



**Testimony of Charles Higley,
Research Director,
Public Citizen's Critical Mass Energy Project**

**on Nuclear Power Plant Safety and Operations
in a Competitive Electricity Market,**

**before the Assembly Committee on Energy,
New York State Assembly**

November 10, 1999

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Public Citizen, founded by Ralph Nader in 1971, is a non-profit research, lobbying, and litigation organization based in Washington, DC. Public Citizen advocates for consumer protection and for government and corporate accountability, and is supported by over 150,000 members throughout the United States. The Critical Mass Energy Project is Public Citizen's energy policy arm, working to decrease reliance on nuclear and fossil fuels and to promote safe, affordable and environmentally-sound energy alternatives.

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Thank you for this opportunity to testify regarding the safety and operations of nuclear power plants in a deregulated electricity market, and the effects of their sales on safe operation, the environment, and nearby communities.

Summary

Public Citizen believes that electricity deregulation is reducing the safety of many nuclear power plants operating in the United States, especially the safety of nuclear plants located in states, such as New York, that have deregulated retail sales of electricity. These comments explain:

- how deregulation may force the owners of nuclear power plants to lay off workers and cut back on maintenance;
- how deregulation is being used as an excuse by the U.S. Nuclear Regulatory Commission to reduce its regulation of nuclear power plants in ways that threaten public health and safety;
- how deregulation may affect the reliability of our nation's electric power system, which is the source of "off-site power" needed for the safe operation of a nuclear reactor;
- how deregulation may encourage the owners of nuclear power plants to run them as long as possible, even though the safety of a nuclear plant declines as it gets older.

In response to the degradation of nuclear power plant safety brought on by electricity deregulation, Public Citizen urges the State of New York to implement the following recommendations:

- New York should make sure the U.S. Nuclear Regulatory Commission is doing its job to protect public health and safety from the risk of nuclear accidents, instead of worrying whether the nuclear power industry can afford to pay for effective regulation.
- New York should make sure that deregulation will not degrade the reliability of the electric power grid, the critical source of "off-site" power needed for the safe operation of a nuclear power plant. Toward this end, New York should insist that the transmission system in the State be owned and operated by a non-profit entity that has no affiliations or subsidiaries

with any person that sells or markets power. New York must ensure that there are enough operating power plants in reserve at all times to ensure grid reliability. New York should also require that nuclear reactors have larger on-site backup sources of power so that they can safely shut down in the event of a loss of off-site power.

- New York should greatly strengthen efforts to reduce electricity consumption through energy efficiency programs, which can cost-effectively increase the reliability of the electric power system by reducing electricity demand.
- New York should provide potassium iodide to those within a 50-mile radius of a nuclear reactor. Potassium iodide is an inexpensive non-prescription drug that would protect the thyroid gland from radioactive iodine 131 released during a meltdown.
- New York should ensure that the new owners of nuclear plants will have enough money on hand to pay for decommissioning when these plants retire from service. Also, New York should require that any unneeded decommissioning funds are returned to ratepayers.

Introduction

As you know, the New York State Assembly has not enacted legislation to deregulate the state's investor-owned utilities. Instead, in May 1996 the New York Public Service Commission (NYPSC) issued an order instructing all investor-owned utilities to submit plans outlining how they would introduce wholesale and retail competition. At this time, the NYPSC has entered into agreements with all of New York's investor-owned utilities, which are now in various stages of implementing their retail deregulation plans.¹

In general, "deregulation" means retail electricity prices will no longer be regulated—after a transition period, market forces are supposed to establish the selling price for electricity. Customers no longer have to buy electricity from their local utility—instead, they are supposedly able to shop among competing electricity suppliers. Utilities will no longer be able to rely on regulated rates to recover their investments in power plants, a profit on invested capital, and the expense of operating a plant. Instead, the power plant owners will sink or swim based on their plant's ability to compete against other power plants. Transmission and distribution service will remain regulated with respect to price, terms-of-service, rate-of-return, and other aspects.

