UNITED STATES



NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

### SEP 1 3 1995

Entergy Operations, Inc. ATTN: Ross P. Barkhurst, Vice President Operations, Waterford 3 P.O. Box B Killona, Louisiana 70066

SUBJECT: RESPONSE FOR REASSESSMENT OF THE OPERATIONS FUNCTIONAL AREA OF THE WATERFORD STEAM ELECTRIC STATION, UNIT 3 SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE (SALP)

This is in response to your letter, dated July 19, 1995, which responded to the Systematic Assessment of Licensee Performance (SALP) Report for Waterford 3 for the period of October 31, 1993, through April 29, 1995. We appreciate the open and candid remarks you provided both in the public meeting of June 23, 1995, and in your response. It is exactly this type of open and direct dialogue that we are attempting to foster with the recent changes in format and structure of the SALP process.

In your letter you provided your insight into the programs and processes that you believe indicate superior performance in Operations. You also specifically requested that we raise the SALP rating of the Operations area to a Category 1 rating. Your views on the performance issues discussed in both the public meeting and SALP report have been carefully considered. The information you provided was helpful in our understanding of your perception of operational performance at Waterford 3. Nevertheless, much of the information provided in your letter had been considered during the SALP Board deliberations and, upon further reflection, we have determined that the original rating of Category 2 remains justified.

We are encouraged by your belief that the degree of NRC oversight has little bearing on the operational performance of Waterford 3 and that a reduction in inspection hours associated with an increased SALP rating would not have an adverse affect on performance. In addition, we recognize your position that your operating record has been achieved through institutionalized processes and an underlying safety culture. We wish to continue to foster support and growth of these activities. In this light, we have addressed the clarifications you provided in Attachment 1 to your letter in a separate attachment.

In conclusion, we are encouraged by your ongoing efforts to improve operational training, procedures, and the corrective action program. We will continue to monitor your efforts during the current SALP period. In addition, we agree that the general actions and performance of your operations staff deserve positive feedback. Although we have determined that a Category 2 rating in the Operations area remains justified, this rating in no way should diminish their accomplishments. In conclusion, we believe that there has been improvement in the Operations area at Waterford 3 that, if continued and sustained, could lead to an improved SALP rating in the future.

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If you have questions concerning our additional deliberations, please contact Chris A. VanDenburgh at (817) 860-8161.

-2-

Sincerely,

mullatim L. J. Callan Regional Administrator

Enclosures: as stated

cc: Entergy Operations, Inc. ATTN: Harry W. Keiser, Executive Vice President and Chief Operating Officer P.O. Box 31995 Jackson, Mississippi 39286-1995

Entergy Operations, Inc. ATTN: Jerrold G. Dewease, Vice President Operations Support P.O. Box 31995 Jackson, Mississippi 39286-1995

Wise, Carter, Child & Caraway ATTN: Robert B. McGehee, Esq. P.O. Box 651 Jackson, Mississippi 39205

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Chairman Louisiana Public Service Commission One American Place, Suite 1630 Baton Rouge, Louisiana 70825-1697

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Entergy Operations, Inc. ATTN: R. F. Burski, Director Nuclear Safety P.O. Box B Killona, Louisiana 70066

William H. Spell, Administrator Louisiana Radiation Protection Division P.O. Box 82135 Baton Rouge, Louisiana 70884-2135

Parish President St. Charles Parish P.O. Box 302 Hahnville, Louisiana 70057

Mr. William A. Cross Bethesda Licensing Office 3 Metro Center Suite 610 Bethesda, Maryland 20814

Winston & Strawn ATTN: Nicholas S. Reynolds, Esq. 1400 L Street, N.W. Washington, D.C. 20005-3502

bcc to DMB (IE 40)

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bcc distrib. by RIV:

L. J. Callan Branch Chief (DRP/D) MIS System RIV File Branch Chief (DRP/TSS) Resident Inspector Leah Tremper (OC/LFDCB, MS: TWFN 9E10) DRSS-FIPB Project Engineer (DRP/D)

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

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RIV:C:DRP/D*	D:DRP*	D:DRS N	NRR*	D:DRSS*
CAVanDenburgh; cam	JEDyer	TPGwynn WY	WDBeckner	RAScarano
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DRA	RA IL N			
SJCollins	LaCallan			
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OFFICIAL RECORD COPY

\*previously concurred

bcc to DMB (IE 40) 1

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L. J. Callan Branch Chief (DRP/D) MIS System RIV File Branch Chief (DRP/TSS) Resident Inspector Leah Tremper (OC/LFDCB, MS: TWFN 9E10) DRSS-FIPB Project Engineer (DRP/D)

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SJCollins	Locallan	1		
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\*previously concurred

#### Enclosure 1

#### Issues Specific to Plant Operations

### Training

We acknowledge that several enhancements to operations training programs were implemented during the SALP period in response to the less-than-expected performance of the March 1994 reactor operator class and the performance of fuel handling operators. Although these improvements have proven useful and contributed to all SRO candidates passing the exam given in March 1995, the training weaknesses identified in the March 1994 class and the aspect of nuclear auxiliary operator knowledge levels related to the ability to reset the emergency diesel generator were not known prior to NRC involvement; therefore, we have not considered these self-identified. In addition, we considered the performance problems associated with the incorrect fuel movements to be self-revealing.

With respect to your exception to our statement that sufficient guidance was not provided for the compensatory measures to be used for degraded fire detection equipment, you indicated that there was confusion and a misunderstanding regarding how the NRC inspector posed the question and interpreted the answers regarding the containment temperature at which operator action would be taken. For clarification, our primary concern was not that the operators had not implemented compensatory actions nor that they had varying expectations for the temperatures which would indicate a fire in containment. NRC Inspection Report 50-382/9504 specifically noted that operators were recording hourly containment fan cooler temperature in response to fire impairments inside containment. We agree that it is reasonable to expect that action would have been taken as temperature began to increase, althcugh hourly logging does not fully compensate for a continuous fire detection system being inoperable. Specifically, we were concerned with the inconsistencies in operator knowledge regarding the ongoing status of these inoperable fire protection systems. For example, some operators were unaware of the status of the supervisory air system and the alarm indications on the fire detection panels. As stated in the inspection report, we considered the potential reliance upon false indications combined with inadequate procedural guidance a concern because they could have resulted in a delay in detecting or extinguishing a fire in containment.

#### Procedures

We acknowledge that several initiatives are in progress to improve the quality of procedures and control room drawings. With respect to your exception to our statement that the overall quality of procedures at the site was mixed, you indicated that operational procedures have never been better. Although we may agree with this assessment, it does not alleviate the observations throughout the assessment period of procedural weaknesses. As you indicated, specific improvements have been made with emergency operating and off-normal procedures. In addition, you have taken action to ensure that outstanding procedural revisions are incorporated in a more timely manner. It is on the basis of these initiatives that we conclude that the overall procedural quality was mixed. With respect to the backlog of temporary revisions in the control room, we acknowledge that this issue was self-identified and note that one characteristic of a superior program is the absence of a significant backlog of procedure and drawing revisions.

With respect to your exception regarding our statement that procedures for locally resetting the emergency diesel generator following emergency trips had insufficient guidance, you indicated that the procedures were adequate, but that operator training was deficient. As indicated in NPC Inspection Report 50-382/95-03, we concluded that the lack of operator knowledge combined with the lack of procedural guidance was of concern, since restoration of the EDG could have been delayed had an actual event occurred.

#### Problem Identification

With respect to the repeated boron dilution events, we agree that individually the events were of little safety significance and not required to be reported. Our concern centered on the fact that it took several events and a management meeting with the NRC before you implemented a thorough root cause evaluation. Through this excelient effort you were able to identify several previously unrecognized operational impediments in the control room that contributed to the dilution events.

With respect to your exception to our statement that licensee self-assessment activities were slow to identify problems, you indicated that significant improvements have been made in the areas of equipment positioning, tagging, and reactivity management, and that personnel errors have been reduced. As stated in the SALP report, we gave considerable weight to the fact that operators in training used excellent judgment and were very proactive in identifying the problem with the Train AB swing electrical buses not being adequately tested during surveillances. However, this instance does not offset our concern regarding the timeliness with which operational issues are identified as evidences by the delays in identifying problems with the engineered safety features (ESF) ventilation systems, the root causes of the boron dilutions, and more recently the operational problems involving the essential chill water system.

With respect to your exception to our statement that operations staff occasionally demonstrated a high threshold for initiating corrective actions, you indicated that one third of all condition reports were initiated by operations personnel. Although this is an impressive percentage, as indicated in NRC Inspection Report 50-382/95-13, we noted that you were in the final stages of implementing the corrective action program, and that upon full implementation the program should be effective in promptly correcting identified problems. Additionally, the inspection report noted that you need to emphasize four remaining areas involving: (1) initiation of condition reports, (2) root cause evaluations, (3) involvement of the condition review board, and (4) allocation of supervisory and engineering resources.

With respect to the operational "work-around" involving safety-related ESF

ventilation systems, you again took exception to our observation and indicated that the design deficiency with the ESF ventilation system was never a "work around" for the Operations Department. NRC Inspection Report 50-382/94-13 clearly noted that a work practice existed in which ventilation system heaters were reset by operations following periodic surveillance testing from the time the design change was implemented on October 1992 and April 1993 until the deficiency was identified in May 1994. Despite the fact that a shift supervisor questioned the practice and assisted in its resolution, the operational practice of resetting the heaters instead of questioning why the heaters needed to be reset masked the identification of a deficiency involving the time response of temperature controllers.



ENCLOSURE 2 Entergy Operations, Inc.

Ross P. Barkhurst

W3F1-95-0106 A4.05 PR

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July 19, 1995

Mr. L.J. Callan Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011

Subject:

Waterford 3 SES Docket No. 50-382 License No. NPF-38 Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995

Dear Mr. Callan:

507210160

The purpose of this letter is to respond to the Systematic Assessment of Licensee Performance (SALP) Report for Waterford 3 for the period October 31, 1993 through April 29, 1995. Entergy Operations, Inc. recognizes the effort and resources expended in the overall performance assessment process . and believes that the SALP process has provided meaningful feedback to Waterford 3 management regarding our performance. We are appreciative of the open and candid discussions at the public meeting held on June 23, 1995. Of particular benefit, were the remarks that clarified, for us, the reason the SALP board and Regional Management rated the Operations Functional Area as a SALP category 2. We were also able to convey to you information that we believe provides a solid foundation for Waterford 3 being recognized as a superior performer with SALP 1's in all functional areas. Although the comments contained in this letter are direct and may be strongly worded, they should not be interpreted as defensive. Instead, we wish to continue the positive and constructive dialogue begun at the public meeting. This letter and it's accompanying attachments form a comprehensive package that should provide you insight into the programs and processes that management at Waterford 3 uses to ensure and maintain the highest safety performance of the plant. Based on this response we ask that you raise the Category 2 rating in the functional area of Plant Operations to a Category 1 rating.

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Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 2 July 19, 1995

In the Plant Support and Maintenance Areas, we are pleased to have maintained a Category 1 rating. Strong programs and management involvement continue to keep Plant Support and Maintenance at Superior Levels. We are also pleased to have received a Category 1 rating in Engineering. To maintain our superior performance, it is recognized that continuous improvements are necessary. Integration of engineering into all phases of plant operations will continue to be stressed.

The Category 2 rating in the Plant Operations functional area was disappointing. You stated, during our SALP public meeting, that the performance of the Operations Department at Waterford 3 has been strong. We agree. Provided in Attachment 1 are some of the details discussed at the SALP public meeting that we believe provide clarification of issues specific to the Plant Operations section of the SALP Report. Your reservations in grading the Operations area a SALP 1 seemed to center around a lack of confidence in the organizations that support Plant Operations and their ability to sustain a high level of safety performance. Lacking this, you felt that the reduction in inspection hours that a rating of SALP 1 in all areas would bring could not be justified. Waterford 3 believes that Superior Safety Performance has been achieved and will be maintained regardless of the degree of NRC oversight. This conclusion is based on the overall superior performance of the plant and the institutionalized processes and safety culture that is the basis for this performance.

Waterford 3 has achieved sustained superior performance when measures that best represent overall performance are considered. This performance could not be achieved without superior performance in the Operations functional area, and is consistent with or better than the performance of plants with ratings of SALP 1 in all functional areas. Specifically, during this SALP period Waterford 3 set plant records in electrical generation for an outage year. unit capability factor for an outage year. corrective maintenance backlog (240), and 3 year scram rate. Additionally for the 3 year period ending in 1994. Waterford 3 set the following four Entergy System records for 3 year averages: collective radiation exposure, unit capability factor, equivalent availability, and forced outage rate. Finally, in reviewing the performance indicators tracked by the NRC, Waterford 3 has performed as well or better than the other sites rated with SALP 1's in all categories. Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 3 July 19, 1995

Specifically, of the 9 sites rated superior, only Davis Bessie had a capacity factor better than Waterford 3 for the 3 year period ending 1994, and in the areas of Safety System Actuations and Safety System Failures, Waterford 3's performance was equal to or better than 5 of the 9 sites. Additional details of this superior performance are provided in Attachment 2.

The level of safety performance reflected in the above results do not just happen, nor is it meaningful without the substance and quality of the institutionalized processes and safety culture that led to its achievement. These institutionalized processes and safety culture have resulted from activities that can be categorized into three key areas: A core corrective action (CA) process. assessment activities that provide additional defense in depth. and strong management direction. Together, they establish redundant barriers that will ensure continued superior safety performance.

The core corrective action process is one that we believe sets an industry standard and was developed and refined through an Entergy, system wide initiative. It was fully implemented at Waterford 3 in June 1994. It is a one document corrective action process that makes all site personnel responsible for the identification of adverse conditions at a low threshold via a Condition Report (CR) and is simple and user friendly for the initiator. The process can be fed by other site processes such as Condition Identification (CI, Waterford 3's work order initiation process), Zone Inspections, or plant walkdowns by operators, engineers or management. The effectiveness and widespread use of this process was best demonstrated during the SALP public meeting where we showed the cumulative results of our efforts for the past year. Of the 1178 CRs generated, 34% were written by Operations (see Attachment 3). The CR also triggers complete and thorough root cause analyses (RCA) for significant conditions adverse to quality, for adverse trends, or whenever management feels that an RCA is warranted. There is also a process for performing a more detailed adverse trend analysis for multiple events where individual event RCA's may not have revealed all the common contributing causes.

Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 4 July 19, 1995

It is worth noting at this point in our discussion that there is really no way Waterford 3 could have achieved overall high and steadily improving plant performance without superior performance in Operations. In fact, we did not. Operations was a SALP 1 for three consecutive cycles. During that time, the corrective action process discussed above did not even exist and thresholds for initiating corrective action were in fact higher than for this last period. This, in combination with the fact that Operations has been leading the way in implementation of the much improved process (as indicated in the public meeting) gives us confidence in our assessment of that department. Its performance is clearly higher than the benchmark previously set with four years of SALP 1 performance.

