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FOREIGN SERVICE DIVISION

TO: AMEMBASSY, TOKYO

FROM: THE DEPARTMENT OF STATE

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99-9137
57-1711
July 10, 1956

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Administrative routing stamp with handwritten notations and numbers.

Subject: Japan's Program for Peaceful Uses of Nuclear Energy

From June 3 to 11, 1956, a team of specialists headed by Dr. Marvin FOX of the Brookhaven National Laboratories visited Japan to discuss the proposed Asian nuclear center in the Philippines. Attached are a memorandum summarizing an Embassy officer's impressions of the Japanese reaction to the Brookhaven team visit, and particularly their attitude toward peaceful uses of nuclear energy, and a subsequent memorandum of a conversation on Japan's atomic program with Mr. Sato Ichiro MATSUI, head of the Foreign Office section dealing with atomic matters.

Evident throughout the visit of the Brookhaven team to Japan was the widespread interest and enthusiasm among all key groups, including the scientists, for the peaceful uses program. Furthermore, in their avid desire to close the scientific gap in their work in the nuclear field created by the post-war hiatus in experimental research, the Japanese are extremely anxious for guidance and assistance from abroad, particularly from the U.S. and Great Britain. However, the Japanese have tended to view the American and British nuclear energy programs as essentially competitive. As a result, the most controversial issue today in the nuclear energy field is the dispute between U.S. and British power reactors. A study mission headed by Mr. Ichiro ISHIZAWA, a member of the Atomic Energy Commission, was selected on June 29 and will depart about the middle of July to make a two-month study of the British power reactor program. It would appear to be equally important that this or a similar mission have the opportunity to view and discuss the U.S. program for atomic power development.

ACTION REQUESTED: The Embassy would appreciate policy guidance and information to assist Embassy officers in answering inquiries and participating in discussions concerning the problem of U.S. vs. U.K. power reactors which is likely to be a major issue in the nuclear energy field in Japan for some time to come.

For the Ambassador:

George A. Morgan
George A. Morgan
Counselor of Embassy

Enclosures:
1. Impressions on the Brookhaven Team Visit
2. Memorandum of conversation
cc: ICA/W

Assistant Secretary

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FOR COORDINATION WITH 575/4

NAZI WAR CRIMES DISCLOSURE ACT

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Date: 2005

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MEMORANDUM

TO: Director, Intelligence Division

1. Japanese Interest in Peaceful Uses of Nuclear Energy

The interest and enthusiasm among all groups for the peaceful uses program are tremendous. While the drive and energy shown by industrial groups, particularly the electric power industry, and by important conservative political circles is already well recognized, the enthusiasm among Japanese scientific circles has been less fully appreciated. Japanese scientists in almost every discipline are making tremendous efforts to close the gap created by the immediate post-war void in experimental research in the nuclear field. During the past year particularly there has been a tremendous change in the attitude of Japanese scientists to the development of nuclear energy. Japanese scientific circles have apparently recognized that the only way to remain in the forefront of international scientific activity is to engage wholeheartedly in research and experimentation in the nuclear field. Further on, these scientists are naturally fascinated by the scientific problems posed for study. These factors have tended to overshadow in the minds of the Japanese scientists the historical antipathies to this field so evident even as little as a year ago.

The industrial elements led by the power industry have an unquenchable curiosity about nuclear energy. They have convinced themselves that not only is there a bright future in developing peaceful uses of nuclear energy, but that these projects can be realized in a relatively short period. The industry people have approached the problem with such intensity and thoroughness that there is little doubt that they will make great progress in the field of nuclear energy given sufficient funds to finance the necessary expensive equipment required.

While the widespread and enthusiastic interest in the peaceful uses of atomic energy, the Japanese must still solve some very basic problems if their atomic energy program is not to falter. In the first place, there is a considerable lack of coordination and cooperation between the three principal groups interested in atomic energy—the political element led by the IAI and the JSC, the scientists, and the industrial element—as well as a disunity within each of these groups. All three groups are vying for leadership and control over the program and each has a slightly different slant on the program. Nakasone and Nakasone look upon themselves as the champions of atomic energy in Japan and naturally are interested in the political and economic results from their activities in this field. While Nakasone and Shofu ostensibly are working together, there are differences in their viewpoints. Of the two, Nakasone is far more optimistic about the problems involved in developing atomic power in Japan and far more cautious and concerned about the program on an ostensible, but realistic basis. The scientists are concerned primarily with protecting their interests and are uninterested in either domestic or international control. While they are greatly interested in the development of atomic power, they are not interested in it so soon and perhaps in power reactors which are not yet considered to be unambiguously beneficial for Japan.