Public Citizen has been very critical of state efforts to deregulate retail sales of electricity, including New York. As predicted, all the benefits of deregulation are going to the investor-owned utilities in the form of multi-billion dollar bailouts, and to large industrial and commercial customers who have the clout to negotiate lower electricity prices.

¹ National Rural Electric Cooperative Association, *Retail Wheeling Report*, Arlington, VA, September 1999.

Meanwhile, residential and small commercial customers are receiving few if any benefits—electricity in New York is still more expensive than in many other states.² Thousands of New York utility workers have lost their jobs—since 1990, about 14,960 workers (about 35 percent of the utility work force) have been laid off.³ Old coal-fired power plants have belched out millions of tons of pollution, which is literally killing thousands of people each year, while ruining lakes, rivers, forests, and farmlands, especially in New York.⁴ Competition in wholesale electricity markets has been stymied as investor-owned utilities continue to manipulate the transmission system to favor their own power sales at the expense of their competitors.⁵ So far, deregulation has created unregulated monopolies to the detriment of consumers, workers, and the environment.⁶

As a result of deregulation, several utilities in the Northeast and Midwest are attempting to sell their nuclear reactors. In particular, on June 24, 1999, Niagara Mohawk Power Corporation (NiMo) announced its intent to sell the Nine Mile Point 1 nuclear reactor and its ownership shares in Nine Mile Point 2⁷ to AmerGen Energy Company, a joint-venture of PECO Energy Company (Philadelphia) and British Energy plc (Edinburgh, Scotland).⁸ Simultaneously, New York State Electric and Gas Corporation (NYSEG) announced its intent to sell its ownership stakes in Nine Mile Point 2 to AmerGen.⁹

On November 2, 1999, the New York Power Authority announced that it has entered into exclusive negotiations with Entergy Corporation (New Orleans) regarding NYPA's potential sale of the James A. Fitzpatrick and Indian Point 3 nuclear power plants.¹⁰

² "Critics Fault New York State's Attempt to Deregulate Electric Power," *The Buffalo News*, October 26, 1999.

³ Utility employment figures come from Federal Energy Regulatory Commission's Form 1 and the Energy Information Administration's *Financial Statistics of Major U.S. Investor-Owned Electric Utilities*, as compiled by the International Brotherhood of Electrical Workers. Total full time employment by New York investor-owned utilities in 1990 was 43,087; in 1998, 28,127 (Central Hudson Gas & Electric 1,173 (1990) to 958 (1998); Consolidate Edison 16,095 to 11,283; Long Island Lighting 6,630 to 3,740; New York State Electric & Gas 4,029 to 2,944; Niagara Mohawk 11,485 to 6,621; Orange & Rockland 1,614 to 1,154; Rochester Gas & Electric 2,061 to 1,427).

⁴ John Coequyt and Rebecca Stanfield, *Up In Smoke: Congress' Failure to Control Emissions from Coal Power Plants*, Washington, DC: U.S. Public Interest Research Group and Environmental Working Group.

⁵ See, for example, Federal Energy Regulatory Commission, *Notice of Proposed Rulemaking on Regional Transmission Organizations*, May 13, 1999, at 58-84.

⁶ For more information regarding Public Citizen's concerns regarding electricity deregulation, please see our website at www.citizen.org/cmep.

⁷ Nine Mile Point 2 is jointly owned by NiMo (41 percent), NYSEG (18 percent), Long Island Power Authority (18 percent), Rochester Gas & Electric Corporation (14 percent), and Central Hudson Gas & Electric Corporation (9 percent) (Niagara Mohawk press release, *Niagara Mohawk and NYSEG to Sell Nuclear Assets to AmerGen Energy*, June 24, 1999).