Our core corrective action process, described above, is also surrounded by organizational barriers that provide the appropriate checks and balances as well as active management oversight. These are as follows:

- · Review of all CR's and CI's by the Operations Shift Supervisor
- Working level review of all CI's by the CI Review Committee (CIRC)
- Management review of all CI's and CR's by the Condition Review Board (CRB)
- In line review of all RCA's by QA for consistency and thoroughness
- CRB and Management review of Corrective Action Trend Reports and required actions
- Regular review of Corrective Action process, activities and trends by the Safety Review Committee (SRC)

Outside of the core corrective action process are numerous assessment activities that provide additional defense in depth and support a long lasting safety culture with a focus on continuous improvement. The Quality Assurance organization, with aggressive and proactive leadership has conducted effective and insightful audits and assessments that go beyond the traditional QA role. Additionally, a rapid response team has been established to quickly investigate and root out emerging problem areas so that appropriate and timely corrective action can be taken. These initiatives have resulted in a strong QA presence that is both independent and actively involved in day to day activities. Other assessment activities that provide additional defense in depth are as follows: Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 5 July 19, 1995

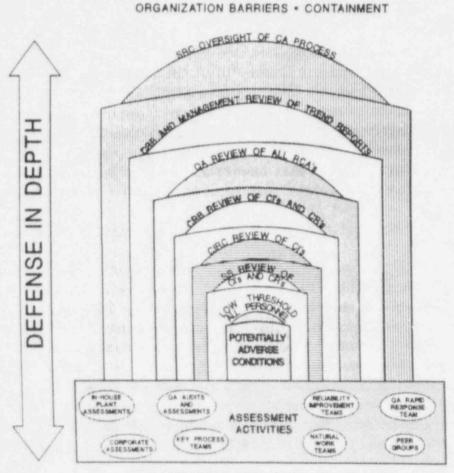
In-house Plant assessments

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- Key process Teams
- Independent Corporate Assessments
  Peer Groups
  - Reliability Improvement Team (RIT) . Natural Work Teams (NWT's)

Figure 1 is a pictorial that best represents our defense in depth which provides barriers to any degradation in plant performance.

### BARRIERS TO DEGRADED PERFORMANCE



ASSESSMENT ACTIVITIES = FOUNDATION

Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 6 July 19, 1995

The final key ingredient that has led to Waterford 3's superior safety performance is strong management direction. You are aware that Waterford 3 and Entergy Operations have identified superior safety/regulatory performance as one of three key goals that we feel ensure the success of our company. This goal is implemented via site business plans which have driven alignment of programs, processes and people that support achievement of superior performance. One outfall from this has been management development through training and rotational job assignments - a long term strength at Waterford 3. This has resulted in a management team with a broad experience base that is technically sound and diverse. This approach coupled with regular senior management involvement has fostered a strong safety culture throughout the organization. Additionally, management direction permeates the processes and assessment activities described above in various ways. Executive sponsors are assigned and are actively involved in Peer groups and Key Process Teams; Total Quality Initiatives receive complete and thorough support from the executive level down, including a site lead team headed by the site Vice President and his Directors: the Entergy Nuclear Committee advises and assists the Board of Directors of Entergy in the proper and complete discharge of its responsibilities relating to the Company's nuclear operations. Clearly, management at Waterford 3 and Entergy is committed to superior safety performance.

Attachment 4 provides additional details on the processes and activities described above.

In summary, we are confident that superior safety performance has been attained at Waterford 3 and that ratings of Category 1 in all SALP functional areas are warranted. This superior performance is evidenced not only by the plant's superior operating record, but most importantly, by the institutionalized processes and safety culture that are the basis for this performance. These processes and safety culture are exemplified by the core corrective action process that sets an industry standard, a wide variety of assessment activities that provide additional defense in depth and strong management direction that fosters an ever improving safety culture. These activities also establish multi-dimensional barriers that will ensure continued superior safety performance. Response to the SALP Report for the Period of October 31, 1993 through April 29, 1995 W3F1-95-0106 Page 7 July 19, 1995

The actions and performance of the staff in general and the Operations Department in particular, deserve the positive feedback necessary to sustain such efforts. We request that you raise the Category 2 rating in the functional area of Plant Operations to a Category 1 rating.

Very truly yours,

R.S. Milling

R.P. Barkhurst Vice President, Operations Waterford 3

RPB/DMU/ssf Attachments

cc:

C.P. Patel, NRC-NRR R.B. McGehee N.S. Reynolds NRC, Document Control Desk NRC Resident Inspectors Office

### List of Attachments

Attachment 1:	Clarification of Issues Specific to the Plant Operations Section of the SALP Report
Attachment 2:	Data Supporting Superior Performance
Attachment 3:	Condition Reports Written During Last Year
Attachment 4:	Details of Activities that Support Processes and Safety Culture

Attachment 1 to W3F1-95-0106

Attachment 1 to W3F1-95-0106 Page 1 of 5

### Clarification of Issues Specific to the Plant Operations Section of the SALP Report

The SALP report cover letter states that "Although strong performance by operators contributed to a long continuous run, improvements could be made with operations training, procedures and problem identification." In the Plant Operations section of the SALP report, a number of items perceived as weaknesses have been identified in these three areas. Waterford 3 would like to clarify these issues and provide further information for your consideration. These issues will be discussed below by area.

### TRAINING

The SALP report states that some weaknesses were identified with "the training program for operators" and that "some less experienced licensed and non-licensed operators demonstrated performance and knowledge deficiencies that should have been remedied by the training and qualification program".

Waterford 3 agrees that weaknesses in several areas of the operator training program did exist, but this example typifies how Waterford 3 handles a self identified weakness. The results of the reactor operator class which ended in March, 1994 did not meet our expectations. As a result, a thorough evaluation of the operator training program was performed, and significant changes and improvements were made. Testing was revised to included oral boards with management and management walkthroughs. Test questions were modified to include written answer and system drawing questions in addition to multiple choice questions during requalification quizzes. Licensed operators are now required to make an 80% grade on requalification quizzes, as well as the annual examination. The results of these improvements were dramatic. All SRO candidates passed the exam given in March, 1995. The average score was 94.3, and no one made less than a 90. In addition, each candidate had strong simulator and walkthrough scores.

In conjunction with licensed operator training program improvements, significant enhancements were also made in nuclear auxiliary operator (NAO) training. Specifically, auxiliary operators are now required to complete job performance measures, take plant field trips during training, and take an annual exam. In addition, each auxiliary operator is given a plant

Attachment 1 to W3F1-95-0106 Page 2 of 5

### Clarification of Issues Specific to the Plant Operations Section of the SALP Report

walkthrough by his SS or CRS every quarter. Lead instructors have also been specifically assigned to the NAO program. Operations training is better than it has ever been.

The SALP report also states that "inspectors identified that compensatory measures for degraded fire detection equipment" did not have sufficient guidance. Waterford 3 takes exception to this statement. After interviewing the operators questioned by your inspectors, we believe there was considerable confusion and misunderstanding over both the question asked and the answers received. Normal containment temperature is between 108-112° F. The technical specification limit is 120° F and is well known to all operations personnel. It is our understanding that all operators queried knew that they were logging containment temperatures as compensatory actions for degraded fire protection equipment. We are confident that if the question asked were, "What would you do if you saw any of these temperatures beginning to rise?" the answers would have been consistent and proper, and would have included immediate investigation.

Another concern stated was that "some weaknesses were identified with the training program for fuel handling operators". A training task analysis was performed to determine areas for improvement in the training program for fuel handling operators. Information from the analysis, such as a need for training on off normal events, was used to enhance the training program.

### PROCEDURES

The SALP report states that the "overall quality of procedures at the site was mixed". Waterford 3 takes exception to this statement as an overall assessment of the operations procedures. We recently finished an Emergency Operating Procedure (EOP) upgrade that was favorably reviewed by the Institute of Nuclear Power Operations. The EOPs are again undergoing revision to include new information and technology as it becomes available. Our Off-Normal procedures were also upgraded. Hard sequencing has been implemented for all appropriate Operation's procedures. The procedure review process has been revised to incorporate verification and validation (V&V) and whenever possible walkthroughs are performed. A departmental goal for 1995 is to ensure that no operations procedure has more than three

Attachment 1 to W3F1-95-0106 Page 3 of 5

### Clarification of Issues Specific to the Pla. t Operations Section of the SALP Report

changes against it. As of this date that task is approximately 2/3 complete. Operation's procedures are better than they have ever been.

The SALP report also states "that procedures for locally resetting an emergency diesel generator following certain emergency trips did not have sufficient guidance". Waterford 3 again takes exception to this statement. Adequate information and instructions are contained in procedures to reset the EDGs. There was however a training issue involved with NAOs not being able to reset the EDG without having the procedure. Weaknesses in the NAO training program had been previously identified. As a result, program enhancements were being implemented to increase the level of training received by NAOs.

Another concern stated in the SALP report was the "backlog of temporary revisions in control room drawings". The need to revise the Document Revision Notice (DRN) posting process on control room drawings was selfidentified by QA on a Process Survey. This survey was performed at the request of Quality Assurance management as part of the Rapid Response Team effort. The results of this survey and the identified need to expedite changes to control room drawings were presented to the SRC. The SRC assigned Design Engineering the responsibility of correcting this situation. As a result, the following process improvements have begun, with full implementation by August 15, 1995.

- All critical changes to drawings maintained in the control room will be updated in one working day following installation in the field.
- Nor-critical changes to drawings maintained in the control room will be updated in 7 working days.
- Posting of DRNs in the "Installed" state in the control room will be eliminated.

### PROBLEM IDENTIFICATION

The SALP report states that "several minor boron dilutions repeatedly occurred" and that "the licensee was slow to take actions for boron dilution control problems".

Attachment 1 to W3F1-95-0106 Page 4 of 5

### Clarification of Issues Specific to the Plant Operations Section of the SALP Report

Waterford 3 takes exception to these statements. The "minor boron dilutions" were indeed minor; not one of the events was reportable. However, each event was promptly and thoroughly investigated. A root cause analysis (RCA) was performed after each event. Although not reportable, a licensee event report (LER) was voluntarily submitted for each event.

Corrective actions specific to that event were made following each event, but no common mode of failure was apparent. A special inspection team from your office conducted a review of these events and could not identify a common cause.

Following the last event on 9-16-94, a Reactivity Management Task Force was formed to determine if any common threads existed between the events. The task force consisted of six plant personnel and one person from INPO who assisted in establishing a process for determining the common root causes for adverse trends. The task force examined training, supervision, conduct of Operations, work control, procedures and personnel. This extensive and in-depth review provided significant additional in-sight to these events and the team identified five common causes: difficulty maintaining operating limits, procedural inadequacies, teamwork/communication deficiencies, training inadequacies and CVCS design inadequacies. Specific corrective actions were recommended in each area and assigned to the appropriate groups for implementation.

After each reactivity event, Waterford 3 evaluated the event. As the events continued, so did our efforts to correct the situation. The boron dilution events took place over four months. Our investigations into these events took six months. Our thorough and timely actions have eliminated this type of precusor event and no significant events related to reactivity control have occured.

The SALP report also states that "Licensee self assessment activities were slow to identify problems". Waterford 3 takes exception to this statement. As a result of aggressive self assessment and prompt corrective action, significant improvements have been made in the areas of equipment positioning, tagging, and reactivity management. Personnel errors for the last six months are less than half what they were for the previous six months.

Attachment 1 to W3F1-95-0106 Page 5 of 5

### Clarification of sues Specific to the Plant Operations Section of the SALP Report

AB Bus components not being tested for LOGP conditions were self identified and promptly addressed. NRC Inspection Report 94-25 states, "The inspectors noted that the licensee's response to the operators and training instructors discovery of the Train AB swing electrical buses not being subjected to surveillance testing was timely...".

Another concern stated in the SALP report was that the Operations staff "occasionally demonstrated a high threshold for initiating corrective actions". Waterford 3 takes exception to this statement. As displayed at the public meeting, for the 12 month period ending June 1995, Waterford 3 generated 1178 Condition Reports (CRs). Of these, 1/3 were initiated by Operations. In addition, two licensed operators are assigned full time to investigate CRs and coordinate implementation of resulting corrective actions.

The SALP report also identified a concern about "a work around for a design deficiency involving the safety-related ventilation systems prevented prompt identification and correction for a significant design deficiency". Waterford 3 takes exception to this statement. The design deficiency of the ESF ventilation system was never "a work-around" by Operations. The system operated the same way it always had. It was, however, a shift supervisor that identified the problem, ensured that an investigation was conducted and that corrective action was implemented. Attachment 2 to -W3F1-95-0106

# **Overall Waterford 3 Performance** - Superior Plant

## **1994 Plant Records**

- Electrical generation (outage year)
- Year end unit capability factor (outage year)
- Lowest corrective maintenance (CM) backlog - 240
- 3-year scram rate



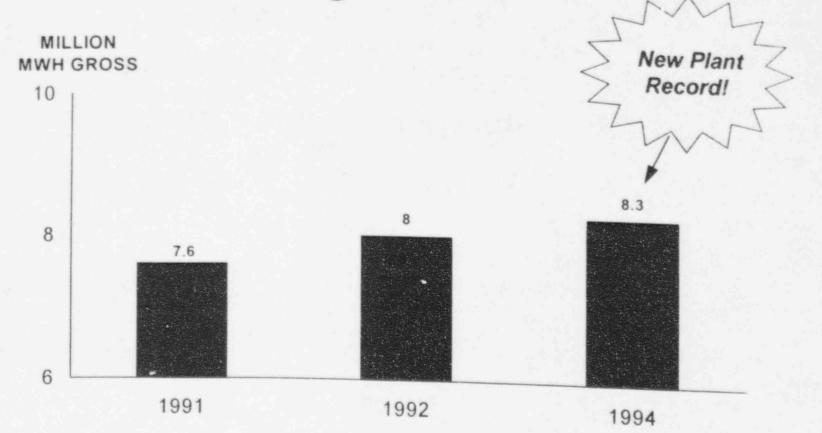
# **Overall Waterford 3 Performance** - Superior Plant

1994 System Records for 3-Year Averages

- Collective radiation exposure
- Unit capability factor (UCF)
- Equivalent availability (EA)
- Forced outage rate (FOR)



## Electrical Generation Outage Years



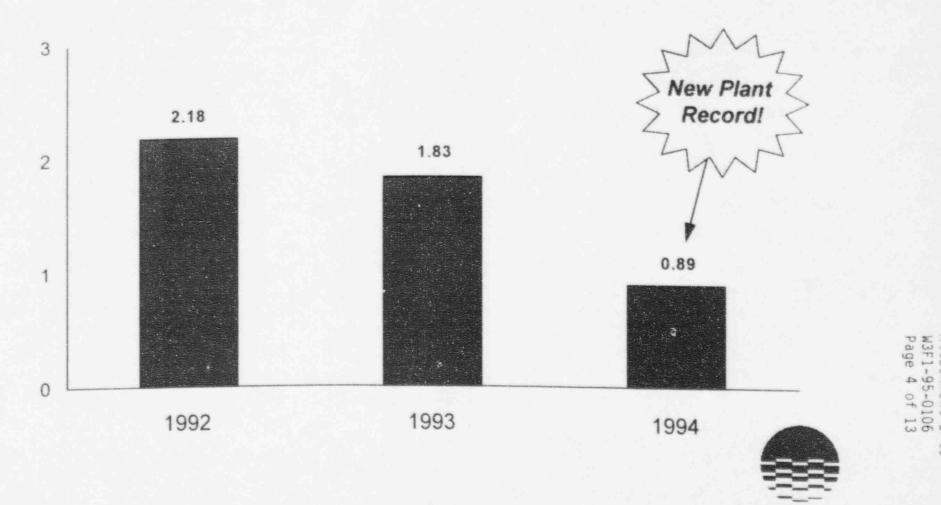


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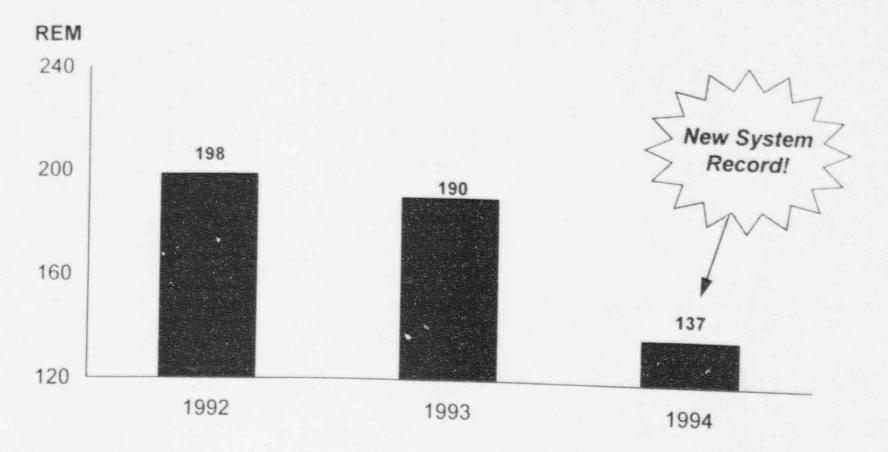
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## **3 Year Scram Rate**



