

Release

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GOOD AFTERNOON.

I AM ART HOWELL. I'M THE DIRECTOR OF THE DIVISION OF REACTOR PROJECTS FOR THE NUCLEAR REGULATORY COMMISSION'S REGION IV OFFICE. AFTER A POTENTIALLY SAFETY SIGNIFICANT FINDING IS IDENTIFIED AND INITIALLY CHARACTERIZED BY THE NRC'S SIGNIFICANCE DETERMINATION PROCESS (SDP) ANALYSIS AS GREATER THAN GREEN, AN OPPORTUNITY FOR A REGULATORY CONFERENCE IS OFFERED TO A LICENSEE. IN THIS CASE, NEBRASKA PUBLIC POWER DISTRICT REQUESTED THAT A CONFERENCE BE HELD TO DISCUSS THE SIGNIFICANCE OF A FINDING INVOLVING THE IMPROPER RESTORATION OF THE SERVICE WATER SYSTEM.

AS DEFINED BY THE NRC'S PUBLIC MEETING POLICY, THIS IS A CATEGORY 1 MEETING. THIS IS A MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION AND THE NEBRASKA PUBLIC POWER DISTRICT. THE PUBLIC IS INVITED TO OBSERVE THIS MEETING AND WILL HAVE ONE OR MORE OPPORTUNITIES TO COMMUNICATE WITH THE NRC AFTER THE BUSINESS PORTION, BUT BEFORE THE MEETING IS ADJOURNED. WE WILL ALSO CONSIDER A BREAK ABOUT 2 HOURS INTO THIS MEETING.

BEFORE I GO ANY FURTHER, I WOULD LIKE THE NRC REPRESENTATIVES TO INTRODUCE THEMSELVES AND GIVE NEBRASKA PUBLIC POWER DISTRICT AN OPPORTUNITY TO INTRODUCE ITS REPRESENTATIVES. I ALSO ASK THAT ALL

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ATTENDEES PLEASE SIGN ONE OF THE MEETING ATTENDANCE FORMS AVAILABLE FOR THIS MEETING. LET ME START BY ASKING THOSE NRC STAFF MEMBERS WHO ARE PARTICIPATING BY VIDEO CONFERENCE TO INTRODUCE THEMSELVES, AND THEN I'LL ASK THOSE WHO ARE HERE IN THE ROOM TO INTRODUCE THEMSELVES.

MR. EDINGTON

A REGULATORY CONFERENCE IS THE LAST STEP OF THE INSPECTION PROCESS BEFORE THE NRC MAKES ITS FINAL DECISION ON THE SIGNIFICANCE OF THE INSPECTION FINDINGS. THE FINDING AND ASSOCIATED APPARENT VIOLATION THAT ARE THE SUBJECT OF THIS CONFERENCE INVOLVED THE TO FAILURE TO RESTORE THE DIVISION 2 SERVICE WATER GLAND WATER SUPPLY TO A NORMAL ALIGNMENT ON JANUARY 21, 2004, FOLLOWING MAINTENANCE ON THE DIVISION TWO SERVICE WATER DISCHARGE STRAINER. THIS ERROR, WHICH RESULTED IN DIVISION TWO OF THE SERVICE WATER SYSTEM AND EMERGENCY DIESEL GENERATOR NUMBER TWO BEING INOPERABLE FOR TWENTY-ONE DAYS, WAS DETERMINED TO BE AN APPARENT VIOLATION OF 10 CFR PART 50, APPENDIX B, CRITERION V.

THIS FINDING WAS EVALUATED USING OUR SIGNIFICANCE DETERMINATION PROCESS FOR THE MITIGATING SYSTEMS CORNERSTONE, AND WAS PRELIMINARILY DETERMINED TO BE FINDING WHOSE SIGNIFICANCE IS POTENTIALLY GREATER THAN GREEN.

THE PURPOSE OF THIS CONFERENCE IS TO ALLOW YOU TO IDENTIFY ANY DIFFERENCES OR DISAGREEMENTS WITH THE FACTS AND ASSUMPTIONS USED BY THE NRC TO DETERMINE THE PRELIMINARY SIGNIFICANCE OF THE FINDING, AND FOR YOU TO PRESENT NEW INFORMATION THAT YOU BELIEVE MAY ASSIST THE NRC IN ARRIVING AT THE MOST APPROPRIATE FINAL SIGNIFICANCE DETERMINATION.

