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:  


Sincerely,  

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:

- 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.

- 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 Baldridge 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)

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone No.</th>
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<tr>
<td>Paul Vogel (Co-Chairman)</td>
<td>301-903-4312</td>
<td>6624</td>
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<td>Roger Dintaman (Co-Chairman)</td>
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<td>6628</td>
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<td>Matt Hutmaker</td>
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<td>3419</td>
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<td>Burton Rothleder</td>
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<tr>
<td>Bob Walston (nonvoting)</td>
<td>505-845-5694</td>
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### METHODOLOGY AND EXPERIMENTS SUBCOMMITTEE (FEDS AND CONTRACTORS)

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<td>Rick Anderson</td>
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<td>5-3657</td>
<td>LANL</td>
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<td>J. Blair Briggs</td>
<td>208-526-7628</td>
<td>0528</td>
<td>INEL</td>
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<tr>
<td>Ed Fujita</td>
<td>708-252-4866</td>
<td>4500</td>
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<tr>
<td>R. Michael Westfall</td>
<td>615-574-5267</td>
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### TRAINING SUBCOMMITTEE (FEDS AND CONTRACTORS)

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<td>George Kachadorian</td>
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<tr>
<td>Nick Delaplane</td>
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<td>7734</td>
<td>EM-121</td>
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<tr>
<td>Dick Trevillian</td>
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<tr>
<td>Henry Harper</td>
<td>208-533-7775</td>
<td>7623</td>
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<tr>
<td>Tom McLaughlin</td>
<td>505-667-7628</td>
<td>5-4970</td>
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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

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