

50-320

NOTE: CONTINUATION
OF MISSIONS
IMMEDIATE ATTACHED

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USNRC:JDLAFLEUR
4/2/75:49E-7788
OES/MET/EIC:DHCOOPER

EUR/RPE:	WBARMON (INFO)	EA/RA:	PCLEVELAND (INFO)
NEA/RA:	MS.GELBRACHT (INFO)	ARA:	MR.SZNIGG/MR.HENNEKE (INFO)
IO/SCT:	AJILLSON (INFO)	L/N:	RJSETTAUER (INFO)

IMMEDIATE ATHENS, BERN IMMEDIATE, BOMBAY IMMEDIATE, BONN IMMEDIATE, BRASILIA IMMEDIATE, BRUSSELS IMMEDIATE, COPENHAGEN IMMEDIATE

USIAEA, USOECB, USEEC PASS TO PARA 1 PARTIES ASAP

E.O. 11652: N/A

TAGS: TECH

SUBJECT: THREE MILE ISLAND REACTOR STATUS

REF: A-0221, STATE

1. ADDRESSEES REQUESTED TO PASS FOLLOWING INFORMATION TO OFFICIAL NRC CONTACTS IN MOST GOVERNMENTS AND TO VISITING SENIOR U.S. OFFICIALS, ASAP, DURING DAYLIGHT HOURS, AND TO USE AS APPROPRIATE IN ANSWERING INQUIRIES. PARAS 3-6 ARE PRELIMINARY, NOT YET VERIFIED.

2. PLANT STATUS AS OF 5:30 P.M., MARCH 31.

A. NO CHANGE IN THE METHOD OF COOLING FROM LAST REPORT. REACTOR COOLANT TEMPERATURES MEASURED BY INCORE THERMOCOUPLES. AT PRESENT NONE OF THE TEMPERATURE READINGS IS ABOVE SATURATION TEMPERATURE FOR THIS PRESSURE (554 DEGREES F.). SYSTEM PARAMETERS REMAIN STABLE. THERE HAS BEEN A SLIGHT DROP IN PRESSURIZER LEVEL FROM 215 TO 192 INCHES.

B. EFFORTS CONTINUE TO COMPLETE INSTALLATION OF COMPONENTS AND PIPING ON THE HYDROGEN RECOMBINER. APPROXIMATELY 220 TONS OF LEAD SHIELDING HAS ARRIVED, OR IS ON THE WAY, TO

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THE SITE. LEAD SHIELDING IS BEING INSTALLED AROUND THE RECOMBINER. A DECISION TO USE THE RECOMBINER HAS NOT YET BEEN MADE. TWO SAMPLES OF CONTAINMENT ATMOSPHERE HAVE BEEN ANALYZED WHICH SHOW HYDROGEN CONCENTRATIONS OF 1.7 AND 1.0%.

C. EFFORTS CONTINUE TO ESTIMATE THE VOLUME OF THE NON-CONDENSIBLE GAS BUBBLE ABOVE THE CORE. LICENSEE CALCULATIONS OF THE SIZE OF THE BUBBLE AT 2:40 P.M. WAS 650 CUBIC FEET AT 875 PSIG. AT ABOUT 4:20 P.M., THIS WAS RE-CALCULATED BY THE LICENSEE TO BE 521 CUBIC FEET AT 875 PSIG. THIS IS BEING FURTHER EVALUATED.

3. ENVIRONMENTAL STATUS AS OF 5:30 P.M., MARCH 31.

THREE FLIGHTS WERE CONDUCTED AT ABOUT 6:00 A.M., 9:00 A.M., AND 12:00 NOON ON MARCH 31. ALL FLIGHTS REFLECTED A RATHER STABLE SITUATION. MAXIMUM READINGS IN THE PLUME WERE FROM 1.5 TO 2.5 MILLIROENTGENS PER HOUR (MR/HR) AT A DISTANCE OF ONE MILE FROM THE PLANT, FROM 0.5 TO 1.0 MR/HR OUT TO 7 MILES, AND 0.1 TO 0.2 MR/HR BEYOND 10 MILES. THE PLUME WIDTH IS ABOUT 1-1/2 TO 2 MILES. NO RADIOIODINES HAVE BEEN DETECTED IN THE PLUME. OFFSITE GROUND LEVEL GAMMA SURVEYS PERFORMED IN THE PREDOMINANT WIND DIRECTION INDICATED MAXIMUM LEVELS OF ABOUT 2 MR/HR AT ABOUT 1/2 MILE FROM THE SITE IN THE DIRECTION OF THE PLUME. THE WIND WAS FROM THE SSW AT THE TIME OF THE SURVEY FLIGHTS. AT ABOUT 1 P.M. THE WINDS SHIFTED AND ARE NOW BLOWING IN A SOUTHEASTERLY DIRECTION.