ENTERGY WATERFORD 3

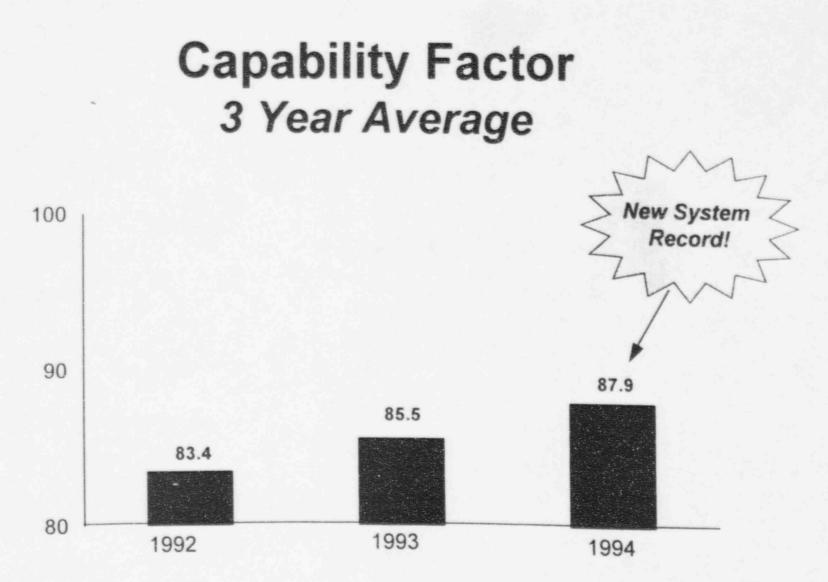
# Collective Radiation Exposure 3 Year Average





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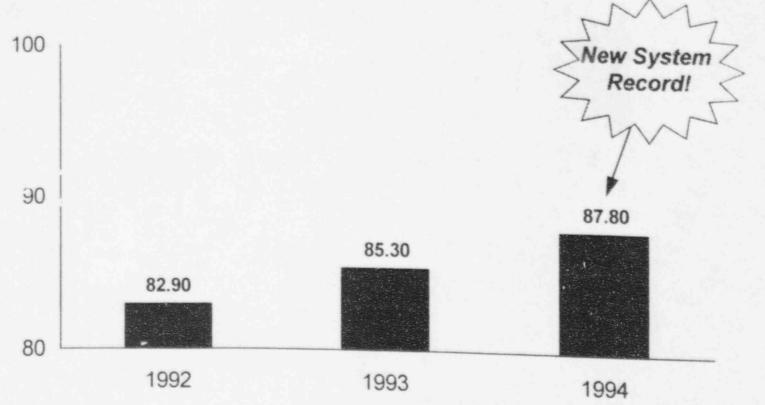


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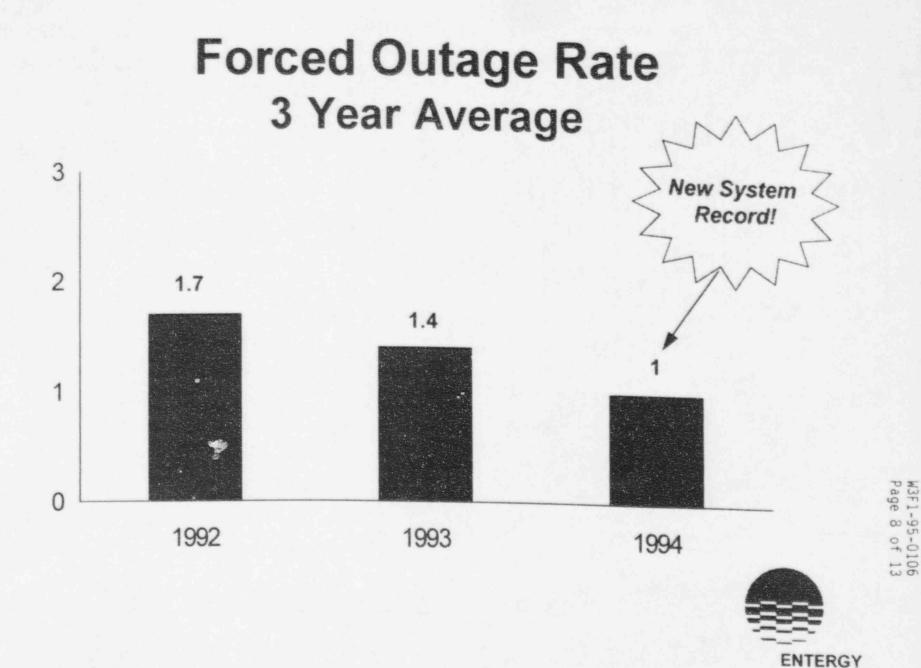
WATERFORD 3

## Equivalent Availability 3 Year Average



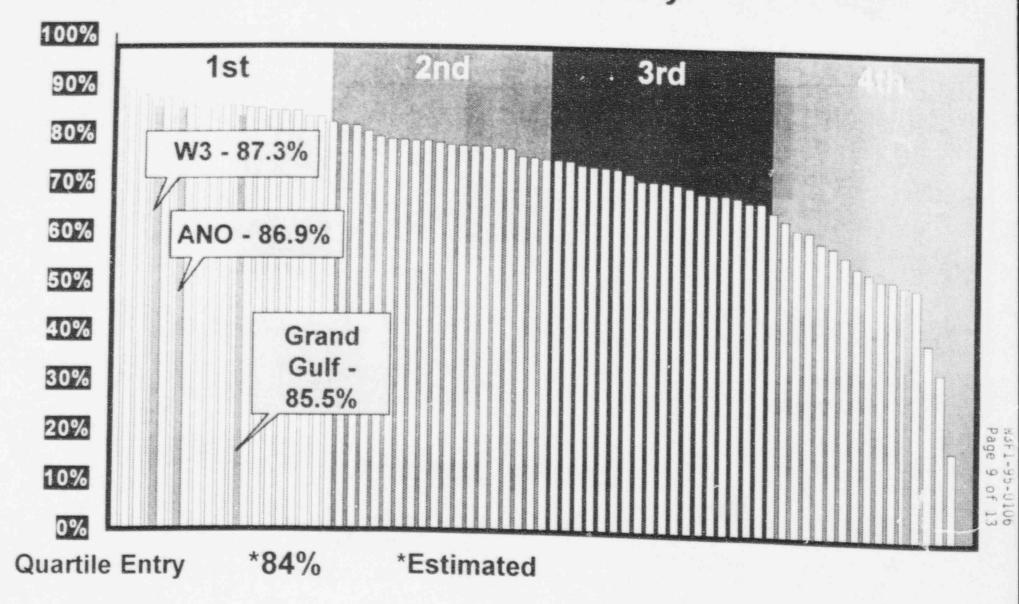


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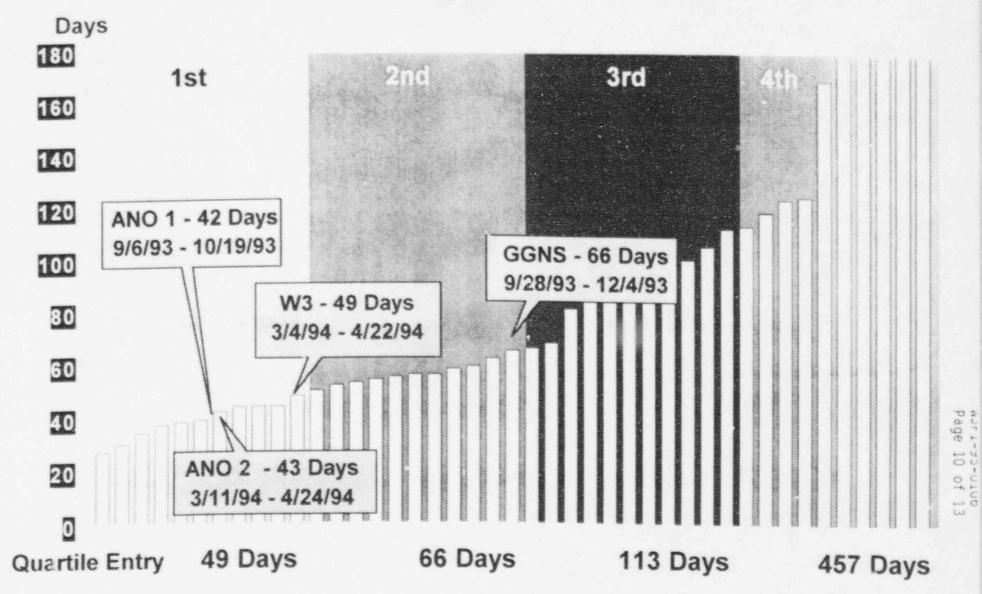


WATERFORD 3

## Capacity Factor Quartile Rankings 1992-94 Preliminary



## Outage Duration 1994 Through 3rd Quarter



The second second

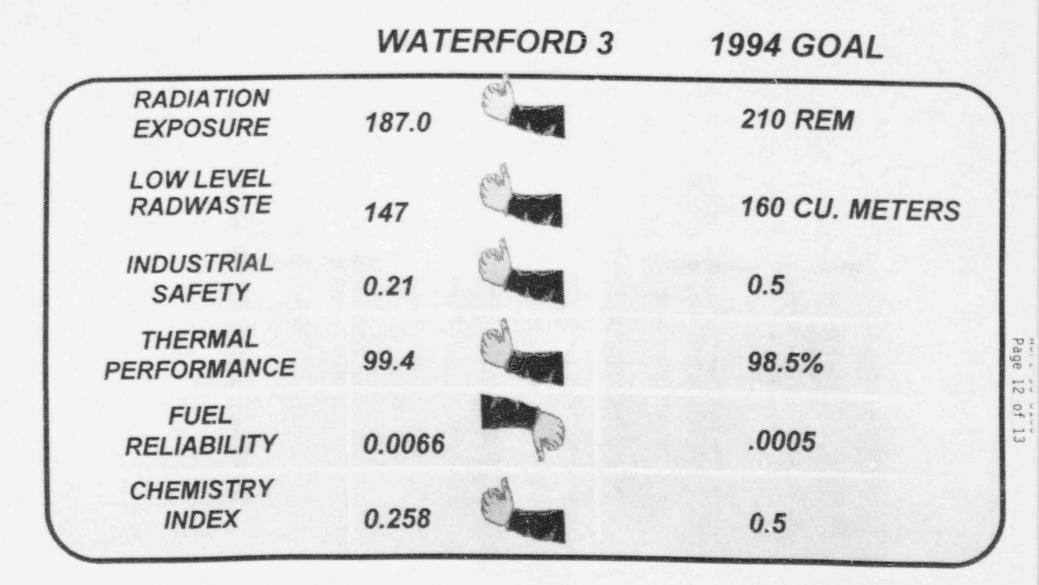
## **Operating Performance**

## INPO Performance Indicators Through 12/31/94

	WATERFORD 3	1994 GOAL
UNIT CAPABILITY FACTOR	84.8%	79%
UNPLANNED CAPABILITY LOSS	1.1%	4.5%
SCRAMS	0.92	<u>&lt;1</u>
HP SYSTEM PERFORMANCE	0.010	<u>≤ 0.02</u>
EFW SYSTEM PERFORMANCE	0.002	≤ 0.025
AC SYSTEM PERFORMANCE	0.007	≤ 0.025

### **Operating Performance**

### INPO Performance Indicators Through 12/31/94



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### Data Supporting Superior Performance

The plants listed below received a 1 rating in all four functional areas during their last SALP rating period.

Davis BessieByronKewauneeNorth AnnaDiablo CanyonTurkey PointGrand GulfSt. LucieHarris

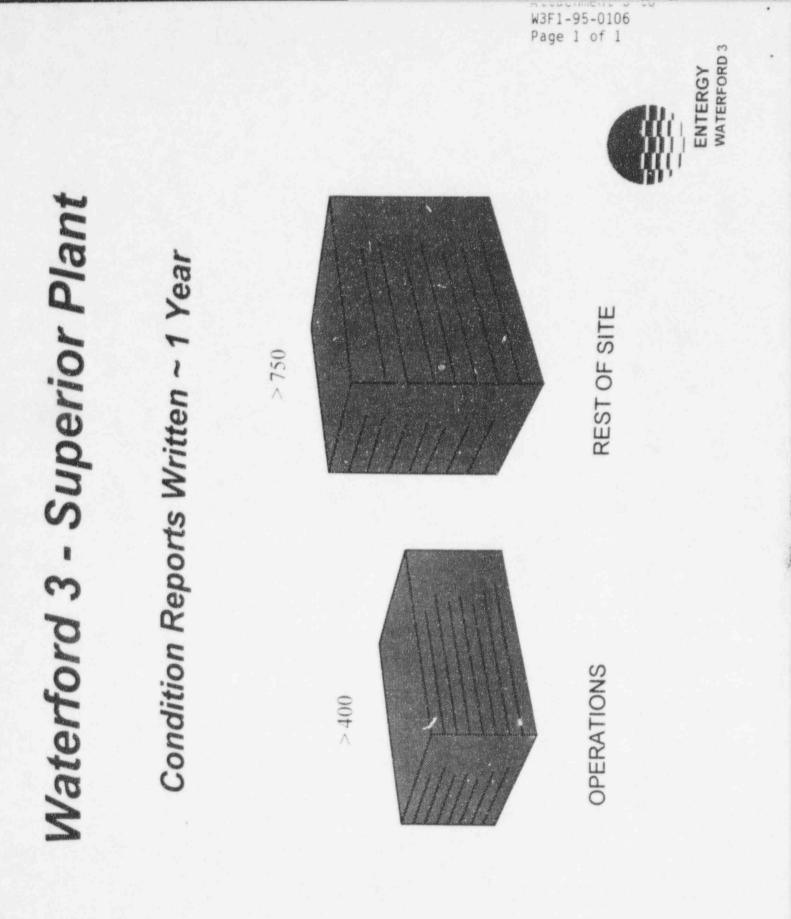
• The 3-year average <u>capacity factors</u> for each plant listed below are from the Utility Data Institute (UDI).

PLANT	1992-94 AVG
Davis Bessie	87.51%
Waterford 3	87.31%
Kewaunee	87.17%
Diablo Canyon	85.85%
Grand Gulf	85.46%
Harris	83.96%
Byron	81.27%
North Anna	81.06%
Turkey Point	80.57%
St. Lucie	78.16%

 Comparison of Performance Indicators for Operating Commercial Nuclear Power Reactors from the NRC Office for Analysis and Evaluation of Operational Data. The events listed are those that occurred over a 12 month period; beginning the second quarter of 1994. Plants that are 2 unit sites have the events listed for each unit individually.

PLANT	Number of Scrams	Safety System Actuations (SSA)	Safety System Failures (SSF)
Davis Bessie	0	0	1
Waterford 3	1	0	1
Kewaunee	0	0	0
Diablo Canyon	1/1	1/0	2/2
Grand Gulf	2	0	3/2
Harris	0	0	0
Byron	1/1	0/0	1
North Anna	1/0	0/0	1/0
Turkey Point	1/2	1/0	0/0
St. Lucie	3/2	4/0	3/2
and the second strength and all showing the	and the second se	7/9	1/0

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## Details of Activities that Support Processes and Safety Culture

### WATERFORD 3 CORE CORRECTIVE ACTION PROGRAM

Several years ago, Entergy Operations, Inc., initiated a corporate-wide effort to overhaul and improve its corrective action program. A corporate level task force was formed to review other industry based programs, with the intent of pulling together the best aspects of proven programs into a single, state-of-the-art program for implementation at all Entergy facilities. The first elements of this program were put into place at Waterford 3 in early 1993, with implementation of a new Condition Report process.