WE WOULD ALSO APPRECIATE YOUR VIEWS AS TO WHETHER THERE IS ANY OTHER INFORMATION THAT MAY BE RELEVANT TO THE APPLICATION OF SIGNIFICANCE DETERMINATION IN THIS CASE, INCLUDING YOUR POSITION ON THE CONTENT AND ACCURACY OF THE INSPECTION REPORT FINDING WHICH WAS PROVIDED TO YOU IN ADVANCE OF THIS CONFERENCE.

WHILE THE PURPOSE OF THIS MEETING IS PRIMARILY INTENDED TO DISCUSS THE RISK SIGNIFICANCE OF THE FINDING, I'D LIKE TO HIGHLIGHT THAT THE SERVICE WATER SYSTEM IS ^{ONE OF} ~~THE SINGLE~~ MOST IMPORTANT SAFETY SYSTEMS, ~~FROM A RISK PERSPECTIVE~~, AT COOPER NUCLEAR STATION. AS SUCH, I

THINK IT IS ESSENTIAL THAT WE NOT LOSE SIGHT OF THAT FACT AS WE GET INTO THE DETAILS OF THE PROBABILISTIC RISK ASSESSMENT. IT WILL BE A GREAT BENEFIT TO ALL OF US HERE TODAY TO COME AWAY FROM THIS MEETING WITH A FULL UNDERSTANDING OF THE CAUSES OF THE UNDERLYING SYSTEM RESTORATION PROBLEM AND THE CORRECTIVE ACTIONS NPPD HAS TAKEN OR PLANNED TO ADDRESS IT. AS A RESULT, WE ENCOURAGE NPPD TO PRESENT ITS VIEWS ON THE ASSOCIATED APPARENT VIOLATION. I WOULD NOTE THAT THE APPARENT VIOLATION RELATED TO THE FINDING IS SUBJECT TO FURTHER REVIEW AND MAY CHANGE PRIOR TO THE ISSUANCE OF THE FINAL DETERMINATION LETTER. ANY VIOLATIONS RELATED TO THE FINDING BEING DISCUSSED TODAY WILL BE ASSESSED IN ACCORDANCE WITH THE COMMISSION'S ENFORCEMENT POLICY.

I ALSO WANT TO EMPHASIZE THAT ANY STATEMENTS OF VIEW OR EXPRESSIONS OF OPINION MADE BY NRC EMPLOYEES AT THIS CONFERENCE, OR THE LACK THEREOF, ARE NOT INTENDED TO REPRESENT FINAL AGENCY DETERMINATIONS OR BELIEFS RELATIVE TO THE MATTER BEFORE US TODAY.

FOLLOWING THIS CONFERENCE, WE WILL REACH A FINAL SIGNIFICANCE DETERMINATION AND ENFORCEMENT DECISION. THAT DECISION WILL BE COMMUNICATED TO NPPD AT THAT TIME.

FINALLY, IN OUR CONTINUING EFFORT TO PROVIDE MORE MEANINGFUL MEETINGS WITH OUR STAKEHOLDERS, WE WOULD APPRECIATE YOU TAKING THE TIME TO COMPLETE ONE OF OUR MEETING FEEDBACK FORMS THAT ARE ON THE TABLE AT THE FRONT OF THE CONFERENCE ROOM. WE WILL USE YOUR FEEDBACK IN OUR CONTINUING PROCESS TO IMPROVE THE QUALITY OF OUR INTERACTIONS WITH OUR STAKEHOLDERS.

IF THERE ARE NO QUESTIONS AT THIS TIME ABOUT THE CONDUCT OF THIS CONFERENCE, I WILL ASK MR. KRISS KENNEDY TO PROCEED WITH HIS DISCUSSION OF THE FINDING.

OPENING REMARKS, BRANCH CHIEF:

GOOD AFTERNOON.

I AM KRISS KENNEDY, BRANCH CHIEF FOR COOPER NUCLEAR STATION. THE FINDING AND ASSOCIATED APPARENT VIOLATION THAT ARE THE SUBJECT OF THIS CONFERENCE WERE DESCRIBED IN THE NRC'S INSPECTION REPORT 20040-14 ISSUED ON AUGUST 12, 2004

IN ACCORDANCE WITH OUR NORMAL PRACTICE, ANY WRITTEN MATERIAL YOU PROVIDE US TODAY WILL BE PLACED IN THE NRC'S ELECTRONIC PUBLIC

DOCUMENT ROOM. IF YOU BELIEVE ANY OF THE INFORMATION YOU PLAN TO PROVIDE US SHOULD BE WITHHELD FROM PUBLIC DISCLOSURE, YOU SHOULD PROVIDE US WITH A WRITTEN BASIS FOR WITHHOLDING THAT MATERIAL.