4. A PLANT STATUS AS OF 7:00 A.M. APRIL 1.

A. THERE HAS BEEN NO SUBSTANTIAL CHANGE IN THE PRIMARY SYSTEM TEMPERATURE AND PRESSURE. INCORE THERMOCOUPLES CONTINUE TO SHOW A DOWNWARD TREND.

B. ACTIONS ARE UNDERWAY TO VENT RADIOACTIVE GASES FROM THE WASTE GAS DECAY TANK TO THE CONTAINMENT BUILDING. THIS WILL BE PERFORMED THROUGH A TEMPORARY PIPELINE.

C. THE LICENSEE PLANS TO HOOK UP AND SHIELD TWO RECOMBINERS PRIOR TO INITIATING RECOMBINING OPERATIONS TO REDUCE THE CONCENTRATIONS OF HYDROGEN IN THE CONTAINMENT. THE LICENSEE ESTIMATES THAT IT WILL REQUIRE ABOUT 24 HOURS BEFORE THE RECOMBINERS WILL BE OPERATIONAL.

D. CALCULATED VALUES BY THE LICENSEE OF THE VOLUME OF NONCONDENSIBLE GASES ABOVE THE CORE CONTINUE TO VARY.

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5. ENVIRONMENTAL STATUS AS OF 7:00 A.M. APRIL 1.

SURVEY FLIGHTS AT APPROXIMATELY 3-HOUR INTERVALS WERE CONTINUED ON MARCH 31 AND THE EARLY HOURS OF APRIL 1. SURVEY RESULTS REFLECTED STABLE CONDITIONS. MAXIMUM READINGS WERE 2 MR/HR IN THE PLUME AT A DISTANCE OF 1 MILE FROM THE PLANT. THE PLUME WIDTH HAS BEEN ABOUT 1.5 MILES OUT TO A DISTANCE OF 10 MILES. AT A DISTANCE OF 10 MILES, PLUME READINGS WERE 0.15 MR/HR. MILK WAS COLLECTED AT NINE STATIONS ON MARCH 31; NO RADIOACTIVE IODINE WAS DETECTED. OFFSITE GROUND LEVEL GAMMA SURVEYS PERFORMED IN THE PREDOMINANT WIND DIRECTION SHOWED A MAXIMUM OF 0.6 MR/HR AT 500 YARDS FROM THE PLANT TO A LOW OF 0.06 MR/HR AT DISTANCES OF 2 TO 3 MILES. AN EXCEPTION WAS NOTED DURING THE COLLECTION OF A SAMPLE FROM THE WASTE GAS DECAY TANK WHEN GAMMA LEVELS OF 3 MR/HR WERE OBSERVED AT A DISTANCE OF 500 YARDS EAST OF THE PLANT.

6. OTHER INFORMATION.

ANALYSIS OF A SAMPLE OF PRIMARY COOLANT INDICATED THAT THE PRINCIPAL ISOTOPES RELEASED FROM THE FUEL WERE IODINE, CESIUM AND NOBLE GASES. A PRELIMINARY EVALUATION OF THE ANALYTICAL RESULTS RELATED TO THESE MORE VOLATILE ISOTOPES INDICATES HIGH FUEL TEMPERATURES EXISTED, PERHAPS FOR EXTENDED PERIODS. HOWEVER, RATIOS AMONG ISOTOPES INDICATE THAT THE LESS VOLATILE ISOTOPES, SUCH AS STRONTIUM, WERE RELEASED TO THE COOLANT IN QUANTITIES CHARACTERISTIC OF RELEASES FROM THE GAPS OF THE FUEL AND, THEREFORE, BASED ON THIS PRELIMINARY EVALUATION, MELTING OF THE FUEL IS NOT CONSIDERED LIKELY TO HAVE OCCURRED. (END UNVERIFIED INFORMATION.)

