



Department of Energy

Washington, DC 20585

MAY 07 1996

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Conway:

The Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 93-2 requires a quarterly status report. Enclosed is the Department of Energy's quarterly status report for the second quarter of Fiscal Year 1996.

Sincerely,

A handwritten signature in black ink, appearing to read "Victor Stello, Jr.", written in a cursive style.

Victor Stello, Jr.
Principal Deputy Assistant Secretary
for Safety and Quality
Defense Programs

Enclosure

cc:

✓ Mark Whitaker, S-3.1, w/encl.



**QUARTERLY STATUS OF THE IMPLEMENTATION PLAN
FOR
DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 93-2
SECOND QUARTER FISCAL YEAR 1996**

The Nuclear Criticality Experiments Steering Committee (NCESC), as delineated in the Implementation Plan for the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-2, met twice during the second quarter of Fiscal Year 1996. An updated roster of NCESC and Subcommittee membership is attached to this report. Accomplishments and key issues discussed by the NCESC during this period of time are as follows:

- o The NCESC completed an extensive review of the full program requirements for maintaining the Department's nuclear criticality predictive capability. The results of this review were documented in a report entitled, "The Department of Energy Nuclear Criticality Predictability Program," dated January 17, 1996. Along with presenting programmatic requirements, the NCESC report recommends a course of action for the institutionalization of this program. The Assistant Secretary for Defense Programs concurred with the NCESC's recommended course of action, and on February 13, 1996, sent a memorandum to the affected Program Secretarial Officers (PSOs) requesting their support. As of March 31, 1996, negotiations with cognizant PSOs on the funding of this activity are continuing.
- o The NCESC conducted its annual program review at the Los Alamos Critical Experiments Facility (LACEF) in March 1996. This review highlighted accomplishments and issues requiring resolution in each of the five major program element areas. A copy of the agenda from the program review is attached. Also attached is a copy of the most recent LACEF Semi-Annual Progress Report which describes in technical detail the nuclear criticality experimental activities being conducted at the LACEF. One noteworthy accomplishment announced at the review was that the LACEF had recently won the Don Summers/Los Alamos National Laboratory Quality Excellence Award. Candidates for this award are evaluated through a rigorous process similar to that used for evaluating applicants for the prestigious Malcolm Baldrige quality award for business excellence. This is truly a momentous accomplishment by the LACEF and its staff.

The NCESC has continued to make significant progress in addressing the key issues surrounding the maintenance of the Department's nuclear criticality predictive capability. The focus of the Committee in the next quarter will be to resolve the short-term funding situation with assistance from Departmental management and begin work on laying the foundation for long-term resolution of the funding situation with a view towards institutionalization of the nuclear criticality predictability program. In addition, the NCESC will use the technical subcommittees, with additional expertise as required, to continue assessing and prioritizing needs from the nuclear criticality predictability community.

Attachments

COMMITTEE MEMBERSHIP**NUCLEAR CRITICALITY EXPERIMENTS STEERING COMMITTEE (ALL DOE FEDS)**

	<u>PHONE NO.</u>	<u>FAX NO.</u>	<u>ORGAN.</u>
Paul Vogel (Co-Chairman)	301-903-4312	6624	DP-16
Roger Dintaman (Co-Chairman)	301-903-3642	6628	DP-13
Matt Hutmaker	301-903-3921	3419	NE-40
Dennis Cabrilla	301-903-7468	1959	EM-4
Al Evans	301-903-4896	9513	ER-13
Ivon Fergus	301-903-6364	4672	EH-22
George Kachadorian	202-426-1320	1480	HR-21
Burton Rothleder	301-903-3726	1182	EH-31
Bob Walston (nonvoting)	505-845-5694	6431	DOE/AL

METHODOLOGY AND EXPERIMENTS SUBCOMMITTEE (FEDS AND CONTRACTORS)

