UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

| In the Matter of | 84 OCT 22 P12:16 |
|--|--------------------------------------|
| TEXAS UTILITIES ELECTRIC) COMPANY, et al. | Docket Nos. 50-445-2 and 50-416-2 |
| (Comanche Peak Steam Electric) Station, Units 1 and 2) | (Application for Operating Licenses) |

MOTION FOR LEAVE TO FILE OUT OF TIME

Oliver B. Cannon & Son, Inc., by its attorneys,
Isham, Lincoln & Beale, moves the Atomic Safety and Licensing
Board for leave to file the enclosed documents out of time. In
support of this motion, movant states as follows:

- 1. The enclosed documents are being produced pursuant to the subpoenas issued to movant in this proceeding. Under the terms of the subpoenas, the documents were to have been produced by October 18, 1984.
- 2. In complying with these subpoenas, counsel for movant was obliged to examine a large number of documents to determine whether the assertion of privilege was appropriate with respect to any of them. Mr. Lipinsky's diary notes took some time to review for this purpose and counsel was unable to complete this task in time to produce them on October 18.
- 3. The other three documents enclosed were inadvertently omitted from the materials produced on October 18. These consist of a desk memo of Robert B. Roth dated

December 14, 1983, a memorandum of Ralph A. Trallo dated October 8, 1982 attaching a Three Mile Island Damage Report, and a May 23, 1984 letter from Richard L. Bangart attaching a Region IV Interim Report on Protective Coatings prepared by Brookhaven National Laboratory.

4. The delay of less than 24 hours in the filing of these documents caused by the circumstances described above should not prejudice any party.

WHEREFORE, for the reasons shown, movant requests that it be given leave to file the enclosed documents out of time.

Respectfully submitted,

Peter Thornton

Counsel to Oliver B. Cannon & Son, Inc.

ISHAM, LINCOLN & BEALE 1120 Connecticut Avenue, N.W. Suite 840 Washington, D.C. 20036 (202) 833-9730

Dated: October 19, 1984

November Wednesday



- * ARRIVE @ CP (H3201) S'ITE W/MEM AND MET WI I MERRIT
 - PROVIDED COPY OF PROPOSED AUDIT PLANS
 - J.MERRITT (JM) WANTED TO KNOW WHERE UN WAS - T. CONN. RAT TO DETERMINE WHERE JUL WAS
 - J. MERRIT INFORMED MICH & JUL TO RETURN TO HOTEL AND NOT RETURN W/O WIN WO ACTION OBE PART W/O DEFINED AND IT SCOPE AND PLAN)
- * T.CONN. WRAT MKM & JJL TO S'TAY IN HOTEL
- * T. JEMA. WILL COTHEW WILL TO COME TO SITE (DID NOT INFORM JUL OF 1800 HE UST MIG. TO GO OVER TRIP REFORT) - JJL INFORMED JUL TO CONTACT RAT
- * T.CONN. W/RAT INFORMED JJL OF TENTATIVE 1300 HK, MTG. GOSTPONED UNTIL 11/10 -PAT INFORMED DE THAT JUE CAN'T REALLY REFUSE TO DISCUSS TRIP REPORT
 - * PICK-UP RAT AT JEW WIMKM
- * UPDATE RAT ON STATUS & IMPRESSIONS
- & T. CONAL W H.B. GRIFFIN (NIRC) SET UP MTG. FOR 1215 HES ON 11/10/13

* MTG. ON STITE - SEE TAPES / TRANSCRIPT

* MISC. MTG. / DISCUSSIONS W/ JUN, RAT, MKM

ON STATUS AND OPTIONS AVAILABLE TO ORC

* MTG. W/ H. E. GRIFFIN (URC) (= 20-30 MINUTES

LATE DUE TO JUL)

- MAINLY DISCUSSED CONFIDENTIALITY

 ISSUE JLL VIOLATED TEXAS OF

 CONFIDENTIALITY (NINC TERAS) BY TALEINIL

 LOPRER DL POINTED OUT THAT UNTIL

 THAT MONBUT ILL WAS HOT AWARE OF

 THOSE TERMS H.B. GRIFFIN TO GET NRE

 RULING
 - HBG MISO TO GET OPINION ON THE JOB STATUS RELATIVE TO TRIP LEGIORT
 - JIL WENT OVER D.J. DRICKILL (NRC)

 MEMO ON 10/14/33 TEZEPHENIE WTEXFIELD

 JIL POINTED OUT MINOR INACCURACIES
 - DIL TO CALL HEG BACK ON 11/14/93
 - HBG ASSURED JUL THAT WRC WILL NOT ATTEMPT TO FIND OUT HOW UL TRIP REPORT SURFACED HBG STATED THAT THE NIRC IS ONLY CONCERNED WY THE TECHNICAL CONTENT OF THE JUL TRIP REPORT

11

* WRAP UP MTS. ON CP (H8801) SITE (SEE TAPER/ TRANSCRIPT) - ADVISED R. TOLSON THAT TRIP REPORT NOT AU * DRAFT TRIP REPORT, GIVE S'AME TO RAT

RAT (RER - RBR OPELLED FED. EXP.

PACKAGE SOUT TO JUL BY J. DLLIS (CASE)

- RBR REVIEWED CONTENTS AND GAVE

PACKAGE TO RAT FOR REVIEW & COMMENT

(JUL TO GET ON MONDAY 11/14/83)

ALSO BRIEFLY DISCUSSED IF FHOW RBA WOULD EXPLAIN TO TUGED WHY THERE IS MORE THAN ONE VERSION OF JIL TRIP REPORT

DATTEMPT TO MALIGN

January 1984 February March November

S M T W T F S S M T W T F S S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 12 13 14 15 16 17 18 19 20 21 12 23 24 25 26 27 28 29 26 27 28 29 20 31 25 26 27 28 29 30 31

March November Sat. / Sun.

1 2 3 4 5 6 7 8 9 10

1 1 2 3 4 5 6 7 8 9 10

1 2 3 14 15 16 17 18 19 20 21 22 23 24 25 16 19 20 21 22 23 24 25 26 27 28 29 30 31

* MINS. T.COUND. WIVARIOUS REPORTEDS IN DALLAS | FORT WOLTH ARMA REFERED ALL CALLORS TO APM

*T.CONN. W/ JUN - UPPATE JUN ON

CURRENT STATUS (CASE, REPORTER ETC)
VOICE CONCERN ON REL ACTIONS ON TRIP

REPORT - ADE STATUS ON TAPES &

TRANSPERIED - JUN TO PROVIDE QUESTIONS

ASKED BY CASE

November

Monday

14

October November 1983 December

S M T W T F S S M T T W T F S S M T W T F S S M T T W T F S S M T T

* T. CONN. W | J. ELLIS (CASE) SEE SUMMARY OF CONVERSATION

* T.COMU W | H.B. GRIFFIN (NRC) WAIVER OF

CONFIDENTIALITY (NRC OFFERED TO EXTEND

CONFIDENTIALITY - BUT PROPABLY A MOUT ISSUE)

* DRAFT WAIVER HAVE RER KEVIEW & APPROVE

* DRAFT WAIVER HAVE RER KEVIEW & APPROVE

SAME (RBR CHANGED FIRST S'ENTENCE SELOND PARAGRAPH)

HOW CHANGED COPY OF TRIP REPORT

WAS DENT TO J. MERRIT (TUGEO)
WANTED JIL TO PENCIL SAME - AUSO

EXPERTED JIL TO DENCIL SAME - AUSO

EXPERTED JIL TO DION CHANGES REPORT

* T. CONN W. J.S. DRISKILL & H.S. GRIFFIN (NRC)

- JJL WENUT OVER WAIVER & DOD HEG S'AID WAIVER WAS OK
- APOLOGIZED (SP?) FOR CURRENT SITUATION (THOUGH NOT BROUGHT ON BY NRC)
- SUGGESTED JLL START LOS OR DIATY ON

 EP (H8301) STATUS WITH RELATION TO

 JJL EMPLOYMENT SITUATION CBC MAY

 NOT FIRE FOR CP (HS301) INCIDENT BUT

 LOG MAY OR MAY NOT SUBSTAN. ANY CLAIMS
 ADVISED JLL THAT HAVE 20 DAYS FROM

 TERMINATION TO FILE AND JLL CONTACT

 DDD OT H86 IF FIRED

* HAVE D. ELLMAN NOT KIEE WAIVER

HIMBELF (JUL) TO LUPORT HOW TWO TRIP HIMBELF (JUL) TO LUPORT HOW TWO TRIP LEPORTS EXIST - RER SAID JOL SHOULD NOT-CHAIT FEEL-JUPY

CONTINUED ON PHECEDIALS MAN DAWER MOU 12/13

January 1984 SMIWIFS SMTWTFS Tuesday 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 15 16 17 18 19 20 21 22 23 24 25 26 27 28 A START DIARY LOW - GO RACE TO 11/9/16 * RESE CALLED ALL IN KER OFFICE FIRST THING THE MORNING (20805HEGEST) AND WELLT THROUGH RER TOLD J. MERCITT - INTEREST BY PRESS, APM HANDLING, NO COMMENT DUE TO POWING LITIGATION - WONT THROUGH CHRONOLOGION (LP) SEPUENCE OF TRIP REPORTS AS DEVELOPED BY REK TO EXPLAIN WHY TWO DIFFERMIT TRIP REPORTS EXIST (RBR DID NOT MENTION THAT REA WANTED HE TO SIGN THE - TOLD J. MERKIT THAT THE WRONG REPORT (VELLOWA) WAS TAXED AT. COULD. IN RAT (3058284444) ADVISE EAT OF CURRENT STATUS & RER CEMMENTS MESO THAT JUL WILL NOT PERSURE ON TRIP REPORT; RAT SAID WELKON 3318 AFTER JJL GETS SETTED DOWN K T. CONN WY JUN RE: GO OVER REA COMMENTS & FACT THAT JIL WILL NOT COMMIT PERJURY ON TRIP REPORT T. CONNIU/J. ELLIS (CASIS), NOAD ARTICLE FROM JAMLAR TIME HERALD - JUL PRINTED OUT THAT JUL TALKED TO T. MILLER NO MORE OR LOSS THOSE STADE INSPECTORS . J'ET SUMMARY AT. COUNT. WIP. MCAREE RJ: PM SUSCESTED THAT WE CALL NEC AND THE MOUT ROLY CHANGED TRY KEPERT \$ 3000 WAIVEL TO NEC - CERTIFIED IMPIL PHAD 730072 * MISC. CONN. W WILL RE: COPY OF NEWS PAPER ARTICLE TELESPIED IN TO PHILA. OFFICE; NOT SENDING INFO. SUPPLIED BY TUGOD CELTUSE OR PHILA. METHON KEZID; WHILE TO GET TOGETHER OU RESPONSES RETORE TESTIMONY UNIUS D. CHAMMAN MOMO AS EASE (JJL TS JJU RESPONSES); CUT OFF BELOWSE JUN HARD T. VERAN (TUSOS OP?) ON PHONE * NEWS PAPER ATTRICE TELECOPIED TO DIR PHICA, E. SHIFTE, MADE OFFICE GAVE TO ME S.L. - APA LET WE REMOTHE ARTICLE IN APM OFFICE (COPY OF 100 100C A QUALITY TO REPROJUCE) * T. CONN. WI RAT ADVINED RAT ON NEWS PAPER CHERARE ALSO INFORMED RAT ON JAL FERSONAL OPINION THAT OBC 15 Spawing too much time detending THE TRIP REJECT - PHOUD GIVE FACTURE ACCOUNT AND LET THE CHIES PALL WHERE THEY MAY

