

New York Power Authority Annual Report for 1984

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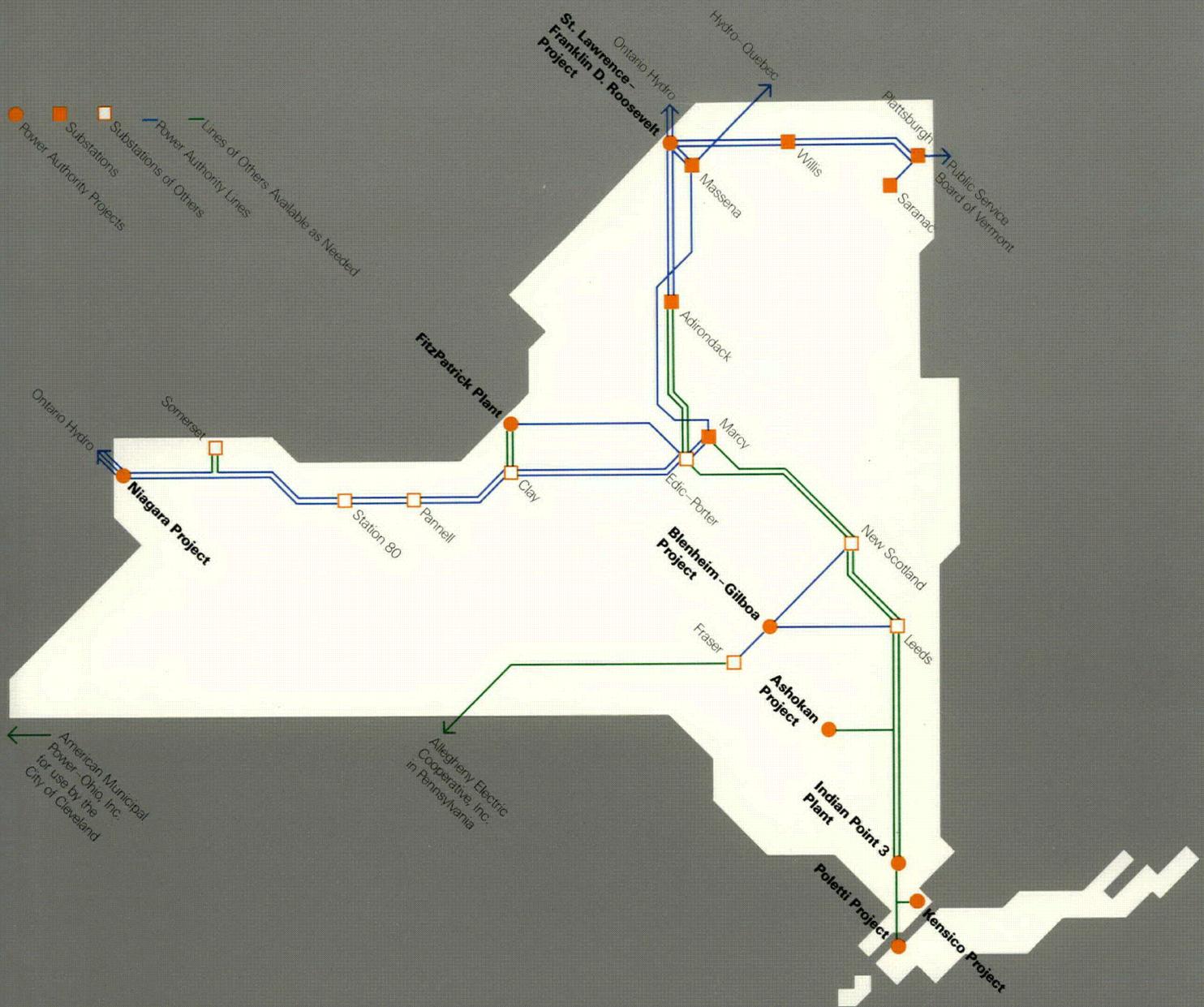
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Power Authority Network



Power Authority Generating Facilities

Project	Type	Net Rated Output-mw	1984 Net Generation-mwh
St. Lawrence-Franklin D. Roosevelt ¹	Hydro	800	7,244,798
Niagara	Hydro	2,400	16,356,818 ²
Blenheim-Gilboa	Pumped Storage	1,000	(1,044,049) ²
FitzPatrick	Nuclear	810	4,899,375
Indian Point 3	Nuclear	965	6,047,226
Poletti ³	Oil/Gas	825	1,487,071
Ashokan	Hydro	3	23,765
Kensico	Hydro	3	15,790
Total Net Generation			35,030,794

¹ Formerly the St. Lawrence Facility

² Net of Pumping Energy

³ Formerly the Astoria 6 Facility

Cover: The fascination of learning by computer is reflected on the faces of sixth-grade students at the Byram Hills Middle School in Armonk. The Byram Hills Central School District is one of the Power Authority's many electric customers.

Message from the Chairman



John S. Dyson
Chairman

When I first came to the Power Authority, I was greatly impressed by the intelligence, creativity and skill of the people who worked here. Now, nearly six years later, as I am about to step down from my chairmanship, I am taking this opportunity to salute their overriding commitment to excellence. In all my years in public life, I have found nothing to surpass it.

The years 1979 to 1984 were six very productive years in Power Authority history. Essentially, we rewrote the record books, both in the amount of electricity we generated from our own plants and projects and in the amount of electricity we provided from other sources. During these years, we were in the forefront of efforts to reduce New York's dependence on foreign oil. We obtained a license to build the Marcy-South facility, a 200-mile transmission line that will provide New York with more affordable Canadian hydroelectricity. We also licensed and built two small hydroelectric projects as part of a series of units that we plan to develop all over the State. As another way of reducing New York's reliance on oil, we conducted the most successful conservation program in the State.

We also filed an application to expand the capacity of our Niagara Power Project, thus adding to a facility that is already the State's single largest generator of electricity. With an eye to the future, we have aggressively sought out and developed alternative technologies, such as an award-winning device that extracts energy from flowing water without the need for dams.

On the financial front, the Power Authority also made significant strides over the past few years. The financial marketplace has recognized the importance of our achievements

by upgrading our credit rating from A to A+.

I take a special personal pride in the inauguration of the "Juice for Jobs" program. Over the past year and a half, this project has helped to create or retain over 11,000 jobs in New York State.

Planning is a key element in the progress the Power Authority has made since 1979. We drew up our first corporate mission statement and corporate strategic plan to establish guidelines for the present and to indicate directions for the future.

To enhance the goals set forth in our planning efforts, we put great importance on continuing our program of responsible and intelligent public communication. Recently, we convened a symposium of energy experts to discuss New York's electric future. The symposium, co-sponsored by Cornell University, was an important part of our campaign to raise the public's energy awareness. This high level of planning and communication is one of our major obligations as an organization.

This symposium, as well as the Power Authority's other educational and community outreach programs, keeps people informed so that they can reach responsible decisions about important energy issues. Through planning and communication on our part—and intelligent decision-making on the part of the public—these children on the cover of our annual report, tomorrow's leaders, will be assured of a brighter, better electricity future.

A handwritten signature in cursive script that reads "John S. Dyson".

John S. Dyson
Chairman

Highlights of the Year

In 1984, the Power Authority provided over one-third of the electricity in New York State. The Authority supplied over 45 billion kilowatt hours (kwh) of electricity from its eight generating facilities and Canadian imports. This surpasses 1983's levels by nearly 5 billion kwh.

Hydropower accounted for 73% of all the electricity the Authority provided during 1984 (51% from its own facilities and 22% from Canadian imports). Nuclear energy provided 24%, while only 3% was generated by burning natural gas and oil.

The Authority's two principal baseload hydroelectric facilities, Niagara and St. Lawrence-Franklin D. Roosevelt, provided about 23.6 billion kwh of energy. The FitzPatrick and Indian Point 3 Nuclear Power Plants generated nearly 11 billion kwh. Since beginning operation, the two nuclear plants have saved more than 5 billion gallons of oil.

Record Year for Power Authority Projects

The Indian Point 3 Nuclear Power Plant in Buchanan set the highest production record ever for a nuclear plant in New York State by producing 6 billion kwh of electricity in 1984. Indian Point also earned the top rating in 9 of 11 areas considered in the Nuclear Regulatory Commission's Systematic Assessment of License Performance (SALP Report), an evaluation of plant operations. Indian Point was also the focus of a series of informal votes in which the Nuclear Regulatory Commission (NRC) indicated support for continued operation of the plant and the adjacent facility operated by Con Edison. The votes came in the final stage of a lengthy process that included public hearings on the

safety of the plants, economics and other issues. A formal NRC decision is pending.

The James A. FitzPatrick Nuclear Power Plant near Oswego established a new record for consecutive days of operation by a Power Authority nuclear facility. The plant operated continuously for 179 days, beginning in 1983, before being removed from service for a scheduled maintenance outage. The FitzPatrick plant earned the top rating in 4 of 9 areas in the NRC's SALP Report. The other five grades were considered satisfactory, the next highest rating.

Emergency preparedness drills were held at both Indian Point 3 and FitzPatrick in 1984. The drills won praise from federal officials overseeing the events.

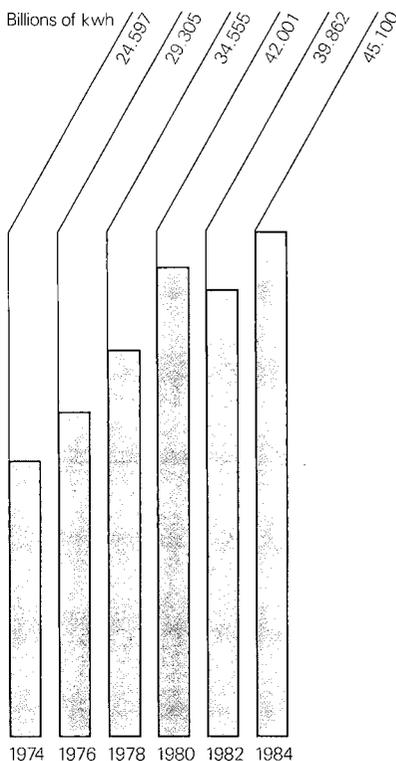
The Blenheim-Gilboa Pumped Storage Power Project generated an all-time annual record of 2.1 billion kwh of electricity in 1984. In July alone, the plant produced over 200 million kwh, surpassing the projected yearly production figure of 181 million kwh when the plant was planned in the 1970s.

Other Operating Highlights

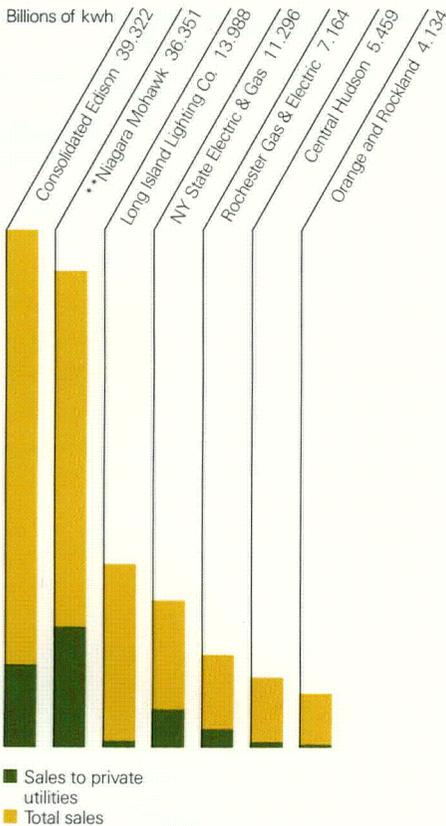
Charles Poletti Power Project—The Poletti oil-and-gas-fueled facility in the New York City borough of Queens generated 58% of its total output with natural gas. Since being equipped to use natural gas in 1980, the plant has saved over \$27 million in fuel costs.

