

# **August 31, 1977**

# US Embassy Tokyo Telegram 13359 to State Department, 'Significance of the Japanese Offer to Delay Construction of the Plutonium Conversion Plant'

# Citation:

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# **Summary:**

The cable describing an importance of the Japanese offer to delay construction of the plutonium conversion plant in exchange of them postponing a decision for two years on co-processing.

# **Original Language:**

**English** 

## **Contents:**

Original Scan

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## Message Text

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FOR SECRETARY FROM GERARD SMITH

DEPT PASS WHITE HOUSE FOR BRZEZINSKI

E.O.11652: GDS

TAGS: PARM, TECH, ENRG, JA

SUBJECT: SIGNIFICANCE OF THE JAPANESE OFFER TO DELAY CONSTRUCTION

OF THE PLUTONIUM CONVERSION PLANT

- 1. BY SEPTEL, REPORT OF SECOND DAY'S NEGOTIATIONS NOTES THAT UNO HAS OFFERED TO DEFER CONSTRUCTION OF PLUTONIUM CONVERSION PLANT. THIS VERY IMPORTANT CONCESSION HAS SIGNIFICANCE ANALYZED BELOW.
- 2. THE PLUTONIUM CONVERSION PLANT IS A CRITICAL ITEM IN THE ENTIRE JAPANESE PROGRAM FOR THE UTILIZATION OF PLUTONIUM IN ADVANCED REACTORS. WITHOUT THE CONVERSION PLANT THE PLUTONIUM PRODUCED AT TOKAI CANNOT BE USED AS REACTOR FUEL. THE JAPANESE DECISION TO DELAY CONSTRUCTION IS AN EARNEST OF THEIR CONTENTION THAT TOKAI IS AN EXPERIMENTAL FACILITY.

## BACKGROUND:

THROUGH A CONTRACT WITH A GERMAN FIRM, THE JAPANESE HAVE SPENT DOLS. FIVE MILLION ON THE DESIGN OF A PLANT TO CONVERT PURE PLUTONIUM NITRATE SOLUTION TO SOLID OXIDE. CONCONFIDENTIAL

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STRUCTION OF SUCH A PLANT, FOR WHICH BUDGET APPROBSL ALREADY HAS BEEN OBTAINED, WAS SCHEDULED TO START LATE IN 1977 AND TO BE COMPLETED BY 1980, AT A COST OF ABOUT DOLS. 15 MILLION.

AS REPORTED IN TOKYO 12191, THE JAPANESE HAD INTENDED TO PROCEED WITH THE CONSTRUCTION OF THIS PLANT WITHOUT

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WAITING FOR THE RESULTS OF R&D ON CO-PROCESSING. THE PLANT WOULD NOT HAVE BEEN ABLE TO CONVERT A MIXED URANIUM-PLUTONIUM CO-PRODUCT TO SOLID FORM, AND HENCE A DECISION TO PROCEED WITH IT COULD HAVE BEEN CONSTRUED AS MEANING THAT THE JAPANESE HAD NO INTENTION OF GOING TO THE CO-PROCESSING MODE AT THE END OF TWO YEARS OF OPERATION OF THE REPROCESSING PLANT.

#### IMPLICATIONS:

A REVERSAL OF THE DECISION TO PROCEED IS IMPORTANT TO THE U.S. AND JAPAN FOR SEVERAL REASONS:

#### FOR THE U.S.:

- --IT DEMONSTRATES TO THE WORLD THAT THE JAPANESE ARE WILLING TO SACRIFICE THEIR PRIOR INVESTMENT IN THE DESIGN OF THE CONVERSION PLANT IN ORDER TO WAIT FOR R&D AND INFCE RESULTS ON CO-PROCESSING AND CO-PRECIPITATION.
- --IT DEMONSTRATES THAT THE JAPANESE ARE WILLING TO DELAY THE ACHIEVEMENT OF THEIR OWN INTERNAL CAPABILITY TO PRODUCE PLUTONIUM FUELS OF ANY KIND FOR ABOUT TWO YEARS.
- --THE JAPANESE HAVE ASKED US FOR ASSISTANCE IN OBTAINING AN ALTERNATE SOURCE OF PLUTONIUM FOR FUELING ADVANCED REACTORS REQUIRING SUCH FUEL IN THE 1980-1983 CONFIDENTIAL