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Most of the scientists I talked to were, needless to say, at Shoriki's announcements about developing atomic power within two or three years, pointing to the fact that, in their view, they have really grasped the practical and scientific problems involved. All scientists are eager and anxious to have their energy capabilities applied to industrial and other practical uses of atomic energy and wish to be free to conduct research and development of their own choice. With the exception of a few scientists who are still concerned about the lease agreement for enriched uranium which they feel will permit U.S. control over their scientific studies and possible development of the power source of all Japanese reactors. (I would rather from what Mr. Fox said that the attitude of Japanese scientists is very similar to that of our own scientists who likewise resent governmental control over their activities.)

Industrial elements appear to be far less suspicious of governmental intervention. Nevertheless, several of the scientists in the Atomic Industrial Forum made clear in private conversations their uneasiness with the political uses made of the atomic energy program by Shoriki. In this connection, it is important to note that the electrical power industry has worked very closely with its counterpart in the U.S. and it is inclined, if at all possible, to look for assistance and guidance from the U.S. in the development of atomic power in contrast to Shoriki's present "love affair" with the British power reactor.

The opposition for leaders in the nuclear energy field and differences about the direction of the Japanese program have made it quite difficult for Japan to achieve agreement on a full scale, long range program. At the present time, there is a considerable lack of leadership and guidance over the nuclear program. Many scientists in the field feel that until a long-range plan is agreed upon by all concerned, the development of peaceful uses of atomic energy in Japan will be hampered and retarded.

Atomic Energy Center

The Japanese will definitely participate in the Asian Center although the feeling is to let the Center in Japan still remain a "not Japanese" however, the Japanese are not yet prepared to make any sacrifices in their own program for the sake of the Asian Center. Therefore, the level of the Japanese contribution to the Center is still very much in the air and it tends to be somewhat uncertain as to our ability to do constructive utilization of this center both to Japan's program and to the Asian Center and position in Asia.

Attitudes of Japanese Scientists

In addition to Japanese scientists, the general attitude is expressed by the extent to which they look to the U.S. for scientific assistance in the present day. As a group, for example, they speak, read and understand English far more fluently than practically any other element of Japanese society, including the businessmen and politicians. A large number have been educated in the U.S. and all follow U.S. scientific publications very closely.

friendship of interests with various scientists who are particularly pleased with the scientific interest and work in their research. Incidentally, one of the guests mentioned himself and his activities quite often at the various social functions in connection with the postwar visit which will the U.S. have in the defense attaché. Apparently, he is exceedingly anxious for any contact or possible with our scientific community.

Dr. K. Ito, Dr. FUJIOKA, and several others also pointed up the troubles of the Japanese scientific community. These men protested that this was a false impression created by a superficial but very small minority in the Japanese Science Council. They stated that they only reported the statements of the left-wing elements at the Science Council meetings and ignored the counterbalancing statements of others. As the former more moderate resolutions adopted by the Council. (In this connection, it should be noted that the Science Council resolution on banning nuclear tests gives a point of emphasizing the need for international agreements on the control of atomic weapons as a means to achieve a suspension of nuclear tests. It is significant that by a large vote of the membership of the Japanese Science Council, a relatively moderate in its political viewpoint and, to a considerable extent, apolitical, their basic attitude is a serious reservation of the freedom of the scientific research and development from governmental control. To a large extent, a large portion of the pre-war scientific activity was very much directly or indirectly controlled by the government.)

It should also be noted in recent years the Japanese scientific community has been taking a greater interest in applied research. However, the scientists have often found Japanese industry reluctant to support the development of their talents in actual production. The divergence between scientific research and practical industrial application has been a major factor in Japan and has retarded the development of Japanese industry. There has never been a tradition of close cooperation between science and industry. Scientists working on problems of applied research have found little encouragement or assistance from industry. In this connection, Dr. Kaya mentioned that several of his own research efforts have been developed by American corporations and no Japanese corporation was interested.