⁸ AmerGen's co-owner PECO currently owns and operates the Limerick and Peach Bottom nuclear plants in Pennsylvania. The other co-owner British Energy owns and operates 15 nuclear reactors in the United Kingdom (Niagara Mohawk press release, note 7).

⁹ Niagara Mohawk press release, note 7. AmerGen has also announced its intent to purchase the Oyster Creek (New Jersey), Clinton (Illinois), and Three Mile Island Unit 1 (Pennsylvania) nuclear power plants.

¹⁰ New York Power Authority press release, *NYPA, Entergy Enter Into Exclusive Negotiations for Nuclear Plant Purchases*, November 2, 1999. Entergy currently owns and operates the nuclear plants Arkansas Nuclear 1 & 2, Grand Gulf 1 (Mississippi), River Bend 1 (Louisiana), and Waterford 3 (Louisiana).

Given all the historic problems with nuclear power, such as huge financing costs, decommissioning liabilities, and nuclear waste issues, why would anyone want to buy a nuclear power plant? To understand the answer requires a quick review of power plant economics.

In order to sell power in competitive markets, the cost of producing power has to be lower than the market price of electricity (under regulation, there were no competitive markets for electricity, and utilities could recover the cost of owning and operating a power plant regardless of how high the cost was.) The cost of producing power can be broken into two components: financing costs and operation & maintenance costs.

Financing costs include paying off the loans and bonds that were issued to raise the money to build the plant and to replace worn-out components. For nuclear plants that cost hundreds of millions to several billion dollars to build, financing costs are very large.

Operation & maintenance (O&M) costs include paying for nuclear fuel, salaries, and maintenance costs.

A reactor can profitably sell electricity only if the combination of financing and O&M costs are less than the market price for electricity. Approximately half the U.S. nuclear fleet will not be able to sell electricity at profitable prices because their costs of producing power (financing costs plus O&M costs) are not competitive.¹¹ In New York, the Fitzpatrick, Ginna, Indian Point 3, and Nine Mile Point 1 plants may have trouble competing in competitive electricity markets.¹²

However, for many nuclear plants, the financing costs are being paid by ratepayer-funded bailouts. For example, the ratepayers of New York's investor-owned utilities are bailing out the financing costs of nuclear plants, allowing the current owners to sell the reactors at prices far below book value. Since the plant's financing costs are being paid off by ratepayers, the new owners only have to worry about keeping low the cost of operation and maintenance. AmerGen and Entergy are hoping to profit from the sale of nuclear power from plants with low O&M costs.

What follows are answers to questions provided in the notice of public hearing.

1. How will the change in ownership of nuclear power plants from fully regulated public utility companies to deregulated or minimally regulated companies affect the operations of the plants?

The Atomic Energy Act of 1954 gives the U.S. Nuclear Regulatory Commission exclusive authority for nuclear power plant safety. New York has little or no jurisdiction over nuclear reactor safety.

¹¹ See, for example, Roger Gale et al, *A New Nuclear Consensus*, Washington, DC: Washington International Energy Group, October 1998; *Comments of IPALCO Enterprises, Citizens Action Coalition of Indiana, and Public Citizen on the Draft Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry*, before the U.S. Nuclear Regulatory Commission, December 9, 1996.

¹² U.S. General Accounting Office, *Nuclear Regulation: Better Oversight Needed to Assure Accumulation of Funds to Decommission Nuclear Power Plants*, RCED-99-75, Washington, DC, May 1999.

Under the old regulated utility system, utilities were able to collect from ratepayers their invested capital, a return on invested capital (profit), and the expenses incurred providing power. The New York Public Service Commission was responsible for making sure the utilities provided all customers with electricity at rates that were just, reasonable, and non-discriminatory, and that balanced the needs of the public interest (affordable electricity, environmental protection) with the needs of the investor-owned corporations that generated and sold the power (return of invested capital, recovery of expenses, and profits).

