UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of

MAURICE P. ACOSTA, JR.

Docket No. 55-08347

Operator License No. 6010-2

NRC STAFF'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE FORM OF AN INITIAL DECISION

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June 26, 1989

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TABLE OF CONTENTS

1.	INTRODUCTION	1
11.	BACKGROUND	2
111.	THE ORDER	4
IV.	FINDINGS OF FACT	6
	A. The Witnesses	7
	B. SCE's Substance Abuse Policy and Program	11
	C. Accuracy and Reliability of Test Results	18
	D. Passive Inhalation	24
	E. Responsibilities of a Reactor Operator	27
	F. Effects of Marijuana	30
	G. Interpretation of Test Results	34
	H. Consideration of Performance	35
	I. Overall Board Findings	36
۷.	CONCLUSIONS OF LAW	37
VI.	ORDER	38

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I. INTRODUCTION

This proceeding was initiated as a result of the issuance of an Order by the Staff of the Nuclear Regulatory Commission (Staff) which suspended the Reactor Operator's License of Mr. Maurice P. Acosta, Jr. and denied his application for renewal of that license. ("Order Suspending License (Effective Immediately) and Denial of Application for Renewal of License; Maurice P. Acosta, Jr." (June 15, 1988), 53 Fed. Reg. 24383 (June 28, 1988), [hereinafter NRC Staff Exhibit 1]). A hearing was held in this proceeding on May 24-25, 1989.

Pursuant to the Order of the Atomic Safety and Licensing Board (Board) designated to preside over the above-captioned proceeding (Cotter, Tr. 278), the Staff hereby submits its proposed findings of fact and conclusions of law with regard to the issues raised in this proceeding. $\frac{1}{2}$

^{1/} As noted, infra, at page 3, during the Prehearing Conference held in this proceeding, Mr. Acosta contended that drug testing violated his (FOOTNOTE CONTINUED ON NEXT PAGE)

II. BACKGROUND

On July 1, 1982, Mr. Maurice P. Acosta, Jr. was issued a license by the NRC to operate the Unit 2 and 3 reactors at the San Onofre Nuclear Generating Station (San Onofre) operated by Southern California Edison Company (SCE). (See NRC Staff Exhibit 1). Mr. Acosta's license was last renewed on July 1, 1986. (Id.). On May 12, 1988, an application was filed for the renewal of Mr. Acosta's license, which was to expire on July 1, 1988. (Id.).

After learning that Mr. Acosta had tested positive for a third time for marijuana, the Executive Director for Operations issued an Order on June 15, 1988, suspending Mr. Acosta's license and denying the application for renewal of that license then pending before the Commission. The Order provided Mr. Acosta an opportunity to request a hearing on the Order. (<u>Id</u>. at 24384). Mr. Acosta responded to the Order on July 1, 1988. (Letter, Acosta to Director/Office of Enforcement, July 1, 1988).

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE

constitutional rights under the Fourth Amendment. During the course of his opening statement at the evidentiary hearing held in this proceeding, Mr. Acosta's Counsel also generally asserted this "purely legal argument" as a reason to set aside the Order at issue in this proceeding. The Staff does not address this issue in the following proposed findings since, as opposed to Mr. Acosta's other factual type defenses, we are of course unable to determine at this time what portions, if any, of the record Mr. Acosta's Counsel will rely on in support of any legal arguments he may make in his proposed findings of fact and conclusions of law. The Staff will fully respond to any such arguments in its reply findings which have been provided for in this proceeding. (Id.).

- 2 -

Mr. Acosta requested that the Staff reconsider its actions in light of his performance over the period during which he held his license. (Id.).

A Licensing Board was established to decide the issue of whether the Staff's order should be sustained. (Establishment of Atomic Safety and Licensing Board, August 18, 1988). The Board held a prehearing conference on October 19, 1988, in order to hear the parties' positions in this matter.

Both the Staff and Mr. Acosta attended the prehearing conference. At that time the Staff reiterated the position taken in its Order of June 15, 1988, that: (1) Mr. Acosta's repeated violation of a policy of Southern California Edison Company which was related to the protection of the public health and safety, demonstrated a disregard for the important obligations of a licensed operator, and a disregard for the public's trust in him; and, (2) that the Commission no longer had reasonable assurance that Mr. Acosta will continue to carry out his licensed duties competently and safely, and comply with all applicable regulations, requirements and procedures. (Prehearing Transcript at 4-5).

Mr. Acosta did not contend that he had not tested positive each of the three times reported in the Orde:, but rather stated that due to the cutoff levels used in the analyses of his specimens, passive inhalation rather than use of marijuana could not be ruled out. He also contended that the Commission should have taken his performance into account in issuing this Order, and that drug testing violated his constitutional rights under the Fourth Amendment. (Id. at 18, 26-27, 47-49).

The parties engaged in one round of discovery. Discovery closed on February 15, 1989. Written testimony was filed by the Staff on May 9,

- 3 -

1980. In addition, the Staff presented the testimony of three subpoenaed witnesses at the hearing. Mr. Acosta did not present any testimony in this proceeding. The hearing was held on May 24-25, 1989, at the end of which time the record was closed. The Board directed the parties to submit briefs and set forth a schedule for doing so. (Cotter, Tr. 278). The Board's findings of fact and conclusions of law are set forth below.

III. THE ORDER

As mentioned above, the Staff's Order of June 15, 1988 suspended Mr. Acosta's license and denied his application for renewal of that 'icense which was then pending before the Commission. (NRC Staff Exhibit 1, 53 <u>Fed. Reg.</u> 24383 (June 28, 1988). In its Order the Staff stated that the responsibilities associated with a reactor operator's license issued pursuant to 10 C.F.R. Part 55 of the Commission's regulations are significant with respect to the protection of the public health and safety. The Staff stated in its Order that these responsibilities require the exercise of sound judgment. The Staff also pointed out that a reactor operator may at times be required to act quickly and decisively to assure that the reactor is properly shut down, and to assure that the public health and safety is protected. (Id. at 24383-24384).

It is the Staff's position that, pursuant to Section 182a of the Atomic Energy Act of 1954 as amended, the character of an individual seeking an operator's license, including his or her ability to exercise sound judgment, is to be considered in determining whether to issue the license. (Id. at 24384). The question of whether an applicant for an operator's license is or has a history of being involved with the use of

- 4 -

illegal drugs has been of concern to the Commission, as exemplified by the requirement that an applicant state that he had no drug or narcotic habit on NRC Form 396, "Certificate of Medical History" accompanying the application and, since 1987, the requirement that an evaluation be performed by a medical practitioner, which includes an evaluation of any drug or alcohol abuse. The Commission's regulations require that a medical certification be provided with every application for a reactor operator's license. (Id. at 24384; see also, 10 C.F.R. § 55.23).

As the Order indicates, in August of 1986, the Commission issued its Fitness for Duty policy statement, setting forth the Commission's view that all utilities should establish programs to provide reasonable assurance that utility personnel with access to vital areas of operating plants are fit for duty. (NRC Staff Exhibit 1 at 24384; <u>See</u>, Fitness for Duty Policy Statement, 51 <u>Fed. Reg.</u> 27921 (August 4, 1986)). ^{2/} As discussed further below, SCE had established such a program.