4. U.S. vs. U.K. Power Reactors

One of the most controversial issues in the atomic energy field is the issue of U.S. vs. British power reactors. As Dr. Shoriki's forthright and somewhat discourteous statements about the British reactor, and after some reflection, this issue is far from a technical one, with the exception of Shoriki, is extremely technical in nature since they concern the indications of any decision, in particular the consent required for a power reactor of substantial size. It may also be true that Shoriki himself has not actually made up his mind, but he still has not taken any position on discussing a power reactor in the near future. The issue is a delicate one between the U.S. and the U.K. and it is not clear how the Japanese

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have decided upon a British reactor and we, therefore, still have a very good opportunity to re-empt atomic power development in Japan, if we so desire. In this connection, it would appear important to arrange an opportunity for members of the Japanese Atomic Energy Commission to view and discuss fully our program in power reactors as well as the British program. Dr. Fox is of the opinion that Sir Christopher HUTTON has probably oversold the British program and, incidentally, failed to tell the Japanese that the British reactor contains a very secret piece of equipment which is critical to its operation. This problem of U.S. vs. U.K. power reactors is likely to be in the forefront for some time to come and it might be useful to seek some guidance from Washington in handling informal conversations on this subject with those Japanese who are likely to raise the question with Embassy members.

James J.

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MEMORANDUM OF CONVERSATION

JULY 3, 1956

Participants: Mr. Sashichiro MATSUI, Fourth Section, International Cooperation Division, Ministry of Foreign Affairs
Mr. Sneider, FSO

Date: July 3, 1956

Subject: Nuclear Energy Program

At lunch today, Matsui, usually ebullient and optimistic, was quite disconsolate about the prospects for Japan's nuclear energy program. The principal reason for his low spirits is his fear that the U.S. is losing out in its nuclear energy race with Japan. Matsui has been the principal champion inside the Foreign Office for close U.S.-Japan ties in the field of peaceful uses of atomic energy since he believes that these ties are both immediately beneficial and will in the long run affect overall relationships between the two countries. Matsui made the following comments in describing the current trend of the Japanese peacetime nuclear energy program.

1. The Position of Sorekida:

Sorekida was convinced by Sir Christopher Hinton that atomic power could be developed fairly soon and on an economically competitive basis. Furthermore, Hinton's sales talk on the use of British power reactors fitted in perfectly with Sorekida's personal predilections for seeing Japan rapidly with development of atomic power. Sorekida is basically a man of action and impatient with efforts to take a more cautious study approach to any problem. On the other hand, Dr. Fey, who urged a cautious approach publicly, made a rather poor impression on Sorekida and convinced him that the U.S. was not endeavoring to speed early development of atomic power.

After Dr. Fey left, Sorekida was all for pushing ahead immediately with a contract for a British power reactor of 100,000 k.w. despite its very high cost. Hinton's talk about the economic feasibility and lack of security safeguards in the British reactors had completely convinced Sorekida. However, in recent weeks Sorekida has changed his tune and has taken a more cautious stand. His own staff within the Atomic Energy Bureau has pointed out certain flaws in Hinton's arguments and the differences between the British and Japanese problem of atomic power. They have pointed out among other things the difference in interest rates and, therefore, cost of power and, secondly, the problem of utilizing the plutonium produced by the British reactor. The British use plutonium for nuclear weapons.) Sorekida has also begun to ponder the impact on U.S.-Japanese relations of his nuclear energy policy.

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In fact, he very quietly sought to call on the Foreign Minister in order to explain his position. However, when Shigemitsu was not available, he called to Kawano, head of the International Cooperation Bureau, ostensibly to convince him on the soundness of purchasing a British power reactor but actually to sound out the Foreign Office view on the effect of this action on U.S.-Japanese relations. As a result of these second thoughts, Shiroki has adopted a new position advocating the purchase of an experimental power reactor of 10,000 k.w. and agreeing to a study mission to the U.K. before any contracts are signed. The study mission, headed by Ishikawa, will include a technical recommendation on the advisability of purchasing a British experimental power reactor. However, the mission, which will be in England from July to September, will not be authorized to negotiate with the British Government or make any contracts with private British firms. The Foreign Office has reserved the right to conduct all negotiations. No decision will be made, therefore, on the British reactor until the survey mission returns and all reports are studied by all agencies concerned. The Foreign Office has requested official permission to send the mission but the U.K. Government has not yet replied.

2. U.S. vs. U.K. Nuclear Energy Programs:

When President Eisenhower initially announced the peaceful uses program at the UN General Assembly, the U.S. was widely considered as being far ahead of other countries in this field. However, after the Geneva Conference last year, British and Russian prestige in the field of peaceful uses was greatly enhanced and has continued to rise.

