

RE: Phila. Elec.Co.

Limerick Gen.Sta. Units 1 & 2

DOCKETED

DOCKET # 50-352, 353

JUL 12 1984

RESPONSE OF ANTHONY/POE TO AFFIDAVITS FROM PECO and NRC STAFF ON TRANSPORTING
TO AND STORING AT THE SITE RAW NUCLEAR FUEL.

March 19, 1984

Box 186, Moylan, Pa. 19065

At a hearing on March 7, 1984 the Board directed affidavits be submitted
in connection with a contention filed by Anthony/POE on 2/23/84 as follows:
Whether or not there is any reasonable basis to believe - and of course,
hand in hand, are the reasons why, or not - there can be radiological releases
in violation of the applicable regulations, on site and off site, in the
event of damage to the low enriched uranium oxide fuel pellets in the unirra-
diated new fuel rods for Limerick.

1. The shipping packages do not conform to the NRC revisions of August 1984
which became effective 9/6/84 (L.Pyrish Affl., p.7) because they have not been
retroactively applied, according to the affidavit.

2. It is apparent, too, that the packages have not been tested in a manner
which protects the public safety for transport on railway or highway, to prove
that they are adequate to maintain the fuels integrity. (A study commissioned
by NRC occasioned a recommendation from REA, Columbus, O., that the NRC criterion
be raised to a testing of the packages to withstand 1,600° for 2 hours, Dec. 1982.

3. The consequences of a railroad explosion of TNT are not analysed in a way
to foresee the effects from the outdoor location and the surrounding hazards.
(FSAR TABLE 3.5-5 MISSILE)

I. The structures between the R.R. and the fuel piles would be thrown onto the
fuel containers and the tangled mass would be thrown against other tanks and
structures ending up at the wall of the turbine building. II. Since the turbine
structure is not a safety one, its wall and roof would be collapsed onto the mass.
III. Two 220 KV towers and wires would be part of the crushing load on the fuel.

IV. The contents of the iron workers' shop, the chemical staff building and
the hydrogen bottle storage would be ground up and piled ^{from} with the fuel against
the turbine building and adjacent surfaces in a fire fed welding fuel, chemicals,
hydrogen and other fuels or explosives. Cushioning material would burn. V. The
conditions listed in N.Ketzlach's affidavit would be met (p.2,3.) (a) Rod cladding
and separation destroyed with grinding, cutting and pulverizing of the pellets.
(b) Uranium dioxide would be dissolved by nitric acid or other acids from the
destroyed structures. Radioactive material in massive quantities ^{far above the regulation limits} would be dis-
charged into the air and water bringing a severe threat to the environment and
the public health and safety. The force of the RR explosion would be considerably
higher than the measured design ^{reactor building} levels at the fuel storage site, only 350'-400' from
railroad.

4. Until protection from the consequences above are provided, no fuel should
be shipped to the site. In addition NRC Inspection 50-352/84-02 (p3, #4) and 84-03
and 84-01 (p.4 # 6) cite deficiencies in monitoring equipment and personnel which
must be rectified before fuel is shipped.

Cc: Judges Brenner, Cole, Morris, NRC Staff, Appeal Panel,
Limerick City, PECO, Limerick Fuel Rods on serv. list

Respectfully,
Robert L. Anthony

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FEB. 16, 1984

3. Training and Qualification Program

The inspector reviewed the training and qualification program for the health physics/chemistry technicians. The technicians are required to complete a nine day course which covers basic mathematics, chemistry, and physics prior to entry into a 16 week initial technician training course. The inspector reviewed the initial technician training course syllabus and the examinations of selected individuals. The inspector noted that the normal progression path for a technician is from assistant technician to technician "C" to technician "B" to technician "A." The total time required for progression to technician "A" is 60 months. The inspector also noted that the licensee was rotating technicians through the licensee's other operating nuclear power station for practical factor training. The inspector discussed technician qualification with respect to Regulatory Guide 1.8, "Personnel Selection and Training" which references ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel" with licensee personnel. The licensee stated that the ANSI N18.1 requirements would be met through the use of ANSI qualified contractor technicians. The inspector also reviewed the qualifications and education of the senior chemist and support chemist. Both of these individuals meet the ANSI N18.1 requirements. The inspector stated that this area will be reviewed at a later date after further staffing has taken place.

4. Facilities and Equipment

The inspector toured the facility including the chemical laboratories and counting room, water treatment plant and laboratory, various in-plant sampling systems, liquid effluent monitors, airborne effluent monitors and selected ventilation systems. The inspector noted that the licensee's chemistry laboratories, although completed, were not yet occupied and no instrumentation had been installed. Also, no instrumentation had been installed in the licensee's counting room. At the present time, the licensee is taking delivery of laboratory supplies and equipment. The licensee's sampling systems are not yet all completed and operational. In addition, the process and effluent radiation monitors are not completely installed and operational. The inspector discussed laboratory and counting room equipment installation with the licensee. The licensee stated that he would attempt to have the chemistry laboratory operational by approximately April 1984 and the counting room operational by June, 1984. The inspector also discussed process and effluent radiation monitor calibration with the licensee as well as air cleaning ventilation system testing. The inspector stated that these areas would again be examined during a subsequent inspection.

5. Plans and Procedures

The inspector discussed procedures with the licensee. The licensee had written approximately twenty chemical analysis procedures. The inspector noted that most of the procedures in areas such as sampling, instrument calibration, radiation monitor calibration, and ventilation system testing

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The licensee provided the inspector with its contractor's reports of analyses of various environmental media collected from its sampling stations. These reports indicated that the licensee has met its commitments as stated in the DES-OL, NUREG-0974, June 1983.

The inspector examined selected environmental monitoring stations including water sampling stations, air samplers for iodines and particulates, and TLDs for direct radiation measurement. All equipment at these stations was operational at the time of the inspection. The inspector reviewed procedures and records for calibration and maintenance of the air samplers and vacuum gauges, and found that these calibrations were performed regularly and on schedule.

5. Meteorological Monitoring

The inspector examined the licensee's meteorological monitoring system, including the primary and backup meteorological towers, the recorder charts in the equipment houses at each tower, and the digital read-outs, charts, and computerized print-out in the control room. The inspector noted that two separate pieces of meteorological tower data were identically labelled as WS6, and that no data were labelled WS5. The licensee stated that the computer had only recently become operational, and that this would be corrected at or before the time of the next system calibration. A second computerized print-out is to be installed in the Technical Support Center.

The licensee stated that new meteorological monitoring equipment had recently been installed, and that new procedures are being written that will better reflect the new meteorological monitoring equipment. The inspector stated that these procedures will be reviewed during a subsequent inspection in this area (352/84-03-02; 353/84-01-02).

6. Training

The inspector discussed with the licensee its training program for personnel involved with the LGS radiological environmental monitoring and meteorological monitoring programs. The procedure relevant to this training was reviewed:

NES 2.0 "Procedure for Specification of Qualifications of Personnel in Radiological Environmental Monitoring and Indoctrination and Training"

The inspector noted that certain individuals associated with the LGS radiological environmental monitoring and meteorological monitoring programs had not received the training required by this procedure. The licensee stated that this procedure currently is applicable only to its Peach Bottom Atomic Power Station, and therefore that the training program is not required for personnel involved solely with the Limerick Generating Station. The inspector stated that this and other NES procedures would require revisions to indicate their applicability to LGS when the facility