



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE
WALNUT CREEK, CALIFORNIA 94596-5368

May 18, 1993

Docket Nos. 50-276/323

Pacific Gas and Electric Company
Diablo Canyon Nuclear Power Plant
P. O. Box 56
Avila Beach, California 93424

Attention: Mr. Robert Powers, Manager
Quality Oversight

SUBJECT: EFFECTIVE SELF-ASSESSMENT

Dear Mr. Powers:

One of the key challenges for safe operation of nuclear power plants is to develop an effective self-assessment capability. Certainly this capability is one of the attributes which we use to gauge licensee performance.

The Region V Administrator, John B. Martin, discussed this subject in a speech on the essential attributes of an effective self-assessment program at the Regulatory Information Conference in Rockville, Maryland on May 4, 1993.

I have enclosed a copy of this speech for your information. I hope that it provides some fresh insights for your program. Please call me if you have any questions or would like to discuss this further.

Sincerely,

K. E. Perkins, Jr., Director
Division of Reactor Safety and Projects

Enclosure:
As Stated

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PDR ADOCK 05000276
P PDR

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bcc:

J. B. Martin

B. F. Faulkenberry

MILLER RICHARDS PERKINS
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REQUEST COPY	REQUEST COPY	REQUEST COPY
YES NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>

SEND TO DCS	SEND TO PDR
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

SELF-CRITICAL ASSESSMENT

ESSENTIAL ATTRIBUTES

OF AN

EFFECTIVE PROGRAM

INTRODUCTION

GOOD MORNING. MY NAME IS JACK MARTIN AND I AM THE REGIONAL ADMINISTRATOR FOR THE NRC'S REGION V OFFICE. I AM PLEASED TO BE HERE THIS MORNING TO PROVIDE MY PERSPECTIVE ON THE ROLE AND THE MANAGEMENT OF SELF-ASSESSMENT AND QUALITY ASSURANCE IN THE SUCCESSFUL OPERATION OF NUCLEAR POWER PLANTS. WHEN QUALITY ASSURANCE IS MENTIONED FREQUENTLY PEOPLE IN OUR INDUSTRY VISUALIZE AN AUDITOR WITH A CLIPBOARD CHECKING ON THE PLANT'S COMPLIANCE WITH APPENDIX B CRITERIA OR PROGRAMMATIC REVIEWS FOCUSED LARGELY ON PAPERWORK AND RECORDS. THAT IS ABSOLUTELY NOT WHAT I HAVE IN MIND. TO BE SUCCESSFUL, THE INDUSTRY MUST HAVE A MUCH MORE ENLIGHTENED CONCEPT OF QUALITY ASSURANCE. FOR THE PURPOSES OF MY REMARKS, I WILL USE THE TERM SELF-ASSESSMENT RATHER THAN QUALITY ASSURANCE. BY THIS TERM I INTEND TO ENCOMPASS ALL THOSE ELEMENTS OF AN ORGANIZATION WHICH SERVE AN OVERSIGHT ROLE IN THE OPERATION OF THE POWER PLANT. I PLAN TO GIVE MY VIEWS ON THE PROPER USE OF A SELF-ASSESSMENT ORGANIZATION AND HOW THE CONCEPT OF HOW IT RELATES TO THE OVERALL OF MANAGEMENT OF NUCLEAR FACILITIES.

DISCUSSION

FIRST AND FOREMOST, THE VICE PRESIDENT OR SENIOR NUCLEAR EXECUTIVE IN A NUCLEAR ORGANIZATION MUST WANT HIS ORGANIZATION TO BE SELF CRITICAL, AND HE MUST DEMAND THAT THE SELF-ASSESSMENT ORGANIZATION FIND AND HIGHLIGHT PROBLEMS. I HAVE FOUND OVER THE YEARS THAT THE SELF-ASSESSMENT ORGANIZATION HAS NO

INDEPENDENT EXISTENCE. IT IS ULTIMATELY A REFLECTION OF THE ATTITUDES AND INTENTIONS OF THE VP NUCLEAR. IF HE IS INTERESTED IN FINDING PROBLEMS, THEY WILL TOO. HIS POSTURE IS CRUCIAL TO ITS SUCCESS.