March

February

November

November Wednesday

October

November 1983 Decen

S M T W T F S S M T W T F S S M T W

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9 10 11 12 13 14 15 13 14 15 16 17 18 19 11 12 13 14 16 17 18 19 20 21 22

23 24 25 26 27 28 29 27 28 29 30 25 26 27 28 29 30 25 26 27 28 29 30

RAT AGREED WI JUL THAT JUL S'HOULD NOT ALLOW TUGED TO LIABLE JUL

4 T. CONN. W/ JUN

-TUGGO PR MAN SAID NOT GOOD TO STONEWALL; SHORT HALF LIFE BUT IF REOCCURS MAY WANT IN TO TALK W/ REPORTERS - JUL POINTED OUT TO JUNI THAT APM ABR HANDLING PRESS & UL DOING WHAT RBR DIRECTS W/ REGARD TO PRESS

- LIN TRIED TO QUESTION IL ON HOW REPORT WAS LEAKED - JUL INDICATED THAT JIL KHEW KASED ON D.D. WRC) MOMO BUT WOULD NOT DISCUSS AT ALL DUE TO

CONTIDENTIALITY ISSUE

- JUN ASKED IF JUL READ NEWS PAPER

ARTICLE THAT WAS TRECOPIED TO OBC

PHILA. OFFICE - JUL S'AID YET BUT NOT

GIVEN A COPY & THERE FORE NOT FAMILIAR

WI ARTICLE - JUN ASKED JUL WHY JUL

DID NOT RELEIVE A COPY TO WHICH JUL

RESPONDED THAT JUL DID NOT KNOW

- JIN SAID THAT HE WOULD S'END COPY

TO JUL HOME ADDRESS!

* EVE TRY TO GET LINE YOUT OF TOWN (DALLAS | FORT WOLTH) NEWS PAPERS

END OF 1145/33 ENTRY

* # 1050 HEN (EST) 11/10/03 T. CONN. W/ JIN S'AID THAT

- JUL MADE HOUSTON POST. JUNI S'AID THAT

TUBCO PR REP. SAID THAT THIS USUALLY CLOWS

OVER IN X 12 HOURS.

CONTINUED ON NEXT PAGE UNIDER 11/17/13

November March February January 1984 Thursday SMIWIFS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 21 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 * T. CONN. W UN CENTED FROM PREVIOUS PAGE - I'M SAIN ORE MAY RE AT RISK (TUGCO FEEL) THAT JUL LEALED COPY OF TRIP REPORT - JUL EXPLAINED TO UN THAT JUL LET E. MOUSER READ REPORT AND JUL GAVE E. MOUSER A COPY OF PROCEDURE [DL RE! O RER APPROVAL PRIOR TO GIVING COPY OF PROCEDURE] BUT CANNOT RECOLD IF E. MOUSER GIVEN A COPY OF TRIP REPORT - OTHER THAN THAT JUL CERTIFICE THAT NICE DY BUT JIN OR LBC REZ. D COPY OF REPORT FROM JUL - IN SAID THAT THE WRE REPORT (DDRISKILL MOMO) WILL VINDICATE OBE (JUL DIO NOT GIVE ANY OTHER DETMIL OF INFO. ON D. DRISEILL MEMO) A ≈ 1545 HES (EST) 11/10/83 CONN W/ REX RBA TOLD JUL (WHOM JOL WAS PICKING UP BLUE THESE KILLS BINDER ON CP ITEMS MAILITAINED BY RER) THAT ALL THAT REMAINS IS TO HAVE JL SIGN THE CHANGED (BY ABR) AND THIS WOULD BE FILLA DRAFT - JIL REPLIED YES SIR GLEFT - JIL DID NOT SIGN THE CHANGED TRIP REPORT 11/11 \$ 20720 HES (EST) T. CONN. WIRAT . JIL MEROKNIED RAT - JUNI CONSERN ON OBE KINE WITHOUT - RER DOMANU FOR ML TO SIGN CHANGE TRIP REPORT (GAVE LAWYERS OPILION THAT WE S'HOULD NOT STIEN) - RAT S'AND HE COULDN'T TEZL WHAT TO UD OUT RAT WOULD NOT SIGN A CHANGED KEYORT - JY EXPLESSED CONSERN THAT THE MORE JUNIRER THE TO THE UTILITY OF THE TO GOVER UP THE DEEPER OBC GETS - ORD COULD HAVE SERIOUS PROBLEMS IF FEDERAL AGENCIES PRECIONE ON COMMITTING FRAND 1 2 0520 HES (EST) 11/17/83 LINE 2,UN, (50 MOD) W/ KBR - REX DECEMBED POSSIBLY CALLING MENTS PAPERS IN AN EFFORT TO SETTLE DUST - HE ADDISED AGAINST HOT IN REPUSPECT SHID IT PRODUCT WOULD HAVE BEEN BETTER IF JJL TIMED TO PRISE WITHLY ALL DYLLING ANTICE INTERPRETED THE KEP AT CONTINUED ON MEXT PAGE UNDER 11/11/23

November October November 1983 December Friday SMIWIFS 9 10 11 12 13 14 23 16 17 18 19 20 21 21 23 24 25 26 27 20 29 13 14 15 16 17 18 19 26 21 22 23 24 25 26 27 28 29 30 11/17/83 ENTRY CONTINUED FROM PREVIOUS PAGE IL POINTED OUT THAT I'LL HAS PROBLEM IN SIGNIAGE A CHANGOTRIN REYCRT (MAY BE THOUGHT OF AS FRAUD) - RER BECAME FLUSH AND SAID THIS LEAS NOT FRADO IT FINAL COPY OF MEMOITRIP REPORT AND ISL WAS TO SIGH THE CHANGED TRIP REYORT AND PLACE A COPY IN THE ELUE THREE RING BINDER TOWN - JUL SHID YES SIR BUT NO NOT SIEN THE SHANGED TRIP REPORT - IL VRAFTED A MEMO HOM REZ FEE REK SIGNIMURG (TELLING IL TO SIGN CHANGED TRIP REPORT) IF RER FORETS JUL TO SIEN THE CHANGED TRIP REPORT THE DISCUSSED WINER WHO RELETED TRIP REFERT (NO HAMPES - NOT SPECIFIES) BUT DE WAS CONREXED THAT NICE NOT THINK THAT IL KELDISED INTO . FUM DRISKILE SELEND HAND IN ED. INDIGNES THAT IN DIVIDERS IN MENC DRISKILL MEMO DISTRIBUTING IL KEYERT IN BAY VITY - REK CONCERNED THAT IF MRE WHATS REWORK THEN UTILITY WILL GO AFTER OBE - IL POINTED OUT REPORT DISANT CAUSE POOR WORK & NRC SHOULD CLEHR LIL (THAT IS NRC INVESTIGATION SHOULD UNFIRM CENCERALS) RER KLED WHAT LOULD IL DAY UNDOR CROSS RXAMIN. ALOUT HOW TUGED EXPLANAD HUMY CONCERNS - DE SMO IF UTILITY DOING WHAT THEY DLAIM HOW JIL COULD NOT PROVE ONE WAY OR THE OTHER THEN CONCERNS WOULD BE MITIGATED - BOTH RER & WIL FELT UTILITY I HOULD HAVE PERMITTED USLIMEM AUDIT TO PUT MATTER TO BED - JUL INDICATED THAT ENSED ON IMPRESSIONS BOTH UL AND MEM FELT MAT AN AUDIT WOULD MIGHT ISNEIN JK CONCEXNS - HEK MSKED HOW LONG FOR AU 400 IT & WE REPLIED 4-5 WEEKS. 1.82 WANTED TO KNOW HOW JUL COULD MAKE JUNETHEN TS IN LEPERT

* TOOM WILL (= 1110 HRS LET IN/IT) TEAMSCRIPTS NOT REVENTED

* COMMINIMATION (= 1166 HAS EST IN/IT) WOULD GOT BEFORE

GOING BACK TO DO ACOUT & EP/LHIBOD-SULDIT NEED

ALL THE HIRSLE THAT WILL EXPOSE TO FROM TRUP REPORT

AFTER 3 DAYS BUT NEED 4-5 WLEKS DE DE THILED LETVIEW. JIL KEYLIED FOR A GOOD OBJECTIVE ACUIT THATS ACUI WING

WITT A COURT OF CHUND ON REAL YOUR WINER IT 1180/35

November March . January 1984 February SMIWI Sat. / Sun. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 26 29 30 31 5 6 7 8 9 10 11 12 13 14 15 16 17 10 19 20 21 22 23 24 25 26 27 28 29 11 12 13 14 15 16 17 18 19 20 21 27 23 24 25 26 27 28 29 30 31 1415/18 ENTRY CONTINUES FROM PLETIALS PAGE \$ ENSADHER (EST) 11/4/83 CONN. WAPM - UN CALLED AIM AT HOME & ADVISED THAT COPY OF JUL REFAIL WILL MEET INFO. \$ 2 1108 Ard (EST) 11/18/83 T. CENN. W/RER - ASKOD LIL IF JIL HAD FINISHED GOING THROUGH THE TRANSPRIPTS JUL REPLIES NO , ONLY ON PE #2 & FOUND MISTERED WHOLE COMPARED TO THE PES - RER STATED JUN TALKED TO LINEREIT AND JUL (JUN 1' GO TO WASHINGTON (HESUMO D.C.) NEET TOUSDAY (1/22/83) TO GC OVER MEMO W/ TUGE WASHINGTON BASED A MORNEYS # 21126 HED (EST) IF | 18 COMM. WI RAT - THIS OFF, REL TO CALL
MEXIT AND EXPLAIN THAT AT THIS TIME A MITS. IS NOT APPROPRIATE

11/19 \$20 83 SPEND & SEVEN (7) HOURS ON GOING OVER TAPES AND TRANSCRIPTS

13

November 1983

November

| | Ja | וחנ | lar | y | 19 | 84 | | F | ebi | rua | ary | | | | M | ar | ch | | | | |
|---|----|-----|-----|---|----|----|----|----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
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| | | | | | | | 7 | | | | | | | 4 | | | | | 1 | 2 | 3 |
| | | | | | | | 14 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | | | | 21 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | | | | | 17 |
| | | | | | 26 | 27 | 28 | | | | | | 24 | 25 | | 19 | | | | | |
| | 29 | 30 | 31 | | | | | 26 | 27 | 28 | 29 | | | | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| | | | | | | | | | | | | | | | | | | | | | |

November

Tuesday



\$ 0620 HES - 0930HES (ET) 11/22/13 TEMEZ TO TUGEN ATTOCNEYS' METICE From proces.

. ..