Small Hydroelectric Facilities—1984 marked the first and second calendar year of operation for the Kensico and Ashokan small hydroelectric facilities, respectively. The

Electric energy sales



1984 electric sales to New York State private utilities in relation to each utility's total sales*



*Power Authority sales totaled 26,959 billion kwh, which included 6.053 billion kwh sold to the New York Power Pool (NYPP). The NYPP used this electricity to supply the utilities as needed.

**Power Authority sales to Niagara Mohawk include .094 billion kwh associated with sales to reallocated Expansion Customers.

two plants together produced more than 39 million kwh in 1984, saving the equivalent of 2.8 million gallons of oil. Construction began at the Hinckley facility near Utica, the third in a series of small-scale facilities planned by the Authority across the State. Hinckley, scheduled for completion in 1986, will produce about 32 million kwh annually and save 2.2 million gallons of oil a year.

Marcy-South

In January 1985, the Public Service Commission voted in favor of the Authority's proposed Marcy-South transmission line, which will provide lower-cost Canadian and upstate power to downstate and improve the reliability of its transmission network. The line will allow the Authority to take advantage of a contract with Hydro-Quebec that provides New York with 111 billion kwh of hydropower between 1984 and 1997. The predominantly double-circuit line will traverse about 200 miles from Marcy in Oneida County to East Fishkill in Dutchess County. Construction is expected to begin in the summer of 1985.

Transmission

During 1984, the Power Authority increased its imports from Hydro-Quebec by more than 10% because of the completion of two short 345-kilovolt (kv) transmission links and substation improvements completed by both the Authority and Hydro-Quebec in 1984. The Authority upgraded its Massena and Marcy substations, and Hydro-Quebec added direct-current converters at its Chateaugay substation. These improvements will nearly double the ability of the Power Authority/Hydro-Quebec systems to provide additional Canadian hydropower to New York State. Since energizing its 765-kv line in 1978, the Power

Authority has purchased more than 51 billion kwh of economical Canadian hydropower, saving consumers almost \$500 million. In 1984, the line supplied almost 10 billion kwh, or the equivalent of 696 million gallons of oil.

The Authority also completed the first phase of studies that could lead to the construction of an underwater transmission cable from Westchester County to Long Island. The cable, which would be completed in 1992, would reduce use of expensive oil-fired electricity on Long Island, helping to ease high electric rates.

In addition, the Authority expanded the 115-kv switchyard at the Niagara project to supply a new 115-kv transmission line to Niagara Mohawk Power Corporation's Lockport substation in western New York.

Allocations of Power to Industry

Thirteen hydropower allocations were made in 1984 under the Authority's "Juice for Jobs" program, thus helping to protect or create over 10,000 jobs in western New York. Over \$125 million will be invested by these companies to upgrade their facilities.

Companies receiving allocations from the Niagara project included Amherst Foundry Inc., Ramco/Fitzsimons Co., Trico Products Corp. and the Freezer Queen Division of United Foods, Inc., for their Buffalo facilities. Also receiving allocations were Roblin Industries for its Dunkirk plant; Occidental Chemical Corp. of Niagara Falls; Dussault Foundry Corp. of Lockport; F.N. Burt Co., Inc. of Cheektowaga; O-Cel-O Division of General Mills



Inc. and Dunlop Tire and Rubber Corp. of Tonawanda; Fisher-Price Toys of East Aurora; and Abex Corp. of Medina. In addition, the Authority confirmed a previous commitment to provide Niagara power to Steuben Foods Inc. for use in a new plant in Elma and transferred a Niagara allocation from the Upson Co. of Lockport to a successor company, Domtar Inc.

Also in line with the "Juice for Jobs" program, Power Authority trustees approved contracts for the sale of economical nuclear power from the FitzPatrick plant to the Shearson Lehman/American Express Co. in New York City and the Grumman Corp. on Long Island. These allocations will result in the companies' investing over \$300 million in New York State and employing 2,500 people.

Permits

The Power Authority applied for federal and State approval of a major expansion of the Niagara project. The applications to the Federal Energy Regulatory Commission and the State Department of Environmental Conservation (DEC) contain detailed plans to add 510,000 kilowatts of capacity at Niagara. The expansion could begin in the spring of 1986 and be completed in 1991 if an amendment to the project's license and other approvals are issued by the fall of 1985.

The Power Authority's small hydroelectric expansion program continued to move forward in 1984. The Authority received federal licenses for expansion of existing hydroelectric facilities at Crescent and Vischer Ferry Dams. The Authority also applied for a federal license to build a project at Delta Dam and Reservoir in Oneida County and in Waterford near Albany.

In April, the Appellate Division of State Supreme Court upheld the DEC's denial of water quality certification for the proposed Prattsville Pumped Storage Project. In September, the State Court of Appeals denied a Power Authority motion for further appeal. The Authority, in cooperation with the DEC, is considering changes in the project design to alleviate environmental concerns.

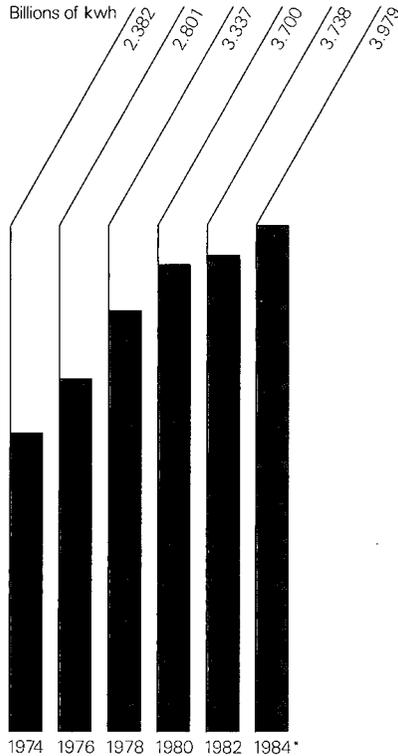
Research and Development

The Power Authority announced plans to install a 20-kilowatt Kinetic Hydro Energy Conversion System (KHECS) in New York City's East River in the spring of 1985. KHECS, which will resemble an underwater windmill in operation, extracts energy from flowing water without the need to build dams. The imaginative concept won a New York State Governor's Award in 1984 and was among the winners in the U.S. Department of Energy's National Awards Program for Energy Innovation.

Tax Law Amendment

A 1984 amendment to the federal tax law will enable the Power Authority to sell up to \$625 million of tax-exempt bonds to finance such projects as the Marcy-South transmission line, small hydroelectric facilities and the underwater cable to Long Island. The amendment will enable the Power Authority to sell the electricity from such projects to investor-owned utilities for the benefit of their customers. Previous tax restrictions significantly limited the amount of electricity which could be sold to investor-owned utilities.

Electric sales to municipal systems and rural electric cooperatives



*Includes out-of-state sales to Allegheny Cooperative of .539 billion kwh.

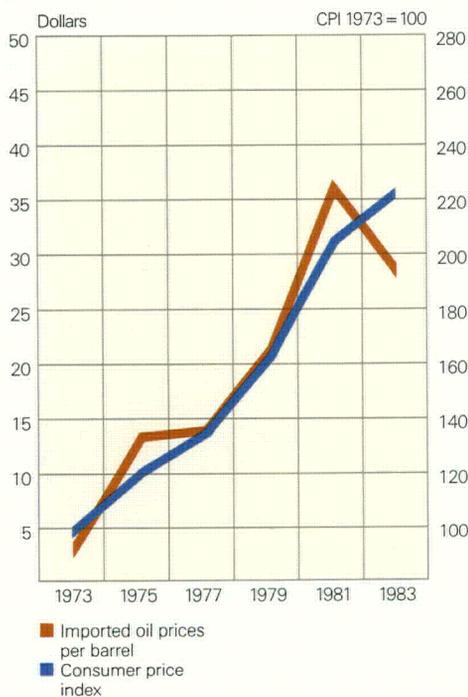
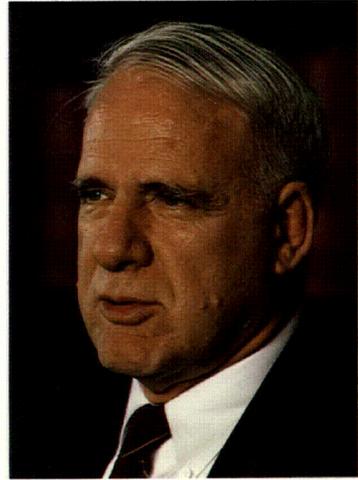
New York's Electric Future



The Energy Crisis and Its Aftermath

“Because of complacency, the seeds of an energy crisis are being laid at this time. The United States, indeed, goes through periods of complacency followed by periods of panic.”

James R. Schlesinger
Shearson Lehman/American Express



The sharp rise in oil prices since 1973 has contributed to spiralling consumer price levels in the United States.

In 1973, a series of events, amounting to a kind of energy revolution, rocked the economies of the free world. Consisting of oil price hikes and production cuts, these events wrenched the world out of the era of cheap energy and into a period of agonizing financial, social, industrial and political readjustment. The series of events was, of course, the energy crisis, and the saga of price hikes and production cuts characterizing it went something like this: In September 1973, a barrel of typical Persian Gulf oil cost \$1.77. In October 1973, that same barrel's price had almost doubled to \$3.50, and its price doubled again in January 1974. By 1978, oil seemed to have leveled off at about \$14 a barrel, but the end of that year held rude price shocks in store. The cutoff of Iranian exports beginning Christmas 1978 incited yet another spurt in prices that topped out only in 1981 when imported oil sold at an all-time high of about \$37 a barrel.

The energy crisis was so detrimental because oil was the primary fuel powering the industrial economy. As the price of oil rose dramatically,

industrial output suffered and profitability sagged. While other factors besides oil prices influenced inflation, the years between 1979 and 1981, the depths of the energy crisis, were also some of the worst years for inflation the country has ever known.

Energy Symposium

To discuss the energy crisis and its implications for New York State's electric supply system, the New York Power Authority and Cornell University convened a two-day symposium of thought leaders in New York City. Speakers included a Nobel Prize-winning economist, a prominent U.S. Senator, leading experts on the utility industry and distinguished university professors. The Power Authority made every effort to present a balanced appraisal of New York's energy situation, so environmentalists, utility officials, economists, legislators, regulators and government leaders were represented, both as speakers and as members of a very dynamic audience.

Effects of the Energy Crisis

During the symposium, Nobel Prize Laureate Dr. Lawrence Klein cited some of the adverse consequences of the energy crisis. Most critical among its many costs were "a growth slowdown for the last 10 years with significant recessions, a rise in inflation, a decline in the rate... of labor productivity and a threat to world financial stability." Rebounding economic growth and lower inflation indicate that the U.S., at

original Secretary of Energy, sees in such attitudes the onset of terminal complacency: "...those things that are beneficial in the short run tend to contribute to the longer run problem.... In periods of complacency, we are most reluctant to incur costs in the short run for longer term benefits." Synfuels development, alternative technologies research and improved conservation measures—all beneficial long-term investments in energy security—have suffered from the complacency in which the U.S. is now immersed.



The threat of fuel shortages made gas lines a common sight during the 1970s. Will America's rising energy consumption cause history to repeat itself?

least, is emerging from some of the worst effects of the energy crisis. The threat to world financial stability, however, as evidenced in the collapse of Penn Square Bank and the monumental debt of some Third World countries, demonstrates that the oil crisis has probably not yet run its full course.

