Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

June 20, 2003

Mr. Scott F. Newberry, Director
Division of Risk Analysis and Applications
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

7/8/03
68FR39600
(2)

SUBJECT: COMMENTS ON DRAFT REPORT ON INTEGRATED INDUSTRY INITIATING EVENT INDICATOR

Dear Mr. Newberry:

By letter dated May 6, 2003, you sent me a copy of the draft report dated March 13, 2003, titled "Development of an Integrated Industry Event Indicator," and solicited my comments.[1] Your letter stated that an integrated industry initiating event indicator (IIIEI) was being considered for incorporation into the NRC's Industry Trends Program.

UCS views the Industry Trends Program as an important component within the agency's overall reactor oversight program. Given its vital role, we commend the NRC for seeking to make this good program even better.

We do not believe that the IIIEI will add much value to the Industry Trends Program for the simple reason that it fails to monitor sufficiently meaningful data. Its focus seems almost completely decoupled from the reality of the NRC's oversight program and thus, if used, will not assist the agency fulfill its mission.

Since September 1984, twenty four (24) nuclear power reactors have been shut down for longer than a year. Those reactors, sorted by shut down date, are:

Plant	Date Shut Down	Date Restarted
Browns Ferry Unit 2	September 1984	May 1991
Sequoyah Unit 1	August 1985	May 1988
Sequoyah Unit 2	August 1985	November 1988
Pilgrim	April 1986	January 1989
Peach Bottom Unit 2	March 1987	April 1989
Peach Bottom Unit 3	March 1987	November 1989
Nine Mile Point Unit 1	December 1987	July 1990
Surry Unit 2	September 1888	September 1989
Calvert Cliffs Unit 2	March 1989	May 1991
Palo Verde Unit 1	March 1989	June 1990
Calvert Cliffs Unit 1	May 1989	April 1990

[1] Although the letter was dated May 6, 2003, I did not receive the letter until June 16, 2003. The letter requested my comments within 60 days of receipt.

E-RIDS = ADM-03

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FitzPatrick	November 1991	January 1993
Indian Point Unit 3	March 1992	June 1995
Salem Unit 1	May 1995	April 1998
Salem Unit 2	June 1995	July 1997
Millstone Unit 2	February 1996	May 1999
Millstone Unit 3	March 1996	June 1998
Crystal River	September 1996	January 1998
LaSalle Unit 1	September 1996	August 1998
LaSalle Unit 2	September 1996	April 1999
Clinton	September 1996	May 1999
D C Cook Unit 1	September 1997	December 2000
D C Cook Unit 2	September 1997	June 2000
Davis-Besse	February 2002	still shut down

The year-plus outages experienced by these reactors are *prima facie* evidence of unacceptable safety levels – it took extensive efforts lasting over a year to restore the safety levels at these reactors.

NONE OF THE EXTENDED SHUT DOWNS FOR THESE REACTORS WAS PRECEDED BY ONE OR MORE LOSS OF INSTRUMENT AIR, LOSS OF VITAL AC BUS, LOSS OF OFFSITE POWER, SMALL LOCA, STEAM GENERATOR TUBE RUPTURE, LOSS OF FEEDWATER, LOSS OF HEAT SINK, OR STUCK OPEN RELIEF VALVE EVENTS – the constituents of the proposed IIIEI. Therefore, had the NRC developed the IIIEI before September 1984, its use would not have enabled the agency to avoid any of these costly safety shut downs. Nor would it have enabled the agency to detect the widespread safety problems that afflicted these reactors earlier, thus allowing them to be fixed sooner.

The NRC should not use the IIIEI. It is as useless as police interest in the speed of a vehicle involved in a drive-by shooting. Instead, the NRC should strive to develop an indicator that monitors the things that ultimately put the two dozen reactors listed above in the NRC's regulatory doghouse. Monitoring those things and taking timely action to curb declining trends before a year-plus residence in the NRC doghouse – or, more importantly, before an event occurs that challenges the degraded safety levels – would be a very useful effort. Twenty four year-plus reactor shutdowns to restore safety levels over a twenty year period is simply unacceptable performance. That behavior needs to stop and this indicator cannot slow, yet alone, stop it.

Setting aside, for the moment, the fact that the IIIEI is monitoring the wrong things, we believe it is monitoring the wrong things in the wrong way. It attempts to allow comparisons between events using importance factors. That might work on a plant-specific basis, but it cannot work on a reactor type basis (e.g, BWR or PWR). This "one size fits all" approach is wrong because it will downplay certain events at some plants and overplay those events elsewhere.

In addition, this indicator is way too convoluted for public consumption. Even if it had value (which it doesn't), it's not suitable for use as part of the reactor oversight program. It's too Ouija-boardish.

Section 6 of the draft report solicited answers from specific questions. Since we strongly feel that the IIIEI is a total waste of effort that the NRC should promptly abandon, we also think that answering these questions would be a wasted effort. Hence, it was not undertaken.

Sincerely,

<ORIGINAL SIGNED BY>

David Lochbaum
Nuclear Safety Engineer