As the basis for issuance of this Order the Staff stated in the Order and reiterated in its testimony that:

> [Mr. Acosta's] history of positive drug tests indicates a continuing use of marijuana and violation of SCE's drug program. This suggests a pattern of behavior and lack of sound judgment that may be inimical to the public health and safety. The failure of [Mr. Acosta] to conform to SCE's prohibition against illegal drug use, which has the purpose of protecting the public health and safety, demonstrates a disregard of the important obligations of a licensed operator and of the public's trust in him. While the tests themselves do not necessarily establish that [he] was incapacitated at the time the samples were taken,

^{2/} The Board indicated that it would take official notice of the NRC Fitness for Duty Policy Statement that was in place during some of the events at issue in this proceeding. (Cotter, Tr. 266).

the NRC does not have the necessary reasonable assurance that the Licensee will carry out his duties in the future with sufficient alertness and ability to safely operate SONGS and observe all applicable requirements, including SCE policies and procedures as well as the NRC's requirements.

(53 Fed. Reg. 24384; "Direct Testimony of Neal K. Hunemuller and John A. Zwolinski in Support of the NRC Staff's Order of June 15, 1988," ff. Tr. 278 at 30-31, [hereinafter Hunemuller-Zwolinski Testimony]). The Staff concluded that had it known of Mr. Acosta's inability or unwillingness to comply with SCE's policies, the Staff would not have issued Mr. Acosta his initial reactor operator's license. In light of this view, the Staff exercised its authority under Section 186 of the Atomic Energy Act of 1954 as amended and 10 C.F.R. §§ 55.61 and 55.57 of the Commission's regulations to suspend Mr. Acosta's license and to deny his application for license renewal.

The issue to be decided in this proceeding is whether the Staff's Order should be sustained. Our decision must rest on whether the record supports the judgments made by the Staff in the Order of June 15, 1988.

IV. FINDINGS OF FACT

 Mr. Maurice P. Acosta, Jr. was a reactor operator at San Onofre Units 2 and 3 from 1982 until the Staff issued its Order on June 15, 1988.
(See NRC Staff Exhibit 1, 53 Fed. Reg. 24383).

The Staff issued its Order as the result of a report that
Mr. Acosta had tested positive for marijuana for a third time.
(Zwolinski, Tr. 249).

A. The Witnesses

 The Staff in support of its Order presented the testimony of seven witnesses.

4. Dr. Edward J. Cone is the Chief of the Laboratory of Chemistry and Drug Metabolism of the Addiction Research Center at the National Institute on Drug Abuse. ("Direct Testimony of Dr. William E. Flynn and Dr. Edward J. Cone," at 2, [hereinafter Flynn-Cone Testimony, ff. Tr. 278]). $\frac{3}{}$ Dr. Cone has a Ph.D. in Chemistry from the University of Alabama. (Flynn-Cone Testimony, ff. Tr. 278, Exhibit 2). The mission of the Addiction Research Center, where Dr. Cone is now employed, is to carry out a coordinated program of multidisciplinary research on the causes, hazards, treatment and prevention of drug addition, the nature of the addictive process and the addictive liability of new drugs. (Flynn-Cone Testimony, ff. Tr. 278 at 2). Dr. Cone presented testimony describing how the Enzyme-Multiplied Immunoassay Technique (EMIT) and Gas Chromatography/Mass Spectrometry (GC/MS) tests are performed, and testimony describing his work concerning passive inhalation of marijuana smoke. (Flynn-Cone Testimony, ff. Tr. 278 at 3-11).

5. Dr. William E. Flynn is a psychiatrist, who is the Director of the Alcohol and Drug Abuse Clinic at the Georgetown University Medical Center. Dr. Flynn received his M.D. degree from Georgetown University School of Medicine in 1957, and has been a practicing psychiatrist for

- 7 -

^{3/} All of the Staff's direct testimony was bound into the record following Tr. 278, rather than at the place where the witnesses actually testified.

many years. (Flynn-Cone Testimony, ff. Tr. 278 at Exhibit 1). Dr. Flynn has been working in the field of drug abuse since 1972. Dr. Flynn has directed the Alcohol and Drug Abuse Clinic at Georgetown for the past 10 years. During that time he has treated numerous drug addicts and other addicted persons. (Id. at 1-2). Dr. Flynn testified concerning the effects of marijuana use on individuals, and as to his opinion of the likelihood of continued drug use by a person who had failed a number of drug tests. (Flynn-Cone Testimony, ff. Tr. 278 at 11-16).

6. Dr. Louis Jambor is the Toxicology Manager at the SmithKline Biosch ce Laboratories in Van Nuys, California. (Jambor, Tr. 108). SmithKline is the laboratory which performed the analyses of Mr. Acosta's March 6, 1986, and May 28, 1988, urine samples. (NRC Staff Exhibits 2, 4). Dr. Jambor has a Doctorate in Analytical Chemistry from Wayne State University, and has been directing toxicological laboratories for the past 12 years. He is a licensed Toxicologist in the State of California. In his position at SmithKline Bioscience Laboratories, Dr. Jambor is responsible for the overall operation including quality controls of the laboratory. He designs tests, and monitors the tests to assure that they are accurate. (Jambor, Tr. 108). Dr. Jambor testified concerning the test equipment and methodology used by SmithKline in analyzing the urine samples and preparing the reports admitted into evidence as NRC Staff Exhibits 2 and 4 in this proceeding. (Jambor, Tr. 107-148).

7. Dr. Alan Keltz is the Director of BPL Toxicology Laboratory in Tarzana, California. (Keltz, Tr. 153). This company has been incorporated into Central Diagnostic Laboratory (CDL). (Keltz, Tr. 154). CDL is the laboratory which performed the analysis of Mr. Acosta's May 12, 1986,

- 8 -

urine sample. (NRC Staff Exhibit 3). Dr. Keltz has a doctorate, has worked in the pharmaceutical industry, and as the director of toxicology laboratories for a number of years. (Keltz, Tr. 153-154). As Laboratory Director, Dr. Keltz is responsible for supervising the operations personnel and for ensuring the quality control at the laboratory. (Keltz, Tr. 155). Dr. Keltz testified as to the procedures and methodologies used in the analysis of the urine sample which resulted in the report which was admitted as NRC Staff Exhibit 3 in this proceeding. (Keltz, Tr. 153-162).

8. Mr. Albert Eugene Talley is a Departmental Assistant with the Southern California Edison Company. (Talley, Tr. 15). Mr. Talley has a Masters Degree in Business Management from the University of Redlands. (Talley, Tr. 14-15). In his current position, Mr. Talley is responsible for the origination and management of the Substance Abuse Program at the San Onofre facility. (Talley, Tr. 15). In his previous position as Manager of Material and Administrative Services, Mr. Talley was also responsible for the San Onofre Substance Abuse Program. (Talley, Tr. 16). Mr. Talley testified concerning SCE's policy prohibiting the use of illegal substances, and the purpose for the development of that policy. He also testified concerning the development of the substance abuse program at San Onofre, its provisions, and how the program worked with respect to each of Mr. Acosta's drug test failures. (Talley, Tr. 14-107).