Under the old regulated system, the utilities did not have to worry about competition. Thus, they did not have to worry too much about keeping low the costs of financing, operating, and maintaining their power plants (indeed, the old regulated system encouraged utilities to spend as much as possible on building power plants). For the most part, the NYPSC allowed the utilities to recover all of their costs, even for over-priced nuclear power plants.

Deregulation requires each power plant to compete against other plants in order to stay in service. Therefore, the owners of power plants will attempt to reduce financing and operating costs as much as possible, hopefully allowing the plant to sell electricity at prices lower than competing plants.

Public Citizen is concerned that the owners of nuclear power plants will become overly concerned about cutting costs rather than ensuring safety, as is further explained below.

2. What effect, if any, will such change(s) have on the level of nuclear safety in plant operations? How will changes in workforce affect safety?

Deregulation is increasing the risk of nuclear power plant accidents that could endanger the health and safety of millions of Americans. Safety is being compromised as nuclear plant owners attempt to minimize operation and maintenance costs and maximize electricity sales, with both actions reducing safety through lay-offs, reduced or deferred maintenance, and questionable maintenance practices. The NRC is attempting to change the way it regulates the safety of nuclear power plants by focusing on reducing regulatory costs instead of increasing safety. Deregulation is threatening the reliability of the electric power system, the source of “off-site” power needed for the safe operation of a nuclear plant.

Deregulation is Pressuring Nuclear Plant Owners to Cut Corners

To keep the cost of operation and maintenance low, the new owners of nuclear power plants will try run these plants with as few workers as possible. Unless there are adequate numbers of experienced workers, the plant may not be operated or maintained in a safe manner. An audit of British Energy, one of AmerGen’s co-owners, and which operates 15 nuclear reactors in the United Kingdom, reveals that “the technical basis for continuing staff reductions was not clear to us but it could be related to the requirement to compete in the commercial market place.” The report says that British Energy sees “poor performance” by its contractors not as safety-related issues, but “in commercial terms.” The report also found that

[A] long hours culture exists within [British Energy's nuclear plants]—especially in areas where work pressures were high. We believe these data are indicative that resource levels have been reduced too far in a variety of areas and this cannot be good for nuclear safety.¹³

As the passage notes, the auditors determined that British Energy had laid-off too many workers, threatening safety at its nuclear plants.

The new owners will try to reduce maintenance costs by delaying maintenance as long as possible. Without adequate maintenance, critical safety components may not function as intended. Similarly, without the timely replacement of parts, critical components may fail unexpectedly. A study of NRC's ability to improve its plant-safety states that:

Increased competition brought on by deregulation may force nuclear utilities to become more cost-conscious in both operations and output. [T]he threat exists that nuclear utilities, in their desire to cut costs and increase competitiveness, will be forced to impair their operational safety and increase risk.¹⁴

Already nuclear power plant owners are performing maintenance and testing of critical components while reactors are splitting atoms. Should something go wrong, safety systems may not be useable if they have been taken off-line for maintenance and repair.

In short, the new owners have every incentive to cut corners so that the plant is as profitable as possible. All of the actions described above threaten the safe operation of a nuclear reactor. With less attention to safety, the likelihood increases for a catastrophic accident that could kill thousands of people and make radioactive large areas surrounding a nuclear plant.

NRC Is Changing Safety Regulations

Electricity deregulation is giving the U.S. Nuclear Regulatory Commission (NRC) an excuse to change the way it monitors and determines whether nuclear reactors are safely operated and maintained. For decades, the nuclear power industry, which has to pay for the regulatory activities of the NRC, has complained that safety regulation is overly expensive and burdensome. Now with nuclear reactors facing competition, the nuclear power industry is redoubling its efforts to reduce oversight by the NRC. Unfortunately for the health and safety of Americans, the NRC is obliging the industry by trying to implement a flawed system for determining the safety of nuclear power plants.

Under current regulation, the NRC considers a reactor safe if it has been built, maintained, and operated in accordance with its "design basis," which is the safety and operational blueprint for the reactor.