\$ 0930 HES & = 1710 HES (EST) 11/22/83 MTB. (WASK THROUGH LUNCH) NICK S. REINGLIS (LIC. ATTRINGY), GILL HORN (LIC. AITSCHEY) BIEK WALKER (LARGE A TTORNEY) UNVIN EN APMANS (TUGGO GAME) (KICK WHEKER & RILL HERE! LEFT MTS = 1415 HRS +, CHAPMAN LEFT MITE = 1630HE ALSO NUR UET. CAMEIN = 1430 HES) THINES ABOUT EVERY THINK THAT LAN UP TO CLE COINS TO CPLHESOI) SITE JUHO LE PALLED WITH AND WHAT WAS SAID, IF IL OFFERD PERSONNE DOS - NO THIKED MEUT POSSIBILITY THOUSE; JL TRIP REPORT; JL MITE & CONMIS. WINKE; LIC CONH. WHELLIS; LIL BACKGROUND; MISE. ITEMS AS WELL AS פחושה ו (בלי) בתפומושום לבונות

\$ 1715 HES TO = 21 30 HES THENER FROM TOUSED ATTER MEYS OFFICE TO IHILL.

= 2150 HES . T. CONIL. W/ RATE FAT HOME D ATTERMEY WANTS WE ; WA TO GO & TESTIFY AS A TESTIM

WILL POINTED OUT THAT ORE WANTED TO GO TO LOAKED WITHES -NOR ASKED IF OBE WOULD GO AS FUCCE WITHERS

3) possibility of EMOUSER RELIVING REPORT - NOTHOST YES OR ALO AS PER HER - WIL ENPLAINED

I) IIL ASKED ATTERNEY (MUR) WHESE SINE THEY KEYRESENTED INDICATIONS ARE THAT COL IS NOT GETTING ALL INFO. 3 JUN WO MAY OF ATTORNEY WHAT WE TO PERFORM AWIT

- The PACTOR AND MAN REQUETABLE () APPARENTLY WAS RESPONDED TO CHAPITHAN MEMO IN ATTORNEY 10SLESION - HOW, LEK INDIGMED THAT AUSPONSES NOT SENT

(1) LBR HAMLUNE TOU NOTES & JUL WELY STUMMENY IN WHATCRINEY @ ILL HAT PROBLEM W/ WIN OFFERING "HERP" TO RICK WALKER CU LABOR MATTERS & & CHAPMAN ON EXPERT WITHESSES

- JUN YOL. NOT BEING ASKETS 9 WIL WANTS TO KNOW WHAT QUALIFIED WIN TO MAKE STATE MENTS ON ANSI, OPE OF PRACTICES, REMONING BEHIND IL MOUD & SIMETHEN EN E - WHAT IS WAN UP TO?

(G) NOV HELEN TO GOT HAD AN ALLENEY WILLIAR NOT PLUMSOD THAT II INGILLYS HTRE TRANSCRIBED IN MOR SAW THE SHOWS HAVE BEEN EXICTED PRIOR TO SITE TRIP

BIU OF III WIS ENTRY

November October November 1983 December Wednesday SMIWIFS SMTWT 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 7 8 9 10 11 12 13 14 15 16 17 18 19 11 12 13 14 15 16 17 16 17 18 19 20 21 22 23 24 25 26 27 28 29 20 21 22 23 24 25 26 27 28 29 30 = 0830HES (EXT) 11/24/83 DL POINTED OUT TO RAT THAT 2 OUT OF 2 MTGS! NOT WHAT JIL HTTU BEEN LEW IN BELIEVE - WHAT IS GRING ON, SIGMEDINE IS NOT ABOUT BOOK) € 1030HCZ (137) 11/23/23 UNTIL = 1340HCZ (057) MTG. W/ RBK, RAT, WAY, 5'TK (S'ER NOTES) LIL DISCUSSED O MTE. WHAT WAS SAIV ALW DISCUSSED AT MITE WY TUGOD ATTORNEY SEE NETES FOR DETAIL (d) GO IN DEDTH ON HAU'T DISACREEMENT AND RAMIPRATIONS - ESTA RERESEAT POLITION OUT TO WAN (3) 60 IN DEYTH ON PERS & BULS OF AN ORD MUDIT ANGI KOQUIREMENTS I FEE TO OAL NOW TO ASSURE THAT JUL HAS NO AS RESULT OF MIG. AXT TO GRILL AND IS WILLING TO PREFORM AN DOBE WOULD AYYEAR HO TOUGHTUSE WITHERS IF MENCO 3) OLE WANT A HOLD HARMLETS ? (FROM UN) OLE TO CHOPERATE BUT WHAT TWO WAY STREET W/ TUGOD / TUSIE. (4) BE TO OFFER HOUT HEMIN \$ OBC IS AND IN ILL CONTINUE TO BE OBJECTIVE & TOTHE LINE OF CEMMON WATON DE WOOD REALEST DULL 11/23/33 NOW KENIED DI'L (A MOCHEY) INTERVIEW AND SUMMERY 3 MONTH & CH ILLERVIED WE PUNTED OUT TO LING KAT THAT INFO. IN INTENSIONS WAS INACCURATE IN JOME MORS AND JOE MISLETTIMOS. & 1500 MED (EST) REE INTERMED RAT JUNGLEL PHAT REK THREED OF NOW AND NOW WIDITED ORIGINAL OF Dit igning that The hicken-ob (4780 myris) HT cohies - NOR PINIO TO KEE THAT I'L MENIO ON HILL -ABR CONVEYED MAN JIL 1110 NO AXE TO GRIND-REST ALSO SHIN THAT OBE NIS S'ADLO EMOBER AT LETER TWICE - RER S'HIN PIRNE CONVERNATION WENT WELL

(NRC) WANTED TO PET UP MTB. W/JJL (PREFERABLY
A FTER WORK OR ON WEEKEND) TO DISCUSS AROS INTO
WHICH F. HAWKING COULD PURSUE. JL POINTED OUT
OBC POSITION AND OFFERED TO COOPERATE.

THEN T.CONN. WIJSAN AND ADVISE ON
T. CONN. WIF. HAWKING

SPEND MOST OF JAY ON FINAL PROOF

READ ON 11/10 411/83 MTG. TRANSCRIPE

2) 1650 HRS (EST) RAT SUGGESTED THAT

VIL CONTACT N. REYNOLDS ON NRC MTG.

[JJL HAD POINTED OUT TO RAT EARLIER

THAT JJL WOULD NOT BE ABLE TO

PROVIDE F. HAWKING WISTPEZIFICS

BOT ONLY SUGGEST ALEAS INTO WHICH

F. HAWKING SHOULD CHECK OUT)

January 1984 February March November

S M T W T F S S M T W T F S S M T W T F S TUESday

1 2 3 4 5 6 7 1 2 3 14 5 6 7 8 9 10 11 4 5 6 7 8 9 10 11 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 19 30 21 22 23 24 25 26 27 28 19 30 21 22 23 24 25 26 27 28 29 10 11 24 83 T.COMM. W NSR

(TUGCO ATTOCNEY) LEFT MESSAGE

T. COULD NOT BE ABLE TO PROVIDE SHLY AROTT OR

AYENUET FOR F. HAWKING TO PURSOE

TIL WOULD NOT BE ABLE TO PROVIDE PRINCES INLY AROTT OR

T. CONN. W/NJR (TUGCD ATTORNEY) & F. HAWKING (NRC) = 1550 HER.

EXPLAINED TO F. HAWKING THAT NJR. REPRESENTS JIL ON THIS

EXPLAINED TO F. HAWKING THAT JIL BASED MEMO W/O

HOM - ALSO EXPLAIN TO F. HAWKING THAT JIL BASED MEMO W/O

TUGCO'S SINE OF STORY AND THAT IF TUGCO IS DOING ALL

TUGCO'S SINE OF STORY AND THAT IF TUGCO IS DOING ALL

THAT THEY (TUGCO) SAYS THEN JIL'S CONCERNS WOULD BE

MITIGATED (JIL CAN NOT PROVE ONE WAY OR THE

MITIGATED (JIL CAN NOT PROVE ON 12/8/83

OTHER) - AGREED TO MEET IN CHICAGO

(NSB TO ARRY. I GOOPM IN CHICAGO)

ADVISE RER ON STATUS (REF MENTIONED TWICE
TODAY JUL WOLFROAD) WINGER & NRC
ADVISE RAT ON S'MTUS WINSR & NRC

:3

DURING T. COND. W/W. CZEROTAR SHE MENTIONIED
THAT LADAMS LHER SISTER) TALKED W/ HER
ON C.P. & NIL SITUATION

December November December 1983 January 1984

Monday

SMIRITS SMIWIFS SMIWIFS

QHILTON AS WELL AS FLIGHT REQUEST

HE LEFT MESSAGE PER F.H. REQUEST

HOVISE JIN ON NER LETTER OF 12/3/33 - STEND

LOVISE JIN ON NER LETTER OF 12/3/33 - STEND

COPY WY TEXAS LETTER & NEWSPAPER ART.

GIVE RBR COPY OF NSR LETTER & NEWSPAPER ART.

COUNTY WIE. MOUSER (SAI) E. MOUSER HAD TALKED

T. COUNTY WIE. MOUSER (SAI) E. MOUSER HAD TALKED

WIR. WALKER & IC TO TESTIFY AT DUNIHAM

WIR. WALKER & IC TO TESTIFY AT DUNIHAM

HERRINGE - E.M. COULDN'T RETAIL IF JIL

LAVIE COPY OF TRIP REPORT TO E.M.—

SEE NOTES - NOTER NOT ELETAR & AS A REJUET

WERE DESTROYED

December 1983 January 1984 December November MIWI Wednesday 12/5/83 RER CALLED JJL INTO RER OFFICE & HAD JJL READ & COMMONT ON WIFE. SENT TO OBC (LL) BY N.V.R. ALSO RER WENT OVER INFO. FOR JUL TO EPHASISE(SP?) WHEN WINRC (RBA LATER TOLD JL TO GIVE NOR THE ARTICLE) 13/5/83T. CONAL. W/F.H. (NRC) O'HARE HILTON RM 2115 5-9 PM (SHOULDN'E TAKE MORE THAN (- 2 HRS.) ASKED - JL TO CALL NOR MESSAGE FROM MR. HORILL (202-857-9837) THAT THE MTG. IN CHICAGO TRIED TO CALL & WAS CAMEELLED 147/83 20900 (EST) T. CONU. W/ F.H. (NIRC) MTG. POST PONES (NRC ATTORLIENS HTML) PROBLEM WY NOR BETHE Q MTG.) 147/83 =0935 (237) T.COUM. WY WM. HORID (202-857-9837) NRC HIME PROBLEM FROM A POLICY STANDPOINT WY AN ATTORNEY BEING PREELIT DURING AN INTERVIEW 12/7/83 = 0940 (EST) LEFT MESSAGE (CHICAGO MIT. CANCELED -NRC HAD PROBLEM W) ATTOCHEY BETHE PRESENT) FOR JUL 12/7/83 INTORN RAT ON MIG. STATUS 12/7/83 PICKED TOD TO RELAY MERSALE TORER

December 1983 January 1984 December November 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Friday

= 3 HES. START KETIEN OF TRANSCRIPT ON 11/109/11/23 ME

T. CONN. W/ NOR SEL LEFT MESSAGE THAT JIL 400W NOT MAKE MTD. ON 12/20/83 - TRIED TO RESCHEDULE - NISK OR SER. WILL CALL BACK TO LESCHEDULE T. CONN W/JIN (1219 HES. EST) TOLD JIN IN OBC FLORIDA OFFICE - JUL CALLED OBC FLA. OFFICE

AUD LEFT MESSAGE T. CONN. W/ NER (OBC FLA. OFFICE & 1230 HES EST)

CO. OVER NER T. CONN. OF 12/8/83 (ELCEYT & 6,7;8)

T. CONN. W/N SR (1511 HES EST) MOVE MTG. TO 12/24/83

@ 0930HRS IN WASH , DC.