In every conceivable way, then, the energy crisis was a period of wrenching adjustment for the nation. Today, however, with rising oil imports, increased petroleum consumption and falling oil prices, many think the energy crisis has disappeared. Dr. James R. Schlesinger, former Secretary of Defense and

New York's Electric Future

Many speakers at the symposium believed that New York is perhaps less complacent about its energy future than elsewhere. On most levels, there is an acute awareness of the State's continuing heavy dependence on oil—particularly for the generation of electricity.

While a New Yorker didn't discover electricity, New York State did lead the way into the age of its commercial production and mass consumption. Today, the New York Power Authority, along with the investor-owned utilities, is hard at work to make sure that the Empire State retains its innovative position in this critical area.

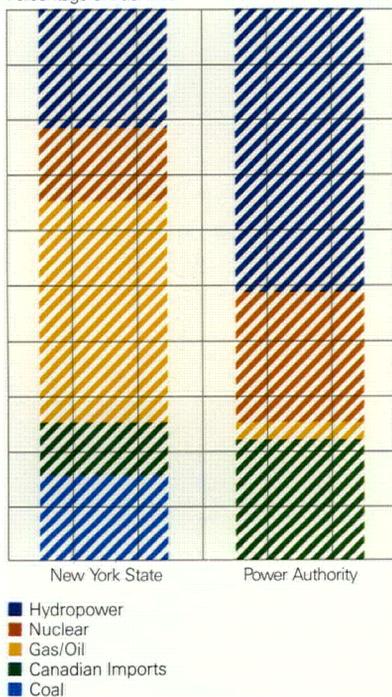
Innovation in the way we produce, distribute and use electricity is essential to the economic well-being of all New Yorkers. Increased pumped storage capacity, more hydropower and better transmission facilities are a few of the ways in which the Power Authority is working to give New York a more affordable, diversified and secure energy mix.

“The overall energy situation in New York is like a good news/bad news joke. The good news is that we’ve improved a whole lot on almost all fronts over the last seven or eight years. The bad news is that we’ve still got a long way to go.”

William E. Davis
New York State Energy Office



Percentage of Fuel Mix



Only 3% of the Power Authority's electric supply comes from gas and oil.

New York's electric power supply system consists of eight major interconnected utility companies, seven of which are investor-owned. The eighth, the New York Power Authority, is the largest state-owned electricity supplier in the U.S., providing over one-third of all New York's electric needs. Among the strengths of New York's system are its transmission network, which allows it access to substantial amounts of Canadian electricity, and hydroelectric generation about twice the national average. The chief weakness of the system is that it is five times more dependent on imported oil than the national average. Largely due to this significant oil dependence, four of the nation's eight most expensive electric utilities are located in New York State, and their customers pay electric bills that are about 50% higher than the national average.

New York's Capacity Situation

As the chart indicates, New York State derives its electricity from a variety of fuels. Its 273 power plants

range in condition from state-of-the-art to antiquated. According to Lester Stuzin of New York State's Public Service Commission, 25% of New York's fossil generators are over 30 years old.

Many of these older plants, particularly the inefficient or oil-burning ones, are used as reserve, i.e., capacity not used to meet ordinary demand, but reserved to assist during electrical emergencies and periods of extremely high loads. At present, New York has about 40% excess capacity, but much of it is of the type the State would rather not operate.

An Impending Capacity Crisis?

It is the consensus of the utility industry that it now takes 10 to 15 years to build a power plant, i.e., to go from concept to operating facility. John S. Dyson, chairman of the New York Power Authority, voiced the sentiments of many in the electric industry when he said, "If you tell me today... I'm to build a coal

plant 10 years from now, I can just barely get it there by 1995... just barely can I do that, starting right this minute." This contrasts with a decade like the 1950s when a plant could go from licensing application to power production in as little as four or five years.

Given the protracted time frame for new capacity, some symposium participants warned of an impending capacity crisis, due to rising demand and inadequate or unusable reserves. Such a crisis could take place as early as the mid-1990s, when forecasters predict energy demand increases that range from a low of 1.4% to a high of 4.5%.

The Power Authority's Capacity

Some of Mr. Davis's recommendations to avoid a future capacity crisis

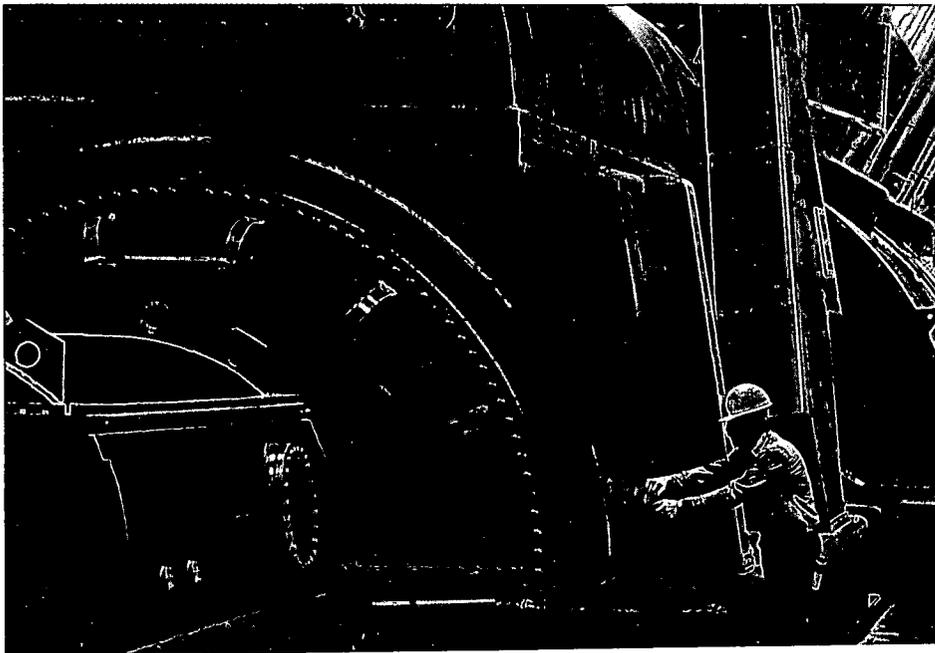
ber 1984, a contract between the Power Authority and Hydro-Quebec, a Canadian provincial utility, went into effect. It will provide the State with 111 billion kilowatt hours of electricity between 1984 and 1997. In order for consumers to derive the greatest benefit from these purchases, the Authority has obtained Public Service Commission approval to build a new double-circuit transmission line that will improve the reliability of the entire transmission system while providing affordable electricity to all sections of the State.

In the area of power production from small units, the Authority has been an active proponent of small hydroelectric development. It now has two plants in operation, one plant under construction and four in various stages of the application or licensing process.

Thus, the Power Authority continues its commitment to meet New York's energy needs from a variety of fuels to prevent excessive reliance on a single source. For example, the Authority maintains its hydroelectric preeminence in the form of its St. Lawrence-FDR and Niagara Power Projects, which between them represent over 3,000 megawatts of installed capacity and roughly 20 billion kilowatt hours of electricity a year for New York State. In addition, the Authority will continue to generate electricity from its two nuclear power plants and from its single fossil-fuel facility while meeting periods of peak demand through its pumped storage hydroelectric project. Reliable electricity at reasonable prices from a diversity of fuels—this is the Power Authority's present... and its pledge for the future.

have been carried out by the New York Power Authority. The Authority has been especially active in small hydropower production and in improvements to the transmission system that would enable New York to make optimum use of Canadian electricity. For example, in Septem-

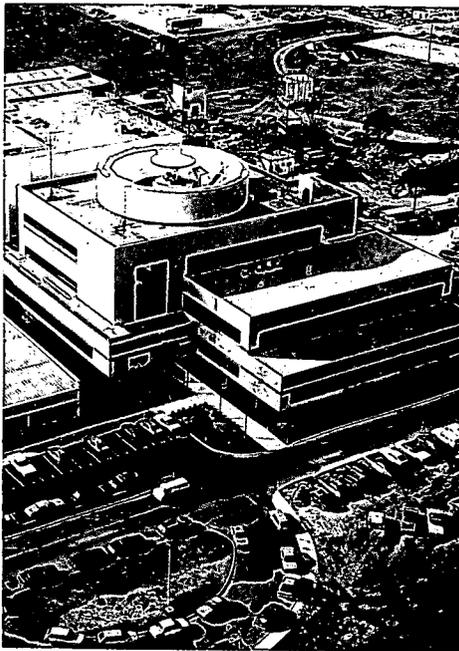
The electric supply system has changed drastically since the days of Thomas Edison. Turbine-generators such as the one below, however, are still basic to the production of hydro, nuclear and fossil-fueled electricity.



Economic Growth and Electric Demand

“It is possible that output could grow much faster than 3% in the nation, and even faster than that in New York State. That would mean higher demands on electricity use and on energy in general.”

Dr. Lawrence R. Klein
Nobel Laureate for Economics
University of Pennsylvania



An allocation of low-cost Power Authority electricity enabled the Grumman Corporation to expand its facilities on Long Island, above, and to create 1,000 new jobs for New York.

The energy crisis forced the United States to take a long, hard look at its way of life. Wasteful energy practices abounded: Americans drove gas-guzzling cars, left lights on day and night, and blasted heaters and air conditioners while not at home. Conservation to many people was synonymous with extreme hardship, and programs like the home energy audit simply did not exist. But America adjusted, redesigning cars and aircraft, lowering thermostats and speed limits, and searching for new energy supplies. Today's challenge is to maintain these habits in a time of lower oil prices and renewed economic growth.

At the symposium, forecasters predicted a robust economic outlook for the U.S. in general, and in particular for New York State. This is especially significant because in the past, New York's growth has been at a fraction of the national level. The outlook for New York's growth prospects has become considerably brighter largely because of the State's skilled labor force. According to Dr. Nancy E. Meiners of Wharton Econometrics, New York has the

potential of becoming a mini-Silicon Valley. Companies like IBM, Kodak and Xerox are prospering here, while other companies, drawn by New York's reputation as a source of skilled labor, are considering relocating to the State.

Many at the symposium, including Dr. Klein, saw an even brighter economic outlook for New York State: "In the 1970s, New York State grew less fast than the nation. New York, however, is coming up to the nation in growth during the 1980s and possibly exceeding the nation in the 1990s."

The Economy and Electric Demand

Indeed, as the statistics attest, a strong relationship exists between economic activity and electric demand. This relationship can be expressed almost as a simple formula. When economic activity rises, the demand for electricity rises. When economic activity declines or falters, the demand for electricity

Mini-Silicon Valleys, right, springing up all over New York, augur a high-growth future for a high-tech State.



Gross State Product and electric demand have grown on a one-to-one basis over the past 10 years.

declines or falters. The Gross State Product is an example of this fact. Over the past decade, Gross State Product in New York has risen at a rate of 1.7% while demand for electricity has risen at 1.6%; in other words, the two have risen on a one-

tighten its belt in times of crisis, it returns to slack complacency in prosperous times. In his warnings about complacency, Dr. Schlesinger echoed Arthur K. Watson, son of the founder of IBM, who once remarked that most business failures arise out



to-one basis. Nationwide evidence further supports this finding. An article published in the Electric Power Research Institute's *EPRJ Journal* states that over the last 80 years, data establish that economic growth and increasing electric demand go hand-in-hand.

Can Complacency Lead to Crisis?

It was the consensus of the symposium speakers that by the early 1990s, with such healthy economic activity and increasing electrical demand, the country as a whole could experience serious electrical shortages. Dr. Schlesinger mentioned several reasons for a scenario of impending crisis, including the political volatility of the Middle East and the West's present practice of exhausting its own oil reserves.

What becomes evident, then, is that although the country can

of good times, not bad ones. Because good times make people more self-satisfied, it is then that we sow, according to Watson, "the next bumper crop of bankruptcies."