9. Neal K. Hunemuller is a Reactor Engineer in the Operator Licensing Branch in the Division of Licensee Performance and Quality Evaluation in the Office of Nuclear Reactor Regulation of the NRC. Mr. Hunemuller received a Bachelor of Science Engree in Nuclear Engineering from Iowa State University. ("Direct Testimony of Neal K. Hunemuller and

- 9 -

John A. Zwolinski in Support of NRC Staff's Order of June 15, 1988," at 1 and Attachment 1). Prior to his employment at NKC, Mr. Hunemuller was an employee of the Iowa Electric Light and Power Company, where he served as a Shift Technical Advisor and later as an Operations Shift Supervisor at the Duane Arnold Energy Center in Palo, Jowa. Duane Arnold is a 1658 Megawatt thermal, 560 Megawatt electric, nuclear power plant. (Id. at 2). Mr. Hunemuller spent approximately one year on the rotating shift actively performing the duties of the Shift Technical Advisor as part of the control room crew. (Id.). In January of 1986. Mr. Hunemuller received a Senior Reactor Operator's license and spent approximately 360 hours performing the duties of the Operations Shift Supervisor as part of the control room crew. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 2-3.) Mr. Hunemuller presented testimony concerning the requirements a person must satisfy to receive a Reactor Operator's License, the training that person must undergo, the responsibilities of a reactor operator at the San Onofre facility, and the skills a reactor operator must use in both normal and abnormal situations. (Id. at 2-30).

10. John A. Zwolinski is the Deputy Director of the Division of Licensee Performance and Quality Evaluation in the Office of Nuclear Reactor Regulation of the Nuclear Regulatory Commission. Mr. Zwolinski has a Bachelor of Science Degree in Mechanical Engineering from Washington State University and a Master of Science Degree in Engineering from George Washington University. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 1, Attachment 2). Mr. 2wolinski was one of the NRC management officials who was involved in the preparation and issuance of the Order which forms the basis for this proceeding. (Zwolinski, Tr. 249). 11. The Board finds that all of the witnesses presented by the Staff were highly qualified in their fields of expertise and presented credible testimony in this proceeding.

B. SCE's Substance Abuse Policy and Program

12. Mr. Talley presented testimony concerning the policy of SCE concerning off-duty drug use. This policy, which was published in September of 1984, indicated that workers with unescorted access to the protected area of the San Onofre facility should be free from drug involvement, possession, use or sale both on and off duty. $\frac{4}{}$ (Talley, Tr. 15-16).

13. This policy has three purposes. First, the Company recognized the use of psychoactive substances as a potential threat to nuclear safety. This policy was developed in an attempt to prevent the occurrence of nuclear accidents and to ensure that, in the event of the occurrence of such an accident, the workers necessary to mitigate its consequences would be unimpaired. (Talley, Tr. 17-18). The second purpose of the policy is to maintain public confidence in response to articles which had appeared in the local media concerning drug use at San Onofre. (Id. at 18).

^{4/} Mr. We ley defined the protected area as the area which includes the nuclear units and other power generation related facilities. It is the area of the facility which is surrounded by a guarded boundary. Both access to the area and movement of materials in and out of the area are controlled. (Talley, Tr. 22). The term "unescorted access," as defined by Mr. Talley, means the ability to proceed within the protected area of the facility alone through the use of a key card. Such a key card is known as a "red badge". Mr. Talley testified that this type of access requires a special level of screening, testing and clearance. (Id.).

Finally, the policy was developed to encourage the establishment by workers with unescorted access to San Onofre of a reputation for reliability and trustworthiness. (Talley, Tr. 18-19).

 Marijuana is one of the substances which is encompassed by this policy. (Talley, Tr. 19).

15. This policy was communicated to the employees at San Onofre by means of a site directive, which is a high-level policy document provided to all personnel entering the San Onofre site, training of employees before being granted unescorted access, and through meetings with employees and the distribution of flyers. (Talley, Tr. 20-21; NRC Staff Exhibit 5).

16. The substance abuse policy is implemented through the substance abuse program, which has a number of different elements. The elements of the program include: development of implementing procedures to describe both the substance abuse policy and the actions to be taken by the company in the event that an employee violates that policy; training of employees with respect to the various provisions of the program; training of supervisors in behavioral observation techniques, and techniques to deal with the reporting of impairment by an employee; employee assistance for those requesting it, and contracts with outside facilities for mandatory rehabilitation of employees if it is deemed necessary. In addition, the program provides for chemical testing of body fluids. In the case of an applicant for employment with SCE, the applicant is given a urinalysis. If a person is observed to be impaired on the job, and that observation is confirmed by another management official pursuant to an established protocol, that person is given a blood test. For those employees

- 12 -

obtaining unescorted access to the protected area, a pre-assignment drug screen is performed, and the employees are retested annually as part of the badge renewal procedure. $\frac{5}{}$ (Talley, Tr. 23-26). Finally, when a person has failed a drug test, undergone the prescribed procedures that follow upon that failure and has had his unescorted access reinstated, the individual is placed on a Periodic Drug Monitoring program. This program involves unannounced periodic drug tests of the individual. (Id. at 26-27).

17. It is the portion of the program which involves the testing done to receive and retain unescorted access to the protected area of San Onofre which is relevant to this proceeding. In early 1986, when Mr. Acosta tested positive for the first time for marijuana, the program was a phased program, with disciplinary actions of varying severity depending on the number of times the individual was found to have violated the substance abuse policy. (See, Talley, Tr. 26-34). The actions ranged from suspension for a brief time after the first positive test result, to termination after the fourth positive test result. (Id.). In addition, the program provided for counseling of the affected employee about the policy, and the consequences of another positive test result. (Id. at 29-30). This was the program as it existed in early 1986.

18. In late 1986 the program was amended to provide for termination of an employee after the third positive drug test. (Talley, Tr. 36; NRC

5/ SCE's substance abuse program also has a random drug testing component which, although it was discussed on the record, is not (FOOTNOTE CONTINUED ON NEXT PAGE)

- 13 -

Staff Exhibit 6). As of November 1988 the program was amended to provide for termination after a second positive drug test. (Talley, Tr. 37).

19. The red badge testing is conducted according to a number of protocols which include a collection protocol and a chain of custody protocol. Each specimen is collected under these protocols. (Talley, Tr. 39). The temperature of the urine is checked to preclude adulteration of the sample. Since 1986, San Onofre personnel have done a pre-screening of the sample using a SYVA EMIT test at a 20 ng/ml cutoff level for marijuana. Any suspect samples are sent to the laboratory pursuant to a lengthy chain of custody protocol. $\frac{6}{}$ (Talley, Tr. 39-42).

20. If the sample is screened by the laboratory as positive, and if that positive result is confirmed by a different scientific method, the positive results are returned to the medical officer at San Onofre for his review. (Talley, Tr. 40). The medical officer reviews the results to determine if there is a valid reason for the presence of the substance in the tested sample. (Talley, Tr. 41). If the medical officer cannot find a valid reason for the presence of the test a positive test result. He verifies the name of the person who was tested,

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE

relevant to this proceeding. The positive drug tests in question were not the result of random drug tests. (See NRC Exhibits 2-4; Talley, Tr. 26-28, 80-82).