LET'S FACE IT THOUGH, HOW MANY OF YOU ARE HOPING, OR EVEN DEMANDING, THAT YOUR SELF-ASSESSMENT MANAGERS COME THROUGH THE DOOR EACH WEEK TO DESCRIBE IN GRAPHIC DETAIL YOUR ORGANIZATION'S FAILURES AND DEEP ROOTED PROBLEMS. HUMAN NATURE MAKES THIS A VERY DIFFICULT ATTITUDE TO ADOPT AND MAINTAIN. THE RELATIVELY SHORT HISTORY OF OUR INDUSTRY IS THAT IF YOU DON'T FIND AND FIX YOUR OWN PROBLEMS, THE PROBLEM WILL ONLY GROW UNTIL IT IS REVEALED BY THE NRC, INPO, A DISGRUNTLED EMPLOYEE, OR PROBABLY WORST OF ALL, IT IS REVEALED BY A SIGNIFICANT PLANT EVENT. FINDING PROBLEMS TO KEEP THE NRC OFF YOUR BACK SHOULD NOT BE THE MOTIVATION HERE. IN YOUR INCREASINGLY COMPETITIVE BUSINESS ENVIRONMENT, SO-SO PERFORMANCE APPEARS NOT TO BE GOOD ENOUGH. TO PERFORM WELL AND RELIABLY, THE ORGANIZATION MUST BE WILLING TO RECOGNIZE THAT IMPROVEMENTS CAN ALWAYS BE MADE. THE ATTITUDE OF CONTINUALLY SEEKING WAYS TO IMPROVE HAS GOT TO COME FROM THE TOP. THE SENIOR NUCLEAR EXECUTIVE MUST RECOGNIZE THE VALUE OF THE QUALITY FUNCTION, MUST STRONGLY SUPPORT THE QUALITY FUNCTION, MUST BE DEMANDING OF QA PERFORMANCE, AND MUST ACT ON QA IDENTIFIED ISSUES.

MY SECOND POINT IS THAT THE SENIOR MANAGER IN THE SELF-ASSESSMENT AREA MUST BE A STRONG PERFORMER. TOO OFTEN THE QA POSITION IS FILLED BY WEAKER MANAGERS OR PERSONNEL WITH ONLY QA EXPERIENCE. THE BEST SITUATION HAS THE TOP SELF-ASSESSMENT JOB ON THE PATH TO VICE PRESIDENT LEVEL POSITIONS. FURTHERMORE, THE SELF-ASSESSMENT MANAGER MUST BE THE EQUAL LEVEL OF THE ENGINEERING AND OPERATIONS SENIOR MANAGEMENT. THIS ISN'T ALWAYS THE CASE. IN ONE INSTANCE, I FOUND A QA MANAGER WHO WASN'T EVEN BADGED TO GET ON SITE. THERE HAVE BEEN

MANY OTHER EXAMPLES WHERE THE SELF-ASSESSMENT MANAGER WOULD NOT OR COULD NOT GO TOE TO TOE WITH THE OPERATIONS OR ENGINEERING MANAGERS. EVEN MORE DISTRESSING, I WOULD ESTIMATE THAT ABOUT A THIRD OF THE QA MANAGERS I'VE MET DON'T HAVE A CLEAR IDEA WHAT THEIR ORGANIZATION'S MISSION IS. IN MY MIND, IT IS SIMPLE AND CLEAR. FIND PROBLEMS THAT AREN'T BEING DEALT WITH BY THE LINE ORGANIZATIONS; BRING THOSE PROBLEMS TO SENIOR MANAGEMENT TO FIX; AND DO IT BEFORE SOMEONE EXTERNAL TO THE ORGANIZATION HELPS YOU AND BEFORE AN EVENT SELF-REVEALS IT. I WANT TO EMPHASIZE HERE THAT I THINK THE SELF-ASSESSMENT ORGANIZATIONS SHOULD STAY OUT OF DICTATING THE SOLUTION TO PROBLEMS. THAT'S THE LINE'S JOB, AS SOON AS SELF-ASSESSMENT GETS INTO SOLVING PROBLEMS IT LOSES ITS INDEPENDENCE TO JUDGE LATER WHETHER THE PROBLEM HAS REALLY BEEN ADDRESSED. THEIR JOB IS TO FOLLOW THE ISSUE RELENTLESSLY WITH THE MEMORY OF AN ELEPHANT. NOT TO FIX IT.

