UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

| Docket No.

AFFIDAVIT OF DAVID PENN

1. My name is David W. Penn.

2. My address is 3032 North Stafford Street, Arlington, Virginia 22207.

3. My current position is Deputy Executive Director, American Public Power Association, Washington, D.C. APPA is the national trade association representing the interests of over 2,000 state and local publicly owned electric utilities in the United States.

4. Prior to joining APPA in 1991, I served 13 years as the first general manager of Wisconsin Public Power, Inc. (WPPI), a wholesale supplier of electricity to its 30-member/owner municipal communities in Wisconsin. Earlier I served as chief economist of the U.S. Department of Energy's office of competition; chief economist of the Nuclear Regulatory Commission's antitrust licensing review; and chief of the Federal Trade Commission's economic research and services division. Over the past 30 years my writings and testimony have been published in numerous utility industry and academic journals, book collections, and government staff reports and hearings records.

5. I earned a B.S. in 1966 from the University of Wisconsin and an M.A. in 1968 from Washington University in St. Louis, both in economics.

6. At APPA, among other management and subject areas, I am ultimately responsible for the policy and member system support on issues of power supply, transmission access, NERC and other system reliability matters, market power, mergers, interventions and other filings at FERC, and analysis and maintenance of industry

financial and operating statistics. At WPPI, I took the fledging power supply agency from its beginnings to a $125 million operation with a mix of power supply contracts with a dozen parties in five states and as far away as 1,000 miles, minority generating plant ownership, plant construction, use of member generation capacity, and hard-fought transmission access arrangements. At the Department of Energy, I was responsible for evaluating competitive impacts of the agency as well as energy markets themselves, including nuclear and other baseload generation in electricity. At the NRC, I participated in the antitrust review of nuclear generating facilities when license applications were at their peak. My support ranged from preparing analyses, providing internal policy advice, to developing expert witness and other testimony. As a result of my experience, I am familiar with electricity markets—both economic and physical—and how they are affected by the ownership and operation of nuclear generation facilities. Historically, a relatively small number of very large vertically integrated utilities have dominated electric markets. This dominance has often come about through control of transmission and retail franchises. These same companies are the primary owners of most large nuclear generating facilities in the United States.

7. Nuclear technology was developed to a very great extent by the Federal government, including through the Manhattan Project, the nuclear submarine program, and the continuing government subsidization of developments in fuels, applied R&D, and generation facilities. The antitrust review provided for in the Atomic Energy Act results from a conviction that those who receive the benefits of the enormous governmental investments in nuclear technology should not be permitted to use the fruits of those

investments contrary to antitrust policy. A parallel purpose is to protect the competitive opportunities of smaller systems compared with those who benefit from nuclear licenses.

8. As a result of the Commission's antitrust authority, many major utilities have become subject to antitrust license conditions. These conditions have had very significant impacts in shaping competitive electric markets. They remain significant to the industry's market structure. A failure to maintain these conditions would undoubtedly substantially reduce electric industry competition.

9. For basic reference and breadth of impact, see my March, 1977, article, "The NRC's Antitrust License Conditions and the Structure of the Electric Utility Industry," in Mitre Workshop Proceedings, MTR-7193, pp. 227-300; and D.W. Penn, J.B. Delaney, and T.C. Honeycutt, *The U.S. Nuclear Regulatory Commission's Antitrust Review of Nuclear Power Plants: The Conditioning of Licenses,* NRC staff report, NR-AIG-001, May 1976. "[T]he degree of competition in the electrical utility industry is significantly increased by the NRC's antitrust license conditions. ... In sum, I feel that the NRC's antitrust review and its attendant license conditions are playing a significant role (1) in providing for a more competitive structure and increased competitive opportunities, especially in the bulk power and bulk power services markets, (2) in promoting coordination, and hence, efficiency, reliability, and organizational diversity, and (3) in helping to allow more substitution of the dynamic discipline of regulation by the market in place of the often static regulation by Commissions and Federal agencies." (Mitre, pp. 291, 292.)