December 1983 January 1984 December November Friday 1045 HES. (EST) 12/16/83 T. CONL. W F. HAWKING (NRC) WANTE TO RESCHEDULE MTG. FOR 1/4/84 IN CHICAGO IN MORNING -NO PROBLEM FOR NOR TO BE PRESENT JUL TO CALL NOR THEN CONFIRM WIFH. @ 312-790-5660 21107 HAR (RET) 12/10/83 ADVISE RBR ; RAT ON T. CONN. W. F.H. ; RBR DIRECTED DL TO CALL NSR THEN SWITCH NSR UP TO RER ZILAS (EST) 10/16/83 LEFT MESSAGE W/ SECRETHRY 2/208 (EST) 12/16/83 T. CONA. W/E.REMP (NSR -SEC.) ON KESCHEDULES MR. RE: MTG: IN CHICAGO ON 1/4/84 OK WY NOR

February March April December

S M T W T F S S M T W T F S S M T W T F S

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12 13 14 15 16 17 18 11 12 13 14 15 16 17 16 16 17 18 19 20 21

19 20 21 22 23 24 25 18 19 20 21 22 23 24 25 26 27 28

25 27 28 29 25 26 27 28 29 30 31 29 30

T. COALD. WE. REMP LE. CONFRA

IN A 1/83 MTB. J/NJR ALJO

ADVISE OF FLT TE & ARRIVAL TIMES TO CHICAGO ON 1/4/4

T. COULD. W F. HAWKING (1/20 HES) AUVISE ON FLT.

Times

December December 1983 January 1984 Wednesday LI. FOR WASH. DC @ 0620HRS = 940 HEG (BST) MTG. WM. WATKINS, N.S. KEYNOLDS & E. REMP (SE) WORK THROUGH LUNCH MIL ENOSO AT \$ /500 MES (EST) - GO OVER DRAFT OF TESTIMONY - EXPAND & ELABORATE ON DRAFT OF TESTIMONY - DISCUSS IN QUAL TO TESTIFY - IL NOT COMFORTABLE STATING THAT UN IS AN EXPERT ON NUCLEAR WORK - NOR TO CONTACT REL & PREHAPS GO W/ RAT (JUL HAD NO PROBLEM WRAT) - DISCUSSED TRIP REPORT CHANGED BY REA - DISCUSSED NIRA MITTER & HEMRILLE POLLAT - JJL ADVISED ALSK THAT JJL HAS OF INVOICE ON CP QUALITY BUT WOULD PRETEX HOT TO DISCUES OTHER THANK THOUS OPINIOUS ALROADY EXPRESSED IN 8/8/13 TRIP REPORT 2 1540 HRE (EST) T.CONN. WRAT BRIEFLY REVIEW W/RAT MTG. W/N. O.R. & M.W.

December

November

December 1983 January 1984

Friday

3 14 15 16 20 21 22 23 27 28 29 30 20 940 HW

20940 HRS (EST) 12/23/83 CONN. WY RER

RE: NEW DRAFT OF JJL TESTIMONY DID

NOT ARRIVE; RBH WENT OVER JIL

PERFORMANCE APPRAISAL - ONLY NEGATIVE

COMMENT WAS THAT DI SHOULD DO A

COMMENT WAS THAT DIE SHOULD DO A

BETTEL JOB ON SETTING DEMOLINES & THAT

BETTEL JOB ON SETTING DEMOLINES & THAT

JJL SHOULD KNOW EXACTLY WHAT EVEYONE

JJL SHOULD KNOW EXACTLY WHAT EVEYONE

IS DONG IN JJL'S DEPT., JJL ADVISED

RBK THAT DEADLINES CAN BE SET & MET

RBK THAT DEADLINES CAN BE SET & MET

BUT JAY TO DAY & RULH ITEMS WOULD SUFFEX

(RBK SAND THAT HE WANTS DEADLINES &

CHARTUT WORK NOT TO SUFFEX); JJL

SALARLY TO INC. 2 K (YR ALSO IC PORTION

SALARLY TO INC. 2 K (YR ALSO IC PORTION

FOR '83 SHOULD BE Z 5.5 K

DID NOT ARRIVE - COPY TO BE SENT TO JUL CO MRI HER E.A. GULLEDGE

February March * April

S M T W T F S S M T W T F S S M T W T F S
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5 6 7 8 9 10 11 4 5 6 7 8 9 10 8 9 10 11 12 13 14
12 13 14 15 16 17 18 11 12 13 14 15 16 17 15 16 17 18 19 20 21
19 20 21 22 23 24 25 18 19 20 21 22 23 24 25 26 27 28
26 27 28 29 25 26 27 28 29 30 31 29 30

December

Tuesday

27

- REVIEW NEW PRATT OF

| March | | | A | April | | | | | | | ey. | , | | | | | January | USNRC | | | | | |
|-------|----|---|----|-------|----|----|-------|-----|-----|----|-----|----------------|-----|---|---|---|---------|-------|-----|----|---------|--------------|--------|
| 5 | м | 1 | w | 1 | F | 5 | S | M 2 | 1 3 | W | 1 5 | F 6 | 5 1 | S | м | T | W 2 | 1 3 | F 4 | 5 | Tuesday | nnt 22 | P12:16 |
| | 12 | | 14 | 15 | 16 | 17 | 15 | 16 | 17 | 18 | 19 | 13 20 27 | 21 | | | | 16 | 17 | 18 | | -84 | - Lines C.C. | |
| | | | | | | 31 | - 200 | 30 | | 63 | 20 | 21 | 20 | | | | | 31 | | 20 | | | |

COMMERCES ON NEW DRAFT OF DIL TESTIMONY

MISC. COUN. WI WATE INS (A TORNEY WYSEL)

AND OR CET ON ALL TRAVEL TO ; ARRIVAL IN

CHICAGO ON 1/4/84

MOVISED BY CEF THAT F. HAWKING (URC) CANDO TO INFORM THAT THE MTZ. IN CHICAGO ON 14184 WOULD BE IN AM 2076 OF O'HARE HILTON AT AS CLOSE TO 1100 AM AS POSSIBLE December 1983 January 1984 February

S M T W T F S S M T W T F S S M T W T F S

1 2 3 1 2 3 4 5 6 7 1 2 3 4
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11 12 13 14 15 16 17 15 16 17 18 19 20 21 12 13 14 15 16 17 18
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25 26 27 28 29 10 31 19 20 31

206 AS HES TRAVEL TO CHICAGO FROM
LAT WETTE HILL, PA (TWA FLT " 123)
20700 HES (EST) STOP BY OFFICE ON WAY TO
AIRPORT -PICK BY NEW BRAFT & TICKET
REVIEW DRAFT OF TESTHONY ON PLANE
2 09 SO HES (CST) MEET M. WATKINS AND
GO OVER POINTS TO THINK ABOUT FOR NKE MTG.
O REQUEST COPY OF TRANSCRIPT
OM.W. DISCUSSED ON RECORD" US OFF RECORD"

3 QUESTIONS FALL MITO 4 CATEGORIES
A-FACTURE B-HYPOTHERICAL C-IMPLIED
D-ASSUMPTIONS

MEET F. HAWKING, C. JOHNSON (CSIT)

MEET F. HAWKING, C. JOHNSON (CSIT) ILL SWORN IN

MENT OVER 0/8/83 TRIP REPORT (COPY WY OND NUMBER)

ANSWERED QUESTIONS ASKED BY F.H. & C.J.

MTG. ENUED AT = 1240 NES (CSIT)

F.H. SHOULS HAVE DRAFT OF TRANSCRIPT BY 1/9/84

TRIED TO CONTACT RER BY PHONE TO BING

STATUS BUT UNABLE (RER ON OTHER LINE)

COUNT. WIM. W. (AFTER ATE.) M.W. FELT JUL DID
WELL WI WARE BUT CAUTIONED THAT J. ELLIS
WOULD BE MORE AGRESSIVE; PERABLY WANT USL
IN WASH. DC THE WK OF 1/9/24
WOULD BUT IN WASH. DC THE WK OF 1/9/24

HAS COPY OF TRIP REPORT (REZIS FROM T.WILLOW SOND - WARSLE TO FIND OUT HOW T.W. REZIS REPORT)

.75 LOCKER. TRAVEL TO pHILA. ON UA FLT \$ LOO

5.27 LUNCH 17.45 DILLIER S.AS10.00 JARKING PHONE

March

SMIWIFS SMIWIFS SMIWIFS SMIWIFS Thursday

A 5 6 7 8 9 10 8 9 10 11 12 13 14 6 7 8 9 10 11 12 13 14 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 27 23 24 25 26 27 28 29 30 31

COULD RBR Q = ORTO HES (FET)

ADVICE RBR OF STATUS ON 1/4/84

MTG.

11

January Friday

S M T W T F S S M T W T F 12 3 1 2 3 4 5 6 4 5 6 7 8 9 10 8 9 10 11 12 13 14 15 16 17 15 16 17 18 19 20 2

February

S M T W T F S
1 2 3 4
5 6 7 8 9 10 11
12 13 14 15 16 17 16
19 20 21 22 23 24 25
26 27 28 29

NO'R OFFICE IN WASH ON 1/9/84 (AFTERNOON)

January Monday

December 1983 January 1984 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



PHONE

TRAVEZ W/RAT TO WASH. J.C. ATTORNEY SEE TRIP REPORT QAD-84-0013 DATED 1/10/84 -OTHER ITEM NOT IN TRIP REPORT WAS FACT THAT STATISTICAL PROSENTATION BY TUSI/TUGEO FOR AS'LE MAY NOT BE READY BY a/0/84 -> RAT ASKED HOW RETROFIT COULD BE STOPPED IF DATA NOT ALREADY compilied (spe).

TRAVEL W/RAT TO PHILA, PA. FROM WASH., D.C. 14.75/3 D 14.85 17.99 PARKING 3.75/ TRAIN &6.501

January March April TWTFS SMTWTFS SMTWTFS
6 7 6 9 10 8 9 10 11 12 13 14 6 7 8 9 10 11 12
13 14 15 16 17 15 16 17 18 19 20 21 13 14 15 16 17 18 19
20 21 22 23 24 22 23 24 25 26 27 28 20 21 22 23 24 25 26
27 28 29 30 31 29 30

T.CONA. WM. WATKING -SE Tuesday 1 2 3 4 5 6 7 6 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 . QAD-84-0014 DATED 1/10/84 RAT ADVISED JUL THAT RAT UPVATED JUN ON C.P. STATUS

January Wednesday December 1983 January 1984 February

S M T W T F S S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S S M T W T F S S

READ CACE FILING OF 11 / 30/03

*1030 HZS (BST) RAT ON PHONE W/R. TOLSON

-RAT ADVISED JIL THAT TOLSON CALLED ABOUT

TRANSCRIPT ON 11/10 (11/83 MTGS ON SITE.