MY THIRD POINT IS THAT THE LINE ORGANIZATION MUST RECOGNIZE THE VALUE OF A STRONG OVERSIGHT ORGANIZATION AND WELCOME THEIR PARTICIPATION IN FINDING PROBLEMS OR IN RECOMMENDING WAYS TO IMPROVE. THIS ATMOSPHERE IS VERY DIFFICULT TO ESTABLISH. THE DEGREE TO WHICH THIS IS ACCOMPLISHED AGAIN DEPENDS HEAVILY ON THE SENIOR NUCLEAR EXECUTIVE'S ABILITY TO DRIVE THIS CONCEPT DOWN INTO THE LINE ORGANIZATION. PERFORMANCE OF QUALITY WORK IS CLEARLY THE RESPONSIBILITY OF THE LINE ORGANIZATION. HIGH QUALITY WORK CAN ONLY COME FROM THE PROPER MOTIVATION AND DIRECTION OF THE WORKFORCE. IT CANNOT BE INSPECTED INTO AN ACTIVITY, NOR CAN THE QUALITY ORGANIZATION SERVE AS AN EFFECTIVE VEHICLE FOR ESTABLISHING AND COMMUNICATING EXPECTATIONS. MANAGEMENT CREATES A DEMANDING, RIGOROUS ATMOSPHERE WHICH ENCOURAGES, ENSURES AND REWARDS HIGH QUALITY WORK. THIS POINT CANNOT BE OVER-EMPHASIZED. THE FOCUS OF SELF-ASSESSMENT IS TO IDENTIFY WHERE MANAGEMENT EXPECTATIONS ARE NOT

BEING MET, NOT TO SERVE AS A SUBSTITUTE FOR MANAGEMENT IN DEFINING PERFORMANCE EXPECTATIONS.

SELF-ASSESSMENT MUST HAVE THE CAPABILITY TO DEVELOP THE BIG PICTURE OF SITE PERFORMANCE.

I HAVE FOUND THAT TOO OFTEN THE SELF-ASSESSMENT ORGANIZATIONS ARE STAFFED WITH PEOPLE WHO ARE NOT QUALIFIED IN ENGINEERING DISCIPLINES OR WHO HAVE NOT ESTABLISHED A SUCCESSFUL CAREER IN LINE ORGANIZATIONS. THE OVERSIGHT ORGANIZATIONS MUST BE STAFFED WITH PERSONNEL OF VARIED EXPERIENCE IN SUFFICIENT NUMBERS. AN OVERSIGHT ORGANIZATION WITH EXCLUSIVELY QA EXPERIENCE HAS A WEAK BASIS TO CHALLENGE HIGHLY TRAINED SPECIALTY GROUPS, SUCH AS OPERATIONS, ENGINEERING, AND I&C. IN ORDER TO ACHIEVE AND MAINTAIN CREDIBILITY, THE OVERSIGHT ORGANIZATION STAFF SHOULD INCLUDE PERSONNEL WITH DIRECT EXPERIENCE IN KEY LINE ORGANIZATION POSITIONS.

ADDITIONALLY, THE OVERSIGHT GROUPS SHOULD ALSO HAVE THE ABILITY AND WILLINGNESS TO BRING IN EXPERT PERSONNEL TO PERFORM AUDITS AND ASSESSMENTS OF VERY SPECIALIZED DISCIPLINES, SUCH AS CORE DESIGN, EDDY CURRENT TESTING, AND PIPING ANALYSIS, FOR EXAMPLE. MANAGEMENT MUST RESIST THE TENDENCY FOR SELF-ASSESSMENT TO AVOID HIGHLY TECHNICAL AREAS OR TO PERFORM ONLY SIMPLE PAPERWORK REVIEWS BECAUSE THE IN-HOUSE STAFF LACKS THE EXPERTISE TO REVIEW A PARTICULAR AREA.

THE APPROACH TO OVERSIGHT SHOULD BE PERFORMANCE-BASED INSTEAD OF COMPLIANCE-BASED. THIS IS DIFFICULT TO IMPLEMENT BECAUSE TOO OFTEN THE LINE ORGANIZATIONS WILL RESIST FINDINGS THAT ARE SUBJECTIVE AND NOT BASED SIMPLY

UPON A CLEAR REQUIREMENT. FOR SELF-ASSESSMENT PERSONNEL, IT IS ALSO FAR EASIER TO FOCUS ON WHETHER OR NOT CLEAR REQUIREMENTS WERE COMPLIED WITH RATHER THAN TACKLE THE MORE DIFFICULT ISSUES. THE MORE SUBJECTIVE ASSESSMENTS REQUIRE A MUCH BROADER KNOWLEDGE ON SELF-ASSESSMENT'S PART, ARE MUCH HARDER TO CONDUCT, AND ARE MORE LIKELY TO MEET RESISTANCE FROM THE LINE ORGANIZATIONS; HOWEVER, BROAD BASED ASSESSMENTS HAVE FAR MORE POTENTIAL TO ALERT SENIOR MANAGEMENT TO PROBLEM AREAS.