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TIME PERIOD, SINCE THE PLUTONIUM SEPARATED IN THE REPROCESSING PLANT IS USELESS WITHOUT A CONVERSION PLANT IN OPERATION

- --WE CAN USE THE JAPANESE DECISION TO FORESTALL OTHERS WHO MIGHT WISH TO PROCEED WITH PURE PLUTONIUM RECOVERY AND CONVERSION, AT LEAST UNTIL FURTHER R&D AND STUDIES ARE PERFORMED.
- --FOR THE PERIOD IN WHICH NO CONVERSION OF PLUTONIUM IS PERFORMED, THE PLUTONIUM REMAINS IN A FORM (NITRATE SOLUTION) WHICH IS ONE STEP FURTHER REMOVED FROM BEING USEFUL AS A WEAPONS MATERIAL.
- --WE WILL OBTAIN THE BENEFITS OF JAPANESE R&D ON CO-PRECIPITATION AND THE POSSIBLE APPLICATION OF THIS TECHNOLOGY TO A FULL SCALE PLANT.

### FOR THE JAPANESE:

--THE PROGRAM STRETCH-OUT OF PERHAPS TWO YEARS WILL ADVERSELY AFFECT JAPAN'S ELABORATELY MADE SCHEDULES.

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IT WILL ALSO LIKELY INCREASE CONSTRUCTION COSTS, SINCE A CONVERSION PLANT FOR A COPROCESSED PRODUCT, IF BUILT IN THE FUTURE, WILL BE LARGER THAN THE ONE ORIGINALLY CONTEMPLATED.

--DESPITE THE EXISTENCE OF A LARGE SUPPLY OF PLUTONIUM SITTING IN ITS BACK YARD, THE JAPANESE WILL BE FORCED TO PURCHASE OR BORROW PLUTONIUM FROM EXTERNAL SOURCES, ALTHOUGH SOME OF ITS NEEDS MAY BE MET FROM MB-10 AUTHORIZATIONS.

--ON THE POSITIVE SIDE, THE JAPANESE WILL GAIN ACCESS TO THE RESULTS OF U.S. R&D ON CO-PRECIPITATION, REPRESENTING A MUCH LARGER R&D INVESTMENT THAN THE CONFIDENTIAL

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JAPANESE HAVE MADE.

--MINISTER UNO AND HIS AGENCY MAY WELL TAKE A BEATING FROM HIS SUBORDINATES AT PNC, SINCE THE DECISION WILL BE HIGHLY UNPOPULAR WITHIN THE COMPANY WHICH HAS RESPONSIBILITY FOR BOTH THE REPROCESSING PLANT AND THE CONVERSION PLANT. TOGETHER, THEY WILL HAVE TO GO ONCE MORE TO THE DIET AND THE FINANCE MINISTRY TO GET FUNDS FOR ANOTHER CONVERSION PLANT ABOUT TWO YEARS FROM NOW. PNC OFFICIALS ARE VERY ACTIVE POLITICALLY IN THE TOKAI MURA AREA AND THE DECISION COULD HURT THE LDP THERE.

JAPANESE TODAY ADDED FOLLOWING LANGUAGE TO THE OFFER TO "HOLD UP" CONVERSION PLANT: "...WITH THE UNDERSTANDING THAT THE SUPPLY OF PLUTONIUM NECESSARY FOR JAPAN'S R&D WORK ON FBRS AND OTHER ADVANCED REACTORS WILL BE SECURED." WHILE NOT UNEXPECTED, ITS "LATE IN THE DAY" TABLING AND DIRECT TIE TO CONVERSION PLANT OFFER DIMINISH SOMWEHAT THAT OFFER'S ATTRACTION. BUT IT STILL IS SIGNIFICANT AND WE HAVE AUTHORIZED LANGUAGE TO MOVE PARTIALLY TO MEET JAPAN'S PLUTONIUM SUPPLY CONCERN.

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