The Japanese still consider the U.S. the leading country in the field of nuclear energy and also recognize that the U.S. has been the only country which has called Japan financially in this field. However, American prestige is falling for the following reasons:

- 1) The Japanese, in their enthusiasm for peaceful uses of atomic energy, are unwilling to wait for technological progress above in the field of power reactors before launching their own program. While the Japanese recognize they will have much to learn, they are also willing to make mistakes in their effort to do so. In this respect, the Japanese do not agree with the American approach which emphasizes caution and continued experimentation, particularly in the field of atomic power reactors, before any large-scale investment is made. While the logic of the U.S. position is a restricted in some circles, the Japanese have become so emotionally involved and deeply convinced that nuclear energy holds the key to their prosperity that they are unwilling to delay their program three or four years until U.S. experimentation has bearing on it.

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(2) The Japanese feel that the U.S. is concentrating too much on the military uses of atomic energy. For example, they cite the early development of a power reactor for submarines but the delay in developing atomic power reactors for merchant ships.

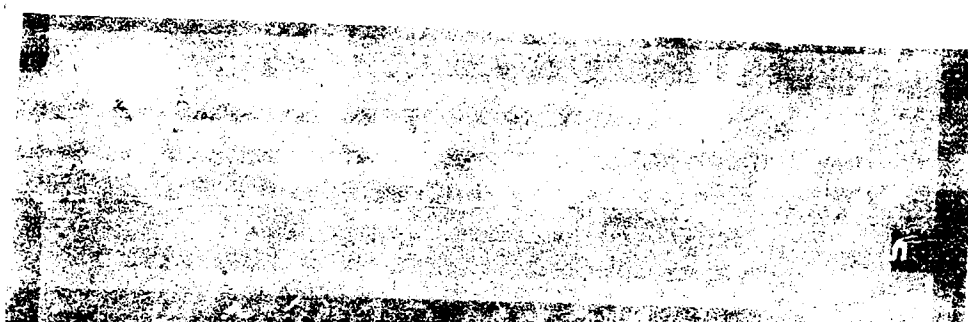
(3) The U.S. is felt to have a far less urgent need for practical use of atomic energy than either the U.K. or the U.S.S.R. due to our rich economy and adequate power resources. Therefore, there is less pressure on American authorities to hasten early development of commercially competitive power reactors or other peaceful use of atomic energy. The U.K. and the U.S.S.R., on the other hand, are faced with an immediate need for new power sources and, therefore, are pushing their programs. Furthermore, the power problems of these countries are similar to those of Japan. Therefore, the experience in these countries in developing power reactors is more applicable to Japan than that of the U.S.

(4) The U.S. is considered overly sensitive on the question of security restrictions. For example, the U.S. in leasing enriched uranium prohibits chemical reprocessing of the fuel and also requires the safe-harmless clause. The security provisions in U.S. nuclear energy agreements have particularly damaged the American influence in scientific circles who are most frightened by these provisions. The Japanese scientists and others consider the U.S. provisions a form of interference in the internal affairs of Japan and they resent their inability to have control over the nuclear fuel provided for their experimental or power reactors.

(5) Finally, the U.K. has an operating program which will produce power on a commercial basis much sooner than the U.S. program. This fact in itself has considerable appeal to the Japanese.

3. Prospects:

While the U.S. is gradually losing out to the U.K. in the field of nuclear energy, Japan has not yet made its final decision. There is still considerable opportunity for the U.S. to develop a program which will appeal equally to the Japanese. However, such a program must, in Matsui's view, stress early practical application of peaceful uses of nuclear energy - particularly power - if the U.S. and Japan are to maintain very close ties in the field of nuclear energy. The Japanese are still studying the American program and will continue to do so despite the current tension to the U.K. A group is going to the U.S. in September from the Atomic Industrial Forum on such a study mission. This group will be composed mostly of industrial and business elements who



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are more conservative than Shoriki and prone to seeing cooperation with the U.S. Mitsui recommended also that, if at all possible, Ishikawa and his group return to Japan via the U.S. in order to make a comparable survey of U.S. nuclear power development. However, Mitsui felt that we should emphasize to key Japanese the positive, optimistic aspects of our program rather than attempt to discourage their hopes of an early realization of commercially competitive nuclear power reactors.

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