaba City and from Fukushima Prefecture to work in Tokyo. Such people must also feel like saying "why don't you do something to help us?" It is necessary for us to answer such expectations.

Until now, we have felt proud that as a supply base for electricity and a location for nuclear power plants, we have been able to send nuclear power/electricity to metropolitan areas. This pride will not change. We still have the desire to continue to send enough supply of power so that consumers will not feel any inconvenience, so that we can support the metropolis and our nation in some way. From this view as well, this situation is very disappointing.

Sharing a Common Destiny with Nuclear Power Plants

- Futaba citizens also have a long relationship with TEPCO, so they must have quite an understanding of nuclear power. However, has the opinion of the citizens changed toward nuclear power through various accidents as the JCO accident in Tokai-mura and the recent misconduct by TEPCO?

Mayor Iwamoto: There has been no concrete or visible change. A few seem to be saying such things, but I have not had one phone call. Even when I meet citizens face to face, there is no such talk. I believe this shows the depth of the understanding by our citizens.

- As you said previously, you have had a long relationship with TEPCO so that even though there may be many things in everyday operation, the relationship of

trust between citizens and plant operator carries you through...

Mayor Iwamoto: That is the foundation. Because of such a long relationship, we also think of ourselves as "having lived within the nuclear power plant itself." I believe that it is not just that we co-exist with the power plant or that we will continue to do so, but that we share a common destiny. Therefore, we always have expectations toward nuclear energy, and are "making a big bet" on it, "a bet that cannot go wrong."

I would like to continue to do so.

Nuclear Power is My Pride

- As you, Mayor Iwamoto of Futaba-cho, says, if the local society and the nuclear power plant can continue to be bound together in a relationship of trust, just as in the words "common destiny," Japan's energy policy can be accepted by the Japanese people as a whole as a rock-solid policy.

Mayor Iwamoto: I will always continue to believe in the promotion of nuclear

power no matter what. I believe that that is one thing that should not be destroyed. This is my pride. I keep telling TEPCO and the government to please understand this. This is not a whine but from the feelings I have toward nuclear energy. I feel as if this has been my whole mid-70s life.

- Thank you very much. We would like to encourage young people with thoughts such as yours in various situations. We look forward to working with you in this endeavor.



CNFC Information

Peaceful Uses of Nuclear Energy Vital as an Energy Source

- The 12th CNFC General Meeting Held -

The 12th General Meeting of the Council for Nuclear Fuel Cycle (CNFC) was held in Kasumigaseki, Tokyo on June 13. Here the Activity and Financial Reports for FY2002 and the Program and Budget Plan for FY2003 were approved. In addition, there was an explanation on a change in several directors.

• Program for FY2003

The issue of data make-up in the voluntary inspection of the nuclear power plant which was uncovered last year lowered the trust of the Japanese public toward the country's nuclear power operations. However, nuclear power is vital to the stable supply of energy and is one of the effective means to prevent global warming. Uses of plutonium are also vital to the efficient uses of nuclear energy into the future.

For this reason, the Council will deliberate on various issues concerning

the nuclear fuel cycle such as the role of nuclear power in the supply of energy, the locations of interim storage facility of spent fuels and high level radioactive waste disposal facility, and the use of MOX fuels in order to promote understanding among the concerned on the Japan's nuclear power policy and policy on peaceful uses of plutonium. In addition, the Iraqi, Iranian and North Korean nuclear weapons development problems are becoming serious issues in the international nonproliferation framework and it is becoming necessary to consider a general strategy for comprehensive global security. We will therefore also deliberate on issues such as nuclear non-proliferation and disarmament, and the disposal of plutonium from dismantled nuclear weapons.

The results of these deliberations will be offered to the public through such media as the "Plutonium" magazine and our internet web site.

• Partial Change in Directors

The following changes in Directors were acknowledged. Member of the House of Representatives Gen Nakatani was appointed to Minister of State for Defense and once resigned from the Directorship of this Council, but the appointment was dissolved, so he was recommissioned to Director. In addition, Member of House of Representatives Taro Kimura was newly appointed as Director. Mr. Yukihiisa Yoshida passed away on March 24, so resigned from Director.

Energy is vital to mankind. The peaceful uses of nuclear energy is a realistic method to obtain a long term stable supply of energy. For the peaceful uses of this nuclear energy for mankind into the future, we believe that it is our duty to act with strong determination toward the abolition of nuclear weapons. We ask for your continued support and cooperation to the Council's activities.

North Korea: More Serious Than New Iraq Law

- Situation in North Korea and Japan's Security -

Satoshi Morimoto

Professor

Faculty of International Development
Takushoku University

Professor S. Morimoto delivered a special lecture at the ordinary general meeting of the Council for Nuclear Fuel Cycle held on June 13. While North Korea has become a serious anxiety to Japan, we have reached a major turning point in considering how best to promote Japan's future security and our relations with the U.S.

(Editor)

Different Approaches of Europe and the U.S.

I believe that at the recent Evian Summit of G8 we could see a phenomenon which symbolizes the direction the present day international community is going. It is this: that France, the host nation, on the day before the meeting, gathered together in one hall the main players of the international community, from 30 major countries, including developing nations. Among them were the leaders of China, India, Brazil, Nigeria, and so on. They themselves demonstrated "the importance of the principles of concord across many nations in a multilateral international community, and of multinational cooperation." In order to show that "there are this many players in the world today, and they come together to dis-

cuss their common issues, and it is precisely through their mutual cooperation that a variety of problems in the international community can for the first time be solved," they took up and discussed together such 'transnational' issues as aid for Africa, the environment, water, and health related problems such as SARS and AIDS. If I may say so, I think that by doing this they give a political demonstration of their rejection of the unilateral world view espoused by the U.S. During the summit conference, there was a group photo of the leaders on every news paper, but it is not immediately clear where President G. Bush is in that photo of 30 world leaders. And that was just as France intended.

On the other hand, the American way of thinking and approach was entirely different. It is not a question of

showing the strength of American unilateralism, but rather, it is that for America, the question of how we can work together on the kind of problems which the international community regards as serious today - the kind we see at this summit meeting, such as the environment, water, aid for Africa, SARS - is not something over which we should all meet together and decide. What America sees as important is an approach which looks for realistic solutions to the immediately pressing problems of preventing the spread of nuclear weapons to Iran, how to stop nuclear development in North Korea, and how to proceed with the Middle East peace plan, together with a co-ordination of policy to facilitate that approach. Unless such matters are discussed at the summit, it is meaningless for them. Therefore, that is why on the second day of the summit, President Bush quickly slipped out and went to Jordan via Egypt, and joined the three-way summit between the U.S., Israel and Palestine which was about implementing the Middle East 'road map to peace.'

Today as a practical matter, there are two major, differing approaches in the international community. One of those

is the American unilateralism which seeks to solve problems within a realistic coordination of policy, while the other is the European way of thinking which urges everyone to gather and discuss in order to build agreement across many nations, and move forward on issues together. These two approaches are, I think, in direct contrast. Therefore, at the recent summit, the bad feeling in U.S.-European relations which had become serious over Iraq, especially the resentment between America and France, appears to remain unburied; but actually this bad feeling was not something that ever could have been buried through having a summit, with such fundamental differences in approach between the Americans and the Europeans as those which surfaced over the use of military force in Iraq. The Iraq question can be seen as an interesting demonstration of the real state of affairs in the international community today.

First Things First: Rebuilding Iraq and Turning the U.S. Economy Upward

Working on the assumption that the above is true, I would like to talk about what the U.S. is thinking. As you know, the Bush administration, which will be plunging into the primaries for the presidential election from the end of this October or November, is getting the ball rolling on reconstruction aid for Iraq, turning the U.S. economy around through lowering the price of oil, and further exploiting political tension, in readiness to fight next year's presidential election. Already each of the nine candidates of the Democratic Party who are committed to standing in the presidential election is a formidable opponent for Mr. Bush. However, if a more

difficult problem arises for the present administration, then they would create new political tensions, and he would probably get through the election. In any case, I think that the Bush administration is looking at the upcoming election with relative optimism.

For the time being, I think the U.S. will continue with the approach of putting indirect pressure on Hamas, Syrian and Palestinian guerillas, by means of a Persian Gulf policy centered on the issue of Iran's development of nuclear weapons, especially the reconstruction of both Iran and Iraq, putting pressure on Saudi Arabia, that is to say the U.S. stance to the Saudi Arabian political regime from now on, and pressing for peace in the Middle East. Pressing ahead with the Middle East and Persian Gulf policy for a little while longer is an international political and diplomatic initiative, but at the same time, the Middle East peace problems also involve domestic U.S. politics given the large numbers of both Jews and Muslims in that country, and I believe that the Bush administration would like to handle U.S. domestic policy with that in mind.

Even If We Were a Permanent Member of the Security Council...

I think there are a number of problems concerning the international order which has been brought about by the war in Iraq.

First of all, we must discuss the whole question of the United Nations. Everybody is aware that the UN today is facing a crisis. However, there are two major opinions as to what we should do about the UN. One of these, as is seen at the recent Japan-U.S. summit meeting, is a serious plan for

recovering the functions of the divided Security Council, through the revitalizing and reforming of the UN.

The other view, which I tend to support, goes like this: "There is no further point in trying to recover the function of the Security Council. The UN has without doubt a large role to play in the individual problems which lie in the domain of the Economic and Social Council; economic issues, development, population, scientific and technological issues, culture, the environment, human rights, and the problems facing the developing nations. That much has to be acknowledged. However, the role of the Security Council, providing the solutions for war, and the maintenance of peace and stability, is unfortunately coming to an end. They already no longer function. The idea that the Security Council can prevent the World War III through its cooperative management of the international community, which was the original aim of the Security Council at the time of its foundation, is no longer realistic."

That Japan would ever be a permanent member of the Security Council has more or less been an illusion from the start. If Japan was to be a member, then the major nations from each region would all have to be members: Germany, Brazil, Argentina, India and Nigeria. Since even the present 5 member countries were divided in opinion up till now it would hardly be likely that such a large number of nations work together under one opinion as permanent members of the Security Council. This means that the Security Council unfortunately is no longer workable. It would be virtually impossible for the UN to fulfill a new role as individual disputes arise. Accordingly, it would

not be a solution to the UN's problems for Japan to become a member of such a Security Council. That is not a suitable objective for Japan to have.