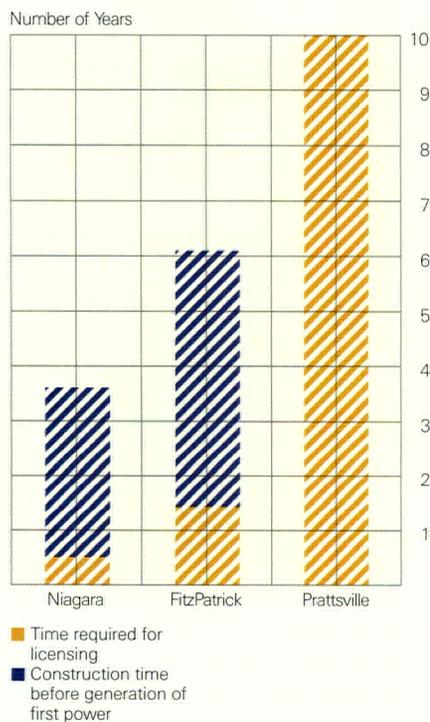
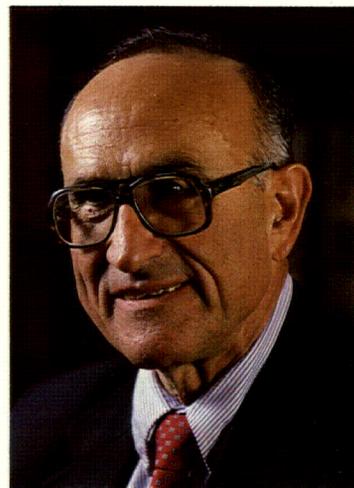
Assured, Affordable Electricity

The New York Power Authority is not complacent. It realizes that the State cannot operate at greatest efficiency or compete for further growth without assured supplies of affordable energy.

By continuing to develop its high-quality electrical system and the State's own energy resources, the Authority is helping to attract the vital industries of future America. It is this commitment to a reliable energy supply that will make the potential benefits of a growing New York an assured reality.

“There is a whole complex of regulatory procedures that...are fundamentally irrational in terms of economics and regulation but are still with us today.”

Dr. Alfred E. Kahn
Cornell University



Due to the general economic prosperity of the 1950s and 1960s, the regulatory process worked, as Niagara and FitzPatrick indicate. In the 1970s, a different climate prevailed, as Prattsville shows.

Governmental regulation of the electric utility industry began early in New York State. In 1907, responding to a growing public concern about “natural monopolies,” the State Legislature established a Public Service Commission (PSC), the first in the nation, to control the industry. Much of that early level of regulation was concerned with rates; later, a new set of rules governing power plant licensing and construction appeared at both federal and State levels. The last major expansion of the PSC’s domain occurred in the 1970s when environmental controls were introduced as Article VII and VIII Amendments to the Public Service Law.

Today, the PSC oversees the rates, operations and construction plans of the State’s seven investor-owned utilities. In contrast, although the PSC has jurisdiction over the Power Authority’s plans for thermal power plant and transmission line construction, it does not regulate Authority rates and operations, which are internally controlled by a board of trustees appointed by the Governor and approved by the Senate.

The Lengthy Licensing Process

During the 1950s and 1960s, the heyday of both low electric rates and power plant construction, the regulatory process worked, said symposium speakers, due to the general economic prosperity of those years. When these circumstances reversed themselves during the 1970s, a great many seemingly successful regulatory procedures became, in the words of Dr. Alfred E. Kahn, renowned economist and former PSC Chairman, “counterproductive.” They resulted in lengthy delays that the consumer ultimately paid for in his monthly utility bill.

In building its own facilities, the Power Authority has had direct experience with the licensing process on both a State and federal level over the past 30 years. In the 1950s, for example, it took six months to obtain a federal license and four years to build the Niagara Power Project, then the Western World’s

Since beginning operation in 1975, the Power Authority's FitzPatrick plant, right, has saved New York the equivalent of more than 68 million barrels of oil.

Due in part to the regulatory climate, below, no New York private utility plans a major new building program in the 1980s.



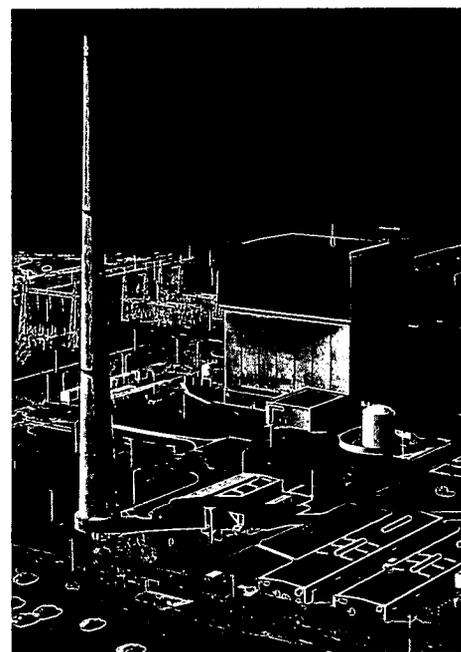
largest generator of electricity. In the 1960s, in an equally expeditious fashion, the Authority prepared the license application for the Blenheim-Gilboa Pumped Storage Power Project in only three months; it obtained the license in ten months and took four years to construct the one million-kilowatt facility. In the same decade, the Authority applied for a license to build its James A. FitzPatrick Nuclear Power Plant; a permit was issued in 17 months, and the plant began commercial operation five years later.

In the 1970s, a different climate prevailed as it became increasingly difficult for utilities to get permission to build power plants of any sort. During this decade, for example, the Power Authority applied for a federal license to build a new pumped storage project, known as Prattsville, but it did not obtain the necessary permission until more than ten years later. Even then, the federal license was contingent upon obtaining a State water quality certification. Application for this certification began in 1977 and has still not been received. Symposium speakers feared that unless this trend is reversed, it could become almost impossible to license and build power plants to meet future public need.

Necessary Changes

It was the consensus of the participants that changes must be made in the process under which power plants are financed, licensed and built. "Primary among these," said Leonard Hyman of Merrill Lynch Capital Markets, "is that there has to be agreement between the utility and its regulators that new capacity is needed." Dr. Richard E. Schuler of Cornell mentioned the possibility of the State's acquiring a band of acceptable sites for power plant con-

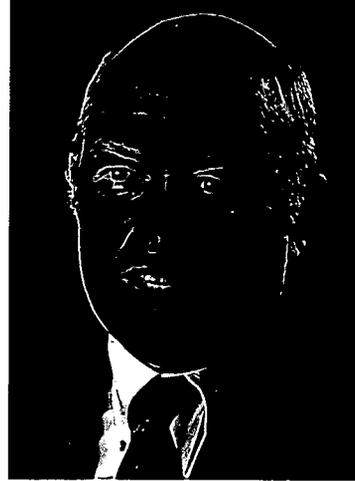
struction. Such a measure would assure PSC-industry accord and remove some of the risk of capital investment. Dr. Kahn advocated a faster licensing procedure and a more active role for regulators in the decision-making process, while Dr. Charles G. Stalon, a commissioner on the Federal Energy Regulatory Commission, favored wholesale reforms in the "adversarial" system under which decisions are reached. Finally, Power Authority President



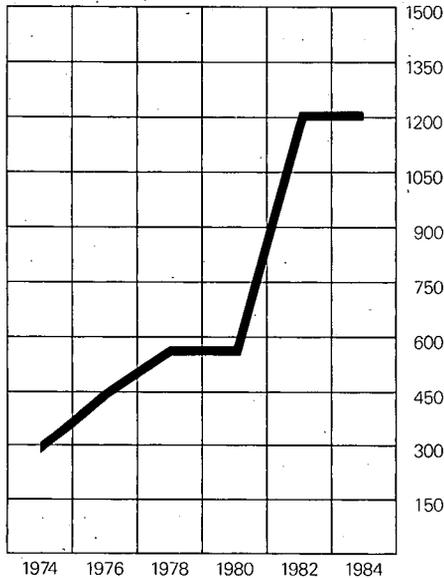
Leroy W. Sinclair urged the State to seize the financial rest period that utilities would probably have over the next few years as an opportunity for tremendous regulatory reform. By streamlining its regulatory structures, New York State could be propelled into the leadership position it enjoyed at the beginning of the century when the State led the nation, first into the age of mass-produced electricity and then into the imposition of pioneering controls over the industry in the interest of public good.

“One thing we must recognize—investors don’t have to invest in New York State, or even in electric utilities generally for that matter, if they perceive that the regulatory, political and financial climate is not attractive.”

Philip C. Kron
Citibank



Construction Cost per Kilowatt in Dollars



Between 1971 and 1974, the average nuclear plant construction cost per kilowatt was \$313. From 1981 to 1984, that figure increased by almost 300%.

With the possible exception of the federal government, no other entity on earth has as great an appetite for funds as the electric utility industry. Since electric utilities reach out to so many sources in their search for funds, their financial condition affects America in ways even more profound than the provision of lights and energy. It is no exaggeration to say that the success with which many Americans work, enjoy, retire and invest depends to a great degree on whether utility ledgers are written in black or red.

Capital Minimization

In recent years, the financial condition of some electric utilities has compromised their access to the capital market. Faced with the possibility of losing access to that market entirely, many utility executives have opted to “defer” major construction rather than to risk financial and regulatory rebuff. In many cases, this absence of action has been perceived positively by investors, and has been elevated to the status of a kind of corporate policy. As Dr. Schlesinger

observed, “Utilities, faced with regulatory problems, faced with a dilution of capital of their stockholders ... have been indulging in what is referred to as a strategy of capital minimization, of avoiding commitments that force them into the capital markets, avoiding commitments that may expose them to criticism from the regulatory bodies.”

Leonard Hyman spoke for the investment community and many of the electric companies themselves when he said, “We see little incentive under the current system for the utilities to do more than make minimal investments to keep the system going...”

Dangers of Capital Minimization

Dr. Schlesinger cited an additional danger of capital minimization. The utility industry could develop an intolerance for prosperity since good times inevitably lead to increases in the demand for power. However, electric utilities, particularly in New York State, may soon have to cope

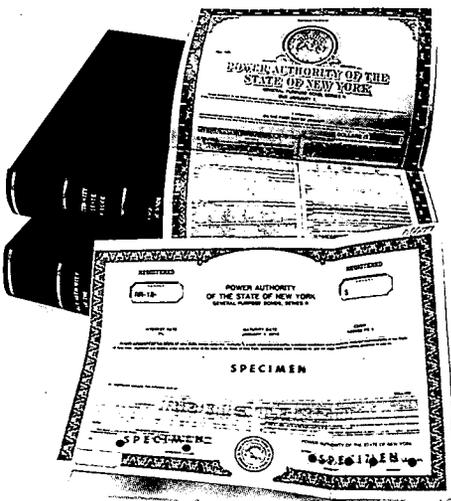
with high levels of prosperity in the economy and hence with growth in electrical demand. According to the assembled speakers and experts, the period of respite remaining to the utilities offers them an ideal opportunity for significant accounting and regulatory reform.

Such reform is essential to the utility industry, especially in New York State because, as Mr. Hyman observed: "The only way commercial banks can continue to support the industry is by having confidence that utility securities remain attractive investments to investors who do have choices. . . . This means that New York utilities must remain financially viable so that the State is assured of adequate supplies of power."

attractive as investments, but may fail to meet their fundamental responsibility to the next generation of electricity consumers.

Among the electric utilities, the Power Authority continues to enjoy a sound financial position that enables it to build financially prudent projects. The Authority's financial viability has been recognized by the investment community. New York Power Authority bonds, rated A1 by Moody's and A+ by Standard and Poor's, compare favorably with bonds that are rated double A.