TOLSON HAS INCORPORATED CORRECTIONS IDENTIFIED

TOLSON HAS INCORPORATED CORRECTIONS IDENTIFIED

IN INK BY OR ON LATT DRAFT. HOWEVER, OTHER

COMMENTS PROBABLY WOULD NOT BE INCORPORATED.

TOLSON TO KEEP COPIET OF DRAFTS ON FILE IN

CASE OF QUESTION.

January

December 1983 January 1984 February

Friday

SMTWTFS SMTWTFS

(BPC - MIDLAND MICH - HE CALLED) DES MICH - HE CALLED DES MICH ABOUT TRIP REPORT - WL TALKEN MENT REPORT BUT DIDN'T GET INTO STELLFIES

LEGASCO BAY CITY TEXAS - HE CALLED)

RB READ TRIP REPORT- SAW LITTLE

BINDIE GAVE TRIP REPORT TO HIM

April May June February

S M T W T F S S M T W J F S S M T W T F S S At. / Sun.

1 2 3 4 5 6 7 12 3 14 6 7 8 9 10 11 12 3 4 5 6 7 8 9

15 16 17 18 19 20 21 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 17 18 19 20 21 22 23 24 25 26 27 28 29 30

SEE PAD 8H - 00 67

ON H8301 ACTIVITIES THIS DATE

Lincoln's Birthday

 February
 January
 February 1984
 March

 Monday
 S M T W T F S

SEE QAD-84-0067 ON H8301 ACTIVITIES THIS DATE Monday T. COND. W STEVE STECKLOW (PHILA. INQUIRER @ = 1350HRJ (EST) 215-854-2183 - S.S. SAID THAT HE WAS DOING A FOLLOW-UP TO AN EARLIER STORY ON ZIMMER. SS SAID THAT WHILE IN WASHINGTON (ASSUME DC.) SOME ONE (SO DID NOT IDEXITIFY) GAVE HIM A COPY OF JJL TRIP REPORT. RBR SAID ODE JJL HAD NO COMMENT BELAUSE CASE IS IN LITIGATIONS - JJL TURNED CALL OVER TO RBR - RBR DID NOT ADVISE JJL ON CONTENT OF CONVERDATION T. COND. W RAT (609 693 1881) Q = 1840 HRS ADVISE ON CONN. W/S. STECKLOW; ALSO MAKE CHANGE IN GLASU BEAD CP

February 1984

January

February

February Wednesday T. CONN W/M. WATKINS 1614 HIS (EST) PINISTY REPORT & AFFICAVIT DIN NOT COME UP - WILL NOT USE AFFIDAVIT - ASLB TESTIMONY SLIPPED (BROOK HAVES / SURCONTRACTOR COMPLETE INVESTIGATION UNTIL 6/84 MAYSE LATER) - STILL COULDN'T RECALL SUBCONTRACTORS NAME (ON ANSI STANDARDS COMMITEE) STEVE STECKLOW (PHILA. THADIRER)-ADVISED M. WATERING OF CALL AND OSC ACTION - M.W. LEQUESTED COPY OF ALLY ALTICLES THAT MAY ADJEAR M.W. DID NOT REZERVE WE COMMENTS TO NEC TESTIMONY

January

February 1984

May

June

July

March

SMTWTFS SMTWTFS SMTWTFS TUESday

6.7 & 9 & 10 11 12 3 4 5 6 7 8 9 8 9 8 9 11 11 12 13 14 15 16 17 18 19 20 21 12 13 14 15 16 17 18 19 20 21 12 23 24 25 26 17 18 19 20 21 27 23 22 23 24 25 26 27 28 27 28 29 30 31

7. LONAL W M. WATKING! (202 - 857-95)

Q DOD HFG. (EST) RE: MW TO GET BACK TO JIL

ON INDORPORATING JIL COMMENTS TO 1/4/24 NICE TESTIMONY

May Friday TOOUR W/ M WATKINS @ 1023 HB (BST) RE: DODY OF REVISED ENTRACT AFFICINIT WILL BE TELECOPIED a) ALL TOLD MW THAT KS OF YET ALL HAD NOT READ INFO. BECAUSE OF OTHER Commitments (H8302 REGIOCT) 3) MW texhowledges I'V TIME of informace BUT NEED AFFIDAVIT - WILL be OFFICE LATE TOUISHT SO NE COOL CALL 1) WHICH COPY OF This REJORT TO HTMCH TO WILL AFFIDAVIT - JUL NOTEATED SIGNED COPY 5) WALT COPY OF JUL RESUME 6) WEST OVER UN T.COMM. ON 5/24 W) RITOLSON WIREGARD TO LWANTER ALD 11FO. WIL HAD OLI B. WALLACE (PONUTED) OUT THAT INFO. WAS HEAR SAY) T. COND WIN WATKINS @ 1125 HES (EST)) NO LONGER RUSH TO HAVE AFFIONIT CEMPLETED TODAY (FEI MAY 25, 1984) 2) IL mentioned THAT ADMINISTRATIVE RESTRAILT ON JUL PERAUSE OF BILLING - MW THOUGHT THAT BILLING WAS TICONN OF WILL @ 1140 HRS. (EST) ADVISE TIT BOW BINT UN ON TEOMIS WIND DISCUSSED PILLING JULI WASHTS AFFILMING AS' A HAMMER

 August
 July
 August 1984
 September

 Wednesday
 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
 S M T W T F S 2 M T W T F S 3 1 2 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

T. CONN. W R.C. TANG (NRC) AT & 1236 hrs (EST, OF U) UN FERENCE CALL WI JIL AND OFFERS (WIDENTIFIED)

DICK WLSUMAN AND OTHERS (WIDENTIFIED)

FOR 1400 HES ON 8/7/34

JUL TO CALL 817-897-4683 IF WAVAILABLE

FOR T. CONN. ON 8/7/84

T. COULD W/ N. REYNOLDS ADVISED OF T. CONLY W/

R.C. TANE AND WHAT JL WOULD DUCUSON

-NO PROBLEM W/ TECH. MATTERS PROVIDED JL

NOT REQUIRED TO SPECULATE

Advise RBR, KAT, JUN

EVE ADVICED BY WHITEMARITH TOWNSHIP POLICE OFFICER

(5'10" PORTING BROWN HAIR GLASSES) LOUISID INL

AT 5 1945 HER OF SUMPRAINT BY NEICHBUR THAT OUR

AT 5 1945 HER OF SUMPRAINT BY NEICHBUR THAT OUR

DOG WAS BARKHIE - NO CRIME TO LEAVE DOG OUT BUT

NEICHBUR COULD FILE A CAMPLAINT WIMHELSTRATE
WHATD TO HANDLE IN A NEICHBURING FASHION - JUL SAID

OHALD TO HANDLE IN A NEICHBURING FASHION - JUL SAID

HE WOULD TRY TO CORRECT STITUTION

THE PROBLEM (JULY KEY OUT AND NOT AWARE OF PROBLEM). WHETHER DOG JUST STARTED TO BARK, PROBLEM, WHETHER DOG JUST STARTED TO BARK, WHETHER DOG SHOW KIDS OR ANOTHER JUST - WOULD WHETHER DOG SHOW KIDS OR ANOTHER JUST - WOULD LIKE TO DISCUSS FROMET. OFFICER JIMO, JUL SHOWL CHECK WHITELED AND EITHER SIDE.

August July August 1984 September

Monday SMTWTFS SMTWTFS SMTWTFS

1 2 3 4 5 6 7
8 9 10 11 12 13 14 5 6 7 8 7 10 11 2 3 4 5 6 7 8
15 16 17 18 19 20 21 12 13 14 15 16 17 18 9 10 11 12 13 14 15
22 23 24 25 26 27 28 19 20 21 22 23 24 25 16 17 18 19 20 21 22
29 30 31 26 27 28 29 30 31 20 22 24 25 26 27 28 29
30

T. CONSI W/M. WATKILL' @ = 1540 HRS (COT)

- ASKED TO WHOM JUL SPOKE - RETANG

JJL PROVIDED PHONE NUMBER GINENRY

INS. TANG

- JUL ALREADY PROVIDED TESTIMONLY TO STAFF (NRC) AND DUE TO PENDENCY OF HEARINGS NOT APPROPRIATE FOR JUL TO THE WINRE

- M. WATKILL WILL ADVINE DE ON

- DL BROUGHT UP BILLING - OBC COULD BILL MWATKINS FIRM BUT FIRST M. WATKINS WILL TALK W/ J. MERRIT

ADVISE RAT

CHOS OF EMELY TOMORECUL ברוות טאים אוצף שובר החבר פאתץ פא בוחובר בעב והאר פאר בא בוחובר (100) why wantered @ = 1009 HEVERT - Mul Tripide To Formand of Old Bill. I MERRIT אוא דציותר האהני אלוניהן לטד טאפטנט אנטיבטל אפטינטש דבב הוחטלין ף גוסת דם פאבר - JIL TO EALL ALT TALK OF ALRE TO DESCUENT [. wald. of M. WATKING! @ = 1405 HES (BST) 8 9 10 11 12 13 14 25 25 25 25 21 28 Wednesday IMIN 5 4

\$861 Isnbny September

Ainc

IsuguA

8-7-84 3101 P.M. (EST)

Mr. Stan Kirslis of the KRC called for Joe Lipinsky. Said he was returning call that had been set up for 2:00 P.M.

- I have here with me Claude Johnson. We are trying to get the squawk box to work.
- JJL: I have talked with McNeill Watkins of Bishop, Liberman, Cook, Purcell and Reynolds, and I thought this call would have been cancelled by now. I would prefer not to have any conversations on this matter, again not that I do not want to cooperate with you, but I feel that an informal conversation would not provide as much
- detail as my upcoming formal testimony.

 I had the message to call Watkins but did not return the call. Well, suppose I call him (MW) then and we try to talk to you some other time if it turns out that we can. We will try to get back to you.
- JJL: Please don't take my attitude as hostile, but I would prefer that you talk to Watkins and coordinate through him.
- You do not want to make a move that he docsn't think is right?
- JJL: I would not say that. However, I think it would be best that you discuss this with Watkins.
- Perhaps we can reschedule it at a later time. I will try to call him and see what the problems are.

JJL1

October Tuesday ROBERT B. ROTH Several menths ago , & D N neduced the Fee of last Contract w/ the client, also being the travel the dien costs associated u/th "G. A peoblem", to slesser a net due Conner of \$7800 32. This reduced net has not been paid & represents menies autstanding for out 5 to 6 mos. John mornitis amore of 7

December

November

T. CONL. W/M. WATKINS (= 1536 HES EST) RE:

- BELAYED COUL CETWEEN JIL & MRC
- M.W. J'AID ALL THEY (NRC) WANT TO DISCUSSI IS MATERIAL TRACCARICITY AND J'HOULD NOT OF A PROBLEM JUL STHOULD REVIEW OI TESTIMONY, AND DRAFT OF AFFIDAVIS
- BILLING, REVIEW REL MOTE
- copy of DEQUALIFYCATION REPORT TO JUL IF NOT A PROPRIETARY DOQUMENT

- JUL TO CALL HE TALK OF NRC TO DIVENSU

MATERIAL TRACEASILITY BUT WHOULD REVIEW

PREVIOUS TESTIMONLY PRIOR TO CALL

MINITEDIAL TO FULLOW OF ON BILL. J. MERRITT

HAW APPLOVED.