Rather what we should be thinking about is forming an association of nations, which have a common set of values, and organizing an allied army, in order to solve each situation on a case by case basis. An autonomous association in the form of an ad hoc problem-solving body, in other words an 'alliance', is, I think, the only way we can manage to solve our problems at present. We can no longer maintain international peace and stability by committing ourselves to the UN Security Council.

For example, let us suppose that some problem were to arise in East Asia. It does not matter whether it is on the Korean peninsula, in China, Taiwan, in the South China Sea, or the Senkaku Islands. Would a resolution be passed in the Security Council? That would be quite out of the question. There is no way that a Security Council resolution could be passed. And without that, what could we do? Only after Japan has cooperated on various problems in the international community, would other countries cooperate with us even to a small extent on a problem occurring in our region of the world. Nobody would give the time of day to a nation which has not been helping out others, when that nation then cries for help because a problem has arisen in its own back yard.

Japanese Government Does Not Explain to the Public Why It Wants to Contribute to International Peace and Stability

I do not think it hasn't been properly explained to the public why Japan

needs to cooperate to such an extent in the peace and stability of the international community. Here, we must rethink why does our country contribute to international peace and stability? The logic of this is simple. Japan relies on foreign imports for over 96% of its energy, and over 60% of its food supplies. Japan cannot live on its own. If a serious dispute were to arise in Asia, including in the area around Japan, or in the Pacific region, or in the international community, our energy resources and food supplies would be cut off. It is an issue affecting Japan's very survival. That is why there is no country which hopes for world peace and stability as much as Japan. That is why Japan has no choice but to cooperate in keeping world peace and stability. Is this logic not simple? Yet the Japanese government does not explain these things. To put it plainly, I don't think that Japan has gone into Iraq simply for the sake of the Japan-U.S. alliance. As you well know, at present the northern part of Iraq is under the control of the U.S. army, the central part of the country under the Polish forces, and the southern part under the British forces. I think Japan will have the job of supervising the long distance air transportation into Baghdad through Jordan and Kuwait. That is not something which the U.S. army needs to take charge of itself.

I do not know how many countries will take part, but already there are more than twenty countries which have made a commitment, and I think that by autumn over forty countries will eventually take part. This is because there are many countries who have made a commitment, but have yet to go out to Iraq. As far as I know, at present

there are for sure 13 countries, plus 13 others, which are going out, and there is a large number of others who intend to go out there. Therefore, Japan becomes 'one of them' taking part in the multinational force activities, and since we would be handling the back-up support for every country, it is clearly not just a Japan-U.S. alliance. Also, Japan will enter into the efforts being made across the world to aid in the reconstruction of Iraq, and we will all pull together, making it the first time for Japan to cooperate in the activities of a multinational task force.

There is no explanation of how, with this current operation, Japan going out to Iraq will somehow further our country's national interest or bring us benefits. Japan's aim is to have good relations with the new administration of Iraq in future, the new government, the new administration of Iraq, a country which has great potential oil resources, and with the Iraqi people in whose hands we will entrust the governing of the country. By doing that, we are indeed pursuing Japan's national with respect to Iraq, and not simply following the limited idea of cooperating with the U.S. army activities.

The government should send a team of investigators precisely to explain that sort of thing properly, and make out an overall plan. Judging from what has happened so far, the general secretaries of three parties have been out there for a few days, and then a government team of investigators went to spend a few days in Baghdad, and the draft of the new Iraq legislation was made on the basis of that. It may well be true that the Iraq legislation is a framework legislation, but in any case I think the process and procedure of making it is

strange. I hope that the public can be made to understand this issue through a 40-day extension of the Diet session for discussion of the matter.

'Special Measures Law' Goes beyond the U.S.-Japanese Alliance

In fact, when seen in the context of the U.S.-Japanese alliance, with the support and cooperation based on the Iraq special measures law, we are now entering a new area of security cooperation. It goes without saying that the treaty which forms the basis of the U.S.-Japanese alliance is a security treaty. At the heart of that security treaty is article 5, which states that, "Each Party recognizes that an armed attack against either Party in the territories under the administration of Japan would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional provisions and processes." However, this is meant for the case of an attack on Japan, that is, a case of a Japanese national emergency. It means U.S.-Japanese cooperation in case of a Japanese national emergency, which in practice means that the U.S. is providing defense for Japan, but not the other way round, and so the U.S. is bearing a one-sided responsibility for defense. Article 6 of the security treaty gives the pay-back for this: "For the purpose of contributing to the security of Japan and the maintenance of international peace and security in the Far East, the U.S. is granted the use by its land, air and naval forces of facilities and areas in Japan." In other words, it says that in the name of peace and stability in the Far East, the U.S. military may use Japanese facilities and territory.

Articles 5 and 6 of the security treaty are two sides of the same coin. That is to say, in return for providing defense for Japan as stated in Article 5, America may use Japanese facilities and territory for the maintenance of peace and security in the Far East.

The Far East is taken to mean up to the Bashi Channel (south of Taiwan, north of Luzon). Beyond the Bashi Channel, the security treaty does not apply. Therefore, the security treaty does not apply to South East Asia, the South China Sea, or the Indian Ocean. There are no guidelines to show the limits of its applicability. Then in 2001, under the special anti-terrorism legislation, the Self Defense Forces went for the first time into the Indian Ocean. Now they are intending to go to Iraq. Such cooperation is beyond what is called for in the U.S.-Japanese security treaty. In the press statement at the end of the U.S.-Japan bilateral summit meeting in the end of May, at Crawford in Texas, U.S., were the words "U.S.-Japanese cooperation in the world". In other words, "strengthening U.S.-Japanese cooperation globally", meaning that, despite the fact that until now the U.S.-Japanese alliance has been limited to operating within the Far East, it can now spread further field, to the Indian Ocean or to the Persian Gulf. That is to say, it is cooperation beyond the framework of the security treaty as it has been understood until now. This does not mean that it applies, say, to the troubles in Ireland or the conflict in the Congo. It is absolutely the Asian and Pacific regions which they have in mind.

As for how far exactly Asia and the Pacific extend, the answer is as far as the East coast of Africa. That is to say,

as far as the Middle East and the Persian Gulf. Seen in the context of the U.S.-Japanese alliance, this means that passing the Iraq special measures law is entering into a completely new field in two senses. First, in the context of the U.S.-Japanese alliance we are stepping outside the framework of the security treaty, and second, Japan is for the first time taking part as an official member in the activities of a multinational force which includes participating members from across many nations.

In consequence, this new legislation over Iraq is a new endeavor in two senses. If we explain it as being just an extension of the law as it has been up till now, and so the Diet should somehow manage to get the legislation through, as the present administration are wanting to do to avoid politicizing the problem, then their negative attitude is plain for all to see, and it leaves me wondering.

One more problem which the war in Iraq has brought us, is that the U.S. view of alliances, and their values system, have changed. It is not the same set of values about freedom and democracy which they have had in the past, but rather a set of values responding to terrorism and weapons of mass destruction, and I suspect they are starting to reassess their alliances. In the aftermath of the war in Iraq, relationships are arising with what are for the U.S. new kinds of partners: groups of nations, from Eastern and Western Europe, the Gulf nations, and Central Asian countries, who fall in line with U.S. policy. Accordingly, a new world order is being put into place with the American sense of values at its heart. That brings big upheavals to the Gulf region, and at the same time increases

U.S. influence in the Gulf, especially in such places as Iraq, Kuwait and Qatar. Other groups, comprising such countries as Iran, Saudi Arabia, and Syria, who do not subscribe to these values, will undergo structural changes. These changes will most likely further the cause of an international world order centered on the American sense of values.

U.S. Will Have Talks with North Korea, but Not Dealings

At this point I now would like to leave Iraq, and turn our attention to North Korea.

As you will be aware, it is still not certain whether the three way talks among the U.S., China and North Korea, which began last April, will continue for a further round with just the same three participants, or will expand to five, bringing in Japan and South Korea. Since it would be a matter of including both Japan and South Korea, we cannot consider these two countries separately. It cannot be either just Japan or just South Korea. If North Korea wishes to bring in the South, then the U.S. will want to bring in Japan, so neither one country will join in alone, but either both or neither. If neither joins in, then the original three will continue as they are. Russia says it would like to join in, but the U.S. will not allow this. We do not know when the next round of talks will be. I think perhaps the next gathering may be before the North Korean event on July 27.

The last round took place in China, but the next round will not be there. Therefore, it must be a third country where both North and South Korea have embassies, and where it is conven-

ient to fly to. In Asia, that would be either Malaysia or Singapore. Both Malaysia and Singapore have embassies from both North and South Korea, and both have diplomatic relations, so I expect it will be one of them.

The focus of the next round of talks will start from the answer which comes from the North Koreans to the message left for them by the Americans in the first round. For this, there are two scenarios. In the first scenario, North Korea makes a considerable climb-down, coming to the negotiating table with the possibility of putting their nuclear development plans on ice, or dismantling it step by step. September 9 is the fifty fifth anniversary of North Korea's Military Foundation Day, but in time for this event, Mr. Kim Jong Il will want to present to his people something of substance, which in this case may mean food or fuel, and to get his hands on such things may take the kind of measures he has taken in the past. This possibility is a relatively positive thing from our point of view.

In the more negative scenario, he might not enter into any negotiations at all. Originally, the U.S. had no intention of having any negotiations or any dealings. To the American way of thinking, the North Koreans broke the framework agreement they signed in 1994, they broke the 1991 non-nuclear declaration, and the NPT and IAEA agreements, and so, the Americans are saying, if they were to scrap all their nuclear development plans, then they, the Americans, would take 'bold measures.' However, until they get to that point, they will not negotiate. Hence, the American response is, "We will talk, but we will not do deals. There is nothing to do deals with. If they come back

when they have unilaterally got rid of all their nuclear material by verifiable means, then we can start talking." A positive scenario would entail North Korea taking up that challenge, but there is every possibility of the negative scenario in which they refuse to enter into any negotiation.

