

PACIFIC GAS AND ELECTRIC COMPANY

PG&E + 77 BEALE STREET, 31ST FLOOR • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211

MALCOLM H. FURBUSH
VICE PRESIDENT AND GENERAL COUNSEL

ROBERT OHLBACH
ASSOCIATE GENERAL COUNSEL

CHARLES T. VAN DEUSEN

PHILIP A. CRANE, JR.

HENRY J. LaPLANTE

JOHN B. GIBSON

ARTHUR L. HILLMAN, JR.

CHARLES W. THISSELL

DANIEL E. GIBSON

ASSISTANT GENERAL COUNSEL

October 9, 1980

GILBERT L. HARRICK
GLENN WEST, JR.
JOSEPH I. KELLY
HOWARD V. DOLLS
JAMES C. LOOSDON
ROBERT L. BORDON
PETER W. HANSCHEM
THEODORE L. LINDSBERG, JR.
DOUGLAS A. DOLESBY

EDWARD J. MCGANNEY
DAN GRAYSON LUBBOCK
JACK F. FALLIN, JR.
BERNARD J. DELLABANTA
JOHNVA BARLEY
JOSEPH B. ENGLERT, JR.
ROBERT L. HARRIS
RICHARD F. LOCKE
DAVID L. LUDVIGSON
SENIOR COUNSEL

DAVID W. ANDERSON
DIANA BERGHAUSEN
LEIGH B. CABBIGY
HEATHER S. CIBSHA
BRIAN B. DENTON
WILLIAM H. EDWARDS
DONALD D. ERICKSON
DAVID C. GILBERT
JUAN M. JAYO
F. RONALD LAUPHEIMER
HARRY W. LONG, JR.
PAULA Y. MAINE
ROBERT B. MCLENNAN
RICHARD H. MOSE
J. MICHAEL REIDENBACH
IVOR E. SAMSON
BUE ANN LEVIN SCHIFF
JACK W. SHUCK
DAVID J. WILLIAMSON
BRUCE R. WORTHINGTON

J. PETER BAUMGARTNER
STEVEN P. BURKE
PAMELA CHAPPELLE
AUREY DAINES
MICHAEL G. DEMARAIS
GARY P. ENGINAS
JOHN H. FRYE
PATRICK G. GOLDEN
KERMIT R. KUBITZ
KEREK E. LIPSON
JOHN R. LOW
A. KIRK MCKENZIE
RICHARD L. MEISS
ROGER J. PETERS
ROBERT R. RICKETT
SHIRLEY A. SANDERSON
JO ANN SHAFER
LOUIS E. VINCENY
SHIRLEY A. WOO
KENNETH YAND
ATTORNEY

Mr. A. Schwencer, Acting Chief
Licensing Branch No. 3
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Docket No. 50-275
Docket No. 50-323
Diablo Canyon Units 1 & 2

Dear Mr. Schwencer:

At an NRC meeting held on November 30, 1979, in Bethesda, Maryland, several applicants with near-term OL plants, including Pacific Gas and Electric Company, were advised of requirements resulting from the NRC's evaluation of the Auxiliary Feedwater Systems (AFWS) of 33 operating units. The attached material is submitted in response to that meeting and to Parts (b) and (d) of an NRC letter by D. F. Ross, dated March 10, 1980.

Part (d) of the NRC letter requested information relating to the design basis of PGandE's AFWS flow requirements and confirmation that the AFWS will meet those requirements. Part (b) requested that a reliability evaluation be performed to identify necessary changes in AFWS design or procedures to assure safe operation, and to identify other system characteristics in design which, on a long-term basis, may require system modifications. Because the objectives are different the assumptions used in the design basis analysis and the reliability analysis are different.

Our response to Part (d) (enclosed as attachment 1) references the design basis analyses performed by Westinghouse that appears in Chapter 15 of the Diablo Canyon FSAR. The analysis assumed delivery of water within 10 minutes to at least two steam generators from at least one AFWS pump. This design basis analysis is conservative and was performed to demonstrate compliance with specific licensing criteria for Condition II, III, and IV accidents.

The response to part (b) (enclosed as attachment 2) is the reliability analysis by Pickard, Lowe and Garrick which was performed

8010140 345

A

Boo 1
5/1/80



1950

1. The first part of the report deals with the general situation of the country and the progress of the work during the year.

2. THE ECONOMIC SITUATION

(a) General

The economic situation of the country during the year has been characterized by a general decline in the volume of trade and industry. The main reason for this is the fall in the price of the principal export commodity, which has led to a sharp reduction in the country's foreign exchange earnings.

(b) Agriculture

The agricultural sector has also suffered from a general decline in output. This is due to a combination of factors, including a shortage of fertilizers, a lack of irrigation facilities, and a general decline in the morale of the farming community. The result has been a sharp fall in the country's food and fiber production.

(c) Industry

The industrial sector has also experienced a general decline in output. This is due to a combination of factors, including a shortage of raw materials, a lack of investment in new plant and machinery, and a general decline in the morale of the industrial workforce.

(d)

(e)

(f)

(g)

Mr. A. Schwencer

2

October 9, 1980

to calculate the relative value of system reliability in performing its heat removal function defined on a best estimate basis for the three transients discussed in Appendix III of NUREG-0611. The Pickard, Lowe and Garrick analysis is based upon Westinghouse's judgment that total delivery of flow of at least 350 gpm to at least one steam generator from at least one AFWS pump in 40 minutes would prevent damage of the fuel or clad.

The conclusion of the Pickard, Lowe and Garrick report shows that in the emergency mode the Diablo Canyon Auxiliary Feedwater System is very reliable. Redundancy, separation, availability during testing and recoverability make the system remarkably sound. Given the already low unavailability in comparison with similar systems at other plants efforts to further improve Auxiliary Feedwater System reliability cannot be justified.

Five copies of this letter and attachments are being sent today to Mr. Bart Buckley by courier.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it to me in the enclosed addressed envelope.

Very truly yours,

Philip A. Crane, Jr.

Attachments (40)
CC w/attachments: Service List



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150