The safety of its financial outlook, as well as the more promising economic outlook for the State as a whole, gives the Power Authority ready access to the capital market. In



New York Power Authority bonds, above, rated A1 by Moody's and A+ by Standard and Poor's, compare favorably with bonds that are rated double A.

Staff members of Goldman, Sachs & Co., right, price the Power Authority's General Purpose Bonds, Series R, which were issued in October 1984.



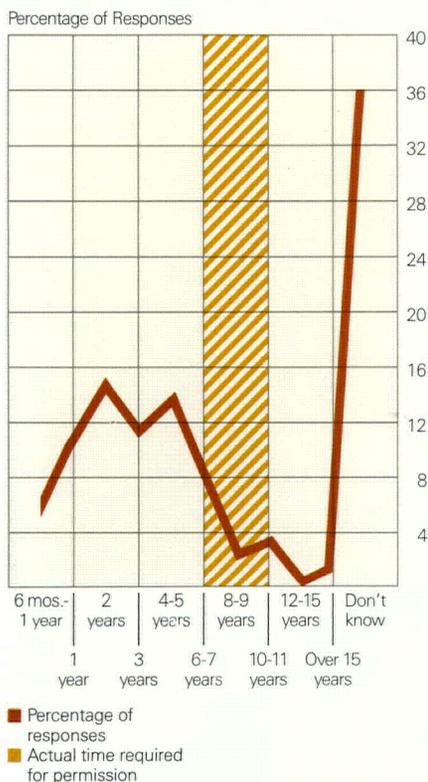
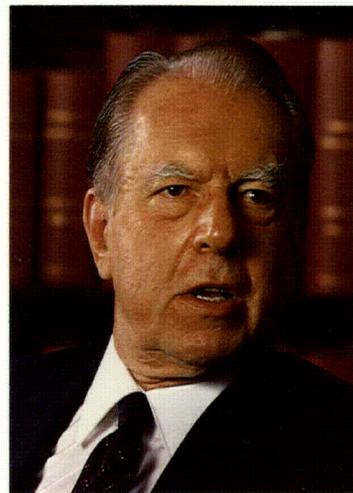
To Build or Not to Build

To build or not to build—such is the electric utilities' dilemma. If they risk building to meet future demand, utilities open themselves up to a whole host of adverse circumstances that range from regulatory rebuff to, in the most extreme cases, possible bankruptcy. If they choose not to build, utilities become

the process of financing its facilities, the Power Authority has exhibited a uniform character for cost-effectiveness and competence that have made it a leader in the electric utility industry.

“People are rightfully taking a more active role in the political process. They’re demanding to be let in on the decision-making that determines the outcome of issues affecting their lives.”

Robert T. Stafford
U.S. Senator



It takes 6 to 10 years to get permission to build a power plant in New York State. In a recent poll, however, more than half the respondents thought that licensing was a less lengthy process.

Time was, not too long ago, that the American people elected someone to represent them in the political arena, and were content with the workings of their representative democracy. That time is no longer.

The rise of environmental groups and anti-war protestors over the past 20 years has contributed to the emergence of an extremely activist citizenry. At the same time, television, satellites and the silicon chip have fomented a communications revolution that has given Americans unprecedented access to the information on which high-level decisions are based.

Participatory Democracy

The outcome of all these events has been, according to John Naisbitt, author of the influential book *Megatrends*, a discontent with the indirect processes of representative democracy. The resultant shift toward participatory democracy is motivated by the belief that citizens are the best initiators of political action and that their direct participation in the political process is the best safeguard of public interest.

The movement toward participatory democracy comes from the public's demand for accountability—not only from government but also from the businesses that affect their lives. The fortunes of electrical utilities, for example, have been determined to a great degree by the public's outcry for responsiveness to its concerns. The formation of Citizens Utility Boards (CUB's), the growing belief in an inalienable "right" to electricity regardless of ability to pay, the increasing number of anti-nuclear initiatives at the ballot box—all show how the burgeoning of direct democracy affects an electric company's ability to operate. John Dyson summed up the implications of this trend at the symposium: "Everything the utilities do is unwelcome. But people absolutely expect, as a matter of simple assumption, that electricity will be there when they throw the switch."

Public Attitudes

A recent survey conducted in New York State underscores the difficulty of reaching an informed decision given widespread public misperception of the central facts. As the chart indicates, only 9% of all respondents could correctly answer the question about the length of time it takes to get permission to build a power plant. Thirty-two percent of

public does not think supply is a problem; they think there's the money plus the time, and they also think that new technology down the road will be a fix-all." Such lack of understanding does not bode well for the long-range planning prospects and construction programs of New York State utilities.

The Duty to Inform

The "behind closed doors" corporate and governmental practices of the past are becoming ever less acceptable in today's participatory democracy. Since public opinion increasingly influences the political process, institutions have more responsibility than ever to give people the information they need to make an enlightened decision. It is for this reason that the New York Power Authority not only surveys public opinion; it also works to inform the public about its objectives and activities.

Through this symposium and its many community outreach programs, the Authority also endeavors to present the full complexity of the issues that affect the electric future of New York State. By showcasing some eminent speakers and their ideas in this annual report, the Power Authority hopes to give the people of New York State yet another tool for making informed decisions on some of the critical energy issues that lie ahead.



In public meetings, the Power Authority actively reaches out to citizens with information on which they can base their energy decisions.

those queried believed that it took two years or less (as opposed to an actual time frame of six years or more), and 36% could not even answer the question.

By misunderstanding the length of the licensing process, the public also shows that it is unaware of an important reason for high rates and heedless of the possibility of future supply shortages. Due to these fundamental misconceptions, the people of New York State simply do not perceive supply problems or potential electricity shortages as motivating political issues. At the symposium, Dr. Steve Barnett from Planmetrics, Inc. pointed out, "If we look at supply, demand and siting as three critical issues, the



Financial Statements

**Power Authority
of the State of New York**

Revenue received during 1984 totaled \$1,358,999,000, a new high for the Authority. The revenues consisted of \$1,275,858,000 from the sale of power, transmission and wheeling and \$83,141,000 of earnings on investments. Of these revenues, \$1,017,840,000 was allocated to the Operating Fund for operating expenses and fuel. A total of \$16,536,000 was deposited in the Projects' Study Fund for research expenditures to determine appropriate methods to fulfill the purposes of the Authority. Interest of \$207,205,000 was paid from the Bond Service Account. In addition, \$29,872,000 was paid to retire \$36,040,000 principal amount of General Purpose Bonds and \$30,759,000 was deposited in the Bond Reserve Account to meet bond resolution requirements. During the year, \$88,800,000 was deposited into the General Reserve Account.

On October 4, 1984 the Authority sold \$350,000,000 General Purpose Bonds, Series R. These bonds were sold to provide funds to pay a portion of the cost of construction of the Marcy-South Transmission Line Project, the FitzPatrick and Indian Point 3 Improvement Projects No. 1 and No. 2, and the Small Hydroelectric Development Project No. 1. These bonds bring the total amount of bonds issued under the General Purpose Bond Resolution to \$3,435,425,000, of which \$2,716,590,000 remain payable from revenues of the Authority. The Series R Bonds were rated A1, A+ by the major rating services as are all the outstanding Authority bonds except all series of Revenue Bonds and the Series C General Purpose Bonds, which were refunded by the Authority and will be paid in accordance with their terms from U.S. Treasury Securities irrevocably deposited with an escrow agent. These bonds are rated AAA, the highest possible rating.

During 1984 the balance of the short-term notes issued for fuel were repaid. There remains \$80,000,000 of notes outstanding for construction purposes at December 31, 1984.

In June 1984, the Authority authorized an expansion of the Niagara Project and withdrew \$150,000,000 from the General Reserve Account for deposit in the Niagara Project Expansion Construction Fund to pay a portion of the estimated \$584,000,000 construction cost of the expansion. The Authority expects to pay the entire amount from available revenues.

As a result of a Federal Energy Regulatory Commission decision, in October 1982 the Authority provided \$42,400,000 for a refund of revenues to certain customers. However, in April 1983, the Commission modified its earlier decision and determined that the Authority is not required to make such refunds. On August 15, 1984, the U.S. Court of Appeals, Second Circuit, upheld this portion of the April ruling. Accordingly, this provision for refund is no longer required and was eliminated on June 30, 1984.

Indian Point 3's better-than-anticipated operating performance during 1984 enabled the Authority to rebate \$11,100,000 to its Poletti and Indian Point 3 customers. Additional savings also accrued to these metropolitan New York City area customers through a reduction in the amount of the monthly energy adjustment component of their bills.

Projections of expenses at the Authority's facilities, bond service and reserve requirements and amounts necessary for operating reserves indicated that no increase in revenues would be required for 1985. Thus, there has been no increase in the rates established for customers served from the James A. FitzPatrick plant and the Blenheim-Gilboa pumped storage facility since 1982 and from the Poletti and Indian Point 3 plants since 1983. Rates to customers served by the Niagara and St. Lawrence-FDR plants have remained unchanged since the reduction retroactive to January 1, 1982.

The Authority's audited financial statements reported on by our independent certified public accountants, Arthur Young & Company, follow.

Balance Sheet

December 31, 1984

(In thousands)

Assets

Utility Plant:

Electric plant in service		\$3,170,684
Less accumulated depreciation		(776,830)
		<u>2,393,854</u>
Construction work in progress		164,648
Nuclear fuel less accumulated amortization of \$131,942		257,274
		<u>2,815,776</u>

Funds Held by Bond Trustee:

Cash	\$ 60	
Investment in U.S. Government securities, at cost	443,739	443,799

Construction Funds:

Cash (including time deposits)	1,417	
Investment in U.S. Government securities, at cost	564,462	
Interest receivable on investments	15,532	581,411

Current Assets:

Cash	748	
Investment in U.S. Government securities, at cost	347,375	
Interest receivable on investments	20,229	
Receivables—customers	63,571	
Materials and supplies, at average cost:		
Plant and general	31,424	
Fuel	22,993	
Prepayments and other	4,576	490,916

Deferred Charges and Other Assets:

Preliminary investigations	27,233	
Unamortized debt expense	38,951	
Nuclear fuel disposal costs (Note I)	8,874	
Other	8,161	83,219

Total Assets

\$4,415,121

Liabilities and Capital

Long-term debt (Notes E and F)		\$2,669,735
Accumulated net revenues		1,351,775
		<u>4,021,510</u>

Current Liabilities:

Notes payable (Note G)	\$ 80,000	
Accounts payable and accrued liabilities	119,469	
Customer advance billings	47,182	246,651

Deferred Credits and Other Long-Term Liabilities:

Nuclear fuel disposal and decommissioning (Note I)	95,388	
Deferred revenue	51,572	146,960

Commitments and contingencies (Note J)

Total Liabilities and Capital

\$4,415,121

The accompanying notes are an integral part of these financial statements.