U.S. Has No Intention of Going to War with North Korea

Let us now try and look at things from the U.S. point of view, moving one step at a time. What are the Americans thinking? They claim they are keeping all their options open, and naturally one of these options must be the military one. The U.S. is not thinking of using the military option in the near future. There are four reasons why not.

The first is that domestically, the U.S. public opinion does not support a war against North Korea. Until Afghanistan and then Iraq, the bitter memories of the September 11 terrorist attacks were still lingering, and the U.S. public would have supported any military action wherever, but a war against North Korea would now make it three wars, and U.S. public opinion would say 'Enough is enough. This has nothing to do with terrorism.' There would be no way the U.S. government could explain their way out of it.

The second reason is financial. As you are aware, during the Clinton administration, finances were in the black, but now they have gone into the red, and they have already poured a hundred billion dollars into the Iraq conflict. The initial amount was twenty-five billion dollars, and then an additional amount of seventy-four billion dollars, just for Iraq, so now in the run-up to the presidential election, they can-

not take on a further financial burden.

The third reason is that in the war in Iraq they used up all eight hundred of their cruising missiles. They similarly used up all of their nineteen thousand precision-guided weapons. The U.S. stocks are virtually empty now. If they were to press ahead with a war now, it would take at least six months, and a large investment of cash into the defense budget, to produce enough cruising missiles and precision-guided weapons. The U.S. also threw seven of their twelve aircraft carriers into the Iraqi conflict. They are now being overhauled, and only three ships are mobile. It is the first time in U.S. history to have only three war vessels mobile throughout the world. In such a state it is not possible to go to war.

If the U.S. Army Second Division Moves South of Seoul...

The stickiest problem is the risk to U.S. forces stationed in South Korea. This risk comes from the fact that two thirds of North Korea's 1,130 thousand military personnel are concentrated within a one hundred kilometer area north of the demilitarized zone (DMZ). Seoul lies a little under sixty kilometers south of the DMZ. That is where the U.S. forces are concentrated. The Second Division consists of 18,000 soldiers, made up of three regiments and rearguard support. It is the largest of all U.S. military corps stationed overseas. With U.S.-South Korean relations having worsened, they are negotiating pulling these troops back to somewhere south of Seoul. They will pull back some time within this year, I think. However, there are no facilities for pulling back all the troops in one go.

There is no base which can accommodate a whole division. And you cannot split up an army division into separate units.

The point of pulling back the troops is that, for the South Korean army, there would be no hostages taken, but the same is also true for the North Koreans. Having the Second Division where it is at the moment means they are within the firing range of North Korean rockets and short-range missiles. Moving out of their firing range would mean that the North Koreans also could not have hostages taken, but the Americans would be able to attack North Korea, with great swiftness, at any time. But there is a condition attached. Namely, that the North Koreans do not provoke the Americans. If they did provoke them, I do not know what would happen.

In this case, the problem is what provoke means. At present, the nations of the world which possess nuclear weapons are the 'P5' - the U.S., Russia, Britain, France and China - and also Israel, India and Pakistan, but North Korea is also a possessor of nuclear weapons. Actually, the American Defense Secretary Donald Rumsfeld said, "They might possibly have one or two nuclear weapons," but I think the North Korean nuclear development program is moving ahead, but it has as yet only just got to the stage of producing primitive nuclear weapons, in other words non-operational nuclear weapons. Recently, some people high up in the Japanese government have questioned whether this might not be a mistake. There is talk that according to the information coming out of the U.S., the North Korean nuclear weapons are in fact in a usable condition and can be

carried by Taepodong and Nodong missiles. Recently, the Director-General of the Defense Agency has been talking about looking at missile defenses in terms of deployment, and saying that commencing a conventional attack if it reached the stage of filling up with fuel at the missile launching sites would be within the realms of the right to self-defense. When you think about what this means, it seems that the Japanese government may have received some highly reliable information somewhere along the line.

But What if North Korea Provokes the U.S.?

We then have to think how we might respond to this. But first, let us see what we mean when we talk of North Korea provoking the U.S. You see, the Americans have been saying all along that they have extracted eight thousand fuel rods, but whether they have done this or not, North Korea is now saying that they have finished the reprocessing of spent fuels, and so that will no longer be a point of provocation. Months before, the U.S. was saying that if they took out eight thousand fuel rods, then, the Americans would take firm measures. But this has already become an accomplished fact. Therefore, regardless whether it may be true or not that they took out those eight thousand fuel rods, North Korea has at least already succeeded in getting to some stage of nuclear development.

As Secretary of State Colin Powell says, the concern with North Korea is not about nuclear development, but rather over nuclear proliferation. By proliferation, I mean selling those weapons somewhere. They can only

sell them if they carry on successfully making them. Consequently, this means that the kind of proliferation that Secretary of State Powell is talking about depends on the success of the North Korean nuclear development, and the idea of them being sold to a third country is for the U.S. another source of worry.

When we think about such things as these, there are three ways in which they could provoke the U.S. The first is by carrying out nuclear tests. Only, carrying out nuclear tests inside North Korea would be an extremely sticky action. That is because this kind of nuclear testing could only be carried out underground. There is absolutely no way they could do in the air or above ground. Even with underground nuclear testing, you normally need a fifty to sixty kilometer square of desert for a nuclear test. In the U.S., this would be something like the Nevada desert. Unless you have the kind they have in India or Pakistan, you cannot do it. The reason for this is that the underground water system gets damaged. North Korea has a very abundant flow of underground water, and if you carry out an underground nuclear test in this kind of place, radioactive materials would get into the water supply for the whole of the Korean peninsula, and also flow out into the Sea of Japan. As a consequence, if there were any underground nuclear testing in the Korean peninsula, it would not be just the ecological system, but also the topography of the land that would be damaged. So, will they indeed carry out tests? I think they might somehow manage to borrow the Pakistani desert, or else carry out tests in another country. Still, this being North Korea, one

can never know. If they did do that sort of nuclear test, then the U.S. would run out of patience.

The second way (to provoke the U.S.) would be to launch an advanced version of the Taepodong or Nodong missiles.

The third way, which is the most serious, would be the case where physical evidence is found that North Korea sells the nuclear technology which they have already succeeded in developing, or the weapons themselves, to a third country. Shipping vessels can be apprehended, as previously when Scud missiles were exported to the Yemen and America captured them off-shore, and there could be a scenario where the U.S. finds physical evidence that they are merrily transferring this technology to a third country. I do not think we can know what the U.S. would do if any of these three situations arose.

U.S. Not Conspiring to Bring Down the Kim Jong Il Regime

Let us now return to our main theme. The U.S. is not at present thinking about military action, but I wonder what they are thinking about the North Korean regime. There are, in fact, two scenarios. In the first, the North Koreans willingly give up all of their nuclear development, and this is proven by verifiable means; whereupon the US recognizes the Kim Jong Il regime. In the other scenario, America decides that, whether they have nuclear weapons or not, Kim Jong Il is too risky and has to be brought down, and sets its sights on the collapse of the regime. In other words, it is the Kim Jong Il regime itself that is the problem, and what they are trying to do, whether it be the weapons of mass destruction, namely the nuclear weapons that the

North Korean army, under the Kim Il Jong regime, is trying to push ahead with, biological weapons or chemical weapons, or the development of the missiles which would be the means to carry those weapons, whether it be the possibility of selling them on to terrorists or to a third country, or whatever, all the manifestations of the present North Korean regime's proclivities cannot be allowed. Are they, therefore, intending to do away with that regime?

Until yesterday I was taking part in a UN meeting in Kanazawa, Ishikawa Pref. There, Richard A. Christenson, Deputy Chief of Mission, the U.S. Embassy in Japan, explained to us that, "We are not conspiring to bring down the Kim Jong Il regime. Iraq and North Korea are different." Hearing that raises another question. Just suppose that what the U.S. is saying is actually true, then if the Kim Jong Il regime were to throw away all of its nuclear weapons, could the present North Korean regime survive anyway? Just what kind of regime is it?

The leader of North Korea wears three different caps. He is the General Secretary of the North Korean Workers Party, the Head of State, and the Chief of the National Defense Committee. Of these three, Kim Il Song relinquished just the third one, Chief of the National Defense Committee, to Kim Jong Il, holding the other two himself up to his death. As a result, Kim Jong Il shows contempt for the North Korean Workers Party, and controls the country through the National Defense Committee. He has relinquished the role of Head of State to Kim Yong Nam. Kim Jong Il is not the Head of State, but only the Chief of the National Defense Committee. In the Japan-

North Korea Pyongyang declaration, Kim Jong Il's title is Chief of the National Defense Committee. That is why Prime Minister Koizumi refers to him as 'Chief of Defense'. What this means, then, is that he is governing the country through control of the military.

In other words, he controls the 1.13 million soldiers of North Korean army as its Commander in Chief, and through this control over the army, he governs the country. That is his way of doing it. If he were to do as he is being told by the U.S., to abandon the development of nuclear weapons and missiles, which is the army's greatest and largest program, to get rid of it all, it is unclear whether Kim Jong Il would survive. But it is the U.S. intention to make him get rid of it. The problem is how. At the moment it is by diplomatic means. The reason for this, as I mentioned earlier, is that the U.S. is not at present thinking about taking the military option. And so they are trying to reach their objective using indirect pressure, tightening the screws on North Korea by using Japan, South Korea and China. What is happening is that the U.S. is playing for time. Many experts say that North Korea is playing for time, but it is actually the U.S. who is doing this, waiting to see what North Korea does.

Does North Korea Really Understand the Present U.S. Administration?

Let us suppose that North Korea made the mistake of provoking the U.S. I think North Korea must understand that that might result in a second Iraq. And yet one cannot be sure. North Korea often makes miscalculations with regard to the U.S., and has often done so in the past. I do not really know why

they make such miscalculations. It may be because Kim Jong Il has no experience of America, or because there is no North Korean embassy in the U.S., or because they just do not understand what America is all about, or because they have built up experience that tells them the U.S. threatens but in the end nothing comes of it. Since Kim Jong Il took over the administration, unfortunately, it has been the Clinton Democrat administration they have had to deal with. Maybe they do not understand the nature of the present Bush administration.