In February, 1993, the process was streamlined, consolidating several corrective action documents into a single document, the Condition Report (CR), designed to document non-hardware deficiencies. The Nonconformance Condition Identification (NCI) remained in place to document hardware related deficiencies.

On June 1, 1994, to further streamline the process, the NCI was eliminated and the CR became the single Waterford 3 corrective action document. The CR is used to document adverse conditions which negatively impact the safe, efficient operation of Waterford 3. Adverse conditions include nonconforming conditions, conditions adverse to quality, industrial safety concerns, and plant reliability concerns.

The program is based on a defense-in-depth strategy that integrates the following essential elements:

- Centralized corrective action program responsibility within the Quality Assurance organization, with cognizant root cause evaluation personnel matrixed into line organization corrective action activities
- Well scoped and comprehensive administrative procedures
- Consolidated problem reporting into a single, easy-to-use CR process having a low initiation threshold
- Prompt Quality Assurance (QA) evaluation, prioritization, and assignment recommendation for each CR generated

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Details of Activities that Support Processes and Safety Culture

WATERFORD 3 CORE CORRECTIVE ACTION PROGRAM (Cont'd)

- A Condition Review Board (CRB) providing prompt senior level review and concurrence with QA recommendations for each CR
- Clear assignment of evaluation and corrective action responsibility for each CR

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## Details of Activities that Support Processes and Safety Culture

### ZONE INSPECTION/OWNERSHIP PROGRAM

- Reinforces Maintenance & Operations responsibility for the materiel condition of the plant.
- Each zone has a maintenance foreman and operations SROs assigned.
- Philosophy if something does not look right or does not look like it belongs in the area, then it should be corrected.
- Periodic tours are made by management and by other zone owners.
- Zone inspection cards assist in identifying items and seeing that the responsible group is advised.

#### RESULTS

- Hundreds of minor deficiencies have been corrected.
- Significant contribution to equipment performance and housekeeping.

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#### Details of Activities that Support Processes and Safety Culture

#### ROOT CAUSE ANALYSIS

Waterford 3 has also implemented significant improvements to the root cause analysis program to ensure that fundamental causes of human performance events, as well as trends are determined and corrected. A Waterford 3 Root Cause Analysis Desk Guide has been issued to provide users with a complete set of analytical tools. The purpose of this guide is to assist Entergy personnel in conducting an effective root cause analysis and in documenting the results of the analysis. Standardizing the process ensures a consistent approach to root cause investigation and analysis and enables identification of generic problems and recurring trends. This guide is intended for use only as a reference by evaluators who have had formal root cause training, and training on the use of this guide. A core group of people matrixed from various site organizations have been trained and gualified as root cause evaluators. The core group method was established to reduce the number of individuals responsible for reviewing root cause analyses and thereby increasing proficiency. The techniques used at Waterford 3 to gather and evaluate information during a root cause investigation are:

- Situational Data Sheet
- Document Review
- Interviewing
- Task Analysis
- Change Analysis
- Barrier Analysis
- Event and Causal Factor Charting (E&CF)
- Fault Tree Analysis
- Behavioral Analysis and How-to-Why Matrix

In addition, Quality Assurance is conducting reviews of root cause analysis results to ensure consistency in the process prior to management approval. Performance measures indicate that the recent changes have greatly enhanced the quality of the root cause analysis process.

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Details of Activities that Support Processes and Safety Culture

#### ADVERSE TREND ANALYSIS

Waterford 3 is currently proceduralizing the process that was used to conduct the analysis of identified adverse trends in the areas of boron control, clearance practices, component positioning and work practices. Multidisciplinary teams performed evaluations to identify and correct the common underlying causes of each area. This multidisciplinary team approach was found extremely effective in systematically identifying the common underlying causes. The new method incorporates the familiar root cause analysis techniques with the process evaluation tools included in our Total Quality Program. This combination resulted in a team of diverse, talented representatives from the key departments openly and candidly discussing the problems within their respective areas, as well as the problems with the various interfaces. The process led the team members through each event and facilitated the development of potential causes. The team conducted extensive interviews and research to validate the causes and to develop recommended corrective actions. The success of these teams has lead to the development of a Team Leader/Facilitator class to be scheduled for select individuals from key departments. Waterford 3 intends to make effective use of this new analytical approach when future potential adverse trends are identified.

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Details of Activities that Support Processes and Safety Culture

#### CONDITION REPORT TREND ANALYSIS

Waterford 3 has implemented significant improvements in condition report trend analysis. In addition to the traditional approach of trending causal factors, a new problem code trend system has been developed. Using a simple annunciator window format, Waterford 3 management is regularly provided the results of trend analysis in all of the major functional areas. The initial report has been issued for the first quarter of 1995.

In addition to the quarterly report, condition reports are coded and are evaluated for trends on a daily basis. The results of this "real time" analysis are documented on the applicable condition report and submitted to our Condition Review Board, providing prompt, high level management review of identified and potential trends. This real time trending allows management to place the appropriate level of resources and attention to the problem area almost immediately. The program's goal is to prevent adverse trends by identifying and correcting in earlier stages.

Waterford 3 has also identified other problem identification mechanisms to assure that areas of lesser significance are periodically reviewed to identify adverse trends requiring escalation to the condition report process. This requirement is being added to the Waterford 3 Plant Trending procedure.

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## Details of Activities that Support Processes and Safety Culture

# CONDITION IDENTIFICATION & CONDITION IDENTIFICATION REVIEW COMMITTEE

The Condition Identification Review Committee (CIRC) is a standing committee which reviews new condition identifications and whose membership is comprised of representatives from the following departments:

- Operations
- Planning & Scheduling
- Mechanical Maintenance
- Electrical Maintenance
- I&C Maintenance
- System Engineering
- Maintenance Engineering
- Reactor Engineering & Performance

The Condition Identification Review Committee is responsible for reviewing Condition Identifications and determining the following:

- Appropriate priority
- Equipment mode
- Proposed schedule date based on priority
- Disposition as a Minor Maintenance item
- Plant mode
- Lead discipline for disposition
- · Status of priority work in planning
- Items needing review by a multi-discipline team to define problem
- Determining the lead discipline, priority, schedule date and whether a component outage is required for the Ops Workaround Input Form
- Identifying CIs which need operational tests requiring system or component operation, outside the scope of the post maintenance test matrix

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Details of Activities that Support Processes and Safety Culture

#### CONDITION REVIEW BOARD

The Condition Review Board (CRB) is a standing board whose membership is comprised of the:

- · General Manager, Plant Operations or designee
- · Director, Nuclear Safety or the Quality Assurance Manger
- Director, Design Engineering or designee
- Licensing Manager or designee
- Operational Experience Engineering Manager or designee
- Training Manager or designee

Also, represented at the CRB daily meeting is a QA representative and a Planning & Scheduling representative.

The Condition Review Board is responsible for maintaining cognizance and ensuring proper identification of emerging conditions through review of new Condition Reports and Controlled Maintenance Condition Identifications. The CRB is also responsible for assuring that adverse conditions receive commensurate attention and dedication of resources.

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### Details of Activities that Support Processes and Safety Culture

#### SAFETY REVIEW COMMITTEE

The Safety Review Committee (SRC) is a standing committee composed of Waterford 3 management and supervisory personnel, representative(s) of Entergy Operations, Inc., and consultants. Consultants are utilized as determined by the SRC Chairman to provide expert advice to the SRC. The SRC functions to provide independent review and audit of designated activities in the areas of:

- Nuclear power plant operations
- Nuclear engineering
- Chemistry and radiochemistry
- Metallurgy
- Instrumentation and control
- Radiological safety
- Mechanical and electrical engineering
- Quality Assurance practices

Significant issues recently addressed by the SRC:

- INDEX Program (Unescorted Access Authorization)
- Control Room Drawings
- Crosby Relief Valve Nozzle Ring Settings
- Setpoint Point Document Control (control of data)
- Reactivity Management (Boron Dilution Events)
- Training Issues (Plant Modifications incorporated into training, GET reconciled with INPO requirements)
- Corrective Action Program (Routine Agenda Item Discussed at Each Regularly Scheduled Meeting)
- Warehouse Material Problems
- Leak Repair Industry event discussion
- · Control of Potentially Radioactive Material Outside of the RCA
- Component Parameter Trending
- New fuel Receipt Inspection
- Post Modification Testing
- ESF Ventilation System
- Tag Out Issues

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#### QA RAPID RESPONSE TEAM

The mission of the Rapid Response Team (RRT) effort is to focus QA resources on emergent industry and plant issues to ascertain effectiveness of the program, process, or personnel relating to the issue. Listed below are assessments performed by the RRT since its inception in November of 1994.

Date	Issue (Source)	Sort Field #1	Reported
11/03/94	CR-94-1026 (abnormal appearance of oil Valve FW-184-"B")	Housekeeping	1st - 95
11/04/94	Hazardous material spill in Water Treatment Building	Housekeeping	1st - 95
11/09/94	Westinghouse molded case breakers (in W3 DC System) failed in Spain	Electrical	lst - 95
11/09/94	Reset alarms for CC 134 and CC 135	Operations	1st - 95
11/16/94	Fabrication of ICI quik lock device	Engineering	1st - 95
11/17/94	HPSI (SI-P-1A) failed surveillance on high vibration	Operations	lst - 95
11/30/94	Update (not DRN) of Control Room Dwgs.	Engineering	1st - 95
01/05/95	Leaking Pressurizer Relief Valve at Calvert Cliff after Reactor Trip	Operations	lst - 95
01/06/95	Failed to adequately load reject test Emergency Diesel Gen. (A/B Bus)	Operations	lst - 95
01/06/95	Is independent verification necessary after surv. testing	Operations	lst - 95
01/06/95	Essential Chiller "B" Tube Replacement	Maintenance	1st - 95
01/06/95	Atmospheric Dump Valve Leakage	Operations	1st - 95
01/11/95	RCS Metal Sensible Heat Transfer to Reactor Coolant during LOCA not addressed in Calvert Cliff FSAR	Operations	lst - 95
01/12/95	A CALCULATION OF A CALC	Operations	1st - 95
01 17 95	Use of SPEER Process	Engineering	1st - 95

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# Detaling factivities that Support Processes and Safety Culture

Date	Issue (Source)	Sort Field #1	Reported
01/17/95	Use of TAR Process	Engineering	1st - 95
01/17/95	Erosion Corrosion of MSR manways at WNP #2	Operations	1st - 95
01/30/95	ID of Q1 piping in Storage Yard is pitted	Site Support	1st - 95
01/30/95	MIC discovered in Fire protection System Piping	Engineering	1st - 95
02/16/95	How are we ensuring that all pieces of steel painted are inspected. (QA)	Construction	2nd-95
02/16/95	Inappropriate action for Low Battery Cell Voltage (OE 7109)	Electrical	lst - 95
02/16/95	Agastat relays exceeded qualified life (PS 3545)	Electrical	lst - 95
03/01/95	Browns Ferry QC suggests a review of Licensee Inspection requirements for installation of Raychem tubing regarding sealant flow at both ends of the tubing. (OE 7120)	Electrical	lst - 95
03/22/95	W3 Preparations in case second RCP seal failure (QA)	Operations	2nd-95
03/22/95	Discussed Diablo Canyon's App. R problem with Pyrocrete at POD (POD)	Fire Protection	lst - 95
03/31/95	W3 activities involving the new Rad Waste Storage Building being built by NOC (QA)	Construction	
04/12/95	ANO had positive amphetamine result that Smith-Kline Beecham lab screened negative & then later notified ANO results were positive (S-95-0007)	Fitness For Duty	2nd-95

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# Details of Activities that Support Processes and Salmir Culture

Date	Issue (Source)	Sort Field #1	Reported
04/12/95	Stroke time for CHW 129 may be unnecessary & over interpretation of Section XI (POD)	Engineering	2nd-95
04/12/95	RX Drain Tank may be taken out of leakage calculation due to negative unidentified leak numbers (POD)	Operations	2nd-95
04/13/95	Effectiveness of W3 actions taken regarding SIT Leakage (QA)	Operations	2nd-95
04/13/95	Investigate for possible adverse trend the failure of Steam Traps in the Turbine Building (POD)	Maintenance	
04/14/95	Evaluating primary & secondary Chemistry Lab techniques due to significant CR-95-0246 (QA)	Chemistry	2nd-95
04/18/95	Evaluate process for possible adverse trend regarding history of hydromotors testing problems on chilled water (POD)	Maintenance	2nd-95
04/19/95	Investigate why personnel can't leave the PA if body frisk indicates no particles instead of waiting for gas to decay (QA)	Health Physics	2nd-95
04/20/95 Evaluate equipment trending process (consider high amount failures of Dry Cooling Tower Monitors) (QA)		Maintenance	
04/21/95	Evaluate adequacy of processes for painting equipment and QA oversight in light of deficiencies identified in CR-95-0295 (QA)	Maintenance	
04/25/95	Evaluate adequacy of NAO Training in areas necessary to satisfactorily perform all assigned duties (QA)	Operations	

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# Details of Activities that Support Processes and Safety Culture

Date	Issue (Source)	Sort Field #1	Reported
04/25/95	ANO discovered that Access Authorization took administrative actions associated with confirmed positive drug test before confirmed by MRO (ANO CR S-95-0008) (Violation of C5.801, Para. 5.12.3)		2nd-95
04/26/95	Evaluate warehouse receipt inspection process regarding possible high rejection by Material Technical of parts returned from vendor after repair (QA)	Materíals Management	2nd-95
04/26/95	Evaluate process for identification of failed instruments for RCP 1B bleed off on CP2 and similar instrumentation (QA)	Operations	
05/04/95	Evaluate adequacy of Non Radiological Environmental activities regarding diesel fuel (QA)	Environmental	2nd-95
05/05/95	Investigate adequacy of activities involving corrosion in the ACCW system (QA)	Chemistry	2nd-95
	Determine if DNs are being written to document conditions adverse to quality (QA)	Materials Management	2nd-95
	Determine if electricians are maintaining material taken from Level B warehouse storage in a trailer on site (QA)	Electrical	
	Investigate use of a CR & WA for repair of a Sump Pump to add an annunciator in the control room instead of a Plant Change (QA)	Design Engineering	2nd-95

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## Details of Activities that Support Processes and Safety Culture

Date	Issue (Source)	Sort Field #1	Reported
05/11/95	Evaluate process that allows parts to abandoned in place but fails to update FSAR regarding operability. (QA)	Engineering	
05/11/95	Evaluate process that allows MODS to be voided but not the associated DRNs (QA)	Design Engineering	
05/19/95	Follow-up on Lessons Learned regarding Reactivity Management Rollup CR #94-918 (QA)	Operations	
05/22/95	Evaluate processes involved that led to T-hot rollup CR #95-0414 (QA)	Design Engineering	
05/22/95	Evaluate process regarding the control of departmental procedures, drawings & calculations. (Contact C. Packer) (QA)	Site Support	
06/01/95	Investigate actions taken & planned regarding numerous failures of Dry Cooling Tower Rad Monitors	Maintenance	
06/01/95	Evaluate process for pulling badges for departed employees both under favorable & unfavorable conditions (QA)	Security	
06/07/95	Investigate the issue of Air Intrusion in systems (CRs)	Operations	
06/13/95	Evaluate the action taken by the Event Review Team regarding the 6/10/95 fire in the TGB (QA)	Numerous Departments	
06/13/95	Evaluate action taken by EP regarding method & timing of VNS activation for 6/10/95 fire in the TGB (QA)	Emergency Preparedness	

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# Details of Activities that Support Processes and Safety Culture

Date	Issue (Source)	Sort Field #1	Reported
06/13/95	Determine adequacy of process regarding Contractor Behavioral Observation Program (CBOP) (CR-94- 1086)	Security	
06/19/95	Investigate conditions regarding the failure of SI 405 A&B to open (POD)	Operations	
06/19/95	Determine adequacy of process that requires CRS to leave Control Room during an emergency to act as Fire Brigade Leader (QA)		
06/20/95			
	Evaluate action taken regarding the rebuild work on RCP 2B (QA)	Maintenance	
06/27/95	Evaluate Peer Inspection Program regarding overview of Peer Inspectors	QA/Maintenance	
	Evaluate process for removal of Hold Points from procedures (QA)	Maintenance	
06/28/95	Evaluate response to 6/28/95 Hazardous Material Spill (QA)	Operations	

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### Details of Activities that Support Processes and Safety Culture

#### IN-HOUSE PLANT ASSESSMENT PROGRAM

Quality Assurance, which reports to the Director of Nuclear Safety, is responsible for implementing a synergistic assessment program that blends performance-based concepts and objectives with their compliancebased counter-parts. The pivotal objective is to enhance the effectiveness of station operation by concurrently verifying compliance and evaluating performance.