Statement of Net Revenues

Year Ended December 31, 1984

	(In thousands)
Operating Revenues:	
Power sales	\$ 982,009
Transmission charges	49,439
Wheeling charges	188,771
Total Operating Revenues	<u>1,220,219</u>
Operating Expenses:	
Operations	175,159
Nuclear fuel	82,657
Fuel oil and gas	80,036
Purchased power—Hydro-Quebec	265,268
—Others	1,967
Maintenance	81,054
Wheeling	188,771
Depreciation	76,614
Total Operating Expenses	<u>951,526</u>
Net Operating Revenues	<u>268,693</u>
Other Income:	
Interest	86,318
Other	1,097
Total Other Income	<u>87,415</u>
Other Deductions:	
Interest on long-term debt	209,024
Interest on notes	5,030
Interest capitalized	(27,368)
Amortization of debt discount and expense	3,186
Total Other Deductions	<u>189,872</u>
Reversal of provision for refund of revenues (Note H)	166,236
	<u>42,400</u>
Revenues, net before bond retirements at less than principal amount	208,636
Bond retirements at less than principal amount (Note E)	6,168
Net Revenues	<u>\$ 214,804</u>

Statement of Accumulated Net Revenues

Year Ended December 31, 1984

	(In thousands)
Accumulated Net Revenues at January 1, 1984	\$1,136,971
Net Revenues	214,804
Accumulated Net Revenues at December 31, 1984	<u>\$1,351,775</u>

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Financial Position

Year Ended December 31, 1984

(In thousands)

Funds Provided by:

Net revenues		\$214,804
Items not affecting funds:		
Provision for depreciation		76,614
Amortization of nuclear fuel		58,311
Provision for spent nuclear fuel disposal and nuclear plant decommissioning		29,582
Provision for deferred revenues		31,507
Amortization of debt discount and expense		3,186
Preliminary investigations expensed		6,485
Reversal of provision for refund of revenues		(42,400)
Bond retirements at less than principal amount		(6,168)
		<u>371,921</u>
Proceeds from sale of bonds—Series R (\$350,000 principal amount) (Note F)		<u>320,818</u>
Total funds provided		<u>692,739</u>

Funds Applied to:

Additions to—Utility plant		71,086
—Nuclear fuel		56,676
Retirement of bonds		29,872
Preliminary investigations		14,097
Nuclear fuel disposal payments		11,295
Increase (decrease) in funds held by Bond Trustee:		
Withdrawal of funds from General Reserve (Note C)	\$(150,000)	
Proceeds from sale of bonds—Series R	84,985	
Other increases—net	65,026	11
Increase in construction funds:		
Deposit of funds into Niagara Project Expansion Construction Fund (Note C)	150,000	
Proceeds from sale of bonds—Series R	235,833	
Other increases—net	57,849	443,682
Increase (decrease) in working capital (excluding cash and investments) and other:		
Interest receivable on investments	(1,985)	
Receivables—customers	(7,156)	
Materials and supplies	649	
Accounts payable and accrued liabilities	(8,190)	
Customer advance billings	(184)	
Deferred Charges and Other Assets—Other	(7,452)	
Other—net	196	(24,122)
		<u>602,597</u>
Increase in cash and investments		90,142
Cash and investments, January 1, 1984		<u>257,981</u>
Cash and investments, December 31, 1984		<u><u>\$348,123</u></u>

The accompanying notes are an integral part of these financial statements.

Summary of Funds (cash basis)

Year Ended December 31, 1984

	<u>Revenue</u>
Available Funds, January 1, 1984	\$ —0—
Cash Receipts:	
Sale of power, transmission and wheeling	1,275,858
Earnings on investments	83,141
Sale of bonds—Series R	
Accrued interest on bonds sold	
Utility plant additions reimbursed from other funds	
Administrative expenses reimbursed from other funds	
Other	
Total Receipts	<u>1,358,999</u>
Total Available	1,358,999
Transfer of funds—revenue	(1,358,999)
	<u>\$ —0—</u>
Cash Disbursements:	
Interest on bonds and notes	
Payment of notes	
Retirement of term bonds—(\$36,040 principal amount)	
Deposit to Niagara Project Expansion Construction Fund (Note C)	
Utility plant additions	
Nuclear fuel	
Fuel oil and gas	
Operations and maintenance	
Purchased power—Hydro-Quebec	
—Others	
Wheeling charges	
Administrative expenses chargeable to other funds	
Preliminary investigations	
Utility plant additions reimbursed to other funds	
Costs transferred to utility plant	
Administrative expenses reimbursed to the operating fund	
Total Disbursements	
Available Funds, December 31, 1984	
Distributed as follows:	
Cash	
Investment in U.S. Government securities	

* Funds held by Bond Trustee

(In thousands)

Operating	Fuel Reserve Account	Projects' Study	General*			
			Bond Service	Bond Reserve	General Reserve	Temporary Interest Fund
\$ 250,355	\$ 97	\$ 7,529	\$ —0—	\$267,630	\$176,158	\$—0—
		929		33,517		51,468
			2,141			
11,188						
2,616				116		
13,804		929	2,141	33,633		51,468
264,159	97	8,458	2,141	301,263	176,158	51,468
825,441	192,399	16,536	205,064	30,759	88,800	
1,089,600	192,496	24,994	207,205	332,022	264,958	51,468
3,249			207,205			3,960
	58,750				10,000	
				29,872	150,000	
36,407						
	53,632					
	80,017					
264,817						
259,093						
8,595						
184,659						
614						
		15,361				
		(6,813)			10,817	
		586				
757,434	192,399	9,134	207,205	29,872	170,817	3,960
\$ 332,166	\$ 97	\$15,860	\$ —0—	\$302,150	\$ 94,141	\$47,508
\$ 651	\$ 97			\$ 9	\$ 8	\$ 43
331,515		\$15,860		302,141	94,133	47,465
\$ 332,166	\$ 97	\$15,860		\$302,150	\$ 94,141	\$47,508

The accompanying notes are an integral part of these financial statements.

Summary of Funds (cash basis)(continued)

Year Ended December 31, 1984

	Poletti	Indian Point 3	Massena-Marcy Line	J.A. FitzPatrick, Blenheim-Gilboa	Kensico	Ashokan
Available Funds, January 1, 1984 ..	\$18,535	\$10,934	\$4,327	\$6,585	\$2,276	\$2,276
Cash Receipts:						
Earnings on investments	2,211	939	292	658	166	193
Sale of notes						
Sale of bonds—Series R						
Withdrawal from General Reserve						
Refund of land deposits			49			
Total Receipts	<u>2,211</u>	<u>939</u>	<u>341</u>	<u>658</u>	<u>166</u>	<u>193</u>
Total Available	<u>20,746</u>	<u>11,873</u>	<u>4,668</u>	<u>7,243</u>	<u>2,442</u>	<u>2,469</u>
Cash Disbursements:						
Interest on notes						
Utility plant additions	414	165	2,021	351	442	713
Utility plant additions reimbursed to the operating fund						
Project termination costs						
Administrative expenses reimbursed to the operating fund	34	48	30		2	22
Bond discount						
Bond financing costs						
Total Disbursements	<u>448</u>	<u>213</u>	<u>2,051</u>	<u>351</u>	<u>444</u>	<u>735</u>
Available Funds, December 31, 1984	<u>\$20,298</u>	<u>\$11,660</u>	<u>\$2,617</u>	<u>\$6,892</u>	<u>\$1,998</u>	<u>\$1,734</u>
Distributed as follows:						
Cash (including time deposits)	\$ 100	\$ 130	\$ 97	\$ 318	\$ 79	\$ 97
Investment in U.S. Government securities	20,198	11,530	2,520	6,574	1,919	1,637
Interest purchased						
	<u>\$20,298</u>	<u>\$11,660</u>	<u>\$2,617</u>	<u>\$6,892</u>	<u>\$1,998</u>	<u>\$1,734</u>

The accompanying notes are an integral part of these financial statements.

(In thousands)

Construction								
Arthur Kill	J.A. FitzPatrick Project Improvement Fund		Indian Point 3 Project Improvement Fund		Small Hydro	Niagara Project Expansion (Note C)	Marcy-South Line	Total
	No. 1	No. 2	No. 1	No. 2				
\$3,604	\$34,893		\$47,003		\$ 2,500			\$132,933
346	3,337		5,607		2,636	\$ 4,329	\$ 791	21,505
	28,483	\$16,095	37,978	\$33,004	58,750		10,000	68,750
					30,847		118,608	265,015
						150,000		150,000
1,415								1,464
1,761	31,820	16,095	43,585	33,004	92,233	154,329	129,399	506,734
5,365	66,713	16,095	90,588	33,004	94,733	154,329	129,399	639,667
					1,814		2	1,816
	9,887		8,413		9,132			31,538
					3,553	3,631		7,184
500								500
	613		746		535			2,030
	1,947	1,100	2,596	2,256	3,091		10,645	21,635
	679	384	906	787	1,078		3,713	7,547
500	13,126	1,484	12,661	3,043	19,203	3,631	14,360	72,250
\$4,865	\$53,587	\$14,611	\$77,927	\$29,961	\$75,530	\$150,698	\$115,039	\$567,417
\$ 108	\$ 150	\$ 12		\$ 8	\$ 29	\$ 45	\$ 244	\$ 1,417
4,757	53,053	14,599	\$77,334	29,953	74,940	150,653	114,795	564,462
	384		593		561			1,538
\$4,865	\$53,587	\$14,611	\$77,927	\$29,961	\$75,530	\$150,698	\$115,039	\$567,417

Notes to Financial Statements

Note A—General

The Power Authority of the State of New York is a corporate municipal instrumentality and political subdivision of the State of New York created by the Legislature of the State by Chapter 772 of the Laws of 1931, as last amended by Chapter 521 of the Laws of 1984.

Properties and income of the Authority are exempt from taxation. However, the Authority is authorized by Chapter 908 of the Laws of 1972 to enter into agreements to make payments in lieu of taxes with respect to property acquired for any project where such payments are based solely on the value of the real property without regard to any improvement thereon by the Authority and where no bonds to pay any costs of such project were issued prior to January 1, 1972.

Note B—Accounting Policies

(1) Accounts of the Authority are maintained in accordance with the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC).

(2) Utility plant is stated at original cost and consists primarily of amounts expended to license, construct, acquire, complete and place in operation the projects of the Authority. Such expenditures include: labor, materials, services, indirect costs and interest on bonds and notes (net of interest income on unexpended funds), reduced by revenues received for power produced (net of expenditures incurred in operating the projects) prior to the date of completion. The costs of current repairs are charged to operating expenses and renewals and betterments are capitalized. The cost of utility plant retired and the cost of removal less salvage (exclusive of nuclear plant decommissioning costs) are charged to accumulated depreciation.

(3) Depreciation is provided on a straight-line basis over the estimated useful lives of the various classes of plant, as determined by independent engineers. The depreciation provision expressed as a percent of average depreciable electric plant approximated 2.5% on an annual basis.

(4) The amortization of nuclear fuel is provided on a unit of production basis. Amortization rates are determined and periodically revised to amortize the cost of nuclear fuel over its estimated useful life. The costs of disposal of spent nuclear fuel will be met from provisions included in operating expenses (see Note I). With respect to nuclear plant decommissioning costs, the Authority anticipates that funds, in addition to those provided from operating expenses, will be available in accounts established under the Authority's General Purpose Bond Resolution (the Resolution) (see Note C) by the end of the useful lives of its nuclear plants.

(5) Deferred revenues represent certain billings, related to the recovery of costs, which have been deferred and will be amortized over the life of the applicable asset.

(6) Costs incurred by the Projects' Study Fund for preliminary investigations of a project are transferred to utility plant upon the specification of a project under the Resolution. If the study does not result in a project, the costs are charged as an expense to net revenues in the period such determination is made.

(7) Unamortized debt discount and expense are amortized over the lives of the related debt issues on a straight-line basis.

(8) In accordance with the Resolution, upon completion, or the latest estimated date of completion, of each project, whichever is earlier, all revenues received are required to be paid into the Revenue Fund.

(9) Funds required for all bond service payments due under the Resolution are payable on July 1 and January 1 and are made available to the Bond Trustee on the immediately preceding June 30 and December 31, by which dates such amounts are segregated for that purpose. Accordingly, at December 31, 1984, no liability is reflected in the accompanying financial statements for January 1, 1985 bond service payments of \$109,372,000.

(10) At December 31, 1984, the aggregate cost of all investments in U.S. Government securities approximated market value based upon published bid prices.