¹³ Nuclear Installations Inspectorate, *Safety Management Audit of British Energy Generation Limited and British Energy Generation (UK) Limited*, 1999.

¹⁴ Arthur Andersen Consulting, *Study of NRC Senior Management Process*, December 30, 1996.

Reactor owners are supposed to report to the NRC anytime the reactor is operated or maintained in a way that differs from its NRC-approved design basis.

Because nuclear reactors are inherently complex, nuclear utilities and regulators have never been able to assure that a reactor is in compliance with its design basis, and thus safe to operate. Although the NRC has been wrestling with design basis issues for decades, even today most (if not all) nuclear power plants operate outside their design basis, including all of the reactors in New York.¹⁵

The NRC has admitted that it would be very costly to ensure that every reactor is within compliance with its design basis. Since regulatory costs are covered by nuclear utilities, the industry has pressured the NRC to reduce regulation and associated cost. To this end the NRC is trying to implement “probabilistic risk assessment” (PRA) for determining which areas of reactor operations are the most critical for safety. PRA uses the operational history of a component or system to determine how likely it is to fail in the future. By primarily focusing on critical areas and ignoring others, the NRC and the nuclear industry hope to reduce the costs of safety regulation. However, a member of an NRC advisory committee expressed the following concerns about using probabilistic risk assessments:

[T]he general argument that the fact that one has operated safely for a finite period of time proves that the safety level is adequate is just not statistically right, because there isn't that much history in the industry. And it's a trap. ... [F]or example, people have used the argument that they had 24 successful Shuttle flights, to show the level of safety was adequate. And in retrospect, after one disaster, it turned out not to be. The Soviets, after Chernobyl, suddenly discovered that the level of safety they had before Chernobyl was not adequate. But the day before Chernobyl they would have said it was adequate on the basis of operating history.¹⁶

Public Citizen views NRC's efforts to “risk inform” the nuclear safety regulations as yet another attempt by the agency and industry to deregulate safety standards based not upon safety but upon cost. NRC's attempt to reduce safety regulation could endanger the lives and property of millions of New Yorkers.

Deregulation Is Threatening the Reliability of the Electric Power System

Electricity deregulation appears to be affecting the reliability of our nation's electric power transmission system (also known as “the grid”), which consists of the high voltage power lines that transmit electricity from power plants to cities and regions where the electricity is used. Reliability refers to the ability of the electric power system to “keep the lights on,” even if power plants break down or storms knock out transmission lines. Grid reliability depends on a well-maintained transmission system and the availability of power from other power plants.

¹⁵ James Riccio, *Amnesty Irrational*, Washington, DC: Public Citizen.

¹⁶ Hal Lewis, Advisory Committee on Reactor Safeguards, Subcommittee on Regulatory Policies and Practices: License Renewal, ACRS-T-1789, March 26, 1990, pp. 153, 154.

For example, for the past several summers electricity supplies have been very tight in the Northeastern United States (and in other parts of the country), especially on hot summer days. So far, the electric power industry has avoided major blackouts (although there have been localized blackouts in New York City, Chicago, and New Orleans due to faulty distribution equipment and poor maintenance). Nevertheless, many industry observers believe the electric power system will continue flirting with major blackouts during the next couple years due to the fact that there are too few power plants, energy efficiency programs have been cut, and transmission line maintenance has been deferred, all due to uncertainties created by deregulation.¹⁷

The Nuclear Regulatory Commission has noted that the safe operation of a nuclear power plant requires a source of power capable of maintaining proper voltages and frequencies, and that the preferred power source is the “off-site power system,” or other power plants connected to the nuclear reactor through the high voltage transmission system. The NRC is concerned that electricity deregulation is threatening the reliability of the “offsite power system,” and is, therefore, threatening the safe operation of the nation’s nuclear power plants.¹⁸

Since the reliability of the electric power system is critical to the safe operation of nuclear power plants, and since deregulation is putting pressure on grid reliability, then deregulation is threatening the safe operation of nuclear power plants.