Assessment activities mainly consist of audits and process surveys that are initiated by the Quality Assurance organization. Assessments are also performed as a support function when requested by management external to QA.

Results of assessments are reported to management. The Condition Report process is used to address conditions adverse to quality, while potential enhancements are identified and tracked as "opportunities for improvement."

In a move to enhance Waterford's assessment capability, an improvement item was recently implemented that formally utilizes QA inspection personnel in the performance of plant assessments.

In addition to QA, the Operational Experience Engineering Group (OEEG) functions as part of the In-House Plant Assessment Program. The OEEG Independent Technical Review function is intended to examine multiple sources of information and when applicable, make recommendations to management regarding the improvement of plant safety. A primary component of the Independent Technical Review function is the selfassessment of Waterford 3 programs, procedures, and activities conducted during the applicability reviews of recent industry experience.

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# Details of Activities that Support Processes and Safety Culture

# IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

Below are lists of the QA Process Surveys, Service Assessments and Audits and OEE Assessments performed over the last 18 month period.

### QUALITY ASSURANCE PROCESS SURVEYS

PROCESS SURVEY #	TITLE	
QS-94-001	Verification of Compliance with 40CFR82 - Protection of Stratospheric Ozone; Refrigerant Recycling	
QS-94-002	VOTES Testing of MS EMTR313A 6J Motor Operated Valve	
QS-94-003	Review of Waterford 3's actions to address NRC Information Notice 93-87, Fuse Problems with Westinghouse 7300 Printed Circuit Cards	
QS-94-004	Welder Qualification Testing	
QS-94-005	Adequacy of Fire Watch Patrols	
QS-94-006	Nuclear Fuel Receipt	
QS-94-007	Administrative Procedure OP-100-009, Control of Valves and Breakers	
QS-94-008	Inspection of ACC "A" Piping Internals	
QS-94-009	Preventative Maintenance of Containment Spray Pump "A' 4.16KV Breaker	
QS-94-010	High pressure Safety Injection Pump A/B Outage Performed from 2/10/94 through 2/14/94	
QS-94-011	Review of Waterford 3's actions to address NRC Information Notice 92-26, Pressure Locking of Motor-Operated Flexible Wedge Gate Valves	
QS-94-012	Rework Emergency Diesel Generator Air Compressor 1B	
QS-94-013	Technical Specification Surveillance for "A" Containment Spray (CS) Pump and the Re-test of Valve CS-117A (Backshift)	
QS-94-014	Performance of Special Test Procedure STP-01117875, Component Cooling Water Discharge Check Valve Test	
QS-94-015	5th Refueling Outage Post Outage Report Recommendations	

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## Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE
QS-94-016	Adequacy of Fire Watch Patrols
QS-94-017	Welding and Heat Treating Activities
QS-94-018	Replacement of Extraction steam Piping for Erosion Control
	During Refuel 6
QS-94-019	Adequacy of Fire Watch Patrols
QS-94-020	Replacement of MDR Relay During Refuel 6
QS-94-021	Spent Fuel Handling Machine Operability Check
QS-94-022	Component Cooling Water (CCW) Heat Exchanger Chemical Cleaning - Refuel 6
QS-94-023	Refuel Outage 6 Core Inventory Mapping
QS-94-024	Fuel Shuffle / FME Control
QS-94-025	Functional Testing of Mechanical Snubbers
QS-94-026	Hydraulic Snubber Functional Test/Contract Order Number W-1263-0005 (Backshift)
)S-94-027	Radwaste LSA Shipment 94-1006
S-94-028	Compliance with Overtime Restrictions During Outage Period
S-94-029	Equipment Control During Outage Period
S-94-031	TBCCW Pump Maintenance
)S-94-032	Refueling (Backshift)
)5-94-033	Motor Operated Valve VOTES Testing
)5-94-034	Corrective Maintenance on SI MVAAA 512A
S-94-035	Sampling of Thermo-Lag Assemblies (Backshift)
S-94-036	Welding of the Extraction Steam Line
S-94-037	Eddy Current Testing of the Steam Generator by ABB
	Combustion Engineering
S-94-038	Evaluation of X-Ray Machines for Regulatory Compliance
)S-94-039	Calibration of CEDMEC Breaker Position Relays
25-94-040	Calibration of EFW Header A to S/G #1 Flow Loop
S-94-041	Sludge Lancing of Steam Generators
25-94-042	Refuel 6 Plant Walkdowns - Health Physics Postings and
	Radioactive Material Storage Areas
QS-94-043	Overspeed Trip Test of "B" main Feedwater Pump Turbine
QS-94-044	Radwaste LSA Shipment 94-1008
94-045	Refuel 6 Plant Walkdowns - Control of Consumable Materials

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# Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE
QS-94-046	Control Element Assembly Insertion Time Measurement
QS-94-047	Design Change 3384, Emergency Diesel Generator Overhead Rigging System
QS-94-048	Cooperheat Heat Treatment of the Extraction Steam Pipe Welds
QS-94-049	Adequacy of Fire Watch Patrols
QS-94-050	Radwaste Resin Shipment 94-1009
QS-94-051	Survey of Special Test Procedure STP-01121620 "Test of Containment Spray Header Isolation Valve CS-125B"
QS-94-052	Radioactive Waste Shipment 94-1002
QS-94-053	Skin and Clothing Contamination Reports
QS-94-054	CVC "A" Component Outage
QS-94-055	Groundwater Level and Chloride Analysis for the Basemat Monitoring Program
QS-94-056	Tech. Spec. Surveillance for Battery Banks and Associated Chargers
QS-94-057	Information Notice 93-37, Eyebolts with Indeterminate Properties Installed In Limitorque Valve Operator Housing Covers
)S-94-058	Design Change DC-3388
)S-94-059	Auxiliary Boiler Installation
)S-94-060	Refuel Outage 6 Activities of the Maintenance, and NOC Groups
S-94-061	Adequacy of Fire Watch Patrols
S-94-062	Verification of Locked Valves
S-94-063	Technical Support Center - Dose Assessment
S-94-064	SBV "A" Temperature Instrument Calibration
)S-94-065	Materials Management Receipt Inspection
28-94-066	Operations Monthly Clearance Audit and Shift Meeting
QS-94-067	OP-903-068. Rev. 9, Emergency Diesel Generator and Subgroup Relay Operability Verification
2	Calibration of Keithley Model 197 Digital Multimeter
15-94-069	Mechanical Maintenance Valve Rework/Testing
05-94-070	MI-003-372, Control Room Outside Air Intake Isolation
	Radiation Monitor Functional Test, ARMIR0200.1

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## Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE
QS-94-071	Weapons Qualification for Waterford 3 Security Personnel
QS-94-072	Plant Monitoring Computer Configuration Management
Q5-94-074	Analysis of QA Process Surveys to Determine Average Number of Days to Issue
QS-94-075	Activities Associated with the Issuance of M&TE from the Issue Facility (Tool Room)
QS-94-076	Torquing of Intercell Connections for the Plant Computer Battery
QS-94-077	Corrosion Product Monitoring - Sampling and Analyses
05-94-078	Preventive Maintenance on Batteries and Chargers
05-94-079	Inservice Test of High Pressure Safety Injection Pump "A"
05-94-080	Radiation Worker Training - GET 2A
QS-94-081	DC-3408 - Replacement of the E7000 Series Agastat Electropneumatic Time Delay Relays
)S-94-082	Walkdown of the Protected Area
S-94-083	Red Tag Clearances
S-94-084	Adequacy of Fire Watch Patrols
QS-94-085	Discharge of Waste Condensate Tank A
QS-94-086	Security Search of Maintenance Support Building and Testing of Security Perimeter Zone
05-94-087	Capacitor Replacement in SUPS Inverter 3014AB
S-94-088	Field Control of Procedures
S-94-089	Emergency Operating Facility - Dose Assessment
QS-94-090	Tech. Spec. Surveillance for the Functional Test of Waste Condensate and Laundry Waste Discharge Liquid Effluent Radiation Monitor Channel (PRMIR0647)
QS-94-091	Work Authorization Packages Completed But Not Closed
05-94-092	N.I. Safety Channel Functional Test
QS-94-093	NRC Information Notice 92-27, Thermally Induced Accelerated Aging and Failure of ITE/Gould A.C. Relays Used In Safety- Related Applications, April 3, 1992
QS-94-094	Fire Brigade Drill (C Heater Drain Pump)
QS-94-095	Inspection and Repair of Reactor Vessel O-Ring by ABB Combustion Engineering
QS-94-096	Health Physics Computer Software Control
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## Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE	
QS-94-097	Materials Management Testing Facility	
QS-94-098	Environmental Qualification Surveillance of Charging Pump AB Motor	
QS-94-099	Annual Land Use Census	
QS-94-100	Thermography Activities	
QS-94-101	Calibration and Control of Measuring & Test Equipment	
QS-94-102	Rework and VOTES Testing of HVREMTR 313 A	
QS-94-104	Unannounced Fire Drill - Diesel Fire Pump #2	
QS-94-105		
QS-94-106	National Nuclear Corporation Test of High Density Fuel Storage Racks and Foreign Material Control	
QS-94-107	Hazardous Materials Incident - November 4, 1994	
QS-94-108	Transfer of Spent Filters from a Shielded High Integrity Container (HIC) to an Outside Shielded Storage Enclosure (OSSE) (Backshift)	
QS-94-109	Incorrect Vibration Survey Readings on HPSI Pump A	
QS-94-110	Adequacy of Fire Watch Patrols	
QS-94-111	Sampling and Replacement of FW-184A Hydraulic Fluid	
QS-94-112	Reworking of the Air Handling Unit B Recirculating Damper Hydramotor (HRVMVAAA403B)	
QS-94-113	Application of 10CFR50.59 Process to Site Support Procedures	
QS-94-114	Shelf-Life Program	
QS-94-115	Spare Part Equivalency Evaluation Reports	
QS-94-116	Radiation Protection Backshift Activities	
QS-94-117	Technical Specification Surveillance for EGFMPMP0001B	
QS-94-118	Quarterly TLD Exchange	
QS-94-119	Reactor Coolant Chemistry	
QS-94-120	1994 Annual Exercise	
QS-94-121	Rework Pyrocrete Equipment Hatch +46 Per Engineering Evaluation and the Manufacturer's Specifications	

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# Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE
QS-95-001	Clearance Procedure (Open Clearances)
QS-95-002	Main Steam & Pressurizer Safety Relief Valve
	Maintenance Procedure Pertinent to NRC Info. Notice 94-56
QS-95-003	Condition Report Trending
QS-95-004	Preparation and Quarterly REMP TLD Exchange
QS-95-005	EFW A/B Component Outage Activities
QS-95-006	CCW & ACCW Motor 18 Month Task
QS-95-007	License Operator Upgrade From Inactive to Active Status
QS-95-008	Containment Spray Pump Outage
QS-95-009	Verification of Heat Transfer from RCS Metal to Reactor
	Coolant in Safety Analysis
QS-95-010	Emergency Diesel Generator (A&C) Fuel Rack Linkage Bolt
QS-95-011	Erosion/Corrosion of the Moisture Separator Reheater Shell
	Manway
QS-95-012	Transfer of Charcoal & Demin Liner from a HIC to an Outside
	Shielded Storage Enclosure
QS-95-013	CC-134 A(B) & CC-135 A(B) Concerns
QS-95-014	Fire Wrap, Fire Seal and Radflex Insulation
QS-95-015	Drawing/Document Updating
QS-95-016	Investigation of Materials Stored on Site Prior to Issue
QS-95-017	Comparison of Valve & Spec List to SIMS database
QS-95-018	DG "B" Outage
QS-95-019	Installation of EDG Air Dryers IAW OC-3407
QS-95-020	Temporary Alteration Control
QS-95-021	SPEERS
QS-95-022	Fire Watch Patrol/QTR. 1995
QS-95-023	MIC of Plant System
QS-95-024	RAYCHEM
QS-95-025	Survey of COLSS Steam Calorimetric
QS-95-027	Replace Gasket on Fuel Pool Purification Pump
QS-95-028	I&C TS Surveillance
QS-95-029	Fabrications/Coatings
QS-95-030	Reactor Coolant Pump Seal Failure Contingency Plan
QS-95-031	Installation of New Primary & Secondary Met Tower Equip.