7. THE WHITE HOUSE HAS ANNOUNCED THAT PRESIDENT CARTER PLANS TO VISIT MIDDLETOWN, PENNSYLVANIA, NEAR THREE MILE ISLAND, DURING THE AFTERNOON OF APRIL 1. HE WILL BE ACCOMPANIED BY GOVERNOR THORNBURGH OF PENNSYLVANIA.

8. THE FOLLOWING IS QUOTED FROM A PRESS CONFERENCE HELD BY NRC CHAIRMAN HENDRIE, MARCH 31.

QUESTION: COULD YOU EXPLAIN TO US WHETHER YOUR FEELING IS THAT AN EVACUATION WOULD HAVE TO TAKE PLACE WHEN YOU REACH THE CRISIS, WHEN YOU HAVE TO MAKE THE MOVE THAT WOULD SOLVE THIS SUBTLE PROBLEM?

CHAIRMAN HENDRIE: I WOULD REGARD IT AS CERTAINLY A POSSIBILITY AND ONE THAT WE WILL HAVE VERY MUCH IN MIND

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IN CONSIDERING THAT STEP. WE WILL BE DISCUSSING IT, OF COURSE, WITH THE STATE PEOPLE, WITH THE GOVERNOR AND SO ON.

IT MAY TURN OUT TO BE A PRUDENT PRECAUTIONARY MEASURE IN THE EVENT WE FEEL THAT THE PROCESS OF GETTING RID OF THAT GAS BUBBLE HAS SOME UNCERTAIN ELEMENTS IN IT.

I GUESS I WOULD COMMENT WITH REGARD TO THE EVACUATION SITUATION IN GENERAL THAT WHILE THE REACTOR IS STABLE AT THE MOMENT, AND APPEARS WELL SITUATED TO REMAIN SO FOR THE NEAR TERM, THAT IT IS OUR JUDGMENT--AND WE HAVE RECOMMENDED TO THE STATE PEOPLE AND TO THE FEDERAL PEOPLE CONNECTED WITH EMERGENCY PLANNING--THAT ALL OF THE EMERGENCY PLAN STAFF SHOULD REMAIN ON AN ALERT STATUS. WE HAVE JUST IN MIND THAT IF THE CONDITIONS AT THE PLANT SHOULD CHANGE, WE ARE IN EFFECT KEEPING THE NEED FOR PROTECTIVE ACTIONS ON THE PUBLIC BEHALF AS A SORT OF JUST CONSTANT AND CONTINUING CONSIDERATION IN OUR --

QUESTION: HOW WIDE AN EVACUATION WOULD THAT BE?

QUESTION: YES, IF YOU DECIDE TO EVACUATE, HOW MANY ARE YOU THINKING ABOUT? HOW BIG AN AREA ARE YOU THINKING ABOUT WHEN YOU GET TO THAT STEP?

CHAIRMAN HENDRIE: SHOULD EVACUATION BE A RECOMMENDED COURSE, I WOULD EXPECT THAT IT WOULD BE OUT TO DISTANCES PROBABLY BETWEEN 20 AND 25 MILES, AND IN A QUADRANT WHICH WOULD BE IN A DOWNWIND DIRECTION. THAT IS A CONCERN THAT YOU'RE TRYING TO MEET, IN AN EVACUATION THERE IS THE POSSIBILITY OF A SIGNIFICANT RELEASE FROM THE PLANT, A GASEOUS RELEASE. THAT RELEASE THEN, OF COURSE, MOVES DOWNWIND, WOULD MOVE DOWNWIND, AND PEOPLE WHO ARE UPWIND ARE IN GOOD SHAPE, AND PEOPLE WHO ARE DOWNWIND WOULD BE BETTER OFF TO BE OUT OF ITS PATH. (END OF PRESS CONFERENCE QUOTE.) 44

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ACTION PRECEDENCE CONTINUED:

IMMEDIATE HELSINKI
IMMEDIATE LONDON
IMMEDIATE MADRID
IMMEDIATE MANILA
IMMEDIATE MEXICO CITY
IMMEDIATE NEW DELHI
IMMEDIATE PARIS
IMMEDIATE RIO DE JANEIRO
IMMEDIATE ROME
IMMEDIATE SEOUL
IMMEDIATE STOCKHOLM
IMMEDIATE TEHRAN
IMMEDIATE TEL-AVIV
IMMEDIATE THE HAGUE
IMMEDIATE TOKYO
IMMEDIATE VIENNA