6/ In 1986 when the prescreening program first began, all samples were sent to the laboratory. (Talley, Tr. 47). Now, even though the presecreening program is in place, all samples taken as part of the periodic Drug Monitoring program are still sent to the laboratory, even though they are also pre-screened. (Talley, Tr. 48). places the report of the results in the person's medical file, and passes the information that a positive test result has occurred to site management. (Talley, Tr. 46).

21. With respect to Mr. Acosta, both Mr. Talley and Dr. Jambor testified that the analysis conducted of the sample collected on March 6, 1986, consisted of the performance of 4 tests on four separate aliquots of Mr. Acosta's urine sample. (Talley, Tr. 43-44; Jambor, Tr. 109-110). Mr. Acosta was found to have screened positive using two EMIT screens with a cutoff level of 100 ng/ml. This positive result was confirmed by both Thin Layer Chromatography and Gas Chromatography/Mass Spectrometry (GC/MS). His test was confirmed at a GC/MS level of 17 ng/ml. (NRC Staff Exhibit 2).

22. Upon learning of this positive drug test, SCE acted in accordance with the policy. Mr. Acosta's unescorted access was withdrawn. He was assigned to other duties until his drug levels were found to have dropped to zero. He was counseled concerning what the company's policy with respect to the use of drugs was, and as to the consequences of another drug test failure. His unescorted access was eventually reinstated with the proviso that he be subject to the Periodic Drug Monitoring program. (Talley, Tr. 46).

23. On May 12, 1986, Mr. Acosta was tested pursuant to the Periodic Drug Monitoring program. The sample was sent to Central Diagnostic Laboratory for analysis. Mr. Talley testified that at this time, tests conducted pursuant to the Periodic Drug Monitoring program were routinely sent to CDL for analysis. (Talley, Tr. 49). CDL conducted its analysis using two separate EMIT tests, and confirming the results through GC/MS.

- 15 -

(Talley, Tr. 50; Keltz, Tr. 159). Dr. Keltz testified that the GC/MS was performed by another laboratory, since at that time CDL did not have the equipment to perform GC/MS. An aliquot of the sample was transported to this laboratory by courier in a locked bag, along with a chain of custody form. The locked bag was given to the entry personnel at Poison Lab, the laboratory which conducted the GC/MS. The results were then communicated back to CDL and incorporated into CDL's report. (Keltz, Tr. 156). The analysis showed that Mr. Acosta tested positive using the EMIT screen for marijuana at a semi-quantitative level of 120 ng/ml $\frac{7}{}$ using a cutoff level of 50 ng/ml. (See, infra, "C. Accuracy and Reliability of Test Results"). This result was confirmed by GC/MS at a level of 45 ng/ml. (NRC Staff Exhibit 3).

24. As a result of this second positive test for marijuana, Mr. Acosta's unescorted access was withdrawn, he was placed on disciplinary suspension, referred to the employee assistance program and, after successfully passing a retest, his unescorted access was reinstated. All of these steps were taken in accordance with the policy which existed at that time. (Talley Tr. 49-50).

25. Mr. Acosta remained on the Periodic Drug Monitoring program. He passed a number of PDM tests, as well as an annual retest for red badge renewal. (Acosta Exhibits 1-10).

- 16 -

^{7/} The report of these results contains a typographical error. Both Mr. Talley and Dr. Keltz testified that the entry "mg" should read "ng". (Talley, Tr. 49; Keltz, Tr. 155-156). Dr. Keltz was able to verify that the entry was a typographical error through consultation of the laboratory analysis which resulted in the final report. (Id.).

26. On May 28, 1988, Mr. Acosta took another PDM test. The sample collected was analyzed by SmithKline Bioscience Laboratories. (NRC Staff Exhibit 4). During the collection of this sample an abnormality was noted in the sample, and another sample was requested. When the same abnormality was discovered, a third sample was collected. These samples were taken over a period of approximately three hours. (Talley, Tr. 54-55, 166). Each sample was treated separately under the chain of custody protocol, and each sample was analyzed separately. (Talley, Tr. 55). This analysis was performed using similar techniques to the analysis conducted by SmithKline in 1986. The specimens were screened using the EMIT test using a cutoff level of 50 ng/ml and confirmed with a quantitative analysis by GC/MS. (NRC Staff Exhibit 4). The EMIT levels were quantified for marijuana as positive at levels of 70, 65, and 50 ng/ml respectively. The tests were confirmed by GC/MS at levels of 17, 15 and 13 ng/ml. (Id.).

27. On receipt of the report of Mr. Acosta's third failure, SCE withdrew his unescorted access, placed him on disciplinary suspension, and required him to enroll in a mandatory rehabilitation program. (Talley, Tr. 56). Mr. Acosta's unescorted access has not been reinstated by SCE. (Talley, Tr. 56).

28. The Board finds that SCE had a policy against the off-duty use of controlled substances including marijuana.

29. The Board also finds that this policy was implemented at San Onofre

through a comprehensive program which was communicated to SCE employees. For those employees with unescorted access, the Board finds that there was

- 17 -

a program of chemical testing and disciplinary actions for test failures of which the employees were made aware. Mr. Acosta was, after each of his drug test failures, made aware of the consequences of any future failure.

C. Accuracy and Reliability of Test Results

30. For the first time at this hearing, Mr. Acosta attempted to challenge the accuracy and reliability of the test results reported in NRC Staff Exhibits 2-4. $\frac{8}{}$ At the beginning of the hearing Staff counsel stated that NRC Staff exhibits were offered into evidence and admitted without objections pursuant to a stipulation. At that time no limit was placed on the purposes for which these documents were being admitted. It later developed that there had been a misunderstanding between Mr. Acosta's counsel and counsel for the Staff as to the exact meaning of the stipulation with respect to NRC Staff Exhibits 2-4. The Staff stated that the stipulation was to the effect that not only were these records made in the usual course of business, but that they were admitted as reports of the test results of Mr. Acosta, and that the test results are accurate. Counsel for Mr. Acosta stated that he did not stipulate that these were Mr. Acosta's test results. (Rothman, Tr. 171-175). Mr. Talley's counsel expressed it as his understanding as well that the stipulation meant that these reports were reflective of Mr. Acosta's test results. (Tr. 174).

- 18 -

^{8/} This attempt was made despite Mr. Acosta's assertions during the prehearing conference that he did not intend to challenge the accuracy or validity of these particular test results. (See, Prehearing Tr. 47-50).

31. Notwithstanding the stipulation, Mr. Acosta was allowed to question the reliability of the test results. Mr. Acosta first attempted to challenge the reliability of the testing techniques used. The technique used by both SmithKline and CDL to screen the samples they analyzed was the EMIT technique. (Talley, Tr. 39-40; Jambor, Tr. 109; Keltz, Tr. 158-159). In the EMIT test the urine to be analyzed is mixed with a reagent which contains antibodies to the breakdown products of marijuana. Binding then occurs between the breakdown products and the antibody. A second substance which is labeled with an enzyme also sensitive to the antibodies is then introduced. The remaining unfilled antibody sites are occupied, which results in a reduction of the enzyme activity of the introduced substance. This reduction of enzyme activity can be measured spectrophotometrically, which makes possible a measurement of the marijuana in the original sample. The result reflects the presence of a variety of marijuana metabolites in the urine. (Flynn-Cone Testimony. ff. Tr. 278 at 3).