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# Details of Activities that Support Processes and Safety Culture

PROCESS SURVEY #	TITLE
QS-95-032	Testing of Hydro Motors
QS-95-033	Routine Primary Chemistry Lab Analyses
QS-95-034	Labeling, Handling and Storage of Radioactive Material
QS-95-035	Radiological Posting & Key Control of High and Very HRA
QS-95-036	OP-903-024 Rev. 9, Changes 1
QS-95-037	CHW-129 Section XI Testing
QS-95-038	Observation of HP, Radwaste & Maintenance Activities
QS-95-039	Dose Assessment Training - EOF
QS-95-040	Condition of ACCW System
QS-95-041	Systems Engineering Action Regarding Safety Injection Tank Leakage
QS-95-042	Verification of Regulatory Compliance for EOF Underground Tank
QS-95-043	Quarterly Fire Watch Tour (Mar Apr May)
QS-95-044	Operations Monthly Fire Locker Equipment Inventory (Backshift)
QS-95-045	Low Level Radwaste Storage Facility
QS-95-046	Repair WA Packages
QS-95-047	Maintenance Rule
QS-95-048	Equipment Trending
QS-95-049	An Junced Fire Drill - (Backshift)
QS-95-050	Comparing Pipeline List Against SIMS Database (Engineering
QS-95-051	T-Hot Reduction
QS-95-052	Equipment Abandoned in Place
QS-95-053	Protected Train Applicability in a Forced Outage
QS-95-054	Station Information Management System
QS-95-055	BD-102B Rework
QS-95-056	Root Cause Analysis Report on the Failure of SI-405A & SI- 405B to open on 6/11/95
QS-95-057	June 10. 1995 Reactor Trip
QS-95-058	Mechanical Maintenance Reworking the 2B RCP Seals

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## Details of Activities that Support Processes and Safety Culture

### IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

## QUALITY ASSURANCE SERVICE ASSESSMENTS

ASSESSMENT NO.	TITLE
94-001	Health Physics Procedure Compliance Assessment
94-002	Erection of Scaffolding Above the "A" and "B" Emergency Diesel Generators
94-003	Containment Piping Penetration Walkdown - Identification of Multi-Ply Bellows That Have Transportation Tabs
94-004	Weld Repair/Overlay of MSR A and B by Welding Services, Inc.
94-005	Foreign Material Exclusion in the Reactor Cavity and Spent Fuel Pool
94-006	Waterford 3 Pump and Valve Inservice Test Plan
94-007	DC-3073 RCB Air Conditioning
94-008	Use of Ludlum 12 for Field Monitoring
94-009	Review of MPR Associates Inc.
94-010	Review of Effluent Release Permits and Composite Sample Analyses
95-001	SIMS Setpoint Verification
95-002	UNT-005-032, Steam Generator Primary to Secondary Leakage
95-003	PREs - Corrective Actions

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# Details of Activities that Support Processes and Safety Culture

# IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

## QUALITY ASSURANCE 1994 AUDITS

AUDIT #	TITLE
SA-94-001.1	Technical Specifications
SA-94-003.1	Performance, Training & Qualification
SA-94-004.1	Corrective Action/Nonconformance
SA-94-004.2	Corrective Action/Nonconformance
SA-94-007.1	Procurement
SA-94-011.1	Inspections
SA-94-012.1	Test Control
SA-94-015.1	QA Program
SA-94-016,1	Fire Protection & Loss Prevention Program
SA-94-017.1	Primary Coolant Leakage Sources
SA-94-018A.1	Health Physics Program - ALARA
SA-94-018C.1	Health Physics Program - Instruments, Process & Area Monitors
SA-94-018D.1	Health Physics Program - Radioactive Contamination/ Respiratory Control
SA-94-019.1	Secondary Water Chemistry
SA-94-020.1	Post Accident Sampling
SA-94-021.1	Basemat Monitoring
SA-94-022.1	Radiological Environmental Monitoring
SA-94-025.1	Personnel Access Authorization
SA-94-026.1	Radiological Emergency Plan
SA-94-027.1	Nuclear Material Control & Accountability
SA-94-029.1	Maintenance
SA-94-030.1	Security Program
SA-94-031.1	Environmental Monitoring (Non-Radiological)
SA-94-032.1	In-service Inspection
SA-94-035.1	Computer Codes and Software
SA-94-036.1	Fitness For Duty

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## Details of Activities that Support Processes and Safety Culture

# IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

### QUALITY ASSURANCE 1995 AUDITS

AUDIT #	TITLE	
SA-95-003.1	Performance, Training & Qualification	
SA-95-004.1	Corrective Action/Nonconformance	
SA-95-006.1	Design Control	
SA-95-008.1	Document Control	
SA-95-013.1	Control of M&TE	
SA-95-022.1	Rad. Envoronmental Monitoring	
SA-95-024.1	Rad. Waste Processing/Packaging & Shipping	
SA-95-026.1	Radiological Emergency Plan	
SA-95-031.1	Environmental Monitoring (Non-Radiological)	
SA-95-034.1	Operations	

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# Details of Activities that Support Processes and Safety Culture

# IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

# OPERATIONAL EXPERIENCE ENGINEERING 1994 ASSESSMENTS

ASSESSMENT NO.	TITLE
94-001	Monitoring of CEDMCS for Grounds
94-002	EOP Assessment of Waterford 3 (Nuclear Assurance Team Audit)
94-003	Review of St. Lucie Trip on High Main Generator Hydrogen Temperature on 11/02/93
94-004	Effectiveness Review of Operating Experience Program at PVNGS
94-005	Effectiveness Review of Operating Experience Program at River Bend Station
94-006	Incorrect Statement in W3F1-93-0169, "Inservice Testing (IST) Plan - Pumps and Valves"
94-007	Compression Fitting Failure Results in Personnel Injury
94-008	Review of Plant Computer Data Entry Errors, CR-93-212 and CR-93-234
94-009	NRC Inspection Report 93-28 on 1993 Waterford 3 E-Plan Drill Weaknesses
94-010	Report to SRC Corrective Action S/C on Differences Between OEE & QA on CRs
94-011	1994 Operator Training Assessment
94-012	Vendor Equipment Technical Information Program (VETIP)
4-012R	Vendor Equipment Technical Information Program (VETIP)
94-013	OE 6811: Testing Method for Nuclear Grade Activated Charcoal
94-014	Closure of Condition Reports
4-015	Assessment of Reactor Engineering Requested by General Manager Plant Operations
4-016	Shift Manning for Simultaneous Fire and EOP Requirements
4-017	1994 Maintenance Training Assessment
4-018	Loss of Off-Site Power with Safety Injection and Steam Generator Dryout-SEN 109
94-019	Enhancement of Training and Procedures to Prevent Steam Generator Overfill

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Details of Activities that Support Processes and Safety Culture

IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

### OPERATIONAL EXPERIENCE ENGINEERING 1995 ASSESSMENTS

ASSESSMENT NO.	TITLE
95-001	SOER 94-01 Training Asssessment
95-002	Licensed Operators Training Assessment
95-003	Berthold Systems Potential Defect in Source Shield Shutter Mechanism
95-004	Review of Implementation of 10CFR55.53(f)(2), Reactivation of Licenses
95-005	Assist in QA Audit of Operations

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Details of Activities that Support Processes and Safety Culture

IN-HOUSE PLANT ASSESSMENT PROGRAM (Cont'd)

### OPERATIONAL EXPERIENCE ENGINEERING 1995 ASSESSMENTS

ASSESSMENT NO.	TITLE
95-001	SOER 94-01 Training Asssessment
95-002	Licensed Operators Training Assessment
95-003	Berthold Systems Potential Defect in Source Shield Shutter Mechanism
95-004	Review of Implementation of 10CFR55.53(f)(2), Reactivation of Licenses
95-005	Assist in QA Audit of Operations

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# Details of Activities that Support Processes and Safety Culture

# CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS

In 1994, the Corporate Nuclear Safety & Licensing group performed 46 assessments, a 44% increase over 1993. These assessments conservatively represented almost 19,000 man-hours of direct assessment effort; 14,150 Entergy participant man-hours (plant and corporate) and 4,800 industry PEER participant man-hours. The 96 industry PEERs who participated in the 1994 assessments represented 33 utilities, EPRI and INPO. An outline describing this program is presented below.

- Self-assessments are performed by customer request. Requests may be made verbally to any of the assessment group individuals in Corporate Nuclear Safety & Licensing or to the Director, Corporate Nuclear Safety & Licensing.
- 2. Assessments are typically performed in the following areas:
  - 2.1 Operations
  - 2.2 Maintenance
  - 2.3 Radiation Protection
  - 2.4 Design Engineering
  - 2.5 Plant Engineering
  - 2.6 Chemistry
  - 2.7 Training
  - 2.8 Industrial Safety
  - 2.9 Outage Management
  - 2.10 Project Management/Modifications
  - 2.11 Materials Management/Procurement
  - 2.12 Planning/Scheduling
  - 2.13 Operating Experience

Assessments can also be performed in other areas. Assessment group individuals should be contacted to discuss specific assessment needs/requirements.

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#### Details of Activities that Support Processes and Safety Culture

#### CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

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- 3. The assessment scope and the performance objectives for each assessment are determined by the team leader and the custumer. Performance objectives are typically derived from documentation such as:
  - 3.1 INPO Criteria. Principally, INPO 90-015, "Performance Objectives and Criteria for Operating and Near-term Operating License Plants"
  - 3.2 INPO Guidelines
  - 3.3 INPO Good Practices
  - 3.4 INPO Training Academy documentation
  - 3.5 Entergy policies, directives, goals and objectives, etc.
  - 3.6 Other applicable industry documentation
- 4. Self-assessments are performance based and modeled after INPO Plant Evaluations or Assist Visits. Typical assessments are five days in duration. The team leader and the customer control the assessment scope and the team size to complete the assessment in this time period.
- 5. Assessment teams include the Team Leader (process expert, from the assessment group of Corporate Nuclear Safety & Licensing) and Entergy and Industry Peers (subject matter experts). Peers may include individuals from the following organizations:
  - 5.1 Entergy operating plant staffs
  - 5.2 Entergy corporate staff
  - 5.3 Other industry operating plant or corporate staffs
  - 5.4 Other industry groups (eg., INPO, EPRI)

A typical assessment team is composed of 5-8 individuals.

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Details of Activities that Support Processes and Safety Culture

# CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

- 6. A written assessment report is the vehicle used to formally present the assessment results to the customer. The report provides the Strengths and Areas for Improvement identified by the assessment team. Customer concurrence is obtained before the final report is issued. Distribution is limited to the customer, the customer's chain of command through the Site Vice President, the Vice President, Operations Support and the Chief Operating Officer. Additional distribution is made only with the permission of the customer.
- 7. The customer is requested to provide feedback on the assessment process at the conclusion of each assessment. The feedback is used to continuously improve the self-assessment process.
- The purpose of self-assessment is not to determine regulatory compliance, but to provide feedback to allow customers to achieve excellence in their areas of responsibility.

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### Details of Activities that Support Processes and Safety Culture

#### CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

#### 1994 Corporate Sponsored Self-Assessment Contribution At Waterford 3

Assessments were performed in the following areas:

Emergency Operating Procedures Management Expectations/Communication Operations Training Reactor Engineering Maintenance Operating Experience Radiation Protection Technical Training Design Engineering Software Control

These assessments included 48 Entergy participants (plant and corporate) which represented approximately 2400 man-hours of assessment effort. Fifteen Industry PEERs from the utilities/organizations shown below also participated in these assessments. The Industry PEER participation represented approximately 750 man-hours of assessment effort.

Atomic Energy Canada Baltimore Gas and Electric Carolina Power and Light Florida Power and Light Houston Lighting and Power INPO Nebraska Public Power District Northern States Power Southern California Edison Texas Utilities Electric Co.

Assessments in 1994 continued to provide line managers the capability to assess the health of functions/processes within their areas of responsibility and promote continuing improvement throughout the organization. Some examples of these assessments include:

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## Details of Activities that Support Processes and Safety Culture

#### CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

#### 1994 Corporate Sponsored Self-Assessment Contribution At Waterford 3 (Cont'd)

#### Emergency Operating Procedures (February)

This was a focused assessment to evaluate whether a proposed revision to the Waterford Safety Function Recovery Procedure fully addressed a previous INPO finding and fully incorporated the guidance provided by the Combustion Engineering Owners Group in CEN-152. The assessment team determined that both conditions had been met. Additionally, the team provided several suggestions for enhancements to the Emergency Operating Procedure process for consideration by Operations Department management. There were no findings in this area in the subsequent INPO evaluation.

#### Reactor Engineering (\* y)

An assessment of the Reactor Engineering group-was performed utilizing INPO-type and customer-developed criteria for procedure, interface, training and fuel integrity areas. This assessment was initiated by the Reactor Engineering Peer Group. The program was viewed as meeting most of the assessment criteria for the procedures and fuel integrity areas. Interfaces with other groups had noticeably improved over past performance according to most of the personnel interviewed.

#### Maintenance (June)

Three sites had Maintenance assessments. The assessments were performed by teams consisting of Maintenance personnel from both inside and outside EOI using the INPO performance objectives as their basis to gauge the current level of performance by the departments. Portions of the plants were also given detailed walkdowns by the teams to determine the materiel condition of the plants.

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## Details of Activities that Support Processes and Safety Culture

#### CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

### <u>1994 Corporate Sponsored Self-Assessment Contribution At Waterford 3</u> (Cont'd)

#### Operating Experience (June)

This was one in a series of assessments conducted by customer request at three of the four stations. The objectives of each of these assessments were essentially similar and some of the same Entergy peers were utilized in more than one assessment to achieve consistency. Two outside Entergy peers were utilized at each of these assessments, representing five different nuclear utilities and INPO. At Waterford 3, the team concluded that process improvements could be made to better distribute information and eliminate non-value added activities.

#### Radiation Protection (August)

A series of Radiation Protection (RP) Assessments were performed at each of the four nuclear sites at the request of the RP PEER Group. Each of these assessments had peer team members from the other sites and corporate staff support. In addition, at least one external peer was on each team. At Waterford 3, the team concluded that there was excellent communication between groups and good radworker practices by workers. The team also concluded that contamination control practices could be improved.

#### Design Engineering Software Control (December)

Control of Design Engineering software was assessed using INPO criteria. The assessment confirmed the customer's perception that software control was weak and identified areas where improvements could be made. This assessment was strongly supported by the customer who provided three peers as team members.

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# Details of Activities that Support Processes and Safety Culture

# CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

# Corporate Assessments - 1995 (Completed)

Date	Assessment	Site
March 6-10	Fitness For Duty	WNP2
March 6-10	Operations	WNP2
March 29-May 16	NRB/FRC QA Audit Assist	RBS
April 10-14	Training (Accreditation)	RBS
April 24-28	Materials, Purchasing & Contracts	W3
April 24-28	Simulator Certification/Config. Control	CNS
May 8-12	System Engineering	W3
May 22-26	Check Valve Program	RBS
May 22-26	Operations	RBS
May 22-26	HVAC	RBS
June 5-9	Nuclear Engineering	ECH
June 19-23	Planning and Scheduling	ANO
June 19-23	Operating Experience	GGNS

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## Details of Activities that Support Processes and Safety Culture

# CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

## Corporate Assessments - 1995 (Scheduled)

Date	Assessment	Site
July 17-21	Operating Experience	W3 ASL/
July 17-21	Chemistry	RBS
July 17-21	Fitness for Duty	W3
July 17-21 and July 31-Aug 4	EFW SSFI	W3
July 25-28	Cigital FW Control	ANO
July 31-Aug 4	Thermal Performance	RBS
July 31-Aug 4	Radiation Protection	RBS
July 31-Aug 4	Operating Experience	ANO
August 14-19	Operating Experience	RBS
August 14-19	System Engineering	RBS
September 11-15	Chemistry	ANO
September 25-29	Design Engineering	RBS
September 25-29	Outage Readiness	RBS
October	Training Review Group Effectiveness	RBS
October 9-13	Maintenance	RBS
October/November	Human Performance Improvement Program	RBS
October/November	Corrective Action	W3

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# Details of Activities that Support Processes and Safety Culture

CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

# Corporate Assessments - 1995 (Scheduled)(Cont'd)

Date	Assessment	Site
November 6-10	Fire Protection	ANO
November 6-10	Setpoint Control Process	W3
November 6-10	PM Program	ANO
November	10CFR50.59 Process	GGNS
November/December	Operations	W3
December 4-8	Materials, Purchasing & Contracts	ANO
December 11-15	Service Water (GL 89-13)	W3
	Dry Cask Storage	ANO
	Planning and Scheduling	W3
	MOV Program	ANO
	MOV Program	RBS

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Details of Activities that Support Processes and Safety Culture

CORPORATE-SPONSORED SELF-ASSESSMENT PROCESS (Cont'd)

## Corporate Assessments - 1996 (Scheduled)

Date	Assessment	Site
January 22-26	Maintenance	W3

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### Details of Activities that Support Processes and Safety Culture

#### CORPORATE PEER GROUPS

#### Purpose

To provide a process for ,imilar functional areas to optimize their process and structure as appropriate, and to identify, review, and resolve emerging issues; to monitor consolidation and merger studies; to administer company-wide contracts; and to share lessons learned.

#### Composition

Composed of senior person from the same functional area at each station, an executive sponsor, and a representative from headquarters.

#### Process Elements

- established by Vice President's request and approved by executive staff
- meets periodically
- members trained in TQI principles
- TQI techniques used to conduct meeting
- chairman selected by group, rotated every two years
- the designated chairman has signature authority on policy/procedure documents
- the executive sponsor will sign in the event the chairperson is not available
- minutes prepared and distributed to executive staff, and Executive sponsor briefed on meeting results
- routinely a periodic calendar or schedule of peer group meetings provided to executive staff
- summary report on all peer groups provided to executive staff semiannually (this report should include assignments from executive management)

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### Details of Activities that Support Processes and Safety Culture

#### CORPORATE PEER GROUPS (Cont'd)

- significant activities such as rule changes are brought to the attention of executive staff by executive sponsor
- assignment of sponsorship will be reportees to officers after each officer has two peer-groups assigned
- executive sponsor meets with group as appropriate to provide strategic direction, coaching, and support

Vice President, Operations Support, oversees process; provides guidance for consistency; maintains peer group listing and assignments current; assesses process for effectiveness and efficiency; and provides semiannually summary to executive staff.

