



**The Secretary of Energy**  
Washington, DC 20585

April 12, 2005

MEMORANDUM FOR DISTRIBUTION

FROM: SAMUEL W. BODMAN

A handwritten signature in black ink, appearing to read "SWB".

SUBJECT: Senior Management Accountability for Electrical Safety

The attached status report clearly shows that the rate and severity of electrical occurrences during routine work activities is a significant concern. In the past year we have experienced the electrocution of a lineman, severe arc flash burns to a technician, and numerous near-miss occurrences.

The causes of the Department's electrical safety occurrences include:

- Inadequate work planning;
- Work on energized equipment without authorization or proper personal protective equipment;
- Failure to perform zero-energy checks;
- Inadequate training of personnel;
- Failure to exercise stop work authority;
- Poor configuration management; and
- Inadequate supervision and oversight.

I believe that the Department of Energy (DOE) and contractor line management need to do more to demonstrate adequacy of performance expectations and accountability for ensuring improved electrical safety performance. We must do better.

As part of the DOE Electrical Safety Campaign, Headquarters Program Secretarial Officers have stressed the importance of electrical safety to field organization directors, laboratory directors, senior contractor officials, and contractor managers. I want these managers to redouble their efforts to improve electrical safety performance and share their lessons learned. DOE's *Electrical Safety Handbook* was recently updated, and I strongly encourage its use in these efforts. In addition, Headquarters Program Secretarial Officers, including the National Nuclear Security Administration, must ensure that Site Offices are taking appropriate actions to improve electrical safety performance.



The Office of Environment, Safety and Health will continue to monitor progress and inform me, the Deputy Secretary, and others of the most significant electrical safety events. I will be personally involved in this over-arching issue of importance to the Department of Energy.

In conclusion, the Department needs to see near-term improvement in electrical safety, and senior managers must be held accountable for improvement.

Attachment

# ELECTRICAL SAFETY

## Issues

Electrical safety occurrences continue to pose a significant threat to DOE's workers.

- In 2004, there were 149 electrical occurrences in the Department, including 25 involving shocks.
- June 2004 electrocution of WAPA lineman
- October 2004 severe arc flash burns to technician at SLAC
- The largest portion of DOE's near-misses are electrical.

Recurring electrical occurrences are due to:

- inadequate work planning and hazard identification
- LO/TO violations, shortcuts, and lack of verification
- failure to perform zero energy checks and stop work

## Actions

The Deputy Secretary launched DOE's Electrical Safety Campaign's in April 2004.

30 DOE sites prepared electrical safety plans and/or evaluations in 2004, responding to directives from the Secretarial Officers (NA, EM, SC, NE, and FE).

In response to the SLAC arc flash accident, SC is conducting a review of electrical "hot work" at its sites.

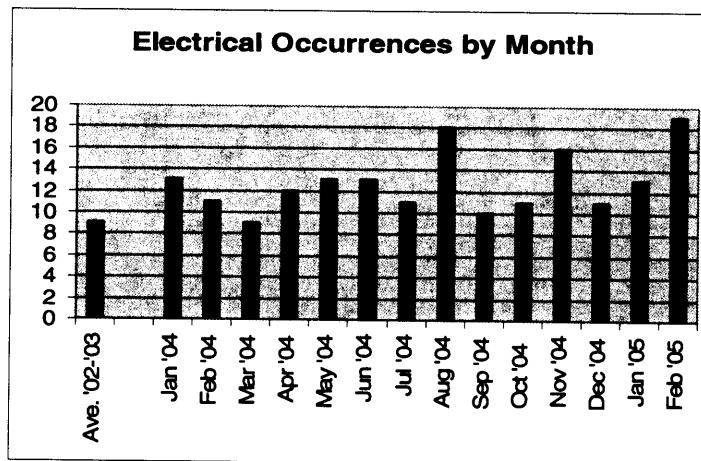
EM and NA developed processes to track and trend their electrical occurrences and share lessons learned.

EH is also analyzing electrical occurrences and serves as a clearing house on electrical safety.

EH issued an updated DOE *Electrical Safety Handbook* in December 2004.

## Performance

Despite the added attention and activities directed toward electrical safety in 2004, the rate of electrical occurrences rose from 9 per month to 12 per month. The rate has further increased in 2005.



The two electrical Type A accidents that occurred in 2004 were the first since 1997.

There remain significant problems by the contractors and subcontractors in addressing electrical hazards, conducting causal analyses, and implementing corrective actions.