In these circumstances, for the time being the U.S. is putting pressure on North Korea with the cooperation of other countries, containing them within close bounds, using whatever means they can, and there is a point of view which says it is OK as long as they are going along with the U.S. Still, I think the U.S. will push them right to the end. If the Bush administration does that during its first term of office it would result in chaos, and so I think they may be keeping it back until a second term, when it will be made a priority. That is, if the Republican Party wins the next election, North Korean policy would become a priority, which means that North Korea's days are numbered.

China wants to make the 2008 Olympic Games a success, the current new administration wants to keep relations with the U.S. as good as they can, for the sake of their reforms and economic liberalization. These are their two objectives, and so although China may voice opposition, I do not think they will do anything like using their veto against the U.S. This makes Japan's response rather problematic.

North Korea's Greatest Fears: No Money from Japan and No Fuel from China

Let us deal first with the Japanese response. As you know, at the US-Japanese summit meeting, Japan talked this time of 'dialogue and pressure', and is tightening up existing laws in order to apply that 'pressure.' As a practical matter, this means sanctions. There is nothing which is formally sanctions, but sanctions are what it amounts to. The flow of people, goods and money out of Japan is being curtailed dramatically. In the near future, Foreign Exchange Control Law will be revised, or ships will be prevented from entering the ports. These would of course need the approval of the Diet, but these kinds of issues will come up some time in the near future. Beyond that, it is a matter for the United Nations. That is, a matter for the UN Security Council.

As you are aware, in March the IAEA put the matter on the development of nuclear weapons in North Korea before the Security Council. The UN Security Council has a duty to deal with this matter. With Iraq, seventeen Security Council resolutions were passed, but as yet there is not a single resolution concerning North Korea; before long, though, Security Council resolutions will be on the cards. It would seem that the U.S. and China are now primarily trying to solve the problem by moving ahead with multi-lateral talks. If it were with the Security Council, there would be too many players, voices of dissent would emerge, and things would not go as they intend. Therefore, it is the U.S. together with China entering into three way discussions with North Korea. The

framework is such that even if Japan and South Korea were to join in, agreement on a matter between just the U.S. and China would be enough for things to happen, and so it is not necessary to bring up those things one by one to the Security Council.

However, if things do none the less get stuck, there might be nothing else for it but to take matters to the Security Council, but it is unclear whether a 'full set' of Security Council resolutions against North Korea would be passed. By a 'full set', I mean first of all criticizing North Korea's nuclear development, demanding a return to the terms of the NPT or IAEA; second, telling them to accept inspections; third, suggesting that if this is not possible, then there is the possibility of sanctions; and fourth, telling them to settle the problem of the abductions once and for all. This sort of 'full set' of Security Council resolutions could not be expected to be passed all at one go. I think it would happen one step at a time.

If this happened, China and Russia probably could not oppose the first of these Security Council resolutions, namely to return to the terms of the NPT or IAEA. Both countries will end up supporting the censuring resolution of the IAEA. Consequently, at the time that is passed, Japanese domestic laws on economic sanctions will be passed, and then we will be able to move further forward, and, on the basis of this Security Council resolution, we will be able to impose sanctions. Consequently, a variety of measures will be possible, such as a revision of the Foreign Exchange Control Law, and of trade control warrants, and so on, and an overall adaptation of catch-all regulations, or in

certain cases laws restricting entry into ports. These will put a stop all the people, goods and money.

In such circumstances, it would be no use Japan implementing this alone, however vigorously. Other countries need to cooperate with us. The toughest things for North Korea are if foreign currency is frozen, or if fuel supplies from China are stopped. To be specific, money coming in from Japan being stopped, remittances being stopped, and crude oil from China being stopped; with these two things, North Korea would more or less be done for. Consequently, we cannot manage without cooperation from the Chinese, and I think the U.S. may put pressure on them over this.

Going back to the main theme, it would be good if North Korea came forward at the next round of negotiations, but if they do not, then there is a whole range of possibilities for what happens after. In the end, the net around North Korea, as we might call it, will start to close in, and eventually the U.S. military option will be bandied about, it will be hinted at, while at the same time we continue to try other measures. So, the fact that the U.S. military option is always available is a big pressure for the North Koreans. There is always the chance that the U.S. will 'lose patience' along the way. Though as I noted earlier, even if they do lose patience, they cannot make a move within the next half year. This is why the timing for moving the U.S. forces in South Korea is the biggest and also the most difficult problem.

The worst scenario for Japan, as you are aware, is that even if the problems of nuclear development and missile development are sorted out, the abduc-

tion problem will still remain. That cannot be tolerated, which is why Japan keeps going on and on about this 'abduction problem'. To be frank, South Korea and the U.S. are not very interested in the abduction problem. The policy of the Japanese administration is to somehow get them interested.

The reason that the Americans are talking of missile defense is that their nuclear deterrent does not offer full security. If that deterrent were fully secure, the U.S. would not come to Japan with such suggestions of missile defense. The meaning of such suggestions is that the U.S. nuclear deterrent alone is not enough to meet the problems, and there must be scenarios where this is so. In which case, though you may think we can be safe with just missile defense, it would in fact be no more than a fan to get the sparks going. I believe that this alone does not constitute a deterrent in the true sense of the word.

To sum up, although the cold war may have finished, and it is more than fifty years since the end of the World War II, we still have to think of these kinds of things precisely because nuclear weapons on the Korean peninsula are becoming a reality. Although the cold war is over, a situation is developing in our region of the world which is not a problem for 'somebody else.' How should we best respond to North Korea? I think this matter is more serious than new Iraq law. 

(On July 31, North Korea has accepted to hold 6-nation talks on its nuclear weapons program. The talks are to involve China, Japan, North Korea, South Korea, Russia and the U.S. (Editor))



Agreement on a Central Asia Nuclear Weapon Free Zone Treaty Text From Samarkand to Semipalatinsk

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Preface

On 27 September 2002, a UN-sponsored Expert Group consisting of experts from the five Central Asian states (the C5) agreed on a treaty text for the establishment of a nuclear-weapon-free zone in Central Asia (hereafter the Samarkand Agreement) during a meeting held in Samarkand, Uzbekistan. The accomplishment of this long held aspiration of the C5 should be welcomed as an outstanding feat. Since I have acted as chair of the meetings since the beginning of this drafting process, I was pleased with this positive outcome to our tireless efforts of the past 5 years.

However, despite the strong wish of the C5 to sign the Samarkand Agreement as soon as possible, 8 months have passed since the Agreement was prepared last September due to the prolonged consultations with the nuclear weapon states (the NWS).

Since the 2000 NPT Review Conference, hardly any visible achievements have been made in the

field of nuclear non-proliferation. Instead, we have witnessed the withdrawal of the Democratic People's Republic of Korea (North Korea) from the Treaty on the Non-Proliferation of Nuclear Weapons (the NPT). Under these circumstances, the Samarkand Agreement should be recognized as an outstanding achievement contributing to nuclear non-proliferation and regional security. The NWS, who have special status in the NPT as well as extraordinary responsibilities for nuclear disarmament and nuclear non-proliferation, should do their utmost to assist the C5 in their early signing of the Samarkand Agreement.

Launching the Idea of a Central Asia Nuclear Weapon Free Zone and the UN's Cooperation

The Central Asia nuclear-weapon-free zone (the CANWFZ) consists of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, five states which were Republics of the former Soviet Union. The idea of establishing the CANWFZ was originally put forward during a summit

meeting of the Presidents of the 5 states which took place on 28 February 1997 in Almaty, Kazakhstan. In the adopted Almaty Declaration, the five Presidents expressed a united position on the need to proclaim Central Asia a nuclear weapon free zone.

On 15 & 16 September 1997, the "International Conference on Central Asia - a nuclear weapon free zone" was held in Tashkent, Uzbekistan. "The Statement of Five Foreign Ministers" adopted during that meeting announced the necessity of declaring Central Asia a nuclear-weapon-free zone as an essential element of strengthening regional security. Thus the idea of establishing a CANWFZ was officially launched. During the Fifty Second UN General Assembly of 1997, the C5 introduced a draft resolution calling upon all states to support the initiative aimed at the establishing of a CANWFZ which was adopted without a vote as UNGA resolution 52/38 S.

The same resolution contained a paragraph requesting the UN

Secretary-General to provide assistance to the Central Asian countries in the preparation of form and elements of an agreement on the establishment of a CANWFZ. As a result of internal consultations, the UN Regional Centre for Peace and Disarmament in Asia and the Pacific (RCPD), for which I am responsible, was designated as a focal point of the UN assistance. In response to the request of the C5, RCPD, as a working method, established a UN-sponsored Expert Group consisting of experts from the C5. Between April 1998 and April 2000, the RCPD organized a total of seven meetings in Geneva (April and October 1998 and April 1999), Sapporo (October 1999 and April 2000), Bishkek (July 1998) and Tashkent (February 1999). In drafting a treaty text, experts took into account the specific conditions prevailing in Central Asia and referred to existing nuclear weapon free zone (NWFZ) treaties. These are: Treaty of Tlatelolco (Latin America and the Caribbean, opened for signature on 14 February 1967, entered into force for each Government individually), Treaty of Rarotonga (The South Pacific, opened for signature on 6 August 1985, entered into force on 11 December 1986), Bangkok Treaty (Southeast Asia, opened for signature on 15 December 1995, entered into force on 27 March 1997) and the Pelindaba Treaty (Africa, opened for signature 11 April 1996).

Deadlock of the Negotiations

During the April 2000 Sapporo meeting, there was an opportunity for the experts to agree on the entire text, however, failure to reach an agreement on Article 12 (Other agreements) caused disappointment among the experts that progress should be halted by the text of a single article. There was a wide and insurmountable gap on whether priority should be given to the position that obligations and rights arising from existing agreements prevailed over the CANWFZ treaty or whether some kind of cohabitation between the two legal approaches should be pursued.