32. Both Dr. Cone and Dr. Jambor testified that the EMIT technique is highly reliable. (Jambor, Tr. 124; Cone, Tr. 189, 226; Flynn-Cone Testimony, ff. Tr. 278 at 4).

33. Under cross-examination Dr. Cone testified that he was not aware of false positives being obtained with the EMIT technique. (Cone, Tr. 190; <u>see also</u>, Jambor, Tr. 115). In addition, upon cross-examination Dr. Cone testified that there are no other substances, to his knowledge, which would result in a false positive for marijuana. (Cone, Tr. 190).

34. Both SmithKline and CDL used GC/MS to obtain quantitative analyses as confirmation of the EMIT results. (NRC Staff Exhibits 2-4).

- 19 -

35. Drs. Flynn and Cone described the GC/MS technique in detail. They testified that the technique is an analytical technique for the identification of a specific metabolite of marijuana called 11-nor-delta-9-tetra-hydrocannabinol-9 carboxilic acid (THC Acid) which is excreted in conjugated form in urine after marijuana exposure. The assay process occurs in three steps. (Flynn-Cone Testimony, ff. Tr. 278 at 4).

36. In the first step, an aliquot of a urine specimen is obtained. It is treated with an alkaline solution (sodium hydroxide), and the mixture is heated. This step liberates the THC Acid by cleaving off conjugates from the THC Acid molecule that were attached during metabolism. (Flynn-Cone Testimony, ff. Tr. 278 at 4).

37. In the second step the acidity of the specimen is then adjusted to an acid level, and a quantity of an internal standard is added to the specimen. The specimen is then extracted with an organic solvent, or alternatively, the specimen is passed through a chromatographic column. Either of these processes is effective in isolating THC Acid in a semi-pure form from urine. The extract is then evaporated under an inert atmosphere to leave the residue containing the THC Acid and other substances. The residue is then treated with a chemical which converts THC Acid to derivatized THC Acid. This step ties up the polar groups on the THC Acid molecule, making it more volatile and giving it better chromatographic properties for GC/MS analysis. (Flynn-Cone Testimony, ff. Tr. 278 at 4-5).

38. In the third step the derivatized THC Acid extract is analyzed by GC/MS. The conditions of the assay are set up, and standard solutions of derivatized THC Acid and internal standard are analyzed at the

- 20 -

beginning of the procedure. This checks out the instrument's response to known amounts of THC Acid and serves as a reference to measure the amount of THC Acid in unknown specimens. The unknown specimens are then analyzed in the same way as the standards. The responses obtained for the unknown specimens are recorded and compared to those of the standards. The amount of THC Acid is measured relative to that of the standards. This analysis also involves measuring the response for the internal standard and using that response to correct for losses during extraction. If the amount of THC Acid measured is equal to or exceeds the amount that can be reliably measured by this procedure, the specimen is reported as a confirmed positive along with the estimated concentration of THC Acid in the specimen. (Flynn-Cone Testimony, ff. Tr 278 at 5-6).

39. The witnesses went on to testify that the principle of GC/MS analysis involves an initial separation step (gas chromatography or GC) followed by a detection step (mass spectrometry or MS). In the GC step, a portion of a derivatized extract is injected into one end of a long glass column through which a hot inert gas (helium) flows. The sides of the glass column are coated with a sticky organic fluid which attracts chemicals to the fluid. The hot gas sweeps the compounds in the extract along the glass column until they emerge from the end of the column. Different compounds emerge from the column at different times because of their attraction to the liquid phase in the column. The time it takes from injection to emerging from the other end of the column is called the retention time for each compound. The retention time is usually unique for each substance and serves to help identify the substance in the extract. This process separates the THC Acid from the many other

- 21 -

substances which might have been present in the extract. As the derivatized THC Acid molecules emerge from the GC column into the MS instrument, they are bombarded with electrons. This process breaks up the THC Acid derivative into ions, but does so in a reproducible way. Each time the THC Acid is fragmented, it produces the same fingerprint of ions. This ion pattern is recorded every few miliseconds and stored by the computer of the GC/MS. The integrated responses from the ions are drawn as a tracing or a chromatogram. Each point along the chromatogram represents an entire ion recording. The computer checks at the appropriate retention time for derivatized THC Acid. If the ion pattern of the response matches the ion pattern of standard THC Acid, the unknown can be identified as THC Acid. The magnitude of the response can then be used to calculate the amount of THC acid in the unknown specimen. (Flynn-Cone Testimony, ff. Tr. 278 at 6-7). At a cutoff level of 10 ng/ml, which was the cutoff level used by both SmithKline and CDL, the GC/MS technique is reliable with a 99 percent confidence level. (Cone, Tr. 225).

40. Mr. Acosta did not present any affirmative evidence and did not adduce any evidence during cross-examination which would cast doubt upon the reliability of these techniques.

41. In light of the above, the Board finds that the test methods used in analyzing urine samples by both SmithKline Bioscience Laboratories and Central Diagnostic Laboratory are reliable test techniques.

42. Also, for the first time at the hearing, Mr. Acosta questioned the chain of custody of the samples, the analyses of which were presented in NRC Staff Exhibits 2-4. In response to objections by the Staff, the Board ruled that the chain of custody issue could be explored but that the

- 22 -

mere questioning of the chain of custody issue would not be sufficient to defeat the representation that Mr. Acosta's drug test results were properly maintained. (Cotter, Tr. 176-177). Dr. Jambor from SmithKline testified that strict chain of custody was maintained of the samples sent to SmithKline. (Jambor, Tr. 117, 146-147). He testified that the vials were well labeled with Mr. Acosta's name and with a client number, all of which were put on the vials at the San Onofre site. (<u>Id</u>.). He testified that the numbers which appeared on the SmithKline reports also appeared on the vials. (Id.).

43. Dr. Keltz testified that while he did not have with him the chain of custody documents for the sample analyzed by CDL in NRC Staff Exhibit 3, it was CDL's usual practice to maintain strict chain of custody of the samples in its possession. (Keltz, Tr. 157-158). The witness testified that he assumes that the chain of custody documents exist, because they are always kept. A record is always kept by the laboratory personnel who handled the specimen. (Keltz, Tr. 162).

44. During cross-examination Mr. Talley testified that although the chain of custody documents are forwarded to the laboratories with the sample, chain of custody notations are made by SCE personnel, and these records are kept at San Onofre. (Talley, Tr. 171-174).

45. No evidence was presented or adduced on cross-examination by Mr. Acosta tending to show that there was a break in the chain of custody of the samples on which the reports in NRC Staff Exhibits 2-4 were based. The documents and underlying work sheets reflect the numbers, according to the witnesses, which were associated with Mr. Acosta's samples. (Talley, Tr. 45, 48-49, 53-56; Jambor, Tr. 115-117; Keltz, Tr. 155).

- 23 -

46. In light of the difference of opinion as to the meaning of the stipulation under which these documents were admitted without objection, the Board must determine whether NRC Staff Exhibits 2-4 are sufficiently reliable to be considered as reports of Mr. Acosta's drug test results in this administrative proceeding. (See, Richardson v. Perales, 402 U.S. 389 (1971); Calhoun v. Bailar, 626 F.2d 145 (9th Cir. 1980)). These reports appear to the Board to be documents that were prepared as part of the laboratories' routine activities. The information contained in the reports was supported by the testimony of credible wicnesses. The Board finds that NRC Staff Exhibits 2-4 have sufficient indicia of reliability for the Board to consider them as reports of drug test results of Mr. Maurice P. Acosta.