NOW I'D LIKE TO GO INTO A DESCRIPTION OF THE FINDING AND OUR UNDERSTANDING OF THE CIRCUMSTANCES SURROUNDING THE ISSUE, AS WELL AS HOW WE ARRIVED AT OUR PRELIMINARY SIGNIFICANCE DETERMINATION. A COPY OF THE APPARENT NOTICE OF VIOLATION AND THE MEETING AGENDA HAS BEEN PROVIDED.

COOPER NUCLEAR STATION IS EQUIPPED WITH TWO DIVISIONS OF SW, DIVISIONS 1 AND 2, EACH CONTAINING TWO PUMPS. THE TWO PUMPS IN EACH DIVISION DISCHARGE TO A COMMON HEADER. SERVICE WATER PASSES THROUGH A DISCHARGE STRAINER AND CONTINUES THROUGH THE SYSTEM. GLAND WATER IS SUPPLIED TO EACH PUMP FROM A CONNECTION DOWNSTREAM OF THE DISCHARGE STRAINER IN THE RESPECTIVE DIVISIONS. THE GLAND WATER IN EACH DIVISION SUPPLIES COOLING AND LUBRICATING WATER TO THE PUMP SHAFT BEARINGS. GLAND WATER IS REQUIRED TO SUPPORT THE OPERABILITY OF THE SERVICE WATER PUMPS. A CROSS-CONNECT LINE EXISTS BETWEEN THE DIVISIONS 1 AND 2 GLAND WATER SUPPLIES WHICH IS ONLY USED DURING MAINTENANCE ACTIVITIES. BY

PROCEDURE, IF THE DIVISIONS 1 AND 2 GLAND WATER SUPPLIES ARE CROSS-CONNECTED, THE DIVISION OF SW THAT IS NOT SUPPLYING ITS OWN GLAND WATER MUST BE DECLARED INOPERABLE.

ON FEBRUARY 8, CONTROL ROOM OPERATORS RECEIVED TROUBLE ALARMS ON BOTH THE DIVISIONS 1 AND 2 SW GLAND WATER SUPPLIES. IN ACCORDANCE WITH THE ALARM RESPONSE PROCEDURE, AN OPERATOR WAS DISPATCHED TO THE SW PUMP ROOM WHERE IT WAS DETERMINED THAT THE ALARM WAS CAUSED BY LOW PRESSURE ON EACH OF THE GLAND WATER SYSTEMS. THE ALARM CLEARED AND NO FURTHER ACTIONS WERE TAKEN. THE OCCURRENCE WAS DOCUMENTED IN COOPER'S CORRECTIVE ACTION PROGRAM.

ON FEBRUARY 11, AN ADDITIONAL TROUBLE ALARM WAS RECEIVED ON THE DIVISION 2 SERVICE WATER GLAND WATER SUPPLY. THE GLAND WATER FLOW WAS FOUND TO BE ACCEPTABLE AND THE ALARM CLEARED; HOWEVER, THE LICENSEE PERFORMED THE ADDITIONAL ACTION OF VERIFYING THE GLAND WATER VALVE LINEUP. AS A RESULT, OPERATORS DISCOVERED THAT THE DIVISION 2 GLAND WATER SUPPLY VALVE (SW-28) WAS SHUT AND THE CROSS-CONNECT VALVES (SW-1479 & SW-1480) WERE OPEN. THIS CONFIGURATION WAS NOT IN ACCORDANCE WITH SYSTEM OPERATING PROCEDURE (SOP) 2.2.71, "SERVICE WATER SYSTEM," REVISION