According to the Multilateral Treaty on Collective Security (the 1992 Tashkent Treaty), subject to special agreements, deployment and operation of the objects of a collective security system shall be made on the territory of the State Parties. For example, in an extreme case one interpretation of this Treaty reads that tactical nuclear weapons can be deployed in the territory of State Parties. It would seem that such a case, extreme though it is, would not be compatible with the objectives and basic obligations of the NWFZ treaty, thus there was a risk that the drafting exercise could become meaningless. If one of the C5 faced an extreme security situation which allowed the inevitable deployment of tactical nuclear weapons, that state would have to withdraw from the

CANWFZ Treaty by applying an article regarding withdrawal, therefore, Article 12 would not be necessary. If required, the C5 can shorten the current required period of 12 months advance notice. Incidentally, no similar article can be found in the four existing NWFZ treaties.

State Parties to the Tashkent Treaty^{*1} have contended that the CANWFZ treaty does not prejudice the rights and obligations of the Parties under other international treaties concluded prior to the date of the entry into force of the CANWFZ treaty. The one state^{*2} which has withdrawn from the Tashkent Treaty and another state^{*3} uphold a neutral position and hold a sceptical view on the necessity of Article 12 referring to some points contained in paragraph 6 above. Since the April 2000 Sapporo meeting, RCPD, with the occasional help of the UN Office of Legal Affairs, made several attempts to form a commonly acceptable formulation on Article 12 through the organization of more than 20 meetings. Alternative solutions were also prepared by some of the C5. Despite everyone's effort, none of proposed options were acceptable.

The September 2002 Samarkand Meeting

As a way of overcoming the deadlock in negotiations, RCPD advised Mr. Dhanapala, the Under-Secretary-General for Disarmament Affairs (the USG) to visit the C5 countries and meet with senior Government officials and, if possible, the respective Presidents to urge them to take a flexible approach in order to work out

*1 : Kazakhstan, Kyrgyzstan and Tajikistan

*2 : Uzbekistan

*3 : Turkmenistan

a commonly acceptable solution. The USG visited the C5 in August 2002 and successfully drew the attention of senior officials to the status of the CANWFZ treaty negotiations as well as some other obstacles that were to be overcome.

As a result of the positive outcome of the USG's visit to the C5 and their reaffirmation of their commitment to revitalize negotiations and in view of the continuous evolution of the geopolitical situation due to the fight against terrorism, RCPD, in close cooperation with the Government of Uzbekistan, decided to hold a UN-sponsored Expert Group meeting in Samarkand, Uzbekistan in September 2002. Through informal and bilateral consultations between the C5 and RCPD, I formed the impression that the C3⁴ supported the deletion of Article 12 and that there was a chance the remaining C2⁵ may go along with that position. To the contrary however, once the meeting started, it became clear that there was no consensus to delete Article 12. In spite of this, this time there was a firm determination among the experts that they could not return to their capitals without a solution to the Article 12 issues. As a result of intensive negotiations, the experts were able to produce a compromised formulation that was to be added as the second paragraph after the formulation preferred by the State Parties to the Tashkent Treaty (see para. 7). The gist of the new paragraph is that, Parties shall take

all necessary measures for the effective implementation of the objective and purposes of the Treaty in accordance with the major principles contained in the CANWFZ treaty. In addition, minor changes were made in the preamble, depositary (an adjustment was required for the UN Secretary-General to act as depositary) and the attached Protocol. Thus the entire text was approved and adopted by all the C5 experts. As proof of an agreement on the Samarkand Agreement, the experts initialled the document.

The Structure of the Samarkand Agreement and Its Characteristics

The adopted treaty text has a preamble, 18 articles and a Protocol. These are:

- Preamble,
- Article 1 (Definitions and usage of terms)
- Article 2 (Application of the Treaty)
- Article 3 (Basic obligations)
- Article 4 (Foreign ships, aircraft, and ground transportation)
- Article 5 (Prohibition of testing of nuclear weapons and other nuclear explosive devices)
- Article 6 (Environmental security)
- Article 7 (Use of nuclear energy for peaceful purposes)
- Article 8 (IAEA safeguards)
- Article 9 (Physical protection of nuclear material and equipment)

- Article 10 (Consultative meetings)
- Article 11 (Interpretation of Treaty and settlement of disputes)
- Article 12 (Other agreements)
- Article 13 (Reservation)
- Article 14 (Signature and ratification)
- Article 15 (Entry into force and duration)
- Article 16 (Withdrawal from this Treaty)
- Article 17 (Amendments)
- Article 18 (Depositary) and a Protocol on negative security assurances.

The Samarkand Agreement has the following characteristics:

- (a) A former NWS (Kazakhstan) is included. No other NWFZ exists to cover the territories of other former NWS, namely Belarus and Ukraine;
- (b) The CANWFZ consists of all land locked states. This will be the first such NWFZ;
- (c) The CANWFZ directly shares borders with China and Russia, both of which are NWS and the expected state parties to the attached Protocol;
- (d) It attaches great importance to environmental issues. Parties undertake to provide assistance to any efforts toward the environmental rehabilitation of territories contaminated as result of past activities related to the development, production or storage of nuclear weapons or other nuclear explosive devices;
- (e) The expansion of the zone. States having common borders with the

*4 : Uzbekistan, Turkmenistan and Tajikistan

*5 : Kazakhstan and Kyrgyzstan

- CANWFZ may accede to this treaty if they accept the obligations under the Treaty;
- (f) As the first NWFZ treaty after the Comprehensive Nuclear Test Ban Treaty (CTBT) was opened for signature in September 1996, it reflects the basic obligations contained in the CTBT;
 - (g) As the first NWFZ treaty after the introduction of Additional Protocol regarding IAEA's strengthened safeguards in 1997, it reflects the elements of strengthened safeguards;
 - (h) The UN Secretary-General (the SG) is designated as the depositary. Normally, one of the state parties becomes the depositary. For example, Thailand is the depositary of the Bangkok Treaty. As the C5 could not make a decision on this matter they request the SG to be the depositary. Under established practice, the SG does not assume the role of depositary if the geographic coverage of the treaty is limited to a region or the treaty deals with small number of states or security issues;
 - (i) According to the mandate given by UN General Assembly resolutions, the UN (RCPD) has been directly involved in the drafting process from the beginning.

Wish of the C5 for the Early Signature of the Samarkand Agreement

With the successful conclusion of the Samarkand meeting, the C5 wanted an early signature to the

Samarkand Agreement. As Mr. Annan, the SG, was planning to tour the countries of the C5, it was suggested to hold a signing ceremony at Semipalatinsk during the SG's visit to Kazakhstan. In fact, at the beginning of October, I was informed that Kazakhstan had initiated preparations for the signing ceremony.

With respect to the arrangement of a NWFZ, in general the state parties within the region (all of them non nuclear-weapon states), accept basic obligations such as not to produce, manufacture, store, or test nuclear weapons or other nuclear explosive devices and not accept any other state's nuclear weapons or other nuclear explosive devices on their territories in the main body of the treaty. On the other hand, the NWS as the state parties to the attached protocol, make their commitments to respect the zone and not use or threaten to use nuclear weapons against the zone (negative security assurances). For the NWS, the expansion of the NWFZ means the expansion of a zone in which they cannot use or station their nuclear weapons and this may cause some problems in the transit of their ships, aircraft or vehicles through the zone.

In order to legally consolidate a NWFZ it is important for the members of the zone to obtain the NWS's negative security assurances. At the same time, as a matter of practice, it was important for the C5 to hold consultations with the five NWS (China, France, Russia, United Kingdom and the United States) before signing the

Samarkand Agreement. For consultations between the two parties, RCPD hosted the first C5/5NWS consultative meeting on 8 October 2002 in New York. During the meeting, the 5 NWS insisted they needed more time to study the Samarkand Agreement as they only received it ten days before the meeting. Since no substantive consultations were held with the C5, the planned signing ceremony in Semipalatinsk was postponed. There was an agreement between the C5 and RCPD that, unless the C5 produced an agreed text, RCPD would not circulate any document to the 5 NWS. However, the 5 NWS were free to access any of the C5 to obtain copies of the negotiated treaty texts. The C5 knew in fact that all 5 NWS had already obtained the negotiating texts. Since the only major change was the new Article 12, the C5 were deeply disappointed at the refusal of the 5 NWS to discuss the Samarkand agreement.

On 17 December 2002 the second consultative meeting was held in New York. At this meeting the two direct neighbours⁶ of the CANWFZ practically endorsed the Samarkand Agreement. The remaining NWS however made several comments and raised points for clarification. The major concerns were:

- (a) They want ensured freedom regarding the transit of their ships, aircraft and vehicles in the zone;
- (b) They are not aware of the arrangement that obligations or rights arising from other agreements can be treated prior to those of CANWFZ treaty. There

*6 : China and Russia



Mr. Ishiguri, thinking of greeting words at Samarkand University (second left)

is no precedent for this therefore Article 12 should be deleted;

(c) The expansion of the zone (above-mentioned (e)) will bring about uncertainty in the future of the CANWFZ. As guarantors of providing negative security assurances, they cannot make commitments to such uncertainties therefore such a clause should be deleted.

In response to the 3 NWS's comments, the C5 informed them of the importance of the Samarkand Agreement after 5-years of intensive work and jointly worked out compromise and expressed their firm wish to sign the Samarkand Agreement in April 2003. Responding to requests from the C5, the NWS presented their comments or questions in written form. To date the C5 are still studying these comments. As soon as

they have completed their examination the C5 have requested the RCPD to organize yet another expert-group meeting in the region.

Future Prospects

In the Final Document adopted by The 2000

NPT Review Conference, the Conference regards the establishment of NWFZ as a matter of priority and expressed their support of the C5 efforts for the establishment of the CANWFZ. "Principles of Nuclear Weapon Free Zones" adopted by the 1999 United Nations Disarmament Commission⁷ reiterated the basic principle that, namely "NWFZs should be established on the basis of arrangements freely arrived at among the States of the region concerned." With respect to the obligation of the NWSs, the Principles refers that " The NWSs should assume in full their obligations vis-à-vis NWFZ upon signing and ratifying relevant protocols including strict compliance with the status of NWFZ and, through the signing of relevant protocols, enter into binding legal commitments not to use or threaten

to use nuclear weapons against the states that belong to NWFZ."