Deregulation and Aging Reactors Threaten Safety

As with all machines, the components of a nuclear reactor are more likely to fail the longer they are in service. This is particularly true of the “reactor vessel,” the structure at the heart of a nuclear reactor that contains the nuclear fuel as it undergoes fission.

Reactor vessels are exposed to high levels of radiation throughout their lifetimes. Reactor vessels, which are made of steel, become embrittled from exposure to radiation, losing their ductility and their ability to withstand stresses without cracking. If a reactor vessel were to crack, a meltdown of the radioactive fuel would be virtually inevitable.

Unfortunately, the NRC and the nuclear industry has tried for years to hide concerns about reactor vessel embrittlement, because the problem could either require an expensive replacement of the reactor vessel, or could lead to the early shut down of the reactor.¹⁹

Other critical components within a nuclear reactor are susceptible to failure as they get older and are used longer. It is beyond the scope of these comments to describe even briefly all of components of a reactor that must work properly to ensure safety. My point is to remind members of the Assembly that

¹⁷ Tina Davis, “Traders Agree, Summer May Offer Wild Ride,” *The Energy Daily*, June 14, 1999.

¹⁸ See, for example, memorandum from L. Joseph Callan to the Commissioners of the Nuclear Regulatory Commission, regarding Information on Staff Actions to Address Electric Grid Reliability Issues, SECY-97-246, October 23, 1997.

¹⁹ James Riccio, *A Roll of the Dice: NRC’s Efforts to Renew Nuclear Reactor Licenses*, Washington, DC: Public Citizen.

nuclear reactors, like other machines, wear out over time. Thus, the likelihood of a serious nuclear accident increases over time, especially given the inherently complex nature of nuclear reactors. Add to this the increased pressure on costs brought on by deregulation, and the chances for a nuclear accident increase even more.

3. What effect, if any, will such change(s) have on the natural environment in the vicinity of the plants and other parts of the State?

Due to the concerns discussed in Question 2, electricity deregulation is increasing the riskiness of a serious nuclear accident that could result in a large release of radiation in the area surrounding the nuclear plant.

Deregulation will also force the owners of the power plants to produce as much electricity as possible, which will lead to increased production of radiation and radioactive waste. In other words, deregulation will likely lead to more radiation and nuclear waste being produced and stored at the plant. Obviously, the chances of an accidental release of radiation increase with more waste stored on-site.

However, even proposals to move the nuclear waste to Yucca Mountain, Nevada do not resolve safety issues related to nuclear waste. Transporting the waste via truck and train will require over 100,000 shipments through 43 states (including New York), bringing over 50 million people within a half-mile of the deadly waste. With so many shipments the, likelihood of accidents will increase. Therefore, the only real solution to nuclear waste is to stop making it in the first place.²⁰

4. Is there a need for additional state legislative or regulatory oversight of companies operating nuclear power plants in New York State?

Although the federal Atomic Energy Act may pre-empt any attempt by a state to regulate nuclear power plants, New York should make sure the NRC is up to the task of ensuring the safety of nuclear plant operations. New York could do so by participating or intervening in NRC activities, and by making sure Congress is providing adequate oversight over NRC operations. In particular, New York should make sure that the NRC does not allow nuclear plant owners to cut employees, maintenance budgets, and maintenance schedules to levels that threaten the safe operation of a nuclear plant.

New York should make sure that grid reliability problems do not threaten nuclear plants. Toward this end, New York should insist that the transmission system in the State be owned and operated by a non-profit entity that has no affiliations or subsidiaries with any person that sells or markets power. If a company that owns transmission lines also owns (or is affiliated with) power plants and power marketers, they could use their ownership and control of the transmission system to favor their power suppliers, potentially threatening the reliability of the grid itself.²¹ The solution is to create a non-profit agency to own and operate the State's transmission system and to do nothing else.