#### Responsibility of Peer Group Members

- monitors implementation of consolidation and merger studies
- shares lessons learned
- review and implements applicable best practices
- review policy/procedures that apply to a specific peer group, implement changes where applicable, and coordinate a schedule for completion with the policy/procedure coordinator in Management Services (See AD-101, sections 4.6, 5.0 and 6.5 for reference)
- conducts assigned or self-identified studies for process and structure improvements
- cognizant of emerging issues; keeps executive staffed informed of issues
- develops company-wide contracts

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## Details of Activities that Support Processes and Safety Culture

## CORPORATE PEER GROUPS (Cont'd)

- develop and maintain Philosophy documents when applicable, and provide availability of these documents to other sources
- executive sponsor provides evaluation of members performances to their supervisors
- Headquarters member prepares summary report for Chairman's approvals and inclusion in Nuclear's peer-group summary report
- Headquarters members prepares periodically a calendar of peer-group meetings

#### ENTERGY OPERATIONS PEER GROUPS

- Chemistry
- Design Engineering
- Emergency Preparedness
- Environmental
- Financial
- General Plant Managers
- Health Physics/Radiation
- Industrial Safety
- Licensing
- Low-Level Radwaste
- Maintenance
- Operations
- Outage Management
- Plant Modification and Construction
- Policies and Procedures
- Procurement/Materials
- Quality Assurance
- Reactor Engineering
- Records Management
- Security
- System Engineering
- Training

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### Details of Activities that Support Processes and Safety Culture

#### DESIGN ENGINEERING PEER GROUPS

As part of the consolidation of the Entergy Operations' Design Engineering departments into one organization, a decision was made to maintain a strong site presence with a small centralized staff. However, to achieve the maximum benefits of consolidation, a mechanism was needed to chare best practices, improve processes and provide an on-going mechanism for self assessments. The peer group concept was implemented.

The Entergy Operations Design Engineering Peer Groups are composed of a management sponsor and members from each of the Entergy Operations' locations. The purpose of these peer groups is as follows:

- Exchange information and ideas related to specific technical issues, procedures, and processes;
- Provide a mechanism to develop and maintain consistency in methodologies utilized, principles implemented and programs developed, while allowing for logical differences between implementation at each site. The differences are to account for different site organizational structure, plant design and commitments to standards and codes; and
- Identify opportunities to improve quality and cost effectiveness.

Each peer group maintains a stated set of objectives which may be modified at any time depending on industry events, regulatory emphasis or department objectives. There are currently 22 peer groups. Each group issues a quarterly status report to the Corporate Vice President, Engineering. The report includes activities in progress and completed, issues requiring management attention and recommendations.

Typically peer groups meet quarterly and achieve substantial progress toward their objectives. Some specific examples of peer group activities are:

 Development of a Standard to be used at all Entergy sites for repairs and replacements.

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# Details of Activities that Support Processes and Safety Culture

## DESIGN ENGINEERING PEER GROUPS (Cont'd)

- · Common standards have been developed for MOV test data review, including the approach for MOV Program Closure.
- Shared expertise/processes between the sites has resulted in program enhancements and more efficient approaches in areas such as:
  - · Eddy Current Testing Criteria.
  - Erosion/Corrosion Evolutions.
  - Grout Testing.
- · A consolidated contracting process was implemented to reduce the number of contractors providing general engineering services.
- · A Welding Consolidation Program to consolidate the welding standards at the Entergy sites.

Peer Groups are expected to continue meeting as long as the subject of the group remains active. Peer Groups may be added or discontinued based on the emphasis needed on particular issues. Below is a list of the current Design Engineering PEER Groups:

- Electrical Design
- Environmental Qualification
- Fire Protection
- Flow Accelerated Corrosion
- 1&C
- Mechanical Design
- · Motor and Air Operated Valves
- · Piping Stress and Support
- ASME Programs
- Security
- Seismic Qualification/Structural
  Safety Analysis

- Welding Programs
- Steam Generator (Eddy Current)
- Training
- Business Practices
- · CAD
- Computer Applications
- Configuration Management
- Design Process
- PSA/IPE
- Procurement Engineering

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### Details of Activities that Support Processes and Safety Culture

#### KEY PROCESS TEAMS

In 1993, the Entergy Operations, Inc. (EOI) Total Quality Lead Team selected four Key Proces es to be evaluated. A Key Process is as the name implies, a process which is important or key to the achievement of our established goals of Safety, Generation, and Cost. A Key Process Team is a permanent crossfunctional team charged with taking actions to ensure that a process is continuously monitored, supported, and improved. Each key process was assigned an EOI Vice President as a process owner, and teams were made up of management from each plant site and the corporate office. The EOI Key Processes are listed below:

#### Process Name: Corrective Action/Root Cause Analysis

Process Definition And Team Purnose:

The Corrective Action/Root Cause Analysis process is used to identify and correct problems affecting safety, cost or power generation capabilities at our company facilities.

The process requires significant employee involvement and is reliant on early problem identification and timely, effective resolutions. The process provides a structured approach for problem identification; root cause analysis; corrective action planning and implementation; and measures to assure that corrective actions were effective.

#### Process Name: Outage Management and Work Control

Process Definition And Team Purpose:

Develop a plan to continuously improve the Outage Management and Work Control Key Process emphasizing outage planning and effective outage implementation to:

- Ensure personnel safety
- · Assure shutdown safety
- Reduce personnel radiation exposure
- · Improve plant availability
- Reduce outage cost
- · Optimize outage duration

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# Details of Activities that Support Processes and Safety Culture

# KEY PROCESS TEAMS (Cont'd)

Outage planning is a continuous process defined by the pre-outage milestone schedule.

Outage implementation begins when the unit is removed from service to start outage work and ends when the unit is returned to service with the completion of outage work.

# Process Name: Daily Work Planning and Control

Process Definition And Team Purpose:

The Daily Work Planning and Control process begins with the generation of work requests, goes through planning work packages, scheduling work, performing work in the field (including post maintenance testing), then ends with work package close-out.

The purpose is to develop a plan to continuously improve the Daily Work Planning and Control Key Process with an emphasis on:

- personnel safety
- nuclear safety
- ALARA
- plant availability
- cost

Process Name: Materials, Purchasing, and Contracts

Process Definition And Team Purpose:

The Materials Management Key Process Team will develop a specific plan of action to focus on process improvements for the Materials, Purchasing & Contracts processes as an Entergy Operations critical processes. The plan of action will address the following issues: (1) eliminating inventory growth, (2) building a defensible inventory, (3) constructing a materials management program that is direct, consistent, and auditable. and (4) cost effectiveness.

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Details of Activities that Support Processes and Safety Culture

#### KEY PROCESS TEAMS (Cont'd)

This team will also ensure completion of a one-time Inventory Justification Project, requiring participation and support at each site.

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## Details of Activities that Support Processes and Safety Culture

#### RELIABILITY IMPROVEMENT TEAM (RIT)

The Reliability Improvement Team (RIT) was established to emphasize and focus on issues affecting nuclear and personnel safety, availability, reliability, and performance of the plant and its systems. The team reviews important issues and facilitates implementation of corrective action measures.

Problems are categorized and assigned to "Trip/Transient" and "High O&M" lists including the priority issues that impact power generation (i.e., cause unplanned energy losses). Potential plant problems which result in the following fall under the category of "Trip/Transient:"

- turbine/reactor trips
- near trips
- lost megawatts (MW) greater than 1000 MW over 12 months for a particular piece of equipment
- · lost MW greater than 2000 MW over 12 months for a particular system

The "High O&M" list includes priority issues that impact plant resources. Potential plant problems which result in the following would fall under the category of "High O&M:"

- industrial safety concerns
- considerations for ALARA
- excessive manpower requirements
- excessive consumption of spare parts or other materials
- inadequate equipment efficiency
- poor equipment reliability resulting in excessive maintenance or expenditure of resources

Resolution of problems on the "Trip/Transient" and "High O&M" lists receive high priority and management attention. In order to focus attention, each RIT issue has an action plan generated by the responsible individual. The action plans provide the following information:

- detailed problem description
- lead individual

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### Details of Activities that Support Processes and Safety Culture

### RELIABILITY IMPROVEMENT TEAM (RIT) (Cont'd)

- actions taken
- results checked for effectiveness
- status
- references

The RIT is chaired by the Maintenance Superintendent and other members of the team include:

- Operations Superintendent
- System Engineering Electrical Supervisor
- System Engineering Mechanical Supervisor
- Radiological Superintendent
- STA Supervisor
- Chemistry Superintendent
- Reactor Engineering & Performance Supervisor
- Design Engineering/PRA
- Senior Reliability Engineer

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## Details of Activities that Support Processes and Safety Culture

#### NATURAL WORK TEAMS

Natural Work Teams (NWTs) were developed as part of the Total Quality Improvement (TQI) program in 1994. A NWT is defined as a team made up of a supervisor and direct reports. Other groups may be considered a NWT if they are involved in a work activity that constitutes the primary work for the participants, the activity is a repetitive work process and there is a common leader for the group. The goal of the NWT is to improve on its selected major work process. Below is a listing of the Natural Work Teams at Waterford 3.

work Group	Function	Process
Ops. & Maint	Ops. Administration	Procedure Review
Ops & Maint	Dos. 4 iministration	Procedure Changes 01-19
Ops & Maint	Ops Administration	Ops. Use of MMIS
Ops. & Marnt	Ops Administration	Operations Work Schedule
Ops & Maint	Ops Administration	Key Control
Ops & Maint	Ops. Administration	Completed Clearance Review
Ops & Maint	Ops Administration	Clearance Process
Operation	Operations	Site Labeling
Ops & Maint	Ops Administration	Operations Truck Maint.
Ops & Maint	Electrical Maintenance	Motor Operated Valve Maint
Ops & Maint.	Electrical Maintenance	Predictive Motor Maintenance Program Team
Ops & Maint	Electrical Maintenance	EO Data Report
Ops & Maint	Electrical Maintenance	Maint. & Repair of Emergency Battery Lights
Ops & Maint	Electrical Planning	Improve Access to Common Planner Information
Ops. & Maint	Mechanical Maintenance	Hot work Permit
2ps ś⊯annt — .	Mechanical Maintenance	Diesel Enspecs Testing
ipa à Marro	Mechanical Maintenance	Air Compressor Rework
ips i Maret	Mechanical Maintenance	Hydromotor Rework

#### PLANT OPERATIONS

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

## PLANT OPERATIONS (Cont'd)

Work Group	Function	Process
Ops. & Maint	Mechanical Planning	Shop/Planner Coordination/Commun.
Ops & Maint	I&C Maintenance	Usage and Storage of Consumables
Ops. & Maint	I&C. Maintenance	I&C Backshift Technician
		Qualifications
Ops & Maint	180. Maintenance	Spare Parts Procurement
Ops. & Maint	I I&C. Maintenance	Security - System Camera Maintenance
Ops & Maint	I&C Maintenance	PMI Task Levelization
Ops & Maint	I&C Maintenance	Evaluating the Issue and Recall of
		Major Measuring and Test Equipment
Technical Services	STA	In-Service Testing
Chemistry	Chemistry	Chemistry Corrosion Control
Chemistry	Chemistry	Chemistry Laboratory QA/QC
Chemistry	Chemistry	Chemistry Procedure Improvement
System Engineering	Electrical	Engineering Work Authorization
		Processing
System Engineering	Mechanical	Special test Procedures
Reactor Engineering &	Reactor Engineering	Routine Core Parameter Trending
Performance		
Reactor Engineering	Performance Engineering	Thermal Performance Committee
& Performance		
Reactor Engineering &	Plant Monitoring Computer	PMC Database Management
Performance	Software Configuration	
	Control	
Fire Protection	Fine Protection	Fire Protection Impairments
Radiation Protection	Radwaste	waste Sample Collection and Isotopic
		Evaluation
Radiation Protection	Radwaste	Leak Containment Device Control
Radiation Protection	Health Physics	Waste Container Coordination
Radiation Protection	Health Physics	Scheduling of Rad Effluent Sampling
	Her Constant States	& Release Permit Update
Radistron Protection	Desimetry	Form 4 Generation & Retention
Raphatoph Printection II.	Rad Protection Support	Computer Software Control
Lever Longenne	Hagine Ingenet	Daily Source Check of HP Instruments

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# Details of Activities that Support Processes and Safety Culture

# NATURAL WORK TEAMS (Cont'd)

# PLANT OPERATIONS (Cont'd)

work-Group	Function	Process
Flanning & Scheduling	Outage Schedule	Containment Coordination
Flanning & Scheduling	Scheduling	Daily Scheduling
Security & General Support	Security Training	Training/Qualification
Security & General Support	Security Operations	Contractor Administration
Security & General Support	Plant Key Security Controls	Plant Key Controls
Security & General Support	Security Shift Activities	Shift Operations
Security & General Support	Invest Badging	Personnel In-Processing
Security & General Support	Security Controls	Reduction Safeguards Information
Security & General Support	Security Operations	0&M Security Support Planning & Scheduling
Security & Seneral Support	Security Operations	3 Year Security (EOI) Business Plan
Personnel Assurance	Personnel Assurance	Fitness for Duty (FFD) Supervisory Requirements
ensonne' Assurance	Censonnel Assurance	FFD Testing Eligibility Tracking
Personne) Assunance	Personnel Assurance	EAP Referrals/Return to Work
erspine) Assurance	Personnel Assurance	FFD Specimen Collection & Results Reporting
Cart Defations	Medical	EFAT Locker Supplies/Control
lant Operations	Medical	Accident Notification
Tart (perations	Sedrica)	Medical Records
ant peratricina	Medical	Site Physicals Scheduling & Tracking
lant Ipenations	Medical	Patient Scheduling
() normente	Enuinormental	Hazardous Waste Disposal
in uniformental	Environmental	Environmental Regulatory Commitment Controls
	industria Sarety	Lost Time Accident Mitigation

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

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## PLANT OPERATIONS (Cont'd)

Work Group	Function	Process
Office Services	General Support Library	Plant Procedure Distribution
Industrial Safety	Industrial Safety	Heat Stress Implementation/Effectiveness
Office Services	Clerical Support	Meeting Rooms: Supplies, Scheduling, Coordination & Control
Office Services	Clerical Support	Waterford 3 Travel
Human Resources	Human Resources	Resume/Application Process
Plant Maintenance	Maintenance	Corrective Maintenance Activities
Radiation Protection	Radiation Protection. Chemistry, I&C and Warehouse	Inventory of Radioactive Sources
Plant Operations	Improving Human Performance	Human Performance Award Program
Plant Operations	Outages	Bus Outages Improvement
Information Technology	Information Technology	Help Desk
Radiation Protection	Radwaste	Protective Clothing Process
Ops & Maintenance	Mechanical Maintenance	Oil Recycling vs. Oil Replacement
Ops & Maintenance	Mechanical Maintenance	Motor Pump Coupling PM Reduction
Ops & Maintenance	Mechanical Maintenance	Pump Mechanical Seal Failures
Dp. & Maintenance	Mechanical Maintenance	Predictive Maintenance PM Reduction

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Details of Activities that Support Processes and Safety Culture