D. Passive Inhalation

47. Mr. Acosta claims that the first and third positive tests for marijuana were not due to marijuana use, but to passive inhalation of marijuana smoke. (Rothman, Tr. 6; see, also, Prehearing Tr. 15).

48. The Staff presented the Testimony of Dr. Cone on the issue of whether the levels of marijuana shown by the reported test results could be due to passive inhalation. (Flynn-Cone Testimony, ff. Tr. 278 at 9-11; see also, Cone, Tr. 190-196).

49. Passive inhalation refers to the exposure of an individual to a chemical simply by being present in an environment where that chemical is in the air and, therefore, breathed in by the individual. It does not involve active drug taking by the individual but rather being in an

- 24 -

environment where, in the course of normal breathing, a certain amount of the drug will be inhaled. (Flynn-Cone Testimony, ff. Tr. 278 at 8).

50. Dr. Cone testified that he has conducted a series of studies regarding the possibility of passive inhalation of marijuana smoke resulting in positive drug tests. (Flynn-Cone Testimony, ff. Tr. 278 at 9; see also, Cone, Tr. 190-191). The studies demonstrated that very extreme conditions must be endured for a human subject to reach the levels found in Mr. Acosta's test results. (Id.; see also, Cone, Tr. 195). Dr. Cone testified that in a study he conducted where five male subjects were exposed to the smoke from four marijuana cigarettes over a period of one hour in a small, unventilated room, the highest level of THC acid detected in the urine of any of the subjects was 12 ng/ml by GC/MS assay. (Flynn-Cone Testimony, ff. Tr. 278 at 9-10; see also, Cone, Tr. 192-193). Dr. Cone pointed out that this specimen was collected immediately after the exposure. (Id.). One other subject produced a specimen containing 8 ng/ml soon after exposure. The three remaining subjects who were exposed to the same four marijuana cigarette smoke conditions at the same time were completely negative by GC/MS, despite the fact that the test was repeated six times on different days with the same subjects. (Id.).

51. The potency of the marijuana used in Dr. Cone's studies was 2.8 percent THC which, he testified, is similar to that found in illicit marijuana. (Flynn-Cone Testimony, ff. Tr. 278 at 10. See, Cone, Tr. 191). Dr. Cone testified that the potency of the marijuana chosen for his research was within the range of that found in street marijuana. He testified that the potency ranges from less than 1 percent THC to greater than 10 percent THC at the outside range. (Cone, Tr. 191-192). Dr. Cone

- 25 -

testified that the conditions under which the individual was exposed to the marijuana smoke, rather than the potency alone of the marijuana, would govern the levels to be achieved from passive inhalation. Dr. Cone testified that in order for the potency to make a difference, the exposure would have to occur in a small, unventilated room over an extended period of time. (Cone, Tr. 195-196).

52. Dr. Cone testified that he also conducted another study where subjects were exposed to the smoke from sixteen marijuana cigarettes with a potency of 2.8 percent THC. (Flynn-Cone Testimony, ff. Tr. 278 at 10-11; Cone, Tr. 194-195). Dr. Cone found levels in these subjects which were equal to or higher than those found for Mr. Acosta. (Flynn-Cone Testimony, ff. Tr. 278 at 10; Cone, Tr. 194). He also found that the subjects exhibited signs of marijuana intoxication similar to those found after a subject had actively smoked a marijuana cigarette of the same potency. (Id.; Cone, Tr. 194-195).

53. As a result of these studies Dr. Cone concluded that passive exposure to marijuana smoke can result in absorption of small amounts of THC. However, he concluded that the conditions under which absorption of amounts sufficient to test positive for up to twenty-four hours require substantial exposure to large amounts of smoke for an extended period of time. He concluded that unknowing exposure under these conditions would be extremely unlikely. (Flynn-Cone Testimony, ff. Tr. 278 at 11; see also. Cone. Tr. 195-196, 204).

54. During cross-examination Dr. Cone testified that he did not believe that Mr. Acosta's test results were consistent with a claim of passive inhalation. He testified that the sixteen cigarette condition,

- 26 -

which was the condition where Dr. Cone's studies showed levels similar to those of Mr. Acosta, was not a condition which was likely to be found in a social situation. (Cone, Tr. 195). He pointed out that the subjects in that study had to wear goggles to remain in the room. (<u>Id</u>. at 195, 202).

55. Mr. Acosta did not present any evidence as to the conditions he claims he was subjected to before his first and third positive drug tests. In fact, he presented no evidence at all to support his passive inhalation claim. Even though Mr. Acosta's counsel posed the hypothetical that Mr. Acosta could have been exposed to very potent marijuana (see Tr. 195-196), he presented no evidence to demonstrate that Mr. Acosta had, in fact, been exposed to such potent marijuana. In addition, Dr. Cone testified that the conditions under which the marijuana was inhaled would have a profound effect on the levels which would be attained. (Id.). Mr. Acosta presented no evidence to show the existence of those conditions.

56. Based on the foregoing, the Board finds that Mr. Acosta's claim that his first and third positive drug tests were due to passive inhalation of marijuana smoke is without merit.

E. Responsibilities of a Reactor Operator

57. The Staff, in issuing its Order, indicated that it considered SCE's policy against off-duty use of marijuana, to have a relationship to safety. (NRC Staff Exhibit 1 at 24383). This position was reiterated in the testimony of Mr. Zwolinski. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 30).

58. The Staff presented detailed testimony concerning the extensive training which a candidate for a reactor operator's license must undergo,

- 27 -

the nature of the requalification program in which a licensed reactor operator must participate, and the nature of the responsibilities of a reactor operator on shift at San Onofre. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 3-30; <u>Id</u>. at Attachments 3-5). The Staff testified that in order for an individual to obtain a reactor operator's license he must undergo a comprehensive training program which includes training in fundamentals, reactor systems, operating practices, and general employee training. The fundamentals course includes, for example, the theory of the nuclear fission process, and reactor operations. The Staff's testimony provides a lengthy list of the type of instruction which should be included in the fundamentals course alone. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 4-5).

59. Once a license is granted, the reactor operator must participate in a requalification program. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 8). The requalification program is a continuing retraining program which covers material similar to the initial training as well as additional material. (Id.). The Staff testified that the requalification program should be designed to ensure that the individuals in the operating organization performing safety related functions remain cognizant of changes to the facility, procedures, governmental regulations, quality assurance requirements, and operating experience. (Id.). The Staff testified as to the complexity of the requalification program. (Id. at 8-13).

60. The Staff also testified concerning the responsibilities of a reactor operator at the San Onofre facility. (Id. at 15-22). The reactor operator's primary responsibility is for the safe and efficient operation

- 28 -

of his assigned equipment. (Id. at 15, 24). He is responsible for operation within the requirements of the operating license, Technical Specifications, NRC orders, approved station procedures and operating instructions. The unit reactor operator is authorized to shut down the reactor if he determines the safety of the unit is in jeopardy, or if operating parameters exceed the reactor protection setpoints and an automatic shutdown has not occurred. (Id.). The station operating procedures also set out responsibilities which a reactor operator must fulfill, such as taking timely and appropriate action during abnormal or emergency situations. (Id. at 16-17).