69. IN RESPONSE, THE LICENSEE IMMEDIATELY DECLARED DIVISION 2 OF THE SW SYSTEM INOPERABLE AND ENTERED TECHNICAL SPECIFICATION 3.7.2, WHICH REQUIRED OPERATORS TO RESTORE THE INOPERABLE DIVISION OF SW TO AN OPERABLE STATUS WITHIN 30 DAYS OR PLACE THE PLANT IN A HOT SHUTDOWN CONDITION WITHIN 12 HOURS. EMERGENCY DIESEL GENERATOR 2, DIVISION 2 OF THE RESIDUAL HEAT REMOVAL SYSTEM, AND DIVISION 2 OF THE REACTOR EQUIPMENT COOLING SYSTEM, WERE DECLARED INOPERABLE AS WELL, SINCE SW IS REQUIRED TO SUPPORT OPERABILITY OF THESE SYSTEMS. THE LICENSEE IMMEDIATELY RESTORED THE VALVE LINEUP PER SOP 2.2.71, AND THE AFFECTED EQUIPMENT WAS DECLARED OPERABLE.

THE SUBSEQUENT INVESTIGATION DETERMINED THAT THE VALVE MISALIGNMENT HAD EXISTED SINCE ROUTINE PREVENTIVE MAINTENANCE HAD BEEN PERFORMED ON THE DIVISION 2 SW DISCHARGE STRAINER ON JANUARY 21, APPROXIMATELY 21 DAYS. CLEARANCE ORDER SWB-1-4324147 SW-STNR-B WAS ISSUED IN SUPPORT OF THIS MAINTENANCE, WHICH REQUIRED THE STRAINER TO BE REMOVED FROM SERVICE IN ACCORDANCE WITH SOP 2.2.71. SOP 2.2.71, SECTION 13, "SECURING SW ZURN STRAINER," DIRECTED OPERATORS TO OPEN THE GLAND WATER CROSS-CONNECT VALVES AND SHUT THE DIVISION 2 SUPPLY VALVE (SW-28). THE CLEARANCE ORDER WAS RELEASED LATER THE SAME DAY FOLLOWING COMPLETION OF

THE MAINTENANCE. THE INSTRUCTIONS (RELEASE NOTES) ON THE CLEARANCE ORDER DIRECTED OPERATORS TO "RELEASE TAGS AND RESTART [THE] STRAINER IAW [IN ACCORDANCE WITH SOP] 2.2.71." OPERATORS UTILIZED SOP 2.2.71, SECTION 12, "STARTING SW ZURN STRAINER," TO RESTART THE STRAINER. HOWEVER, SECTION 12 TO DID NOT CONTAIN INSTRUCTIONS TO RESTORE THE GLAND WATER SUPPLY TO ITS NORMAL CONFIGURATION. THOSE INSTRUCTIONS WERE LOCATED IN SECTION 10, "SW GLAND WATER SUBSYSTEM B OPERATION," WHICH WAS NOT REFERENCED BY THE TAGOUT AND WAS NOT USED BY PERSONNEL DURING SYSTEM RESTORATION. AS A RESULT, UPON COMPLETION OF THE ACTIVITY, OPERATORS DECLARED DIVISION 2 OF SW OPERABLE, UNAWARE THAT THE GLAND WATER SYSTEMS REMAINED CROSS-CONNECTED.

DURING OUR FOLLOWUP INSPECTION, WE DETERMINED THAT THE FAILURE TO ESTABLISH APPROPRIATE PROCEDURAL GUIDANCE FOR THE RESTORATION OF THE DIVISION 2 SW PUMP GLAND WATER SUPPLY FOLLOWING MAINTENANCE AND PRIOR TO RETURNING THE SYSTEM TO SERVICE WAS CONSIDERED TO BE A PERFORMANCE DEFICIENCY. THIS DEFICIENCY RESULTED IN THE DIVISION 2 SW PUMP GLAND WATER BEING PROVIDED BY THE DIVISION 1 SW PUMPS. IN THIS CONFIGURATION, A FAILURE OF THE DIVISION 1 PUMPS WOULD HAVE RESULTED IN LOSS OF

GLAND WATER TO THE DIVISION 2 PUMPS AND THE POTENTIAL LOSS OF ALL SW.

GIVEN THE STATED PERFORMANCE DEFICIENCY, WE INITIATED A SIGNIFICANCE DETERMINATION IN ACCORDANCE WITH NRC MANUAL CHAPTER 0609, "SIGNIFICANCE DETERMINATION PROCESS."

THIS FINDING WAS ASSESSED BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME, INCLUDING INFLUENTIAL ASSUMPTIONS. THE FINDING WAS PRELIMINARY ASSESSED TO HAVE A SIGNIFICANCE GREATER THAN GREEN. OUR PRELIMINARY DETERMINATION WAS DOCUMENTED IN OUR AUGUST 12, 2004, LETTER TO YOU.