(11) Employees of the Authority are members of the New York State Employees' Retirement System (System). For personnel who became members of the System prior to July 1, 1976, the Authority contributes the entire amount determined by the System to be payable. Personnel who became members of the System on or after July 1, 1976 deposit three percent of gross salary, and the Authority contributes the balance payable to the System for these employees. Pension costs for the year ended December 31, 1984 were \$12,900,000. The Authority's employees are also covered by the Federal Insurance Contributions Act (Social Security).

(12) Sales and purchases of power between the Authority's facilities are eliminated from revenues and operating expenses.

(13) Revenues are recorded when billed. Customers' meters are read and bills are rendered on a monthly cycle basis. Fuel and purchased power costs above base-rate levels are recovered from customers served by the Poletti and Indian Point 3 plants under an energy adjustment clause. Interest costs incurred on obligations issued to purchase fuel are included as a fuel cost.

Note C—General Purpose Bond Resolution

The General Purpose Bond Resolution adopted on November 26, 1974, as amended and supplemented, covers all projects of the Authority. Projects are defined in the Resolution as any project of the Authority directly or indirectly related to power generation or transmission, whether owned jointly or singly by the Authority, including any output in which the Authority has an interest, authorized by the Power Authority Act and specified in a supplemental resolution adopted at the time a series of bonds is authorized. Before bonds are issued for any new project, a prescribed earnings test must be met, based on estimated revenues and operating expenses certified by an independent engineer. A Projects' Study Fund to finance preliminary efforts of the Authority to determine appropriate methods to fulfill its purposes under the Power Authority Act was established by the Resolution.

The Authority has covenanted with bondholders that at all times, rates and charges will be sufficient, together with other moneys available therefor, to meet the financial requirements of the Resolution. All revenues from any completed project of the Authority (after deductions for operating expenses including necessary working capital reserves and for Projects' Study) are applied first to the payment of bond service (interest only to December 31, 1984; thereafter interest and principal installments due on outstanding bonds); then a sum equal to fifteen percent of each year's bond service is set aside in a bond reserve account; and any remaining revenues are deposited in a general reserve account. Amounts in the bond reserve account will be applied by the Bond Trustee monthly to meet any deficiency in the bond service account and may be paid to the Authority for emergency repairs or replacements.

The Resolution also provides for the retirement of bonds from amounts in the bond reserve account in excess of the bond reserve requirement. Any excess of principal amount over the cost of bonds retired is used for additional bond retirements. The Authority has periodically purchased such bonds when available at favorable prices (see Note E).

The Twelfth Supplemental Resolution adopted in 1981 amended the Resolution by providing that amounts in the general reserve account not needed to meet any deficiency in the bond service or bond reserve accounts shall be deposited in a subaccount to meet the costs of major repairs and replacements, renewals, additions, betterments, improvements and extensions with respect to the Authority's projects and shall be maintained in such subaccount in amounts necessary or desirable, as determined by the Authority, to keep the projects in good operating condition, to meet regulatory requirements, to expand project capacity or to provide facilities for the transportation of

project power and energy to their markets. Amounts in the general reserve account not required for the foregoing purposes shall, at the Authority's direction, be paid to it for any lawful corporate purpose.

On June 19, 1984, the Authority authorized the expansion of capacity of the Niagara Project and established the Niagara Project Expansion Construction Fund. Under the supplemental resolution authorizing the Niagara Project Expansion, the Authority also authorized the withdrawal from the subaccount in the general reserve account of \$150,000,000, free and clear of the lien and pledge created by the Resolution, and the deposit of such funds in the Niagara Project Expansion Construction Fund. This Fund along with all other Funds established under the Resolution is subject to the lien of, and is pledged in accordance with, the Resolution.

On October 4, 1984, the Authority designated as new construction projects the Marcy-South Transmission Line Project, a 345-kv transmission line from the Authority's Marcy substation near Utica in Oneida County terminating at a new substation to be owned by Consolidated Edison Company of New York, Inc. in East Fishkill, Dutchess County, New York; and the FitzPatrick and the Indian Point 3 Improvement Projects No. 2.

Note D—Termination of Arthur Kill Power Plant

In December 1983, the Authority adopted a resolution to sell the Arthur Kill Project, a 700 MW coal and refuse-fired plant on Staten Island in New York City.

Costs incurred (including estimated termination charges) totalling \$53,881,000 were charged as an expense to net revenues at December 31, 1983. The Authority estimates that the unexpended balance in the Arthur Kill Construction Fund will be sufficient to pay any remaining costs in connection with the Project. The Authority is presently attempting to sell the assets of the Project.

Note E — Long-Term Debt

A summary of General Purpose Bonds payable at December 31, 1984 follows:	Amount	Maturity January 1	Interest Rate (a)	Earliest Redemption Date Prior to Maturity (b)
Series A				
Term Bonds	\$ 105,150,000	2010	7.875%	1/1/85
Serial Bonds	25,000,000	1987 to 1995	6.50% to 7.30%	
Series B				6/1/85
Term Bonds	91,560,000	2010	8.125%	
Serial Bonds	40,000,000	1987 to 1997	6.90% to 7.90%	
Series E				10/1/86
Term Bonds	115,400,000	2010	7.25%	
Serial Bonds	20,000,000	1987 to 1994	6.00% to 6.90%	
Series F				2/1/87
Term Bonds	155,410,000	2010	6.625%	
Serial Bonds	25,000,000	1987 to 1993	5.40% to 6.10%	
Series G				1/1/88
Term Bonds	42,200,000	1999	6.40%	
Term Bonds	217,715,000	2012	6.75%	
Serial Bonds	65,200,000	1987 to 1995	5.50% to 6.20%	
Series H				1/1/89
Term Bonds	119,530,000	2009	8.00%	
Serial Bonds	26,000,000	1987 to 1999	6.80% to 7.75%	
Series J				1/1/91
Term Bonds	113,000,000	2000	9.60%	
Term Bonds	67,000,000	2006	9.75%	
Term Bonds	60,000,000	2010	8.00%	
Term Bonds	198,775,000	2020	9.875%	
Serial Bonds	60,000,000	1986 to 1995	7.20% to 9.00%	
Series M				1/1/92
Term Bonds	35,000,000	1999	11.75%	
Term Bonds	60,000,000	2004	12.00%	
Term Bonds	100,000,000	2009	12.125%	
Term Bonds	32,500,000	2010	9.00%	
Serial Bonds	22,500,000	1987 to 1995	8.875% to 10.875%	
Series N				1/1/94
Term Bonds	23,415,000	1998	9.00%	
Term Bonds	55,915,000	2003	9.50%	
Term Bonds	47,745,000	2006	9.00%	
Term Bonds	344,810,000	2017	9.75%	
Term Bonds	52,495,000	2018	6.00%	
Serial Bonds	45,270,000	1987 to 1995	6.50% to 8.75%	
Series R (see Note F)				1/1/95
Term Bonds	33,525,000	2005	10.25%	
Term Bonds	201,095,000	2016	10.375%	
Term Bonds	65,205,000	2018	7.00%	
Serial Bonds	50,175,000	1990 to 2001	7.75% to 10.00%	
	2,716,590,000			
Less: Unamortized discount	46,855,000			
Total	\$2,669,735,000			

(a) Interest is payable semiannually on January 1 and July 1.

(b) The Bonds are subject to redemption prior to maturity in whole or in part in inverse order of maturities (except that amounts available in the bond reserve account for the Series J Bonds will be applied first in equal amounts to purchase or redeem Series J Term Bonds maturing January 1, 2000, January 1, 2006 and January 1, 2020; amounts available in the bond reserve account for the Series M Bonds will be applied pro rata to purchase or redeem Series M Term Bonds maturing January 1, 1999, January 1, 2004 and January 1, 2009; amounts available in the bond reserve account for the Series N Bonds will be applied first in equal amounts to purchase or redeem Series N Term Bonds maturing January 1, 2003, January 1, 2006 and January 1, 2017 and Series N Term Bonds maturing January 1, 2018 will not be redeemed until all other Series N Bonds have been retired; and amounts available in the bond reserve account for the Series R Bonds will be applied first in equal amounts to purchase

or redeem Series R Term Bonds maturing on January 1, 2005 and January 1, 2016, and Series R Term Bonds maturing January 1, 2018 will not be redeemed until all other Series R Bonds have been retired), beginning for each series of bonds on the date indicated at principal amount or at various redemption prices according to the date of redemption and the amount redeemed together with accrued interest to the redemption date. Annual maturities within the next five calendar years are as follows: 1985, \$6,000,000; 1986, \$29,200,000; 1987, \$30,820,000; 1988, \$32,345,000; and 1989, \$36,390,000.

During 1984, the Authority purchased \$36,040,000 principal amount of Bonds at a cost of \$29,872,000.

None of the Bonds of Series D, I, K, L, O, P and Q has been or will be issued by the Authority.

The Authority has announced its intention to refund the \$250,000,000 General Purpose Bonds, Series M issued in November 1981. The refinancing is tentatively scheduled for the end of February 1985.

Note F – Bond Financing

On October 4, 1984, pursuant to the Resolution and the Sixteenth Supplemental Resolution adopted on October 4, 1984, the Authority sold for settlement and delivery on October 24, 1984, \$350,000,000 principal amount of General Purpose Bonds, Series R. The proceeds of the bonds, after deposits of \$33,517,000 to the bond reserve account and \$51,468,000 to the temporary interest fund are being used to pay a portion of the Costs of Construction of Marcy-South Transmission Line Project; Small Hydroelectric Development Project No. 1; FitzPatrick and Indian Point 3 Improvement Projects No. 2; and the remainder of the Cost of Construction of FitzPatrick and Indian Point 3 Improvement Projects No. 1.

Note G – Notes Payable

At December 31, 1984, the Authority had outstanding, under a master note arrangement with a bank renewed in November 1984, \$80,000,000 of short-term notes payable within one month from the date of issuance or on prior demand. The proceeds of the notes may be used to finance the costs of fuel, including the repayment of obligations issued to pay the costs of such fuel, and/or costs of construction of any project designated pursuant to the Resolution. Interest is computed at a specified percentage of the 13-week United States Treasury bill rate converted to an annual yield, applied to the daily principal amount outstanding.

Under a 1981 revolving credit agreement, as amended, with a bank, the Authority may borrow up to \$80,000,000 for the purposes of paying the costs of fuel and/or costs of construction of any project designated pursuant to the Resolution, including the repayment of obligations issued for any such purposes. The agreement (which expires in March 1986 and which is subject to annual extension) provides for interest on outstanding notes (none outstanding as of December 31, 1984) at a specified fraction of the bank's prime rate in effect from time to time and for a fee on the unused portion of the commitment.

Note H – Reversal of Provision for Refund of Revenues

In October 1982, FERC issued a declaratory opinion and order which provided, among other things, for a refund with interest by the Authority of amounts paid by its municipal and rural electric cooperative wholesale customers for power and energy sold to them at rates in excess of the rates at which the Authority sells them hydroelectric power, and which provided further for the Authority to begin to bill such customers at its hydroelectric rates for all power currently sold to them. Since the latter part of 1979 the Authority has been selling nuclear power to supplement the requirements of these "preference" customers at rates higher than the Authority's hydroelectric power rates, and the refund was ordered on the basis of a finding by FERC that the Authority was obliged under the Niagara Redevelopment Act to provide hydroelectric power to preference customers in an aggregate amount up to 50% of Niagara Project capacity. As a result of this FERC decision, at December 31, 1982, provision was recorded for estimated refunds aggregating \$42,400,000.