61. The reactor operator is also often responsible for directing others in the performance of plant functions. (Id. at 22-23). The reactor operator must be familiar with a large number of station procedures including: individual systems' normal operating procedures, integrated plant normal operating procedures; annunciator or alarm response procedures, selected equipment or test surveillance procedures; abnormal conditions operating procedures, and emergency operating procedures. (Id. at 23).

62. The Staff testified that it is not enough for a reactor operator to learn his job and perform it by rote. There are far too many procedures for this to be done. In addition, the staff testified that it is the reactor operator's obligation to determine from the intent of the procedure whether a particular procedure is applicable to a given situation. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 25). The reactor operator must constantly use his judgment based on his knowledge

- 29 -

of plant procedures, Technical Specifications, equipment and his assessment of the condition of the plant. (Id.).

63. The Staff provided an example of a situation where a reactor operator was required to make judgments based on plant conditions in a relatively short period. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 27-29).

64. No attempt was made by Mr. Acosta to contradict any of the Staff's testimony concerning the responsibilities of a reactor operator or to question the extent to which an operator must be capable of using judgment and assessing situations that are changing rapidly.

65. In light of the above, the Board finds that an individual in the position of reactor operator must undergo rigorous training which requires the ability to absorb and retain a large amount of information. The reactor operator must also be capable of using sound judgment to deal with changing situations affecting plant safety ard, potentially, the health and safety of the public.

F. Effects of Marijuana

66. The Staff, in issuing its Order, expressed its position that the Commission no longer had the necessary reasonable assurance that Mr. Acosta would continue to operate the reactor with the requisite amount of alertness and competence. (NRC Staff Exhibit 1 at 24384). The Staff based its position on its view that Mr. Acosta, in violating a company policy related to safety on a number of occasions, had shown a lack of the ability to exercise sound judgment. (Hunemuller-Zwolinski Testimony, ff. Tr. 278 at 30-31).

- 30 -

67. The reason that this particular policy bears a relationship to safety is due to the potential effects of marijuana on an individual's ability to function. The Staff presented the testimony of Dr. William E. Flynn on this issue. Dr. Flynn's testimony is drawn both from the scientific literature and from his more than fifteen years of clinical experience practicing as a psychiatrist treating people with various types of addictions. (Flynn-Cone Testimony, ff. Tr. 278 at 12-15; Flynn, Tr. 210-212, 220-221).

68. Dr. Flynn testified that in the area of physical functioning, the most important effects of marijuana are on the reproductive system, the pulmonary system and the immune system. (Flynn-Cone Testimony, ff. Tr. 278 at 12). More important to the case before this Board are the effects of marijuana on mental functioning, particularly with respect to cognitive and psychomotor activities. (<u>Id</u>.).

69. In the area of learning, the detrimental effect of marijuana appears to operate primarily through its influence on short term memory. Marijuana affects a central area of the brain, interrupting normal nerve conduction pathways and making recent bits of information unavailable for comparison. (Id. at 12-13). The learning process requires the making of such comparisons, as well as evaluation of information for meaningful retention to take place. (Id. at 13).

70. A variety of effects produced by the use of marijuana have been demonstrated in the area of psychomotor activities by research on those driving automobiles and flying airplanes. (Id.). Dr. Flynn testified that the demands on a reactor operator in a control room are at least equal to those placed on individuals engaged in the above activities.

- 31 -

(Id.; see, NRC Staff Exhibit 9, "Adverse Effects of Alcohol and Other Drugs on Human Performance," by Herbert Moskowitz, M.D., <u>Alcohol Health</u> and <u>Resources World</u>, (Summer 1985); NRC Staff Exhibit 10, "Drug Addition and Drug Abuse," <u>Goodman and Gilman's The Pharmacological Basis of Thera-</u> peutics, (Seventh Edition 1985) at 558-561; <u>see also</u>, Flynn, Tr. 220-222).

71. One such effect is difficulty in tracking. Tracking is the ability to follow a stimulus such as a light or verbal or written directions over a period of time. Researchers have consistently found that a person under the influence of marijuana cannot maintain tracking. (Id.).

72. A person under the influence of marijuana also has difficulty responding to peripheral stimuli. Such an individual has less success responding to lights or directions that are off to the side of his attention. (Id. at 13-14).

73. It has been determined that rote responses in simple situations are unimpaired by the use of marijuana, but responses in complex situations are dramatically impaired. For example, the witness testified that in a driving simulation where the individual was required to respond to an accident, or to engage in avoidance behavior by using his judgment and making comparisons, his performance is impaired. The greater the complexity of the required response, the witness testified, the more the impairment of the individual is apparent. (Id. at 14).

74. Dr. Flynn testified that it is regularly observed that the marijuana user does not see his own mistakes and has a falsely high opinion of his own performance. This phenomenon does not only apply to creative activities, but has been noticed in motor activities as well,

- 32 -

such as where an individual believes he has done well on an obstacle course only to learn that he has knocked over all the barriers. (Id.).

75. The witness testified that such impairment can result from smoking small amounts of marijuana, and can last from four to ten hours after the marijuana induced "high" has passed. (Id. at 14-15).

76. Dr. Flynn testified that his review of the testimony of Mr. Hunemuller made it clear that a reactor operator must make complex responses to emergency situations. (Flynn-Cone Testimony, ff. Tr. 278 at 15). He testified that these responses require a considerable amount of sequencing of steps, repeated judgments about the necessity of taking further safety measures, and a critical ability to use extremely accurate judgments. (Id.).

77. It was Dr. Flynn's opinion that the routine duties of a reactor operator might not be affected at all by some levels of marijuana, but in a complex situation, the reactor operator's performance would be unpredictable. (Id.). Dr. Flynn testified that, based on Mr. Hunemuller's testimony, it is his opinion that a reactor operator must be capable of reacting in a flexible manner to unpredictable events. It is his opinion that a person impaired by marijuana cannot react in such a manner. (Id. at 15-16). Dr. Flynn also testified that a reactor operator must be acutely aware of his own level of functioning, and that a person under the influence of marijuana does not have such an awareness. (Id.).

78. Mr. Acosta did not present any evidence on the subject of the effects of marijuana. He did not adduce any contradictory evidence on cross-examination to that presented by the Staff.

- 33 -

79. Based on the above, the Board finds that marijuana may have effects on those learning and psychomotor activities which are required by a reactor operator to safely operate a nuclear facility.

G. Interpretation of Test Results

80. Both Dr. Cone and Dr. Flynn testified that it was their opinion that Mr. Acosta's drug test results indicate a pattern of marijuana use. (Flynn-Cone Testimony, ff. Tr. 278 at 9, 11-12). Dr. Cone testified that the test results indicate to him a pattern of marijuana use extending over a period of more than two years. He stated that the results are convincing that Mr. Acosta used marijuana on more than one occasion. The levels of the marijuana metabolite, THC acid, detected in Mr. Acosta's urine by the initial screening tests and confirmed by GC/MS are similar to those detected in subjects within twenty-four hours of actively smoking marijuana. (Id. at 9).

