

P21 91110
Publicly Available*To: Carl Burlinger*
*I sent a copy to*Westinghouse Engineering Technology
Nuclear Safety Licensing*Richardson*
*also*Date: November 8, 1991*Please treat this*To: Mr. Charles E. RossiSender: John S. GalembushCompany: USNRCBay Location: WEC ECE-412Location: Rockville, MD.Extension: 412-374-5036

Extension: _____ Return originals: Yes _____ No _____

Cover sheet + pages = 1 + 1*as a Part 21*

USE BLACK PEN!

Also, treat as
*Proprietary*Comments: Attached for your information and use is a brief summary of our
discussion of the situation in France whereby certain EdF
plants have discovered cracking in reactor vessel head adaptors.*until (W)**determines otherwise**Ernie**Per discussion with Carl, proprietary statement*
is not necessary (later discussions
*with Westinghouse).**Jane Campbell*
*11/91*Phone number of
receiving equipment: 301-492-0260/0261

Nuclear Safety Licensing Telecopy Number

412/374-4011 or WIN 284-4011

Pitney Bowes 8050

~~Proprietary~~

EdF Reactor Vessel Head Adaptor Issue Summary

- Leaking reactor vessel head penetration discovered at Bugey 3 (Three loop / 900 Mwt) in France during approx. 3000 psi hydrostatic test associated with 10 year ISI.
- Leak at core location H-14 detected via microphones located on both top and bottom heads of the reactor vessel.
- Visual exam indicated presence of longitudinal (axial) cracks in the I.D. of the head adaptor tube.
- Head Adaptors manufactured from Inconel 600 material. Differences do exist between the French and Westinghouse fabrication processes.
- Examination of three other head adaptors at Bugey 3 indicated no cracking.
- Examination of 12 penetrations at each of two additional plants -- Bugey 4 and Fessenheim 1 -- was subsequently performed.
 - o Bugey 4 - One penetration with cracks found.
 - o Fessenheim 1 - One penetration with cracks found.
- At Bugey 3 EdF plans to remove the penetration at location H-14 for hot cell examination / root cause determination. Although the cause has not been determined, EdF suspects that the cracking may potentially be a stress corrosion cracking (SCC) related phenomenon. In addition, indications are that EdF plans a 100% inspection of the head adaptors at Bugey 3.

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To: Carl Berlinger
(treat as a Part 21)
and
Jim Richardson



Westinghouse Engineering Technology
Nuclear Safety Licensing

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until (W) says
otherwise.~~

~~Copies sent to
Berlinger &
Richardson~~

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Per John Galembush on
11/14/91, the French have
said this does not need to
be treated as proprietary

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