Recalling the past history of the negotiation of existing NWFZ treaties and consultations held between the NWSs and state parties to such zones, it is not surprising to note that the NWSs took more than ten years to sign Protocols and it is almost an established practice that they put reservation on Protocols when they sign them. The C5 should carefully study the NWS's comments and questions and respond to them. While some comments of the NWSs may be acceptable, the C5 may not be able to make concessions on some Articles since they are the reflection of their intense work and of their security needs. As the C5 indicated before, they want to consolidate the legal status of the Samarkand Agreement by signing it. For that purpose, they should set a date for sometime this year. Being given special status in the NPT, the NWS are responsible for nuclear disarmament and nuclear non-proliferation. In relation to NWFZ they have responsibilities and obligations to support such zones as requested in the above-mentioned Principles. It is our hope that the NWS welcome the genuine desire of the C5 for a nuclear weapon free Central Asia and support the Samarkand Agreement from a much broader and noble point of view. The C5 should make a move from Samarkand to Semipalatinsk. 

^{*7} : A subordinate body of the UN General Assembly mainly dealing with disarmament related principles.

冥王星 ④
(Pluto)

A Section of Energy History – Part VIII
A Country Having Coal in the
North and Water in the West

Shigeru Goto



"As soon as the rainy season is over, cats climb up the trees."

Kajin Aioigaki

Since the olden days, the Japanese people have taken to the small signs of spring and autumn. However, the end of the rainy season is different. Summer arrives suddenly, as if a magician made a sweep with his wand. Maybe because I was born in July, summer is my favorite season with its bright sun and blue skies.

One weekend after the end of the rainy season, I opened wide my study window to let in the clear summer breeze. It was not hot.

"As I open my books to dry and tear letters to discard, how blue the sky!"

Suiha Watanabe

Thinking how many more summers I would be able to greet again, I break down the untidy mound of materials and bring out books that I had shoved deep into my bookcase. "Bakusho" is a word meaning the drying out of books and is used to indicate summer in Haiku a Japanese

poem. I really enjoy this annual book drying. Sometimes there is a new discovery, and I lose consciousness of time.

As I picked up Mosa-san's essay, The Recommendation to Reading and looked through it, the following passage came to my eye.

"As I read in the train, a plain clothed detective from the special political police, who had followed me like a "tsukeuma" (a person who follows a reveler home to collect the bill of his pleasure) looked in and put me in handcuffs just because he had found the word "Social." I ended up being thrown in the slammer (jail) for many months."

Mosaburo Suzuki (Mosa-san) used to be a newspaper reporter before the War. He was involved in the proletariat movement, and was a politician who became a Diet member after the war. This Mosa-san became the chairman of the Japan Socialist Party, which is capped with the word "Social." I, who ended up working at the headquarters of this Socialist

Party, was drawn by Mosa-san 's human charm, who had a picture by Yumeji Takehita within his study full of large amount of books and documents.

When I look back on it, the leadership by excellent politicians within the Socialist Party did not last long. Mosa-san 's good friend, Yoshimichi Ito, passed away when he was yet young. Numa-san (Inejiro Asanuma) was killed by the sword of a right wing. Hiroo Wada, Mosa-san, and Jotaro Kawakami, all first generation leaders of the Socialist Party, passed away in succession between 1955 and 65.

With regard to nuclear energy, the period when we lost those people with elucidating intelligence, and the period when the mention of nuclear power was enough to freeze the Socialist Party are subtly intertwined. Such things did I think about on that day of Bakusho.

From within the mound of materials, I found the "List of Deliberation Materials on Bilateral Agreements

related to Nuclear Energy. This was a piece of paper on which was written a memo of each Party's yeas and nays within the House of Representatives Foreign Affairs Committee.

The Socialist Party agreed to the "Japan-U.S. Agreement for the Peaceful Uses of Nuclear Energy" which was submitted to the Diet in December 1955. This was Japan's first international agreement regarding nuclear power. In addition, the Socialist Party said "yea" to the "Agreement between Japanese and U.S.'s Atomic Energy Commissions concerning the Lease/Purchase of Special Nuclear Materials" and "Japan, Great Britain and Northern Ireland Agreement for the Peaceful Uses of Nuclear Energy" but for some reason, from the "Japan-Canada Agreement for the Peaceful Uses of Nuclear Energy" the Socialist Party turned to the "nay" vote. Since then, they have objected to all of the agreements between Japan and the U.S., UK, France, Germany and Canada except those concerning the IAEA (International Atomic Energy Agency). This was influenced of course by the frequency of incidents in the early years of Japanese nuclear power plants, but still I do not understand the reason for such an alteration.

What you could say was emblematic of this was the reaction toward the Japan-China Agreement for Cooperation toward the Peaceful Uses of Nuclear Energy, which was

ratified in May 1986. The Socialist Party, which had begun to freeze up like they had seen a ghost just by hearing the word "nuclear energy" voted nay without giving any rational reasons. I left the room right before the vote at the Diet plenary session in protest of the Party's decision. As I looked at the next day's newspaper, it said that "Five Members including Mr. Goto left the session." Especially because I had not planned this exit with any of the others, I felt better knowing that there had been others who had not been able to stand it and did not participate in the vote.

Exactly one year earlier, I had sent a long article to the "Economist" magazine (issued on July 23, 1985) with the title "The Japan-China Nuclear Energy Agreement is the litmus test for the Socialist Party." I urged "a positive response concerning China's nuclear policy" out of worry that depending on the response for the ratification of this agreement, the contrariness of the Socialist Party's nuclear energy policy would be revealed.

I have traveled to China several times. It was in the summer of 1960 that I visited the Sanmenxia—that which a past emperor tackled saying "one who rules the Hwang Ho (the Yellow River) rules the world." I can never forget how moving it was to see the site where they had just succeeded in closing off the Sanmenxia where the mudbanked water swirled. They were about to con-

struct 4 power generators each of which would generate 200MW of electricity. I felt thrilling as I heard the roaring of the Hwang Ho, which shakes the heavens and let the earth resound.

It was when I visited China in July 1984. I just happened to obtain a copy of the Beijing Weekly Review in which there was an article by Chinese Nuclear Association Chairman Geng Shengjie called "Let Us Develop Nuclear Power Project in China." Most of this article was on securing safety and it was the following points that drew my attention.

"Electricity generated in China has increased by approximately 80 times, from the 4.3 billion kWh in 1949 to 351.4 billion kWh in 1983, but still cannot fulfill the demands of economic and social development. For the last several years, almost every year there has been a lack of 40 billion to 50 billion kWh, which has resulted in blackouts, and still half of the farming villages are unable to use electricity."

I had heard that China did not have enough electricity, but I saw the strong determination of China with regard to constructing nuclear power plants in the sentence "We must cover this lack with nuclear power generated electricity."

"Electricity generated thermal power increased in 2000 to 900 billion kWh from 240 billion in 1980, and they plan to increase hydro power from 58.2 billion kWh to over 200 billion but still they will be lacking

approximately 100 billion kWh. They must make up for this lack with nuclear power."

It was 1970 when Premier Zhou Enlai answered to such appeals with the instruction to "develop 10 million kW of nuclear power by the end of the century." The cultural revolution cast a dark shadow on this period, but at National People's Congress (NPC) in 1978, Chairman Song Ping of the State Planning Commission reported that "one of the issues that must be faced in the economic and social development of the Chinese people is the setback in energy, transportation, and shipping areas, especially in the lack of electricity and railway transportation." He clarified their policy to not only continue with their own development of nuclear energy but in obtaining the cooperation of countries advanced in the uses of nuclear energy and incorporate these technologies.

The reaction of other countries to such movement by China was swift. First, President F. Mitterand of France signed a nuclear energy cooperation agreement during his visit to China in 1983. The next year President R. Reagan of the U.S. visited China and initialed an agreement. Next, in the same year, German Premier H. Kohl signed an agreement during his visit. In 1985, news that Premier Zhao Ziyang and British Prime Minister M. Thatcher signed a nuclear energy cooperation and new economic cooperation agreement was heard throughout the world.

Japan started its discussion concerning the future of the Japan-China nuclear energy cooperation in September 1983 at the Third Japan-China Council of Ministers. The method and areas of cooperation, securing peaceful uses and other points to be included in the agreement could be agreed upon by the end of 1995.

I wished to hear the direct opinion in the main land as to the actual situation of China's nuclear energy development plan before the Japan-China nuclear energy agreement needed to be ratified in the Diet, so I flew to Beijing right after the Chinese New Year. An old acquaintance, Vice Manager (Undersecretary) Chen Zhaobo greeted me with a big smile when I visited the China National Nuclear Corporation. Specialist, Scientists and engineers, all welcomed me with great enthusiasm.

"The Chinese energy resources distribution is unbalanced geographically. Coal is centered around Northern China, hydraulic resources that can be developed are within the wild mountain ranges of South Western China. The Yanhai district, which accounts for 50% of industrial manufacture is poor in electric power resources." Mr. Chen's words became more and more heated as he talked of the urgent need for developing nuclear energy while pointing to a large map of China.

"Chinese economic construction will be centered around the Yanhai District in the east from now on, so it

will be difficult to transport the resources within the country who is rich in coal in the north and rich in water in the west. It would necessitate a large investment in constructing the industrial infrastructure. The only solution to the serious energy lack in the Kwangtung, Shanghai, Jiangsu, Zhejiang and Lioing, which will be the center for industrial development, is nuclear energy."

In response to the ardor of Mr. Chen or no, the translator's voice also became high pitched. I nodded often in understanding as he went on to give me a very clear explanation, including numbers, the 7th plan that was instituted in 1981, and the 8th plan which was then now in the formulation stage.

I still remember Mr. Chen's face as he shook my hand warmly when I was about to leave, saying, "I understand the allergic reaction that Japan takes toward nuclear energy as a country that has suffered a nuclear attack, but Japan should view nuclear energy without getting emotional, from a scientific standpoint. Japan has long experience in the peaceful uses of nuclear energy. We would like to incorporate these scientific and technological accomplishments and experience and humbly learn from them."

When we ended our two and a half hour talk, I was praying that Japan and China could create a strong cooperative structure for nuclear energy development. It was cold outside in Beijing despite the

coming of spring, but I was drunk with excitement.