10. If nuclear licenses can be transferred without *any* Commission antitrust review, companies may be able to evade or eliminate antitrust conditions. Many antitrust

conditions came about through agreements among market participants, including NRC licensees. In the process of negotiations, in reliance upon the continued effectiveness of antitrust license conditions, many smaller systems settled cases or failed to press potential cases in reliance upon the conditions. Neighboring entities that were intended beneficiaries of conditions have entered into millions of dollars of investments, including in nuclear plants and in other generation and transmission, based upon the legal rights that are ensured by the conditions. If the conditions were eliminated or undercut, this would upset contract and other reliance interests of these systems, weaken competition and deprive systems of bargained for benefits.

11. Transfers of licenses without adequate opportunity for Commission review may allow the sellers of nuclear plants to escape their bargains. Such transfers could be made to affiliated companies or to larger successor companies, for example, through merger. Sham sales could result for the purpose of permitting licensees to avoid the pro-competitive requirements of antitrust license conditions.

12. Many regions throughout the country are subject to constrained transmission conditions because of physical limitations of transmission systems, because of actions by companies to protect their markets, or both. Although the Federal government through the antitrust laws, the actions of this Commission, and the "open access" policies of the Federal Energy Regulatory Commission has been acting to open transmission, transmission constraints can and do severely restrict market opportunities by creating small, geographically balkanized bulk power markets. Additionally, large transmission owners are aware that their transmission policies can aid their own and their affiliates' marketing departments, injuring actual or potential competition by existing

firms and new entrants. Adding to the impact of transmission barriers and attendant market power is the ability of some transmission owners to limit the use of transmission over transmission interfaces (*i.e.*, interconnections between transmission systems). Transmission owners may be able to "determine" transmission capabilities in ways that limit competitors' use of transmission. They can set Available Transfer Capacity and Capacity Benefit Margins (*i.e.*, reserved transmission) in ways that discriminate against smaller systems. Many transmission companies refuse to join regional, independent transmission systems, thereby creating "pancaked" rates and market disadvantages for competitors. Transmission owners can often create transactional costs in negotiating transmission service agreements and the terms of transmission use, notwithstanding the theoretical open availability of tariffed service. One merely need examine any recent volume of Federal Energy Regulatory Commission reports to find the many examples of controversy and abuse.

13. For example, Florida has limited interface capacity to the north. Within Florida at least one large transmission owner and nuclear licensee has refused to agree to regional transmission arrangements, thereby limiting competitive opportunities for dependent systems. The so-called ERCOT transmission area in Texas has only two d.c. transmission ties to interstate transmission grids. The major Michigan transmission owners claim that transmission is constrained to the south. There are other mid-west transmission constraints that can severely limit power flows.

14. In California, the outage of one or more of the Diablo Canyon units has a severe adverse impact on import capability from the Pacific Northwest and desert Southwest. American Electric Power recently confirmed widespread concern that both

Cook units will be unavailable for summer 1999. According to W. Robert Kelley of AEP, "The Cook plant affects critical pathways for some transmission customers' power supply, and the market needs to know the availability of transmission services before they can finalize their energy options." (*Electricity Daily*, March 29, 1999, p. 1.)

15. Nuclear plants tend to be very large and often have comparatively low operating costs. Especially in regions where there are limitations of available generating capacity or constrained transmission, the unreviewed transfer of nuclear plants may permit those plants to be used to manipulate power sales markets, contrary to antitrust principles. If the owner of large base load plants and other generation withholds or overprices nuclear energy, it can destabilize market energy conditions, create artificial power shortages or cause "price spikes." Such activities may severely injure competitive market opportunities for smaller competing systems.

16. In my negotiating and operating experience as General Manager of WPPI, I was acutely aware of the role large nuclear plants owned by very large private power company competitors could play in potentially crippling the economic markets and altering the region's reliability. The operation of the Zion and other nuclear plants of Commonwealth Edison in Illinois could determine the power flows northward into Wisconsin. Two summers ago this was reaffirmed as Wisconsin citizens held their breath in being dependent on less reliable sources from the west because a whole array of northern Illinois nuclear units were out of commission and the resulting generation configuration virtually eliminated the possibility of transfers to the north. From the west, flows on the crucial single 345 kV transfer line were subject in a general equilibrium sense to NSP's loading of its nuclear and other baseload capacity. Within the state of

Wisconsin, control of the generation on the greatly more populous eastern side of the state confers ultimate control over which customers will have electricity and at what price during constrained situations. This large generator capacity in Wisconsin is owned by Wisconsin Electric and the state's other private power companies and is heavily weighted with three large nuclear units located on the shores of Lake Michigan. The importance of this in-state generation, and its inability to fully protect the state, was brought home again during last summer's "price spikes" in the Upper Midwest. The 1998 experiences even led Wisconsin Electric to complain to FERC about NSP's manipulations and contributed to legislatively driven production investment actions now being implemented by efforts of the Governor's office and the Public Service Commission.