NOW I WILL BRIEFLY SUMMARIZE THE PROCESS WE USED TO COMPUTE THE IMPACT OF CORE DAMAGE FREQUENCY.

IN ACCORDANCE WITH THE SIGNIFICANCE DETERMINATION PROCESS PHASE 1 SCREENING LOGIC, THE INSPECTORS DETERMINED THAT THE FINDING RESULTED IN AN INCREASE IN THE LIKELIHOOD OF AN INITIATING EVENT, NAMELY, A LOSS OF SW, AS WELL AS INCREASING THE PROBABILITY THAT THE SW SYSTEM WOULD NOT BE AVAILABLE TO PERFORM ITS MITIGATING SYSTEMS FUNCTION. THEREFORE, A SIGNIFICANCE DETERMINATION PROCESS PHASE 2 EVALUATION WAS REQUIRED.

THE INSPECTORS PERFORMED THE PHASE 2 ESTIMATION USING THE RISK-INFORMED INSPECTION NOTEBOOK FOR COOPER NUCLEAR STATION. BASED ON THE RESULTS OF THE PHASE 2 EVALUATION, THE DETAILS OF WHICH ARE DOCUMENTED IN THE INSPECTION REPORT, THE RISK ASSOCIATED WITH THIS FINDING WAS ESTIMATED TO BE OF SUBSTANTIAL SAFETY SIGNIFICANCE, OR YELLOW. BASED ON THE PHASE 2 SIGNIFICANCE ESTIMATION, A PHASE 3 EVALUATION WAS PERFORMED.

THE PHASE 3 ANALYSIS CONSISTED OF THE RISKS ASSOCIATED WITH INTERNAL AND EXTERNAL INITIATING EVENTS. NRC RISK ANALYSTS QUANTIFIED THE INTERNAL RISK USING THE IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY (INEEL) STANDARD PLANT ANALYSIS RISK MODEL FOR COOPER NUCLEAR STATION. THE ANALYST ALSO ASSESSED THE IMPACT OF LARGE EARLY RELEASE FREQUENCY. THE DETAILS OF THE ASSUMPTIONS AND METHODOLOGY USED DURING THE RISK ASSESSMENT ARE DOCUMENTED IN THE INSPECTION REPORT. BASED ON THE ASSUMPTIONS USED, THE ANALYST DETERMINED THAT THE TOTAL CHANGE IN CORE DAMAGE FREQUENCY (CDF) WAS ESTIMATED TO BE 1.0×10^{-5} AND THE TOTAL CHANGE IN LARGE EARLY RELEASE FREQUENCY (LERF) WAS ESTIMATED TO BE 9.5×10^{-6} .

ENFORCEMENT

FROM AN ENFORCEMENT STANDPOINT, WE DETERMINED THAT THIS PERFORMANCE DEFICIENCY IS A POTENTIAL APPARENT VIOLATION OF 10 CFR PART 50, APPENDIX B, CRITERION V, WHICH REQUIRES THAT ACTIVITIES AFFECTING QUALITY BE PRESCRIBED BY DOCUMENTED INSTRUCTIONS, PROCEDURES, OR DRAWINGS, OF A TYPE APPROPRIATE TO THE CIRCUMSTANCES AND SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE INSTRUCTIONS, PROCEDURES, OR DRAWINGS. CONTRARY TO THAT REQUIREMENT, CLEARANCE ORDER SWB-1-4324147 SW-STNR-B DID NOT PROVIDE ADEQUATE INSTRUCTIONS TO RESTORE THE SW SYSTEM TO AN OPERABLE CONFIGURATION FOLLOWING THE COMPLETION OF MAINTENANCE ACTIVITIES ON JANUARY 21, 2004. THIS RESULTED IN DIVISION 2 OF THE SW SYSTEM BEING INOPERABLE FROM JANUARY 21 THROUGH FEBRUARY 11, 2004.

UNLESS YOU HAVE ANY QUESTIONS AT THIS TIME, WE NOW WANT TO GIVE NPPD AN OPPORTUNITY TO PROVIDE ITS PERSPECTIVE ON THE RISK SIGNIFICANCE OF THE FINDING AND THE ASSOCIATED APPARENT VIOLATION.