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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
PRIVATE FUEL STORAGE L.L.C.) Docket No. 72-22
)
(Private Fuel Storage Facility))

AFFIDAVIT OF WESLEY JACOBS

CITY OF ENGLEWOOD)
) SS:
STATE OF COLORADO)

I, Wesley J. Jacobs, being duly sworn, states as follows:

1. I am a Lead Electrical Engineer for Stone & Webster Engineering Corp. I am providing this affidavit in support of a motion for partial summary disposition of Utah K in the above captioned proceeding to show that smoke from a fire or explosion, including smoke from the Tekoi Rocket Engine Test Facility or a wildfire adjacent to the Private Fuel Storage Facility (PFSF), would pose no credible hazard to the facility and that potential electrical interference with respect to overhead aircraft would pose no credible hazard to the facility.

2. My professional and educational experience is summarized in the curriculum vitae attached as Exhibit 1 to this affidavit. I have worked as an electrical engineer in the power industry for 17 years and I have specific experience in the licensing of away-from-reactor spent fuel storage facilities and their electrical and controls design. I have been responsible for the direction of engineering and design activities and equip-

ment specification and selection at a nuclear power plant. On the Private Fuel Storage (PFS) project I am responsible for electrical engineering and design, the site security system design, and support for security training, qualifications, and contingency plans.

3. I am knowledgeable of the design and operation of the PFSF and the spent fuel casks that will be used there. I am specifically knowledgeable of the electrical and security systems at the PFSF, their importance to safety, and the effect of their potential failure on operations at the PFSF.

4. In its response to PFS's first discovery request, the State of Utah alleged that the function of the electrical systems at the PFSF could be impaired by a smoke plume potentially created by a fire or explosion at the Tekoi Rocket Engine Test Facility or by a wildfire adjacent to the PFSF. The State in Utah K (and Confederated Tribes in a contention combined with Utah K) had alleged that PFS had inadequately considered the impact on the PFSF of credible accidents, including potential rocket motor explosions at Tekoi and wildfires.

5. Smoke simply would not pose a significant hazard to the PFSF. Even if one assumed that smoke could interfere with electrical systems at the PFSF (an assumption PFS believes to be wrong), PFSF SAR Section 8.1.1.3 states: "PFSF spent fuel storage nuclear safety functions do not rely on electrical power for their accomplishment." The electrical systems at the PFSF are not classified as important-to-safety and their postulated malfunction would not have safety or radiological consequences – such malfunction would cause no release of radioactive material to the environment. If the spent fuel storage cask temperature monitoring systems were to fail, the cask air inlet and outlet ducts would be inspected visually until the temperature monitoring systems were restored, to ensure that the inlet and outlet ducts were not blocked. Therefore, smoke would pose no significant hazard to the PFSF.

6. In addition, smoke would not cause a breakdown in security at the PFSF. Any failure of any component of the security system at the PFSF will result in the im-

plementation of compensatory measures. These measures may involve increased security patrols until the component failure is rectified. Furthermore, if the electrical system at the PFSF were to fail, the emergency diesel generator would start and supply the necessary power for the security loads.


7. In its second set of discovery requests, the State implied that electrical interference from aircraft could cause the electrical or security systems at the PFSF to fail and that electrical interference from the PFSF could cause an overflying aircraft to crash at the PFSF. The State had alleged in Utah K that PFS had inadequately considered the potential impact on the PFSF of aircraft overflying this area.

8. Electrical interference from aircraft will not cause the PFSF electrical or security systems to fail. While PFS has not yet selected specific equipment or equipment suppliers, radio systems at the PFSF will have dedicated FCC-licensed frequencies for each system that will be different from any frequency utilized by military or other aircraft. Therefore, the frequencies used by military or other aircraft will not affect PFSF equipment. Further, PFS will use commercially available security, electrical, alarm and computer systems at the PFSF that have been used and found acceptable at other facilities. These systems will be shielded to prevent radio interference per the vendor recommendations utilizing standard practices.

9. Electrical interference from PFSF equipment also will not cause aircraft to crash into the PFSF. Because PFSF equipment will operate on frequencies different from those used by aircraft, radio frequencies used at the PFSF would not affect the aircraft.


Wesley J. Jacobs

Sworn to before me this 7th day of June 1999.


Notary Public

My Commission expires 04-21-2003