	<u>PHONE NO.</u>	<u>FAX NO.</u>	<u>ORGAN.</u>
Ivon Fergus (Chairman)	301-903-6364	4672	EH-22
Dennis Cabrilla	301-903-7468	1959	EM-4
Dennis Galvin	301-903-2972	8754	DP-45
Burton Rothleder	301-903-3726	1182	EH-31
Rick Anderson	505-667-4839	5-3657	LANL
J. Blair Briggs	208-526-7628	0528	INEL
Ed Fujita	708-252-4866	4500	ANL
R. Michael Westfall	615-574-5267	3527	ORNL

TRAINING SUBCOMMITTEE (FEDS AND CONTRACTORS)

	<u>PHONE NO.</u>	<u>FAX NO.</u>	<u>ORGAN.</u>
George Kachadorian	202-426-1320	1480	HR-21
Nick Delaplane	202-586-9403	7734	EM-121
Dick Trevillian	301-903-3074	4672	EH-11
Henry Harper	208-533-7775	7623	ANL
Tom McLaughlin	505-667-7628	5-4970	LANL

Attachment 2

**DOE/LACEF PROGRAM REVIEW
MARCH 12-13, 1996
LOS ALAMOS NATIONAL LABORATORY
TA-18, BUILDING 30 CONFERENCE ROOM**

MARCH 12, 1996

8:00 R. Anderson	Welcome, Introduction of Participants
8:10 R. Dintaman/P. Vogel	DOE/NCESC Overview
8:20 R. Walston	DOE/AL Overview
8:30 R. Anderson	NIS-6 Overview
8:40 R. Scarlett	NN-20 R&D Program
8:50 E.M. Hanson	NMSM Program Overview
9:00 D. Cobb	Non-Proliferation Program Overview
9:10 J. Pratt	NEST Program Overview
9:20 D. Rutherford	International/Domestic Safeguards Program
9:30	BREAK
10:00 B. Partain	Facility Status, Compliance Efforts
10:30 R. Paternoster	LACEF Program Overview & Status
10:50 K. Butterfield	LACEF Support of NEST & TA-55
11:10 R. Sanchez/ P. Jaegers	Variable Spectrum Experiments for Untested Matrix Materials
11:40 C. Cappiello	APT and LWR Target Experiments
12:00	WORKING LUNCH

DOE/LACEF PROGRAM REVIEW
MARCH 12-13, 1996
LOS ALAMOS NATIONAL LABORATORY
TA-18, BUILDING 30 CONFERENCE ROOM

12:20	W. Casson	Dosimetry Measurements
12:40	C. Cappiello	Status of Acquisition of New Materials
1:00	R. Kimpland	Excursion Kinetics in Solution and Metal Systems
1:20	W. Myers	Excursions in Underground Repositories
1:50	C. Goulding	Sub-Critical Measurements
2:10	BREAK	
2:30	R. Paternoster	Russian Critical Experiment Activities
2:50	K. Coop	Sub-critical Measurements for Waste Assay
3:10	D. Loaiza/ R. Sanchez	Delayed Neutron Parameters
3:30	D. Glenn	Molybdenum-99 Production Experiments
4:00	R. Sanchez	Actinide Critical Masses
4:10	R. Paternoster	New Initiatives
4:30	OPEN DISCUSSION	

MARCH 13, 1996

8:00	M. Westfall	Analytical Codes
8:30	C. Parks	Nuclear Data
9:00	B. Briggs	Benchmarking
9:30	N. Pruvost	Critical Experiments Archiving