²⁰ See, for example, *Statement of Joan Claybrook on H.R. 45*, before the U.S. House of Representatives Commerce Subcommittee on Energy and Power, February 10, 1999.

²¹ FERC, note 5, at 43-44.

New York must ensure that there are enough power plants in reserve at all times to ensure grid reliability. If private companies fail to build enough power plants, power plant reserve margins could fall dangerously low, threatening the reliability of the grid and a nuclear power plant's source of off-site power. New York may have to order private companies to build plants to ensure there are adequate reserves of power; or the State may have to build and own plants for the same purpose.

New York should also require that nuclear reactors have larger on-site backup sources of power so that they can remain safely shut down in the event of a loss of off-site power.

New York should greatly expand energy efficiency programs, which can cost-effectively increase the reliability of the electric power system by reducing electricity demand. However, since 1994, most states and utilities have drastically cut back on investments in energy efficiency, leading to increased electricity use accompanied by power shortages, overloaded transmission and distribution systems, voltage reductions, price spikes, and blackouts (such as the blackout in the Washington Heights area of New York City in early July 1999²²).²³ Although the New York Public Service Commission created a "systems benefit charge" to fund energy efficiency programs (and other public purpose programs), the fund will last only three years, and the level of funding will not capture the cost-effective benefits that can be realized by energy efficiency programs.²⁴ Therefore, we recommend that New York provide more support for energy efficiency programs.

New York should provide potassium iodide to those within a 50-mile radius of a nuclear reactor. Potassium iodide is an inexpensive non-prescription drug that would protect the thyroid gland from radioactive iodine 131 released during a meltdown. Although the NRC has known for decades that potassium iodide could prove effective and useful under certain conditions, the NRC has dragged its feet on stockpiling and distributing potassium iodide. New York could make up for this safety shortfall by making potassium iodide available to people living near the state's nuclear reactors.

5. How are the risks of nuclear plant operation and environmental impacts covered in settlement agreements between the State's regulated electric utilities and the Public Service Commission?

Public Citizen was unable to thoroughly review the settlement agreements in order to answer this question.

²² New York Public Service Commission, *July 1999 Consolidated Edison Electric Service Interruptions*, Case 99-E-0930..

²³ Richard Cowart, *Testimony before the Subcommittee on Energy and Power of the Committee of Commerce, U.S. House of Representatives*, October 6, 1999.

²⁴ New York Public Service Commission, "Opinion and Order Concerning System Benefits Charge Issues" Opinion No. 98-3, January 30, 1998.

6. How will the sale of nuclear power plants within the State affect the decommissioning of such plants?

Unfortunately, we did not have enough information about the proposed sales to know how decommissioning of the nuclear reactors will be paid for.

Nuclear utilities have been collecting from their ratepayers funds with which to pay for the decommissioning of their nuclear reactors at the conclusion of their operating lives. New York must ensure that the new owners will have enough money on hand to pay for decommissioning when these plants retire from service.

Several studies have pointed out concerns that utilities may not have been collecting enough money to pay for decommissioning costs, especially if the plants are forced to shut down before the end of the 40-year operating licenses (so far, no nuclear plant has operated longer than 31 years, and one study suggests that as many as 26 plants may be forced to shut down early, including Fitzpatrick, Ginna, Indian Point 3, and Nine Mile Point 1).²⁵

New York should make sure that the new owners are held responsible for all decommissioning costs that will occur when these units shut down. On the other hand, New York should require that any unneeded decommissioning funds are returned to ratepayers, otherwise plant owners could enjoy windfall profits on the backs of consumers.

This concludes my testimony. Thank you for your consideration.

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²⁵ See, for example, U.S. GAO, note 12; Bruce Biewald and David White, *Implications of Early Nuclear Plant Retirements*, Cambridge, MA: Synapse Energy Economics, January 1999.