T. CONN. W/M. WATKIND @ = 1409 HES (2017)

- IPPULITE SAID NRC WILL TALK ONLY ON

ONE ITEM (MHTERIAL TRACENCILITY) EITHER

TODAY OR EMRLY TOMORROW

-J. DERCHLE & BROOKHAVER - H.W. ASKED

ABOUT REPUTATION OF J.O. & METALWED

JTL REPLIED THAT OBE & METALWED ARE

ON JAME LEVEZ, WHEN IT COMES TO

BIDDING (METALWED 60-70% NUCLEAR VE)

OBE 30% LIVELEND. ALSO THAT J.O. IS

TO PRO FILM JOVER W/ REBARDS TO COATINGS.

ADVISE JUN @ 1425 HKS (EST)

December August

Thursday

 September
 August
 September 1984
 October

 Wednesday
 S M T W T F S 1 2 3 4 5 6 7 8 7 8 9 10 11 2 3 4 5 6 7 8 7 8 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 32 24 25 16 17 18 19 20 21 22 22 22 24 25 26 27 28 29 30 31
 S M T W T F S 2 M T W T F S 3 M T W T F S 3 4 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20 12 22 21 22 23 24 25 26 27 28 29 30 31

TO TALK WHE - SHOULD I CALLED PACK OR WHAT

- M.W. UP TO JIL - NO REAL HOVIER ONE WAY OR THE OTHER

-ANTICIPATE T. MILLER TO FILE A

210 COMPLAINT BUT T. MILLER NO
LONGER EMPLOYED & O.P. AND AS A
RESULT MAY BE LOOKING FOR A JOB

(NOST SPECULATION)

- DIL LEFT MHTTER THAT IF T.MICLER GOT A HELD OF JIL THEN JIC WOOLD THIK BUT OTHER DISE JIL WOULD NOT CALL T. MILLER

- NOTHING BREWING WIREGARD TO C.P.

September

Wednesday



| August | | | | September 1984 | | | | | October | | | | | | | | | | | |
|--------|----|----|-----|----------------|----|----|----|----|---------|----|----|----|----|----|-----|----|----|----|-----|---|
| s | м | T | w | r | F | s | s | | T | w | T | F | 5 | S | м | T | w | 1 | F | |
| - | | | . 1 | 2 | 3 | 4 | | | | | | | 1 | | 1 | 2 | 3 | 4 | 5 | |
| | | | 8 | | | | | | | 5 | | 7 | 8 | 7 | - 8 | 9 | 10 | 11 | 12 | 1 |
| | | | | | | 18 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 | 15 | 16 | 17 | 18 | 112 | 1 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 21 | 22 | 23 | 24 | 25 | 26 | 3 |
| 26 | 27 | 28 | 29 | 30 | 31 | | 23 | 24 | 25 | 26 | 27 | 28 | 29 | | 29 | | | | - | ĺ |

T. CONIN. W/M. WATKINS ~ 1023 HAS (EST)

- BRIEFLY REVIEW BOARD HEARINGS, L'O REAL DETAILS
- STATUS ON AFFIDAVITE (Sf?) BRANDT & LIPMING
- THIKED ABOUT SEQUENCE ON TRIP KEBORT (AUGUST & S'HON. DATE)
- ALSO WHETHER 8/8,9,10/84 MTG, HAND ALLY IMPACT ON TRIP ROSORT -NO.
- COPY OF REBURT ON DEGUAL OF COMPINISS

November December January 1985 September

S M T W T F S S M T W T F S S M T W T F S T L 2 3 4 5 6 7 8 9 10 11 12 3 45 11 12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Thursday

Thursday

T. CONN. WHITE INS CALLED H.C. (3332)

SITE ASKED IF I REZED PACKAGE

W/ AFFIDAUTE (4?) (CRANDT/LIPINGLY) AND

MOTIONS - JUL EXPLAINED ROR HAS

PACKAGE ON DESK WHICH IS SOP FOR

CANNON - JUL TO CALL ON FRIDAY

September August September 1984 October

Friday SMIWIFS SMIWIF SMIWIFS SMIWIFS SMIWIFS SMIWIFS SMIWIFS SMIWIFS SMIWIFS SMIWIFS

WE HAD DETERMANT WITHTHES /NOTARIZES JUL AFFIDAVIT (Sp?)

TREEOFY RESUME - T. CONUL. W/H. WATKINS

-EXPLAIN THAT DL CONDA'T FIND

TWO PAGE VERSION OF RESUME

- OFFICED TO SEND (TELECOPY) SIGNED

AFFIDAVIT (JULY SIGNATURE

September January 1985 November Sat. / Sun. REVIEW ÉCOMMENT ON JUL AFFIDAVIT - SEE NOTES --- GO OVER W/M. WATKING

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10/4/34 SHOULD BE OVER_ -> RER FAIT ENUMIE SIMEATICAL GENOING OUT OF HIMLD JUL AGREED BUT POINTED OUT THAT AT THIS STABLE THERE IS LITTLE USE COOLD TO BUT TRUNT THE MATTER SERIOUSLY.

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- LATE AFTERNOON 4 1730 HES CONN. WIRZR

JIL KSKED IF OBE HIRED COUNSEL ROR

SAID YES

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RELATED CORRESPONDENCE

91: ZId

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DOCKELED

OLIVER B. CANNON & SON, INC.

JK

RELATED CORRESPONDENCE

DEPARTMENTAL CORRESPONDENCE

| | | DORATE October 8, 1982 | |
|-------|---------------------------------|------------------------|---|
| BJECT | Three Mile Island Damage Report | | |
| | Staff | *84 OCT 22 P12:16 | - |
| IOM | Ralph A. Trallo | OPPIDE OF SECRETARY | |
| | | DOCKETING & SERVI | |

Attached is a presentation summary on the cause of coating damage within the Three Mile Island Unit Containment.

The Summary was prepared by EPRI (Electric Power Research Institute) which is sponsoring several investigations of materials performance at Three Mile Island.

The last paragraph is of utmost importance to Cannon. I have requested at set of slides taken within the Three Mile Island Containment.

Ralph A. Trallo

RAT: ja

Attachments

PENTEK

PPESENTATION SUMMARY

erst is sponsoring several investigations into the performance of mechanical equipment and the behavior of materials in response to the Three Mile Island Unit Two accident. As part of these efforts, preliminary investigations are being undertaken with reserved to paints and projective costings.

The Initial damage mectanisms in the reactor containment building were principally the result of a hydrogen burn caused by the from hydrogen gas generated as a result of extensive core damage. The hallegen burn created a 28 PSIG (a) pressure spike in the ecotainment building which in turn automatically initiated the er tarrent spray system, a "shower" system designed to condense large artists of steam to the every of a major pipe break. (The Time wire Island Unit Two accident did not involve any major 1 : e create. 1 A side effect of the spray initiation (the system ver en'y activated for five or six minutes before isolated by the sperature, was that the spray contained a corrosive solution of y diem by frevide and breit seid to remove todine isotopes and to provide additional tractor shutdown capability, respectively. it the event of a najor pipe break. The longer term effects of corrections due to very high (saturated) humidity conditions personned in the containment building for fifteen months after the arestent until the first purging was allowed.

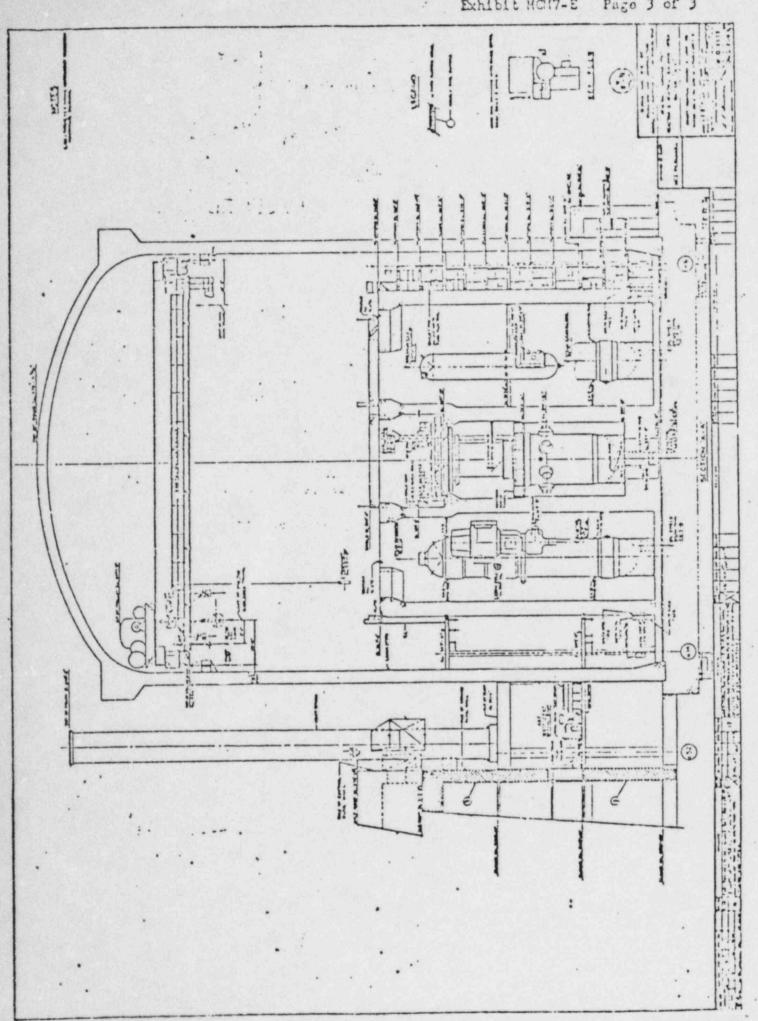
Frierly then, damage was due to hot gases and localized high the personnel of the hydrogen burn, corrective effects of the apray and the serior in a saturated almosphere for a long period of the fit afford he noted that the containment building basement contained rearly nine fert of highly contaminated water for almost three areas after the accident).

The demace path began in the basement (282' elevation), where hadron was first released through the reactor coolant system relection. The hydrogen migrated up stairwells and elevator stairs to the interrediate elevations (305' elevation - containing to the contract and air handline units; 347' elevation - refueling to the elevation - point crane platform), and eventually to the reactor building done thighpoint at 470' elevation). It is believed the burn was initiated by equipment in the upper elevations, and since a hydrogen flame tends to propogate upward, which is a since a hydrogen flame tends to propogate upward, the najority of damage due directly to the burn and overpressure is seen in the upter elevations. (There are as yet no photographs of the tasement area since it has been inaccessible due to high reduction and the submergence of equipment.)

