

Marvin L. Lewis  
3133 Fairfield St.  
Phila., PA 19136  
(215) 676 1291

U. S. N. R. C.  
Washington, D. C. 20555

Dear Commissioners:

On April 14, 1997, the NRC met with the Niagara Mohawk Power Corporation about the Nine Mile Point Restart. The Staff Safety Evaluations came to a highly controversial result which appears technically indefensible on its face.

- \* The conclusion that the reactor may operate safely for 10,600 hours is based on some esoteric reasoning which ignores many contradictory considerations: sensitized grain boundaries, interference with vibrational pickups, origin of the rod end damage.
- \* The requirement that Niagara Mohawk maintain water chemistry as a condition of operation ignores the evidence that the water chemistry was not previously maintained in strict accordance with good practice. A history of poor performance does not bode well for a future of good performance.
- \* Aside from considerations such as causing strainer blockage during a LOCA, changing heat transfer considerations due to loss of geometry, the cracked core shroud raises many other possible interferences with good practice; specifically, sensitization of other structures susceptible to intergranular stress corrosion cracking (IGSCC.)

Intergranular stress corrosion cracking refers to a constellation of symptoms which include stress, sensitization of grain boundaries with precipitate, and a corroding medium. The core shroud is not the only structure in a reactor vessel subject to IGSCC. IGSCC has been observed in many structures in many reactors over the years. The NRC must require that all structures susceptible to IGSCC be evaluated and inspected before a restart of Nine Mile Point.

The stress to which the core shroud was subjected had many components. One source of stress is vibration. Vibration causes 'noise' which is picked up on vibrational sensors used to pinpoint pipe cracking as part of the 'leak before break' technology.

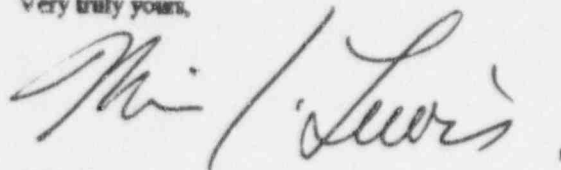
The change in vibrations due to a cracked shroud may or may not affect the efficacy of the vibrational pick ups used in the leak before break technology. It is a consideration, and it is one of the considerations which should be investigated before the reactor restarts.

The origin of tie rod end damage purports that the engineering evaluation of this 'fix' was less than adequate. Some exploration of Niagara Mohawk's engineering evaluation criteria and methods seems appropriate before restart. The NRC staff would also go on record as to how adequate the engineering evaluation is prior to restart. A 'root cause' for the tie rod end damage deserves study.

IGSCC requires exposure to a corroding medium sometime before the structure evidences any cracking. Once sensitization or cracking develops exposure to a corroding medium is not required to continue the development of more and larger cracks. The present requirement for water chemistry may be only window dressing, and not provide any benefit.

The restart of Nine Mile Point places the public at unknown risks. I respectfully request that the restart be halted until the NRC completes adequate evaluation.

Very truly yours,



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