81. Dr. Flynn testified that three positive drug tests strongly indicate to him an inability to refrain from drug use and the presence of a chronic problem. (Flynn-Cone Testimony, ff. Tr. 278 at 11-12). Dr. Flynn expressed the opinion that any person in a sensitive, responsible position who, knowing of a high likelihood of further testing, repeatedly tests positive has demonstrated a definite inability to refrain from drug use behavior. He believes that such a situation could also indicate a lack of awareness on the part of the individual that he has a problem with marijuana use. Dr. Flynn testified that the repeated positive tests would suggest that the individual has poor impulse control and very little perception of the danger he was causing to himself and to others. (Id.).

- 34 -

Dr. Flynn testified that such a person could have a positive test, then test negative for a time, but then relapse into marijuana use. (Id.; Flynn, Tr. 213). Dr. Flynn testified that such behavior is characteristic of an individual with a psychological dependence on marijuana. (Flynn, Tr. 217-218).

82. The Board finds that the facts and circumstances of this case indicate that Mr. Acosta is likely to continue his use of marijuana.

83. The Board finds that continued marijuana use by a reactor operator is inconsistent with his ability to perform his duties in all situations competently and safely at all times.

H. Consideration of Performance

84. Mr. Acosta contends that his performance should have been taken into account by the Staff before issuing the Order suspending his license and denying his application for renewal. The Staff testified that the information concerning Mr. Acosta's performance was not available to the Staff at the time the Order was issued. (Zwolinski, Tr. 258-259). The Staff's witness stated that even had such information been available to the Staff, it would have had little effect on the issuance of this Order. (Id. at Tr. 258).

85. It is the Staff's position that use of illicit drugs off or on duty by an individual brings into question that individual's trustworthiness, dependability and reliability. Mr. Zwolinski further testified that it is the Staff's position that individuals at the controls of a nuclear power plant are in a very sensitive position, and must be above and beyond reproach in all facets of life. (Id. at 258-260). Mr. Zwolinski testified that it is his opinion and that of the Staff that even more important than on-the-job impairment is the ability of the Staff to be able to trust an operator to exercise sound judgment at all times, including in the remote event of an accident at the facility. (<u>Id</u>. at Tr. 260).

86. The Board finds that, due to the sensitive nature of a reactor operator's position, and in light of the potential effects of marijuana on an operator's ability to perform his functions in the event of an abnormal situation, an individual's performance need not be taken into account when determining whether an individual should be removed from operator's status for positive drug tests.

Overall Board Findings

87. In light of the record discussed above, the Board finds that SCE has a policy prohibiting the off-duty involvement with any controlled substance, including marijuana. This policy is implemented at San Onofre by a comprehensive substance abuse program. With respect to those employees of SCE requiring unescorted access to the protected area at San Onofre, SCE has communicated the policy and program to the employees, and they are aware of the requirement of drug testing in order to receive and maintain their unescorted access.

88. The Board finds that Mr. Acosta was made aware of this policy both by its communication to him as an employee of SCE, and through individual counseling after his first positive drug test for marijuana. He was placed on the Periodic Drug Monitoring program, under which he knew he would be subject to unannounced periodic drug tests. In spite of this

- 36 -

knowledge, and in spite of the warnings he received concerning the consequences of future positive drug tests, he continued to use marijuana and tested positive on two more occasions.

89. The Board finds that, as a reactor operator, Mr. Acosta was in a very sensitive position, requiring the ability to perform his duties competently and safely at all times and in all situations. Such an obligation is necessary to protect the public health and safety.

90. The Board finds that, due to the potential effects of marijuana on an individual who uses it, marijuana use is inconsistent with the safe operation of a nuclear power plant.

91. The Board finds that where, as here, an individual continues to use marijuana in the face of a company policy against it, that individual is either incapable or unwilling to fulfill the necessary obligations of a reactor operator to protect the public health and safety.

92. The Board finds that Mr. Acosta cannot be relied upon to refrain from marijuana use in the future. Therefore, despite Mr. Acosta's past performance the Board lacks reasonable assurance that Mr. Acosta will continue to perform his duties competently and safely in the future.

V. CONCLUSIONS OF LAW

93. Based on the above, the Board concludes that a license can be suspended for any reason for which it would not have issued originally. (10 C.F.R. § 55.61(b)). In light of the Commission's policy on fitness for duty as set forth in its policy statement of August 4, 1986, "Commission Policy Statement on Fitness for Duty of Nuclear Power Plant Personnel," 51 Fed. Reg. 27921, the Commission would not issue a license

- 37 -

to an individual with a history of continuing drug use or with the potential for continued drug use. Therefore, the Staff had the authority to suspend Mr. Acosta's license.

94. The Commission may decline to renew a license if it cannot make the finding that there is reasonable assurance that an individual will continue to operate a facility competently and safely. (10 C.F.R. § 55.57(b)(2)(i)). On the basis of this record, the Staff has demonstrated by a preponderance of the evidence that such reasonable assurance is lacking.

VI. ORDER

WHEREFORE IT IS ORDERED, that for the reasons set forth above, and based on the entire record of this proceeding, the Board concludes that the Staff's Order of June 15, 1988, is sustained. Mr. Acosta's Reactor Operator's license is suspended. Mr. Acosta's application for renewal of his Reactor Operator's license is denied.

In accordance with 10 C.F.R. §§ 2.760, 2.762, 2.763, 2.785 and 2.786 of the Commission's Rules of Practice, this Initial Decision shall become effective immediately and shall constitute with respect to the matters decided herein the final action of the Commission thirty (30) days after the date of issuance hereof, subject to any review pursuant to the Commission's Rules of Practice.

A notice of appeal may be filed by any party within ten (10) days after service of this Initial Decision. Within thirty (30) days after service of a notice of appeal (forty (40) days in the case of the Staff), any party filing a notice of appeal shall file a brief in support thereof.

- 38 -

Within thirty (30) days of service of the brief of the appellant forty (40) days in the case of the Staff), any other party may file a brief in support of, or in opposition to, the appeal.

IT IS SO ORDERED.

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Respectfully submitted:

MIRE MOND

Janice E. Moore Counsel for NRC Staff

Bennard M. Bordenick

Counsel for NRC Staff

Dated at Rockville, Maryland this 26th day of June, 1989

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

'89 JUN 29 P3:53

ARANUM

CONFERENCE MIL

MAURICE P. ACOSTA, JR.

Operator License No. 6010-2

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S PROPOSE' FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE FORM OF AN INITIAL DECISION" in the abovecaptioned proceeding have been served on the following by deposit in the United States mail, first class, or as indicated by an ast risk through deposit in the Nuclear Regulatory Commission's internal mail system, this 26th day of June, 1989:

B. Paul Cotter, Jr., Chairman* Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

Dr. Harry Foreman Administrative Judge 1564 Burton Avenue St. Paul, MN 55108

Dr. Jerry R. Kline* Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

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Robert B. Rothman, Esq. 110 West C. St., Suite 2000 San Diego, CA 92101 Atomic Safety Licensing Appeal Panel (5)* U.S. Nuclear Regulatory Commission Washington, DC 20555

Docket No. 55-08347

Adjudicatory File* Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

Docketing and Service Section* Office of the Secretary U.S. Nuclear Regulatory Commission Washington, DC 20555

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LIVE MORE Janice E. Moore Counsel for NRC Staff