Spray initiation occurred at the spray headers located in the reactor dome. Simply stated, all equipment located directly in the path of spray (principally the polar crane and components

on 347' elevation) were exposed to the spray solution. Equipments on 305' elevation were protected by the 347' elevation floor slab, with chemical spray due to some Grainage through the 347' deck plates and via recirculation of the reactor building air by the air handling units.

Despite the harsh immediate environments and the longer term highhumidity conditions, the protective coatings applied in Three Hile Island Unit Two performed exceptionally well (based upon visual observation) except for very localized greas.



DEFARTMENTAL CORRESPONDENCE

| | . DATEFS | brusry 10. 1931 |
|----------------------------|------------------------------|-----------------|
| Nuclear Coatings Performan | ce - Containment Liner - IML | |
| As noted below. | | |
| | | |

I received a copy today of Bob Moore's letter to Al Roebuck, re the ASTM D-33 Committee, in which he quotes the recent trade and news release on the Inspection of the Containment Liner coating at T.H.I., Unit #2.

The liner plate was the Carboline #368 Phenolic Epoxy. We sandblated the plates on the ground and first coated, then touched up welds and finish coated in place. Concrete and masonry surfaces in Containment were Keeler & Long Epoxy.

Unit 2 work would be five to six years old, so I feel we have gotten a nice testimonial.

R. B. Roth

11

C!

To: R. R. Kerns

J. H. Neyer

. J. D. Lauck

R. J. Bodner

G. Helson

Js. R. Wineman

T. F. Rogers

J. J. Norris

February 4, 1981

Dr. Al H. Roebuck, Chairma ASDI Consisted D-33 Fluor Engineers & Constructors Inc. 3333 Michelson Drive Irvine, Calif. 92730

Pear Al:

Mappy New Year: In case any ASTM or UNCMC members, or non-members, wonder if all the DBA, radiation and decontamination qualification testing at ORML is worthwhil:, please note the following excerpt from the Philadelphia Inquirer of 12/28/80, reporting on the condition of the TH-2 containment interior:

"An easier cleanup job is expected because special epexy paints throughout the interior have minaged to weather the severe temperatures and moisture extremely well. Hovey (Gale Hovey) chief engineer) said that if they had cracked or flaked, cleaning would have meant painstakingly peeling off all the paint. Because the epexy resin held up, liet Ed workers have relatively smooth surfaces to scrub clean."

These epoxy coatings were manufactured by Carboline and Keeler & Long, and applied by O.B. Cannon & Son of Phila., all of whom deserve much credit. (UESC was the constructor of TMI Units 1 & 2). Certainly, the TMI-2 (conditional Containment temperatures and radiation levels must have exceeded any DBA test exposure of epoxy coated panels, either performed or conceived.

As for D33 meetings, Preston McAbee will represent us at Phoenix, and I plan to attend the New Orleans meeting. See you at BORROSION/81 in Toronto.

Singerely, / Sole Libert Robert E. Hoore Supervising Engineer Corresion Engineering

REM/dbm CC: Nr. Albert M. Levy

. . .

: 1,1 1, :10

R.E. Moore, P.E. Separation Liquidad Constant Engineering

Three Mile Island

per nour

"In all, radiation levels are about four or five times lower inside Unit 2 than we originally requested," said Gale ilovey, the husky, dark haired chief engineer in charge of cleaning up Unit 2. "The predictions are almost always conservative, so we kind of expected to find actual readings much lower than 'hat"

Hovey himself took part in the last Met Ed entry, on Dec. 11, when a 14member crew stayed inside Unit 2 for 45 minutes The color videotapes they made during that and a previous entry show a covernous interior with little visible duler ge, despite a hydrogen gas explosion on the first day of the accident the would have destroyed a small building Surfaces have corroded from the moisture, and from being sprayed on the first '& day of the accident with the corrosive chemicals of Unit 2's fire control

There is some evidence of the ex-

plosion. A steel door on the entry level that was apparently blown open stolently by the blast is crushed. wedeed between the heavy pipes it hit. The mouth of an elevator whose drors open vertica . half the door slides down, half up) suffers from malocclusion -- the upper half of the door protrudes several inches over the lower half. Some empty steel drums were dented and crushed like soda cans. Telephones, wiring, and other instruments fashioned out of low-temperature plastics were melted and deformed

"Still, the overall impression is that the explosion caused little or no serious structural damage," Hovey said. "The lid to the reactor vessel, up on the operating level, shows no structural damage at all.

An easter cleanup job is expected because special epoxy paints throughout the interior have managed to weather the severe tempera-

(Continued on next page)

an eerie scene

Continued from preceding page

tures and moisture extremely well. Hovey said that if they had cracked or flaked, cleaning would have meant painstakingly peeling oil all the paint. Because the cpoxy resin held up. Met Ed workers have rela- a millions already spent will be lost. tively smooth surfaces to scrub a clean.

Lower that expected radiation readings mean that Met Ed workers will be able to stay inside, when the cleanup begins, for longer stretches before being "burned out." But no cleanup work will proceed inside Unit 2 until the basement pool is cleaned and removed; that is the next big ster flovey and his crew

Met Ed currently lacks the money to proceed. The company has already spent million; building a submerged demineralizer system, the complicated device that will filter radioactive cesium and s contium from the basement water. The hitration system is

expected to be ready for use in April. but it has not yet been approved by the Nuclear Regulatory Commission (NRC) If the NRC staff opts for a difterent method of cleaning up the containment building flood, those and the cleanup will be further de-

So although another short entry into Unit 2 is scheduled for late January, actual cleanup operations are at a standstill. Other than some final mopping-up in the auxiliary building, the low, more conventional structure abutting the containment which houses, support equipment, piping and machinery, Unit 2 will continue to sit.

The experts are hoping that further months of delay will not endanger those living near TMI, or communities further down the Susquehanna

Late last month, Met Fil technicians discovered traces of radioactive ity beaming up from a two-inch-vide,



UNITED STATES

NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TEXAS 76011

May 23, 1984 DOCKETED

Dockets: 50-445 50-446

'84 not 22 P12:16

Texas Utilities Electric Company .
ATTN: M. D. Spence, President, TUGCO
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

. Gentlemen:

In January 1984, the NRC Region IV office began a special inspection of the coatings program at the Comanche Peak Steam Electric Station in response to allegations that had been received regarding the adequacy of the coatings. To assist us in this inspection, we have contracted with Brookhaven National Laboratory (BNL) for assistance in the onsite inspection program.

The principal purpose of this special inspection is to examine the adequacy of the applied protective coatings. Our contractors have now completed three trips to the Comanche Peak Steam Electric Station to review your procedures and practices for the application and inspection of protective coatings. In order to complete our review, we require additional information, as identified in Section III of the enclosed "Interim Report on Protective Coatings" prepared by Brookhaven National Laboratory," dated April 25, 1984. We request that you provide this to us within 30 days from your receipt of this letter.

As documented in the interim BNL report, our contractor has identified two general areas of concern wich are summarized as items 2 and 3 of interim report Section V. Also within 30 days from the date of this letter, please respond to this office with your evaluation of the safety significance of these findings. Your response should address the specific concerns identified in the interim report and for each concern provide: (1) information that supports your position as to the safety significance of the concern, (2) a description of corrective actions that will be taken to alleviate safety questions associated with each significant concern, and (3) a description of actions that will be taken to prevent any safety significant concerns from recurring in the remaining coatings program work. Your response should also describe the actions that will be taken to modify the backfit program so that its conclusions will address the adequacy of applied coatings as far as the total coatings system is concerned.



-2-

A copy of the April 25, 1984, interim BNL report has been filed with the ASLB and parties to the hearing.

The responses directed by this letter are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions regarding this matter, please contact Mr. D. M. Hunnicutt at 817/860-8137 or me at 817/860-8248.

Sincerely,

Richard L. Bangart, Director

Region IV Comanche Peak Task Force

Enclosure: As stated

cc w/enclosura:
Texas Utilities Electric Company
ATTN: B. R. Clements, Vice
President, Nuclear
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

Texas Utilities Electric Company
ATTN: H. C. Schmidt, Manager
Nuclear Services
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

BROOKHAVEN NATIONAL LABORATORY

ASSOCIATED UNIVERSITIES, INC.

Upton, Long Island. New York 11973

(516) 282 7005 FTS 666 7005

Department of Nuclear Energy

April 25, 1984

Mr. Eric H. Johnson
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Eric:

Enclosed is Brookhaven National Laboratory's (BNL) report titled "Interim Report on Protective Coatings" for Comanche Peak Steam Electric Station (CPSES). The NRC comments in the draft report dated April 19, 1984 have been incorporated. This report also includes the requested information needed to assess the adequacy of applied coatings at CPSES.

We are currently in the process of preparing an additional report that will address each of the 60 allegations. We anticipate issuing this second report on or about April 30, 1984.

Yours truly,

John Taylor, Group Leader

Plant Systems & Equipment Analysis Group

VL: JHT/ar

cc: R. Bari

R. Hall

F. Hawkins (NRC Reg. III)

D. Hunnicutt (NRC Reg. IV)

W. Kato

H. Kouts

V. Lettieri

J. Oechsle

U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

INTERIM REPORT ON PROTECTIVE COATINGS PREPARED BY BROOKHAVEN NATIONAL LABORATORY

LICENSEE:

Texas Utilities Generating Company

2001 Bryan Tower Dallas, Texas 75201

FACILITY:

Comanche Peak, Units 1&2 Glen Rose, Texas

TECHNICAL SPECIALISTS:

APPROVED:

^{*} Stephen G. Pinney and Associates

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| IV. | FINDINGS RELATED TO THE ADEQUACY OF APPLIED PROTECTIVE COATINGS | 4 |
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I. INTRODUCTION

This is an interim report in response to an NRC Region IV request to itemize the information that is necessary to assess the adequacy of the Applied Protective Coatings Backfit Program at Comanche Peak Steam Electric Station (CPSES), Units 1 & 2. That information is contained in Section III of this report.

The remainder of the report is organized as follows:

Section II: Provides historical background related to CPSES and BNL's

work to date

Section III: Outlined above

Section IV: Summary of findings to date

Section V: Conclusions

The major portion of BNL's effort to date has been in evaluating approximately 60 allegations. A report on this subject is due April 30, 1984.

II. BACKGROUND

There are two major reasons for applying protective coatings inside the reactor containment building. The first reason is to protect exposed carbon steel surfaces from corrosion. The second reason is to provide for easier decontamination, which also reduces the level of occupational radiation exposure.

If coatings are not properly applied and subsequently fail, they can have an adverse safety impact by clogging pump strainers, spray nozzles, and fan filters which can degrade safety equipment operation.

This is more than a theoretical concern since a number of protective coatings failures have occurred at nuclear power stations. For example:

- o Beaver Valley (1975) During construction, the coatings failed on the containment dome.
- o Brunswick 2 (1980) During operation, coatings failure occurred below the torus water line.
- o Dresden 2 (1971) During operation, Torus coatings failure occurred.
- o Peach Bottom 2 (1971, 1973) During preoperational testing, torus coatings failure occurred.