# NATURAL WORK TEAMS (Cont'd)

# PLANT MODIFICATIONS & CONSTRUCTION

work Group	Function	Process
Modification Management	Modification Management	Modification Management
Modification Estimating	Modification Estimating	Estimating
Construction	Field Construction	Construction Supervision (Firewatch)
Ichstruction	Field Engineering	Managing/Standardizing Electronic Files
Project Management	Facilities Maintenance	Facilities Maintenance
Plant Modification & State Construction	Δ. L	Scaffolding
<sup>pl</sup> ant Modification & Construction	Scheduling	Integrated Schedules
Modification Scheduling/ Estimating	Modification Scheduling/Estimating	Scheduling/Estimating
Construction	Field Engineering	NOC Work Packages

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

## DESIGN ENGINEERING

Work Group	Function	Process
Proc./Programs Engr.	Procurement	Commercial Grade Evaluation
	TH VEUR BINETIC	Process
Proc./Programs Engr.	Drafting/CAD	W3 Drawing Numbering System
Proc./Programs Engr.	In-Service Inspection	ISI Procedure
Electrical I&C Engineering	Electrical Engineering	WATS Process
Electrical I&C Engineering	I&C Engineering	Setpoint Calculations
Electrical I&C Engineering	I&C Engineering	Design Verification
Mechanical/Civil Engineering	Applied Mechanics	Applied Mechanic/Civil Interface
Mechanical/Civil Engineering	Mechanical Specialties	DBD Update Process
Mechanical/Civil Engineering	Mechanical Systems	DRN Processing
Mechanical/Civil Engineering	Civil Engineering	SQRT File Review and Handling
Design Engineering	Plant Design Change	Plant Change Process
Design Engineering	Design Engineering	Design Engineering
	Procedures	Administrative Guides
Design Engineering &	work Authorizations	Work Authorizations
Maintenance		
Programs Engineering	Support & Database	Routing. Tracking and
and the second second second		Completion of CI/WAs in D.E.
Safety & Engineering Analysis	Safety & Engineering	PRA Model and Documentation
	Analysis	Update Process
Design Engineering	Support and Database	Close-Out Process for Design Change Work Authorizations
Proc Programs Engr	Produrement Engr.	Engr. Evaluation of Vend.
		Exceptions - PDCR
Proc Programs Engr	Procurement Engr.	Engr. Evaluation of Receipt
		Inspection Discrepancies - PDCR
Proc Frograms Ergn	Drafting Database	Closing and Transmitting Plant
	Support	Changes to Records

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

## SITE SUPPORT

Work Group	Function	Process
Sinte Business Serv	Budgeting	Plant Cost Control System
Sitte Business Serv	Accounting	Payroll Process
Emergency Planning &	Onsite Emergency	Emergency Plan
Administrative Services	Planning	
Emergency Planning &	Administration	Emergency Planning Support
Administrative Services		
Emergency Planning & .	Administrative	Indexing R/Type
Administrative Services	Services	
Emergency Prenning 3	Administrative	Data Conversion
Administrative Services	Services	
Emergency Flanning &	Administrative	Controlled Drawings
Administrative Services	Services	
Materials: Funchasing &	Purchasing	Faxing POs and Bids
Contracts		
Materials, Porchasing &	Contracts	Purchase Order Close Out
Contracts	4월 21일은 영화 전문 공장이다.	
Materials, Furchastro & Lili	7 A.	Outage Report Update
Contracts		
Materia i, Purchasing S.	λ. Δ.	Committed Dollars/Spent Dollars
Contracts		
daternais. Purchasing & 1991	17 A	Certificate of Insurance
Contract:	Na da Alteria da Barra	
Materia's funchasing &	1 A	QCL Approval List
ichtracts	요즘 집안되었는 것은 것은 것이 없는 것	
Haternalis, Runchashre &	Materials Management	Material Receipt
Chothacta		1996년 - 1996년 - 1996년 - 1997년 -
Materials, Runshasing &	Materials Management	Material Stocking
Contrasts		
Neter a l'un de meser e la comp	Materrals Management	Material Issuing
State 200		
	Materia e Management	Inventory Control

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

## SITE SUPPORT (Cont'd)

Work Group	Function	Process
Materials, Purchasing & Contracts	Materials Technical	Major Exception
Materials. Purchasing & Contracts	Materials Management	Maintaining Optimum Inventory Levels
Emergency Planning & Administrative Services	Administrative	Data Base Cleanup
Site Support Management	Management Programs & Excellence	Employee Awards & Recognition - Shining Through (Supervisory Awards)
Materials, Purchasing & Contracts	Materials Management	Material Test Lab - Record, Track & Trending Tests
Site Support Management	Management Programs & Excellence	Maximum Utilization of Copy Machines at W3

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# Details of Activities that Support Processes and Safety Culture

# NATURAL WORK TEAMS (Cont'd)

# TRAINING

Work Group	Function	Process
Operations Training	Operations Training	Conduct of Simulator Training
Simulator Training	Simulator Training	Simulator Problem Report Process
Maintenance Training	Maintenance Training	Job Performance Measures
Terrordal Training	Technical Training	sob refformance measures
Engineering Training & Accreditation	Engineering Instruction	Documentation of Off Site Vendor Training
Engineering Training & Accreditation	Developmental Instruction	Qualification Cards
"Serations Training	Operations Training	Maintenance of Training Materials for Operations

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## Details of Activities that Support Processes and Safety Culture

## NATURAL WORK TEAMS (Cont'd)

## NUCLEAR SAFETY

Work Group	Function	Process
Licensing	Licensing Support	Part 21 & Reportability
Licensing	Operational Licensing	Part 21 & Reportability (CFR Reporting)
Licensing	NSR&A	Commitments Maintenance
Licensing	NSR&A	Commitments Closure
Licensing	NSR&A	Commitments I.D Outgoing
Licensina	USR&A	Commitments I.D Incoming
Operational Experience	Operations Experience	Evaluation of Industry Experience
Engineering Duality Assurance	Review DA Inspection	Plant Walkdown
Ivality Assurance	JA Audit Assessment	Audit Process
luality Acturance	Connective Action Review	OA CA/Review
Safety Review	Q-Team	Employee Concern
Safety Review	Technical Review	Technical Review

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Details of Activities that Support Processes and Safety Culture

#### BUSINESS PLAN

The information listed below is taken from the Waterford 3 1995-1997 Nuclear Business Plan. This is only a summary of portions of the Business Plan.

Title of Program:	Excellence in Self Assessments and Strong
Program Lead: Strategic Objective: Critical Success Factor:	Corrective Action Program Director, Nuclear Safety Safety/Regulatory Performance Strong Safety Culture

#### Description of Program:

Conduct a review of the assessment function and implement changes that capitalize on internal expertise through activities such as Peer Group exchanges of information. The Corrective Action Root Cause Analysis process is used to identify and correct conditions affecting safety, cost or power generation capabilities at Waterford 3. Waterford 3 will continue to review the existing site corrective action processes in detail to identify and implement opportunities for improvement of site specific processes. The key process team for corrective action will play a major role in identifying these changes.

Title of Program:	Training Improvements
Program Lead:	Manager, Licensing
Strategic Objective:	Safety/Regulatory Performance
Critical Success Factor:	Technical Competance

## Description of Program:

Pursue the hiring and promotion of technically competent personnel and ensure development plans address technical competence development.

Title of Program:	Technical Understanding
Program Lead:	Director, Design Engineering
Strategic Objective:	Safety/Regulatory Performance
Critical Success Factor:	Technical Competance

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## Details of Activities that Support Processes and Safety Culture

#### BUSINESS PLAN (Cont'd)

#### Description of Program:

Improve technical understanding of safety margin through the use of Deterministic and Probabilistic calculation tools, Design Basis Documentation, and severe accident management programs.

Title of Program:	Excellence in Written Regulatory Communications	
Program Lead:	Manager, Licensing	
Strategic Objective:	Safety/Regulatory Performance	
Critical Success Factor:	Open Communications	

Description of Program:

Maintain standards and programs that ensure accuracy, completeness and timeliness of written NRC communications.

Title of Program:	Excellence in Verbal External Communications
Program Lead:	Manager, Licensing
Strategic Objective:	Safety/Regulatory Performance
Critical Success Factor:	Open Communications

Description of Program:

Develop and maintain processes to ensure that verbal communications with the NRC are accurate, open and timely. This will provide for a common understanding of the organizations and their roles.

Title of Program:	Cost Beneficial Licensing Actions
Program Lead:	Manager, Licensing
Strategic Objective:	Safety/Regulatory Performance
Critical Success Factor:	Open Communications

Description of Program:

Continue to pursue regulatory burden reductions that maintain plant safety margins while eliminating unnecessary and costly requirements.

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## Details of Activities that Support Processes and Safety Culture

#### TOP DECILE GOALS

Entergy has established goals in 3 broad areas for it's nuclear plants that are critical to the success of the company. Specifically, industry top decile status is targeted for each of these 3 areas by 1998. The specific goals for Waterford 3 are as follows:

Safety/Regulatory Performance Goal by 1998 - INPO 1 and SALP 1.25

Cost Performance Goal by 1998 - 17.0 Mills/KWHr

Operating Performance Goal by 1998 - 87% Capacity Factor

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#### Details of Activities that Support Processes and Safety Culture

#### TOTAL QUALITY IMPROVEMENT

Total Quality Improvement (TQI) at Waterford 3 began January 1991. The initial efforts began at Entergy Corporation in mid-1990. TQI, an Entergy improvement initiative, was designed to help achieve the five corporate priorities:

- Become more customer oriented
- Become more cost competitive
- Energize our people
- Satisfy internal and external constituencies
- Prepare for the future

As these initiatives have been deployed down through the corporation, Entergy has become even more aware of the need for a different culture, new set of skills, improved systems. a new way of leading and managing, and meeting customer needs. TQI is the change management vehicle selected by Entergy under the corporate priority of "prepare for the future," to plan and drive the transformation.

TQI is a philosophy supported by a set of guiding principles that represent the foundation of a continuously improving organization. It is the effective application of quantitative methods and human resources to improve material and services supplied to an organization, all the processes within an organization, and the degree to which the needs of the customer are met, now and in the future. It integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach focused on continuous improvement. In other words, it is an integrated management system which is customer focused, process oriented, prevention based, and built around employee involvement and continuous improvement.

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## Details of Activities that Support Processes and Safety Culture

### TOTAL QUALITY IMPROVEMENT (Cont'd)

The TQI process is designed to secure leadership and management support to create a supporting environment, followed by building the necessary mind-set and capabilities for employees to contribute to Total Quality. Focus will be directed fully to continuous improvement of all aspects of Waterford's operations. Continuous improvement at Waterford means:

- Using the Plan-Do-Check-Adjust Cycle (PDCA) to raise the performance levels of people and work processes
- Using the 4-D problem-solving process: define the problem,
- determine the cause, develop solutions and deliver recommendations
- Activities are motivated by a strong focus on customer needs and requirements
- Using benchmarking to set goals for quality
- Quality is a process that never ends
- Continuous improvement means that everyone at Waterford 3 does things better today than yesterday.

Active leadership is also vital to Total Quality, but another central element is empowered employees. Empowered employees have confidence in their ability to make improvement and remove barriers to quality. They have the skills and the willingness to try new things and take calculated risks in creatively addressing problems or opportunities for improvement.

Three initial total quality training courses were designed to help employees speak the same language of quality and help them focus on internal as well as external customers.

Introduction to Total Quality (ITQ) is aimed at creating the mind-set of continuous improvement in employees, while Quality Through Empowerment (QTE) teaches the elements central to empowering employees to seek out quality. The Quality Action Team Leader (QATL) Training prepares facilitators and team leaders for their roles in working with Quality Action Teams (QAT).

A QAT is comprised of a process owner, team leader, four to six team members and a facilitator. Team members are chosen from those employees most knowledgeable of the process being improved, and represent all organizations or functions involved in the process being reviewed.

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### Details of Activities that Support Processes and Safety Culture

#### TOTAL QUALITY IMPROVEMENT (Cont'd)

Total Quality Improvement training focuses on the following concepts, tools and strategies:

- Quality is defined by the customer
- · Quality means work is seen as a process
- · Quality requires continuous improvement
- · Quality is achieved through teamwork
- · PDCA work cycle
- Right things done right the first time
- Seven elements of quality
- Customer/supplier relationships
- 1-10-100 rule
- Benchmarking
- · Prevention Planning
- 4-D problem solving process
- Defining customer requirements
- Input-Output model
- Flowchart
- · Measuring quality
- Natural Work Teams
- Reengineering

Currently, Natural Work Teams (NWT's) are the primary vehicle used to analyze and improve site processes. NWT's and total quality tools and techniques have become ingrained in day to day Waterford 3 activities.

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# Details of Activities that Support Processes and Safety Culture

# ENTERGY NUCLEAR COMMITTEE OF THE BOARD OF DIRECTORS

#### PURPOSE

The Entergy Nuclear Committee is established to advise and assist the Board of Directors in the proper and complete discharge of its responsibilities relating to the Company's nuclear operations. The Entergy Nuclear Committee may be requested by the Board of Directors to investigate any nuclear related activity of the Company.

# AUTHORITY AND RESPONSIBILITIES

The Entergy Nuclear Committee assists the Board of Directors in fulfilling its responsibilities for the safe and efficient operation of the Grand Gulf Station. Unit No. 1; Waterford Nuclear Station, Unit No. 3; River Bend Station, Unit No. 1; and Arkansas Nuclear One, Units 1 and 2. The Chairman of the Entergy Nuclear Committee reports to the full Board of Directors at each regularly scheduled meeting. As a general rule, the Entergy Nuclear Committee communicates its recommendations and observations to the Board of Directors and not Directly to the Company's nuclear personnel. However, as to matters of immediate concern, members of the Committee may communicate directly with the Company's senior management and, thereafter, to the Company's Board of Directors.

Specific responsibilities and authority of the Entergy Nuclear Committee include, but are not limited to, the following:

- A. Review significant inspection and evaluation reports, including the Company's responses, performed by regulatory authorities in connection with the operation of the nuclear units operated by the Company, including SALP, INPO, ANI, and state regulatory bodies' reports.
- B. Evaluate any significant incidents or events relating to the nuclear units operated by the Company.
- C. Review monthly reports of plant "key indicator" trends and monthly report letters from the Company's senior management on the operation and costs of the nuclear units operated by the Company.
- D. Visit and inspect each nuclear facility operated by the Company at least annually and hold at least one of its meeting each year at each of the nuclear facility sites.

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## Details of Activities that Support Processes and Safety Culture

#### ENTERGY NUCLEAR COMMITTEE OF THE BOARD OF DIRECTORS (Cont'd)

- E. Review and approve minutes of each Entergy Nuclear Committee meeting and provide copies to all members of the Board of Directors and to the Secretary of the Company for the Company's files.
- F. Request, as desired, special reports or briefings by the Company's senior management on the operation of ANO, Units 1 and 2, Waterford 3, Grand Gulf 1 or River Bend 1.
- G. Request, as desired, and evaluate quarterly presentations from the Company's senior management on the performance and status of ANO, Units 1 and 2, Waterford 3, Grand Gulf 1 and River Bend 1.
- H. As appropriate, meet with NRC officials, INPO officials, station quality assurance management, the Chairman or other members of each site's Safety Review Committee, and the Company's senior management to discuss matters relating to performance and safety of each of the units.
- Request, as desired, the Company to conduct any special reviews or studies considered necessary. The Committee has access to all Company files, data, reports, and personnel, as in its judgment are deemed necessary to carry out its responsibilities.
- J. Retain at the Company's expense, legal counsel, consultants or other persons from within or outside the Company having special competence as necessary to assist the Committee in fulfilling its responsibility.

#### MEETINGS

The Entergy Nuclear Committee meets as often as desired, but in no event less than quarterly, to accomplish the aforementioned duties and responsibilities. The Committee's Chairman may call meetings at any time to review matters of responsibility or interest with the Committee. As deemed necessary by the Committee, meetings are attended by Company personnel.