The biggest issue in the Japan-China nuclear energy agreement was how to secure peaceful uses. China possesses nuclear weapons, so that negotiation took many twists and turns, but we can highly evaluate Japan's effort to strongly set the limitation to peaceful uses by including the application of the IAEA safeguards to the agreement. This is why I included my trip to China and conversation with Mr. Chen in my article to the "Economist" magazine urging the Party to actively agree to the agreement.

The Japan-China nuclear energy agreement was deliberated in the Foreign Affairs Committee in the Diet. From the Socialist Party, Susumu Kobayashi and Tamio Kawakami stood for questions, but even as I read through these questions again in the memo, I could not find any reason for disagreeing. Rather, Mr. Kobayashi ended his personal questioning with the statement "This is an agreement in which Japan's opinion has been fully incorporated, and it is an international agreement in which such friendly direction by China has been shown, so personally I believe that this agreement should be ratified with good will..."

Mr. Kobayashi had come to me before this meeting to tell me "I have read your article. I am in complete agreement." In the questioning session, my opinion was used in many

instances. However, the Socialist Party voted against it, without any debate on reasons for voting against. Maybe because the members were at odds, but even from the minutes I cannot find any reason for voting against the agreement.

As far as I know, the only criticism of my article in the "Economist" came from a booklet called "Rolling Fire—A guide to the local opposition movement for nuclear power" which is put out by the Socialist Party Nuclear Power Countermeasure National Communication Conference. It was a personal attack on myself which read "While he utilizes the title of a Party VIP, he is used by industrial and commercial magazines, making the Liberal Democratic Party and monopolistic capital happy, and making those all over the country who are opposing nuclear power unhappy."

They gave misplaced criticism saying, "The argument of Goto's article for agreeing to the Japan-China nuclear energy agreement says 'The Chinese people want to construct nuclear power plants and need cooperation of Japan to realize this. Even if we agree to this for the good relations between the two countries, this has no reason to progress into promotion of nuclear energy development within Japan.' Such an argument is fragmented." It is I who feels sad to be thrown a stone hardened with ideology from within my own Party of "You are just making the LDP (the ruling party) happy" - espe-

cially because this is not a policy debate.

I had heard that within the Socialist Party's Executive Board Committee many thought that the Party should vote for the agreement, but the Party decided to oppose it due to pressure from a few activists. Whether this was right or not, is still unclear. I felt sadness in the lack of leadership in my Party. Important policy and party positions are decided at the Party convention. Despite those that come to this convention as delegates are the activist party members from the outlying regions. Nothing can be decided by ignoring the voice of such party members. Although it is natural that we must respect the voice of those party members who are active in the outlying regions, the problem which came to the head with regard to nuclear energy was that the central leadership called the democratic centralism of party administration is not sufficiently realized.

The executive office has called at the convention time and time again to become a Party that is able to take government leadership and create renewal. We have shouted loudly for a "New Socialist Party" but each time we have a convention, there is confusion and we have not been able to overcome the divergence of democracy and concentration. I still look back at our Party history as a bitter memory.

(Former Member of the
House of Representatives)

Swiss Referendum Says No to the Phase-Out of Nuclear Power

- Awaking from the Nightmare of the Chernobyl -

All Surprised by Result

Dr. Beat Wieland, Head of Nuclear Energy Section, Swiss Federal Office of Energy (SFOE) began with "I was surprised by the result of the referendum, but I think all of our citizens were surprised." Many people had thought that, out of the two petitions made public by the people concerning nuclear power, the "Strom ohne Atom (Electricity without Nuclear)" would be rejected but that "Moratorium Plus" would be accepted as in the public poll before the referendum.

The "Electricity without Nuclear" petition was to shut down all the 5 reactors of all nuclear power stations within 30 years, starting with Unit 1 and 2 of Beznau nuclear power stations and the Mühleberg plant in 2 years, and the Gösgen and Leibstadt plants in 2009 and 2014 respectively. This petition was so unrealistic that all thought it would be rejected.

With regard to the Moratorium Plus, however, it had already been decided in 1990 by referendum that no new nuclear power plant would be constructed for the next 10 years. The new petition was for the continued freeze on construction for another

10 years, and an additional condition to stop the present reactors after 40 years of operation. Although there was a possibility of extending the 40 years by another 10 years, in order to extend the life of operation for over 10 years, another referendum would need to be held. If this petition was accepted, the Beznau nuclear power plant, which began operation in 1969 would reach 40 years of operation in 2009, and to extend the life of operation for another 10 years, it would take 5 years to go through all the procedural requirements for the extension so that they must start the extension procedure right away and put it to a referendum. The estimated cost of this was great.

Reasons for No Are the Worsening of Economy and Employment

The battle between those for and against nuclear power was fierce before the May 18 referendum. It seemed that even those against nuclear power thought that the "Electricity without Nuclear" was too unrealistic and would be rejected. And, both those for and against the petition increased funding and personnel toward this referendum.

Those for nuclear power urged citizens to vote against the petition with the banner "For safety, climate preservation and employment - Say no to the 2 nuclear power petitions" ("Für Sicherheit, Klimaschutz und Arbeitsplätze: Atom-Initiativen 2 x Nein") on the cooling tower of Gösgen nuclear power plant close to the railroad, in imitation of the style of such organizations as Greenpeace who opposes nuclear power. Whether it was the fruit of such a campaign or not, neither the "Electricity without Nuclear" nor "Moratorium Plus" passed, with 66.3% and 58.4% of the voters against the respective petitions.

The reason for such a result of the referendum is under analysis at the SFOE as well, but one reason that can be thought of for both petitions having failed is the worsening of the Swiss economy and employment. Due to increasing costs of human resources, there was a hollowing-out of the Swiss industry, and unemployment in 2001 climbed to 1.9%. The inclination is the same as that of Japan. Swiss unemployment reached the highest rate seen since the great depression - an average of 4.5% - in

1993, and this is still fresh in the minds of the people. It is thought that this is one of the big reasons why the people voted against the petitions. It is natural that the advocates for nuclear power would point this out - their argument was that by moving out of nuclear power, energy costs would increase and employment would drop.

The argument of the opposition was lacking in persuasiveness and they did not even have an alternative suggestion. In the past, the common people used to say how the use of solar energy was important, but now they have acknowledged that this is not a concrete measure. Wind power is also not thought desirable by the common people when considering the importance of the Swiss landscape to its sight-seeing business, and the unstable supply of power.

In Switzerland, as well as the other European countries, there was a big movement against nuclear power after the Chernobyl accident, but as the Head of Nuclear Energy Section in SFOE said, "time has passed." The argument by the electric company related persons concerning this referendum was that "the Swiss nuclear power plants have checked for safety themselves, and it would not be good to move out of nuclear power to import expensive power from other countries." No one welcomes expensive electric bills.

Referendum

Any issue for which the set number of signatures is obtained can be taken to a referendum, which will be imple-

mented in the federal or cantonal level. A referendum has been held often in Switzerland, and in this May 18 referendum, there were 9 petitions. There are an average of 4 referendums a year. For a referendum to amend the constitution there must be 100,000 signatures, and to implement an amended law for nuclear power which has been put forward, there must be 50,000 signatures.

Switzerland Is De Facto Member of EU

At the 1815 Vienna Conference, Switzerland was recognized as a permanently neutral country and with the promulgation of the 1874 constitution, the present Swiss Confederation was pretty much established. In order to maintain this neutrality, Switzerland did not participate in the UN or EU. However, since the end of the cold war, there has been a change in the strict neutrality policy, and while participation in the UN did not pass in the May 1986 referendum, the lower house made a resolution in March 1992 toward UN participation and preparation for this virtually began. UN participation ended up being supported in the March 2002 referendum, and the September UN General Assembly made a unanimous decision to accept Switzerland as its 190th member.

Switzerland applied for EU membership in May 1992, but in the December referendum of the same year, the preliminary European Economic Area (EEA) Agreement was rejected, and again in March 2001, it was also rejected in the referendum

regarding early participation in EU. Switzerland has a cooperative relationship with the EU in various areas even though it is not a member of the EU, and is in a relationship of mutual influence with the EU. With regard to the Swiss law as well, the Swiss are proud to say that they have adapted in an even more EU fashion than the EU countries.

Because it is a neutral country, Switzerland has always been known for its work in trying to supply its own energy and food. However, after World War II, the international community moved toward the use of oil and also because of the end of the cold war and the globalization of international society, the Swiss self-sufficiency rate dropped. In 2001, Swiss self-sufficiency of energy was 20.2% (Japan; 20%, out of which 16% is nuclear power), and food was 61% in 2000 (Japan; 40%). The Head of Nuclear Energy Section said, "It is no longer an age in which we must grow potatoes on soccer grounds." Within the area of power generation in Switzerland, hydraulic power accounts for 60% of the whole, while the performance of nuclear power was good in 2002 and increased to 39.5%. Thermal power was 3.7% (2001).

Future of Nuclear Power

Those concerned say that the presently operating nuclear power plants in Switzerland will operate for at least 50 years, and the new ones could operate for 60 years. To the question "Should not new nuclear power plants be constructed after those in operation are closed and dis-

mantled?" The Head of Nuclear Energy Section replied, "You are right. One cannot build a dam for water power on top of a previous dam, and water levels are not increasing." He also expressed his opinion that, "Concerning the Kyoto Protocol, Switzerland is not a model country - our energy consumption is increasing by 2% every year. The goal of the energy policy to create 0.5-3% regenerated energy has not been attained. For this reason, we have made up for this by increasing the heat efficiency of nuclear power plants by 5-10%. It would probably be impossible to construct a new nuclear power plant to cover increasing energy consumption - for this, a referendum would be necessary."