In 1981, Region IV of the NRC conducted an inspection of protective coatings at Comanche Peak. As a result of this inspection, (Inspection Report #81-15), a Notice of Violation was issued regarding failure to follow quality assurance procedures for the inspection of protective coatings. From late September 1979 through October 1981, documentation for protective coatings was not maintained or was incomplete. As a result of this Notice of Violation, Comanche Peak instituted a Backfit Program to verify that the applied protective coatings were themselves adequate even though adequate documentation did not exist.

Starting in 1983, numerous individuals have made allegations concerning the adequacy of the applied protective coatings at Comanche Peak.

Brookhaven National Laboratory (BNL) was contracted to provide technical assistance in performing on-site inspections of the protective coatings program at Comanche Peak. The work, as stated in the contract, is to "Provide technical assistance in performing an inspection of the protective coatings program at the specified NTOL nuclear power plant. This inspection will include the examination of site procedures and verification of the adequacy of these procedures against standards and FSAR commitments, the adequacy of applied coatings, the adequacy of rework, and the procedures governing rework, the adequacy of verification tasting, and the adequacy of completed quality records. Also included in the scope of this task will be the followup on specific technical questions contained in sworn restimony from persons making allegations of the adequacy of the protective coatings program."

The responsibility for reviewing the statistical adequacy of the licensee's Backfit Program, (i.e., sampling techniques, acceptance criteria, etc.) has been assigned to the NRC Auxiliary Systems Branch. With the concurrence of NRC Region IV, a meeting was held between ASB and BNL on April 2, 1984. The outcome of this meeting was that additional statistical information is required. This information has ben incorporated into Section III of this report.

III. INFORMATION REQUIRED TO DETERMINE ADEQUACY OF APPLIED PROTECTIVE COATINGS THROUGH THE BACKFIT PROGRAM

Based on interviews with various personnel on the licensee's staff, it is BNL's inderstanding that the Backfit Program is limited to the primer coatings applied prior to the NRC's issuing Notice of Violation, Inspection Report No. 81-15. That is to say, no statistical analysis of Elcometer adhesion pull tests and Tooke Scratch tests was performed for coatings applied since the NRC issued its violation and for the top coat that has been applied since the coatings application first began. Therefore, if this understanding is accurate, BNL does not believe that the Backfit Program will be useful in determining the adequacy of applied coatings as far as total coating system is concerned. It is understood that in some if not all cases, the testing may have been performed for the total system. However, the licensee chose to perform a statistical analysis only in regard to the primer coat, and does not address the statistical significance of test results for the total coatings system. This will be resolved when the required information is supplied by the licensee.

Information Required

Note: The information requested in this section should be provided in reviewable form to BNL or made available at the site.

A. Programmatic

- Provide the document or series of documents that explains the Backfit Program in its entirety.
- What is the estimated total square footage of applied coatings in Unit 1 containment? What portion of the total applied coatings represents coatings applied to concrete surfaces, miscellaneous steel and containment liner plate?
- 3. Provide the location and boundaries and define all areas that have been exempted from the Backfit Program. Also provide the justification for the exemption.
- 4. Provide the percentage of the three major areas (see Question 2), that was included/exempted in the Backfit Program.

B. Training

- 5. Provide the operating procedure for instruments used during the Backfit Program.
- Provide indoctrination and training records that demonstrate that those individuals performing testing for the Backfit Program were qualified.
- 7. Provide procedure reference for field checking of instruments during the Backfit Program.

C. Instrumentation and Testing

- 8. Provide instrument history/calibration records of each instrument used in the Backfit Program.
- 9. Provide the method used to evaluate and account for instruments found to be out of calibration during the Backfit Program. How was and is the deviation incorporated in reporting Elcometer Adhesion Test results?

Additionally, for an instrument found out of calibration, provide documentation that shows that all tests done with that instrument since its last calibration were invalidated. Also, provide the procedure used to handle those inspection reports written after the instrument went out of calibration.

10. If not provided in the answers to Questions 7 and 8, provide the total number of instruments used in the Backfit Program. Provide the type and serial number of each instrument.

D. Statistical

- 11. Provide the total number of individual pull tests performed and number of individual pull tests that failed for each of the three major areas (see Question 2).
- 12. Provide the final calculations for each of the three major areas (see Question 2) that demonstrate the estimated failure rate with its associated confidence limits, for each of the three major are individually.

IV. FINDINGS RELATED TO THE ADEQUACY OF APPLIED PROTECTIVE COATINGS.

A. Testing

1. BNL has performed independent tests on the protective coatings at a site. On a random basis, 6 areas of approximately one hundred (100) square feet were chosen at various elevations and various azimuths. Two areas represented liner plate, two areas represented miscellaneous steel and two areas represented concrete surfaces. In each area, five (5) test dollies of approximately-1/2 square-inch were glued to the protective coatings and a pof 250 psi was applied to the test dollies. If a dolly separated from the surface, the force that caused the separation was recorded. If the dolly not pull off the surface at 250 psi, a reading of 250 psi was recorded and dolly was knocked off of the surface after the instrument had been returned a reading of zero and removed.

For the liner plate, a failure rate was exhibited of 4 out of 10, or 40 Failures occurred in both test areas with corrected readings of 156, 186, 186, and 186. For miscellaneous steel, no failures were recorded in ten (1 tests, and for concrete surfaces, a failure of the concrete was experienced a corrected reading of 156 psi for one test and no failures of the protectic coatings in nine (9) tests.

In addition to Elcometer adhesion pull tests, 30 Tooke (scratch) tests were performed adjacent to the pull tests. No "out of specification" conditions were recorded in the dry fim thicknesses testing.

BNL's observed failure rate for the liner plate is unacceptable. Altho it was limited in scope, it raises questions about the adequacy of the Back Program for the liner plate.

2. During the week of March 18, 1984, BNL observed an area at approximately elevation 860 and azimuth 175 of the liner plate that was being repaired because of recent unacceptable adhesion test readings and visible deterioration. This same area had acceptable adhesion test readings during initial backfit testing in December 1982. This again raises doubts about tadequacy of the Backfit Program for the liner plate.

B. Procedural

- 3. Contrary to good industry practice, solvent has been used excessively to wipe cown primed surfaces prior to the top coat application. Excessive solvent retention will inhibit the curing of inorganic films and can lead to coatings failure under operating conditions. The licensee's procedures do not provide direction or caution on solvent use, nor is there evidence of proper training to this effect. In three areas of coating system failures on the containment liner plate, BNL observed a solvent odor that was far in excess of what would be considered normal.
- 4. Contrary to CPSES FSAR Section 1A(B), Regulatory Guide 1.58, and ANSI/ASME N45.2.6-1978, Section 4 and Table 1, Level 1 Coatings QC Inspectors have been making judgments and evaluations that they are not qualified to make.

Examples of this were evident in procedures where level I inspectors were:
a) evaluating surface preparation without instruments or approved visual standards, b) evaluating the adequacy of coatings materials when its "pot life" had been exceeded, and c) evaluating the acceptable extent of overlapping dry spray beyond the specific areas to be coated.

- 5. Contrary to Gibbs & Hill, Inc., Protective Coatings Specification No. 2323-AS-31, Revision 1-March 15, 1978 for CPSES, Section 6.1 b and Brown and Root, Inc. letter BRV-12605, dated May 7, 1981 to Tim Dolen, Carboline Company from D. C. Frankum, Project Manager, proper surface preparation was not achieved. Instruction Number QI-QP-11.4-5 allows 80 grit "flapper wheels" versus the 60 grit "flapper wheels" used to qualify surface preparation.
- 6. BNL has identified numerous procedural deficiencies. A summary of some of the more serious deficiencies follows:
 - a) Contrary to good industry practice and 10 CFR Part 50, Appendix B, Criterion V;
 - The procedures are not "stand-alone" documents, acceptance criteria are found in other referenced documents.
 - 2) Procedures such as Instruction Number QI-QP-11.4-1, and QI-QP-11.4-5 requires a flashlight to be held perpendicular to the inspection surface only. Proper inspection technique would require a light to be positioned parallel to the surface to locate certain types of defects. Additionally, the minimum light required is not specified.
 - Procedure QI-QP-11.4-1, 'paragraph 3.1.2, states that for abrasives "... All grease, oil, and deleterious material is unacceptable", and yet provides no methods to determine if these materials are present. The procedure also does not define deleterious material.

- b) Contrary to 10 CFR 50 Appendix B Criterion V and CPSES FSAR, paragraph 17.1.1.5, the final coatings walkdown procedure contained n acceptance criteria and did not contain appropriate instructions regarding hiding quality, cracking, delamination, peeling, excess overspray, excessive roughness, flaking, blistering, or cracking. conjunction with inadequate inspection procedures, this could all acceptance of inadequate coatings.
- c) Contrary to CPSES FSAR, page 1A(B)-22; R. G. 1.54, and ANSI N101.4-1972, paragraph 4.4.3, CPSES coatings procedures allow well splatter to remain on metal surfaces. This could contribute to coatings failure.
- d) Contrary to CPSES FSAR, page 1A(B)-2°; R. G. 1.54, and ANSI N101.4-1972, paragraph 5.2.2, CPSES coatings procedures provide f the writing and approval of special coatings procedures, without approval of the coating manufacturers.
- e) Contrary to CPSES FSAR, paragraph 6.1B.2 and ANSI N.101.2, coatin applied over "drypack" concrete repairs were not DBA-qualified. Additionally, the "drypack" does not appear to meet paragraph 6.4 of ANSI N101.2-1972.

C. Documentation/Design Control

- 7) Based on a brief review of Design Change Authorizations (DCA's) written in the coatings area, it does not appear as though Quality Assurance is included in the review and approval chain, as would required by 10 CFR 50 Appendix B, Criterion III. Also, there is a formal mechanism to ensure that users of controlled copies of the Coating Specification have received and are aware of all applicable DCAs. Finally, there is no requirement for specification revision after DCA's have been issued against it, either based on time or number of DCA's. Additional review in this area is needed to determine how quality is assured in the DCA program.
- 8) Contrary to FSAR Section 6.1B.2, ANSI N101.2, Section 4, a number of coatings systems have been specified and used that have not been qualified. After identification of this by BNL, the licensee has committed to submitting these coatings systems to the appropriate testing.
- 9) Contrary to FSAR Section 1A(B), Regulatory Guide 1.54 Section C.4, "STAF Hospital Spray Disinfectant", an aerosol containing chloride was used by painters inside containment where stainless steel is located.
- 10) A number of the 60 allegations against CPSES's protective coatings have been substantiated and additional allegations may be substantiated. The status of all 60 allegations will be stated in a foll up report due April 30, 1984.

V. SUMMARY AND CONCLUSIONS

- 1. An adequately conceived and properly implemented Backfit Program will permit an evaluation of the applied coatings at Comanche Peak. The information requested in Section III of this report will permit an assessment of the licensee's Backfit Program.
- 2. As demonstrated in Sections IV B and C, the coatings procedures and design control for coatings at CPSES appear to be inadequate to assure the specification of proper coatings systems and the application of coatings, once they are specified. As such, no determination can be made as to the adequacy of coating for the following applications: a) any repair work completed subsequent to the backfit testing, b) coating applications not included in the scope of the Backfit Program, and c) all coating work for Unit No. 2.
- 3. As stated in Section IV A, and further reinforced by conclusion number 2, the liner plate coating appears to be inadequate.