



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 18, 1980

MEMORANDUM FOR: Chairman Ahearne
FROM: Edward J. Hanrahan *EJH*
SUBJECT: WHAT NRC MIGHT DO IN A NATIONAL ENERGY EMERGENCY

In your memorandum of December 8, 1980 you requested a status report on what OPE is doing, on behalf of the Commission, in conjunction with DOE on actions to be taken during a national energy emergency. During the latter part of 1979 we prepared for DOE an analysis of options to increase nuclear productivity in response to an energy emergency.¹ We also participated in a meeting at DOE regarding development of initiatives to respond to potential oil shortages at which time our analysis was distributed to other participating agencies. A report of this meeting was forwarded to the Commission.² We also prepared a response to your memorandum of November 14, 1980 which dealt with the following: plant status and possible startup dates; methods for restricting new reactors to 50 percent power; a discussion of safety advantages to operating at reduced power levels.³ No further work was requested of NRC by DOE for this particular effort.

On September 25, 1980 you received from Robert Davies of the Economic Regulatory Administration three draft (untitled) papers dealing with actions the Federal government might have taken in response to an oil shortage created by the Iran/Iraq war. You asked OPE to contact DOE directly and provide comments on these papers. Our comments were limited to questioning the magnitude of the oil savings resulting from "expedited" startup of nuclear plants shown in these papers. The basis for our criticism was mainly a disagreement with DOE on the construction completion and anticipated full power dates. Bob Tedesco (NRR) and I met with Bob Davies to go over these dates. The table attached is the final result. The Department of Energy has not released a final report on this subject.

¹Memorandum from Dennis Rathbun to Carlyle Hystad dated November 13, 1979 entitled "NRC Contribution to Domestic Initiatives to Respond to Potential Oil Shortages." (Copies distributed to Commissioners.)

²Memorandum from E. J. Hanrahan to Commissioners dated November 19, 1979.

³Memorandum from E. J. Hanrahan to Commissioners dated December 19, 1979.

OPE's latest effort regarding contingency planning has been to draft a response to a letter from DOE dated November 3, 1980 requesting the Commission to name a contact for contingency planning in the event of an oil shortfall emergency. In addition, we provided proposed answers to specific questions raised in the letter. These were coordinated with OGC and NRR. So far, two Commissioners have approved the letter within minor revisions.

Attachment:
As Stated

cc: Commissioner Gilinsky
Commissioner Hendrie
Commissioner Bradford

Oil Savings Achieved By
Start-up of Nuclear Units
(Barrels Per Day)

<u>Unit</u>	<u>Net Rating MWe</u>	<u>Construction**** Complete Date</u>	<u>Anticipated Full Power Operation</u>	<u>Estimated Oil Displacement*</u>
Sequoyah 1	1,148	Sep 80	Nov 80	6,000
Salem 2	1,115	Oct 80	Dec 80	24,000
Diablo Canyon 1	1,084	Jan 81	Sep 80	14,000
McGuire	1,180	Dec 80	May 81	5,000
Farley 2	829	Oct 80	Mar 81	4,000
LaSalle 1	1,078	Dec 80	May 81	15,000
Diablo Canyon 2	1,106	Jun 81	Sep 81	<u>12,000</u>
				80,000

* Oil displacement is expected daily average at the end of the period considering only physical plant completion. Values for displacement have been determined after considering plant maturity. Litigation could impose significant delays.

**** NRC must make the appropriate statutory findings before operation is approved. Estimated construction complete date does not necessarily indicate that the reactor will be licensed for full power operation by that date.

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