17. Although the Federal Energy Regulatory Commission and other regulatory agencies are promoting competition, the opportunity for larger companies to exercise market power not only remains, but it is being exercised. The combination of market control and reduced regulation makes antitrust review of the potential use of nuclear plants increasingly important. Other factors that emphasize the need for antitrust review are the extensive number of recent mergers and merger applications in the industry.

18. Based on the above, power from nuclear plants can be sold into closed markets, thereby creating "situations inconsistent with the antitrust laws." The transfer of plants may permit the sale of power from nuclear plants into differently configured markets to the disadvantage of smaller systems.

19. Many NRC license conditions have focused on plant participation, transmission access, coordination and wholesale power access. Plant transfers may be used to weaken existing conditions or the effectiveness of existing conditions for each in these

areas. First, it is certainly possible to have renewed nuclear monopolization. If a majority owner of a nuclear plant sells its interest to a third party, an anticompetitive situation may be created unless minority plant owners can also sell their interests on similar terms or unless suitable corrective conditions are made applicable to the new licensee.

20. Second, most existing license conditions cover transmission access over a transmission network that covers only the licensees' transmission system. Where there is a merger, if a license transfer takes place, but transmission license conditions are limited to the original licensees' transmission system, the merging system may obtain access to a larger transmission network, but the minority owners may be limited to the original -- now truncated -- system. In this way, the larger system will have access to a broad market on far more favorable terms than the smaller one.

21. Third, through its license conditions this Commission has recognized the importance of electrical coordination. Large systems are often in a position to deny coordination. In an environment that has reduced regulation, especially where mergers create large internal systems, transferees of NRC licenses may coordinate their generation, including their nuclear generation, but deny coordination and similar bulk power services offered internally or to affiliates.

22. Fourth, the reduction of regulation is leading to less favorable wholesale power terms, including where wholesale power is generated using nuclear plants. Antitrust enforcement may be required. License transfers may create conditions of dominance or reduce smaller system access.

23. The applicants in this case argue that NRC antitrust review is unnecessary because other agencies, such as the Department of Justice, the Federal Trade Commission,

the Federal Energy Regulatory Commission or the state agencies may perform the NRC functions. Other agencies do not have the authority or continued electric industry focus that is required to correct the above potential abuses. The Department of Justice, Federal Trade Commission and many state antitrust enforcement agencies do not concentrate on electric matters. They often tend to correct abuses after the fact as opposed to adopting preventive measures. They tend to perform a policing function.

24. Although the Federal Energy Regulatory Commission has merger approval authority, it is difficult to envision that agency adopting prophylactic measures that parallel the NRC conditions. FERC's ability to broadly condition the use of nuclear plants may be deemed limited. Where generation is concerned, the agency tends to defer to state authority, even in the context of mergers. Plant construction—and operation—are generally deemed local matters. The FERC performs essential functions to aid competition, but ones that are differently focused than that of the NRC. Also, FERC's generation authority is deemed to be incomplete. FERC has yet to clarify its authority over generation asset divestiture where there are no transmission facilities. See "Petitioners' Answer to Motions and Response to Protests," filed March 30, 1999, by the American Public Power Association and Citizen Power, Inc., in FERC Docket No. EL99-40-000.

25. Likewise, many, but not all, states are concerned about antitrust impacts. However, state regulation can hardly deal with developing multi-state holding companies and market concerns.

26. In writing this affidavit, I point out very real problems. The type of problems that I raise are not only potential, but occur, in fact. For the NRC to avoid any examination of license transfers invites anticompetitive abuse.

27. In giving this affidavit, I do not mean to imply that in some situations a limited NRC antitrust review would be inappropriate. However, it cannot be said that this would be true in *all* cases. That being the case, the Commission must afford those affected by license transfers the attempt to demonstrate real problems that license transfers may cause, including granting adequate initial discovery where information to prove potential abuse would be in the possession of the license transfer applicants.

David W. Penn

March 31, 1999

Edward Eskin
Notary Public, District of Columbia
My Commission Expires Nov. 30, 2003