THE OVERSIGHT ORGANIZATIONS MUST BE IN TUNE TO DEVELOPING INDUSTRY ISSUES. THEY SHOULD BE INVOLVED IN INDUSTRY ACTIVITIES, PERSONNEL EXCHANGES, AND VISITS TO OTHER SITES. THEY SHOULD BE AGGRESSIVE IN ASSURING THAT INDUSTRY PROBLEMS ARE ACTED ON BEFORE THEY SELF REVEAL AT THEIR SITE.

OVERSIGHT ORGANIZATIONS SHOULD ASSESS THE APPROPRIATENESS AND EFFECTIVENESS OF CORRECTIVE ACTIONS TO CORRECT PROBLEMS. I MUST EMPHASIZE THE FOCUS ON THE WORD ASSESS.. THE OVERSIGHT GROUPS MUST MAINTAIN INDEPENDENCE AND OBJECTIVITY BY AVOIDING DICTATING OR FORMATION OF THE CORRECTIVE ACTIONS. CORRECTIVE ACTIONS AND ISSUES MUST BE TRACKED TO COMPLETION AND SELF-ASSESSMENT SHOULD HAVE THE CAPABILITY AND MECHANISM TO TRACK AND REPORT PERFORMANCE TRENDS. FREQUENTLY, INTEREST FADES QUICKLY AFTER AN ISSUE IS INITIALLY RAISED AND TENTATIVELY ADDRESSED. ACCORDINGLY, LONG TERM CORRECTIVE ACTIONS OFTEN GET POORLY IMPLEMENTED AND SELF-ASSESSMENT FAILS TO FOLLOW THROUGH. THE INEVITABLE RESULT IS THAT THE PROBLEM RESURFACES AGAIN AT A LATER TIME.

FINALLY, THERE SHOULD BE CLEARLY WRITTEN REPORTS TO SENIOR MANAGEMENT DEFINING THE MAJOR AREAS OF WEAKNESS AND THE ACTIVITIES OF THE VARIOUS OVERSIGHT GROUPS, SUCH AS QA, QC, ISEG, PRB, AND OFF-SITE REVIEW, SHOULD COMPLIMENT EACH

OTHER.

CLOSING REMARKS

IN CLOSING, I'D LIKE TO SUMMARIZE THE THREE MAIN POINTS OF MY REMARKS.

FIRST OF ALL, THE SENIOR NUCLEAR EXECUTIVE MUST UNDERSTAND THE PURPOSE OF THE SELF-ASSESSMENT ORGANIZATION AND DEMAND PERFORMANCE FROM THAT ORGANIZATION. HE MUST ENSURE THAT THE LINE ORGANIZATION LIKEWISE RECOGNIZES THE VALUE OF STRONG OVERSIGHT.

SECOND, THE SELF-ASSESSMENT MANAGER MUST BE A STRONG PERFORMER WHO RECOGNIZES THE THAT THE FUNCTION OF SELF-ASSESSMENT TO FIND AND FORCEFULLY REPORT PROBLEMS BEFORE THOSE PROBLEMS SELF REVEAL OR OTHERS FIND THEM.

THIRD, THE OVERSIGHT ORGANIZATION MUST HAVE THE TECHNICAL CAPABILITY TO FIND PROBLEM AREAS WELL BEYOND THOSE SURFACED BY PAPERWORK REVIEWS. PROBLEM AREAS SHOULD BE CLEARLY REPORTED, TRACKED, TENDED, AND TENACIOUSLY FOLLOWED UNTIL FULLY CORRECTED BY THE LINE ORGANIZATION, NOT BY SELF-ASSESSMENT.

I HOPE THESE THOUGHTS ARE USEFUL TO YOU. THANK YOU FOR YOUR TIME AND ATTENTION.