After Referendum - Amended Nuclear Energy Law Made Public

In Switzerland, a Nuclear Energy

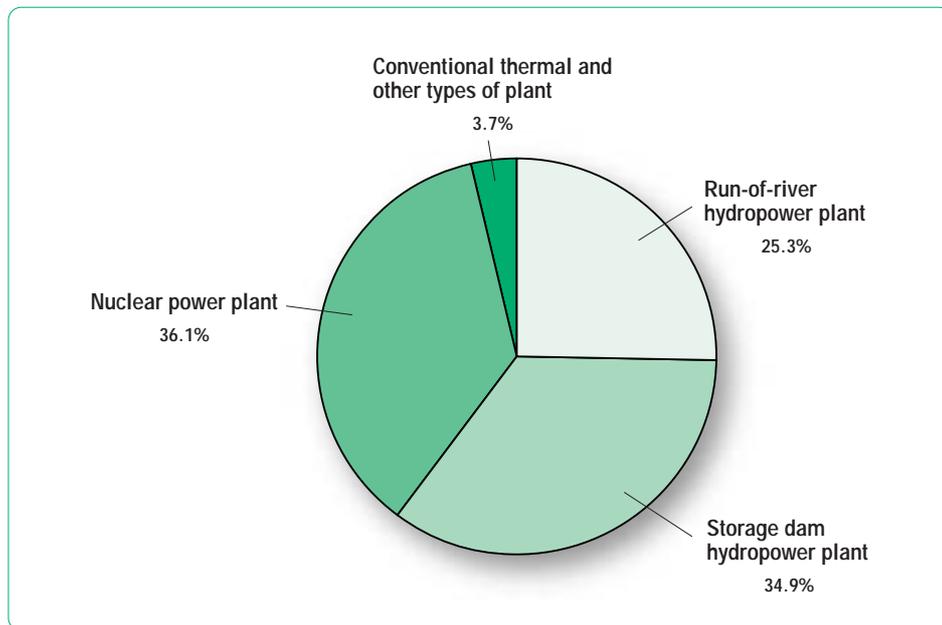
Law was formulated in 1959. Since then, for the last 20 years they have been working on amending this law and the draft revision for both the Nuclear Energy Law and Energy Law have been completed. The Government was planning to bring this amended Nuclear Energy Law to a referendum, but the opposition had objected to the draft saying that it was pro nuclear power, and the government had not been able to put it to referendum. However, with the result of this referendum, the draft that was passed by the Federal Council on March 21, 2003 was announced fast on May 27.

Within the process of amending the Nuclear Energy Law, the Swiss government included concessions toward the opposition such as stopping the reprocessing of spent fuels after the contract with France and the UK was completed. The Federal Council

changed this to conduct a 10 year moratorium after completing their obligation toward France and the UK with regard to reprocessing.

Despite such things, they were able to include many changes in rules concerning the disposal of radioactive waste. For the permission, construction, operation and closure of final disposal site, the jurisdiction had been given to the cantons, but in the amended law, it was set that only the federal government could give permission. Until now, the federal government had the jurisdiction for permission regarding nuclear power plants, but the cantons had the jurisdiction for the waste disposal site. This was because the jurisdiction for mining was given to the cantons and waste disposal was thought of as a part of this. Because of such division of jurisdiction, the disposal site, that the federal government had been constructing would be opposed and stopped by the cantons. In addition, because Switzerland is a small country and the construction of disposal site could and had actually caused diplomatic problems with the countries around it, it was thought that it was better foreign policy for the federal government to have jurisdiction for this.

With regard to this nuclear power amendment law, a referendum will be held for the enforcement of this law if 50,000 signatures were gathered within 100 days after the announcement. However, at this point, Greenpeace, Energy Foundation and other opposition parties have been allowed their various opinions within



Electricity production per type of power plant 2001

the draft amendment, and their two petitions in the recent referendum were denied so they believe they will not be able to get 50,000 signatures in 100 days and are not planning to conduct a signature collecting campaign. The Head of Nuclear Energy Section told us, "We are surprised at such a turn of events." This amendment law will come into effect in 2005 as long as there is no referendum to reject it.

MOX Fuel and Uses of Uranium after Reprocessing

In Switzerland, recycling of nuclear fuel is conducted at a far-more daily operation than Japan. What is the same as Japan is that the fuel that is used in Switzerland is sent to the UK and France to be reprocessed. The plutonium attained through reprocessing in these two countries is reused as MOX fuels (plutonium/uranium mixed oxide fuel) in the 2 nuclear power reactors in the mother country. The MOX fuels for these nuclear power plants are manufactured in the Sellafield Plant in the UK and the Dessel Plant in Belgium.

In the Gösgen nuclear power plant, the uranium left after reprocessing is also used as fuels. Uranium fuel before it has been burned in a nuclear reactor is enriched into 3-4% in uranium-235. After it is burned for 4 years in a nuclear reactor and isolated in a reprocessing plant, the uranium has only 1% of uranium 235. This uranium is sent to Russia where it is fabricated at the Siemens's plant. The Siemens operates this plant in Russia.

Uranium in, which there is only 1% of fissionable uranium-235, cannot be used as fuel by itself so it is mixed with 20% enriched uranium for nuclear weapons in Russia to fabricate 4-5% fuel and sent back to Switzerland. This is then sent to Gösgen Power Plant. In last year, fuels for Gösgen Power Plant were all from this reprocessed uranium or MOX fuels. With regard to the use of



Signs on the cooling tower of Gösgen nuclear power plant which saying "For safety, climate preservation and employment - Say no to the 2 nuclear power petitions."

this fuel, there is no concern by the common people. It makes us wonder what all the fuss about MOX fuel is in Japan. 

Joyo MK-III Core for Use in Various Technical Developments Goes Critical

At one of the Japan's national research centers - Oarai Engineering Center (Oaraimachi, Ibaragi Prefecture) of the Japan Nuclear Cycle Development Institute (OEC/JNC), a three-year upgrading program was implemented in order to improve the core performance of the experimental fast reactor Joyo. On July 2, criticality was accomplished with the MK-III core during trial operations. Performance tests will be conducted until the end of October, and full-scale operations with the MK-III core will start from April 2004.

Since first reaching criticality in April 1977 as Japan's first sodium cooled fast breeder reactor (MK-I core at that time), and through its operations as an irradiation core (MK-II), Joyo has accumulated large amounts of data concerning the reactor core performance and plant characteristics of a liquid sodium cooled fast reactor for about 25 years. Countless tests have been conducted during this time, and Joyo has filled the role of the main pillar for research and development of fast breeder reactors (FBRs). With accumulated operation time of 60,725 hours and accumulated thermal output reaching 5,061GWh, Joyo continued to operate very smoothly, with no serious troubles such as sodium leaks or fuel failure.

Number of plutonium/uranium mixed oxide fuel (MOX fuel) assemblies produced for the Joyo core reached 562 fuels during this time, and the amount of plutonium in itself reached approximately 1.5 tons (metallic plutonium equivalent). It has been proven through the use of this fuel that MOX fuel exhibits superior characteristics within FBRs. In addition, in September 1984, spent fuels from Joyo was reprocessed to extract plutonium which was then loaded into the Joyo reactor core again as new MOX fuels, realizing a small scale nuclear fuel cycle within an FBR. These accomplishments can be said to show the high quality of the MOX fuel, as well as the superior irradiation reliability and stability within FBRs.

With the first MK-I core of Joyo, breeding performance was confirmed as a core for breeding plutonium. The MK-II core was

operated as a plutonium burning reactor, replacing the blanket fuel assemblies (those for producing plutonium that were put around the reactor core) with stainless steel reflectors with an approximately 0.3 conversion ratio of plutonium (1.2 with blanket fuel), in order to make the core suitable for an irradiation test facility for various fuels or materials. Through the tests with MK-I and MK-II, it was verified that FBRs could use plutonium fuel flexibly.

As shown above, Joyo has conducted fuel/material irradiation tests and obtained much irradiation data necessary for the practical application of the FBR cycle such as with the FBR prototype Monju. Further, with the start of "strategic research for the practical application of FBR cycle," the upgrading program (MK-III Program) was put into effect to increase Joyo's irradiation capability as a fast neutron flux irradiation testing reactor, to cope with the increasing various requirements for irradiation tests for the fission reactor fuel/material development, fusion reactor material development as well as for basic research of domestic and overseas research institutes.

In the MK-III Program the reactor core was modified to increase the maximum fast neutron flux density of the core to 1.3 times of the previous core, and increase the irradiation test region to approximately 2 times that of before, enabling more efficient and speedy irradiation testing. In addition, large scale modifications were made toward the sodium cooling system

because the thermal output of the reactor core increased to 1.4 times. To improve the operating rate, modifications were made to incorporate a remotely operated fuel handling system. Efforts are also being made to develop more advanced irradiation technology such as development of capsule type irradiation equipment to cope with irradiation requirements of various types of fuel.

Joyo is one of the few test reactors in the world that is able to conduct irradiation tests with fast neutrons, which are necessary for development of fuel and materials for FBR, as well as having a post-irradiation testing facility next door for testing irradiated fuel. Through the MK-III program's improvements in irradiation testing, Joyo will not only contribute to the development of FBR cycle technology but will continue to be used as an irradiation reactor wide open for use in research and development by those in Japan and abroad.



Head of the experimental fast reactor "Joyo" to which the fuel handling machine has been attached.

Editor's Postscripts

◆ The Diet, which had been extended, finally finished on July 28. It feels as if this Diet began and ended with the Iraqi and North Korean issues. Since the end of World War II, I do not think there has ever been any other time at which the production of mass destruction weapons such as nuclear weapons became such a volatile issue to be debated within the international society. The possibility has arisen for nuclear weapons, which were to be possessed but could not or would not be used, to be used in some place. It must be acknowledged that whoever uses nuclear weapons will end up shaking the

very ground that they stand on.

◆ Recently, there have been many abnormal weather patterns such as heat waves and floods. What could be the reason? One of these may be the global warming. It maybe a warning to implement concrete measures for the prevention of global warming as soon as possible.

◆ This summer, with the possible shortages in supply of electricity in Tokyo, many sectors have given out the call to save electricity. All nuclear power plants which were supplying electricity to the Kanto Metropolitan area were stopped for a while,

but now Unit No. 4, 6 and 7 of the Kashiwazaki-Kariwa Nuclear Power Station, and Unit No. 6 of the Fukushima Daiichi (First) Power Station have resumed operations and with these 4 reactors, and the cooperation of business companies and households, emergency power adjustment contracts, they say they will be able to handle metropolitan power demand under seasonal weather conditions. However, if there comes a heat wave, then power demand will increase. Let us all be careful to save on electricity no matter what the circumstances.