**DOE/LACEF PROGRAM REVIEW
MARCH 12-13, 1996
LOS ALAMOS NATIONAL LABORATORY
TA-18, BUILDING 30 CONFERENCE ROOM**

9:40 S. Vessard Criticality Safety Training

9:50 T. McLaughlin Criticality Safety Classes

10:10 BREAK

10:30 Budget Discussions

11:50 WORKING LUNCH

12:30 NCESC MEETING

2:30 MES MEETING

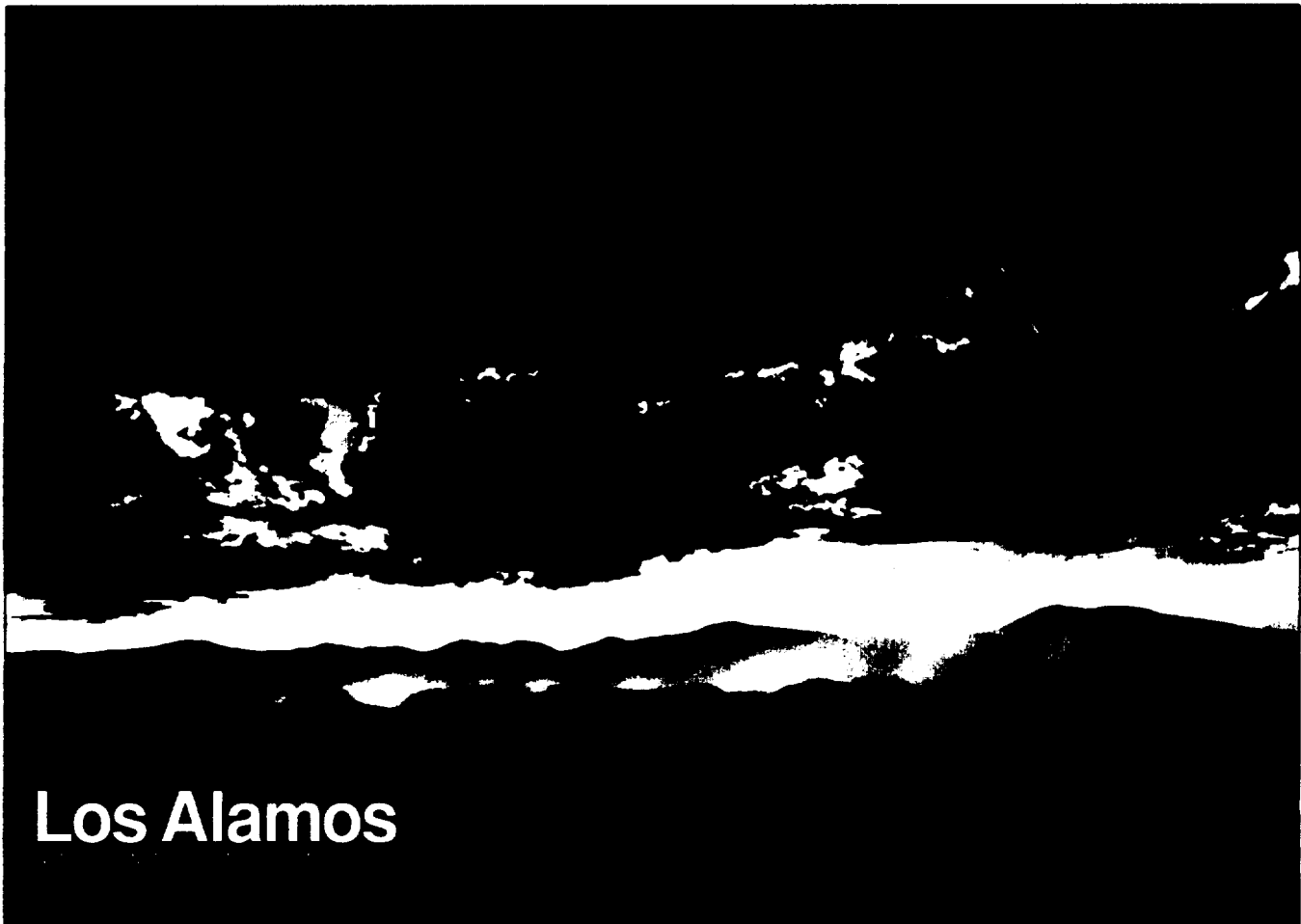
Los Alamos Critical Experiments Facility Semi-Annual Progress Report

April 1, 1995 — September 30, 1995

Compiled by
R. Paternoster

With Contributions by:

R. Anderson, D. Barton, J. Bounds, G. Brunson, K. Butterfield,
C. Cappiello, W. Casson, A. Criscuolo, R. Damjanovich, D. Glenn,
C. Goulding, P. Jaegers, R. Kimpland, D. Loaiza, W. Myers, D. Rutherford,
R. Sanchez, and W. Stratton



Los Alamos

Photograph by Chris J. Lindberg