In April 1983, FERC issued an opinion and order on rehearing, modifying its earlier order and finding in part that the Authority is selling sufficient hydroelectric power at the preference power price to meet the preference customers' reasonably foreseeable needs through June 30, 1985, and consequently, the preference customers are not entitled to any additional preference power (or any refunds) through June 30, 1985. FERC held further that the Authority is required to meet the actual preference customer needs from July 1, 1985 to January 1, 1990 with preference hydro-power at the preference power price, and found it appropriate to terminate contracts for the sale of hydroelectric power with three investor-owned utilities as of June 30, 1985 insofar as they pertain to preference power, with the Authority to make available to preference customers, after that date, up to 50% of Niagara Project power. In May 1983, FERC issued a third order to clarify its two previous orders.

On appeal, the U.S. Court of Appeals for the Second Circuit (the Court) on August 15, 1984 issued a decision in which it affirmed FERC's orders in all respects other than to modify the FERC remedy for the post-1985 period by refusing to set aside the three investor-owned utilities' contracts as of June 30, 1985 and permitting the Authority to furnish the preference customers' reasonably foreseeable needs with hydroelectric power from other sources. With the Court's affirmance that no refunds by the Authority are required, the \$42,400,000 provision for refund previously recorded is now reflected as a credit to net revenues.

Note I — Spent Nuclear Fuel Disposal

In accordance with the Nuclear Waste Policy Act of 1982, the Authority in June 1983 entered into a contract with the United States Department of Energy (DOE), under which DOE, commencing not later than January 31, 1998, will accept and dispose of spent nuclear fuel. The contract provides that the Authority will pay quarterly to DOE a fee based on gross nuclear generation at a specified rate from April 7, 1983. In addition, the contract requires the payment to DOE of a one-time fee relating to spent nuclear fuel discharged prior to April 7, 1983 and for in-core spent fuel on that day. As permitted by the contract, the Authority presently intends to pay this one-time fee of \$58,470,000 together with interest, accrued thereon from April 7, 1983, when the Authority first ships spent nuclear fuel to an approved DOE disposal facility. As of December 31, 1984 the liability to DOE related to the one-time fee, including accrued interest from April 7, 1983, totalled \$69,441,000, of which \$60,567,000 was collected from customers as of December 31, 1984. The excess (\$8,874,000) of this liability to DOE over the amounts recovered from customers at December 31, 1984 is reflected as a deferred charge. The Authority expects to recover the fee for disposal of spent nuclear fuel through rates charged to customers.

Note J — Commitments and Contingencies

Estimated costs to be incurred on outstanding contracts in connection with the Authority's construction programs aggregated approximately \$180,000,000 at December 31, 1984.

In addition to the proceeding referred to in Note H, there are pending before federal and State courts and agencies actions and proceedings involving several of the Authority's existing or planned projects as well as its revenues from certain projects. The effect of these matters has delayed and may impede the Authority's construction and operation of such projects or planned projects and require the Authority to incur substantial additional costs or reduction in revenues. While the ultimate outcome of these matters is not presently determinable, the Authority's General Counsel believes that the Authority has meritorious positions which have or will be asserted in these matters.

Under regulations established by the Nuclear Regulatory Commission (NRC), each licensee of a nuclear plant must provide a guarantee that assures, following a nuclear incident in the United States, that it can pay retrospective premiums up to a maximum of \$10,000,000 in each calendar year for each large power reactor it operates. The Authority has submitted to the NRC such guarantees for both its Fitz-Patrick and Indian Point 3 nuclear plants.

Power Authority of the State of New York
New York, New York

We have examined the accompanying balance sheet of the Power Authority of the State of New York at December 31, 1984, and the statements of net revenues, accumulated net revenues and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the financial position of the Power Authority of the State of New York at December 31, 1984, and the results of operations and changes in its financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Our examination has been made primarily for the purpose of expressing an opinion on the basic financial statements taken as a whole. The summary of funds (cash basis) is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examination of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.



Arthur Young & Company

New York, New York
February 8, 1985

Additional Data*

1984 Sales to Customers (kwh)

Niagara

Investor-Owned Utilities

New York State Electric & Gas	2,298,731,000
Rochester Gas & Electric	1,152,737,000
Niagara Mohawk	7,494,325,595 ¹

Municipals & Cooperatives

	2,320,232,626
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Out-of-State

Public Service Board of Vermont	268,142,000
American Municipal Power of Ohio	128,769,000
Allegheny Electric Cooperative	539,379,000

Southeast New York

Metropolitan Transportation Authority	174,999,996
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St. Lawrence-FDR

Investor-Owned Utilities

New York State Electric & Gas	135,061,000
Niagara Mohawk	781,943,000

Municipals & Cooperatives

	407,242,581
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Out-of-State

Public Service Board of Vermont	654,289,000
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Others

St. Lawrence Seaway	291,241
Parks and Recreation	378,049

Industrials

Alcoa	1,914,041,000
Reynolds	2,095,211,000
General Motors	72,699,111

Southeast New York

Metropolitan Transportation Authority	40,098,960
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Blenheim-Gilboa

Investor-Owned Utilities

Central Hudson	118,193,000
Con Edison	121,772,000
New York State Electric & Gas	377,943,000
Rochester Gas & Electric	100,219,000
Niagara Mohawk	130,387,000

Others

Ontario Hydro	200,000
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FitzPatrick

Investor-Owned Utilities

Central Hudson	121,637,000
Con Edison	835,657,000
Long Island Lighting Co.	293,626,000
New York State Electric & Gas	310,273,000
Orange & Rockland	67,893,000
Rochester Gas & Electric	96,623,000
Niagara Mohawk	878,136,000

Municipals & Cooperatives

	712,226,318
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Industrials

Alcoa	1,400,929,000
Occidental	204,160,711
Air Products & Chemicals	87,400,866
Reynolds	117,424,000
Airco Carbon	1,046,922
Olin Corporation	1,478,053
Airco Industrial Gases	119,587,704
SKW Alloys	106,715,385
Grumman Corp.	32,736,617 ²
Associated Universities, Inc.	184,747,583 ³

Poletti/Indian Point 3

Investor-Owned Utilities

Con Edison	2,590,892,000
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Southeast New York

Metropolitan Transportation Authority	2,160,982,040
N.Y.C. Public Buildings	2,226,714,210
Port Authority of N.Y. & N.J.	739,070,302
N.Y.C. Housing Authority	858,154,296
New York State Office of General Services	226,393,507
Village of Ardsley	327,362
Bedford Central School District	408,960
Village of Briarcliff Manor	1,838,102
Briarcliff Manor Union Free School District	1,051,920
Village of Bronxville	1,631,678
Village of Buchanan	504,433
Byram Hills Central School District	1,576,934
Chappaqua Central School District	3,149,412
Town of Cortland	1,121,412
Croton Harmon Union Free School District	684,306
Village of Croton-on-Hudson	1,970,800
Village of Dobbs Ferry	1,020,662
Town of Eastchester	1,831,214
Eastchester Union Free School District	1,060,600
Village of Elmsford	768,036
Town of Greenburgh	17,974,268
Greenburgh Housing Authority	794,132
Town of Harrison	4,557,277
Village of Hastings-on-Hudson	892,850
Hendrick Hudson School District	1,617,420
Village of Irvington	1,203,107
Lakeland Central School District	4,381,451
Village of Larchmont	886,501
Town of Mamaroneck	912,159
Village of Mamaroneck	2,123,048

Mamaroneck Union Free School

District	3,129,884
Montrose Improvement District	989,060
Village of Mount Kisco	2,175,118
Town of Mount Pleasant	3,775,526
Mount Pleasant Central School District	1,117,846
City of Mount Vernon	10,956,918
Mount Vernon City School District	6,321,877
Town of New Castle	3,254,982
City of New Rochelle	15,965,784
New Rochelle Municipal Housing Authority	3,746,160
Town of North Castle	1,126,543
Village of North Tarrytown	1,181,260
North Tarrytown Housing Authority	364,200
Town of Ossining	364,877
Village of Ossining	4,313,399
Ossining Union Free School District	1,902,120
City of Peekskill	9,732,116
Village of Pelham	384,064
Village of Pelham Manor	301,663
Pelham Union Free School District	1,061,034
Village of Pleasantville	952,784
Pleasantville Union Free School District	1,098,590
Village of Port Chester	2,621,238
Port Chester Housing Authority	1,482,894
Port Chester-Rye Union Free School District	1,755,707
City of Rye	3,726,282
Town of Rye	2,143,711
Rye Neck Union Free School District	1,085,516
Village of Scarsdale	3,221,721
Scarsdale Union Free School District	2,397,216
Village of Tarrytown	3,416,244
Union Free School District of Tarrytown	1,276,539
Thornwood Water District	360,360
Village of Tuckahoe	1,116,641
Tuckahoe Housing Authority	632,910
Tuckahoe Union Free School District	544,440
Valhalla Union Free School District	479,670
Westchester County	108,896,866
Westchester Joint Water Works	957,861
Westchester South Board of Cooperative Education Services	3,228,424
City of White Plains	19,231,610
White Plains City School District	3,627,472
White Plains Housing Authority	3,121,680
City of Yonkers	43,645,557
Yonkers Housing Authority	7,585,444
Town of Yorktown	497,483

¹Energy includes 94,333,595 kwh reallocated on a temporary basis.

²Grumman received power and energy on a temporary basis.

³86,215,539 kwh was received on a temporary basis.

*The additional data have been prepared from records and other data of the Authority and have not been examined by the independent auditors.

Energy Transfers and Purchases¹ (kwh)

Energy Transferred	
St. Lawrence-FDR to:	
Niagara	1,027,698,000
Niagara to:	
Blenheim-Gilboa	1,281,941,000
FitzPatrick	527,850,000
Poletti/IP3	1,281,840,000
Blenheim-Gilboa to:	
FitzPatrick	16,785,000
Poletti/IP3	53,548,000
FitzPatrick to:	
Poletti/IP3	22,176,000
Ashokan to:	
Poletti/IP3	23,747,000
Kensico to:	
Poletti/IP3	15,799,000
Purchased Power	
Canadian sources to:	
FitzPatrick	149,296,000
Poletti/IP3	797,027,000
Investor-owned	
Utilities to:	
FitzPatrick	14,468,000
Poletti/IP3	22,078,000

¹Transfers between projects are reported on a net basis and do not reflect transmission losses.

Selected Financial Data^(a)

Project	Operating Revenues (000)	Operating Expenses (000)	Accumulated Depreciation (000)
St. Lawrence-FDR	\$ 66,007	\$ 35,468	\$134,424
Niagara	93,632	75,667	232,638
Blenheim-Gilboa	41,616	18,761	37,513
FitzPatrick	169,513	123,073	107,822
Poletti/IP 3	625,600	458,976	231,215
Ashokan/Kensico	(b)	918	461
Massena-Marcy	296,317	283,809	30,422

(a) Operating revenues and operating expenses, by project, include interproject sales and purchases of power. They do not include any of the following unallocated items:

Other income (principally interest)	(000)	\$ 87,415
Other deductions (principally interest on debt)		189,872
Reversal of provision for refund of revenues		42,400
Bond retirements at less than principal amount		6,168

(b) Available energy is transferred to and sold from Poletti/IP 3.

1984 Sales Supplemental Schedule (kwh)

Municipals & Cooperatives	Hydro Energy ¹	Nuclear Energy ²
Akron	30,985,131	8,580,688
Andover	5,306,322	622,523
Angelica	5,803,758	1,123,552
Arcade	88,664,230	25,805,281
Bath	48,093,951	16,032,796
Bergen	7,379,098	7,484,850
Boonville	36,693,065	16,255,688 ¹
Brocton	9,919,685	0 ¹
Castile	6,048,070	686,342
Churchville	10,538,268	3,118,350
Delaware	35,292,518	944,591
Endicott	37,942,244	6,913,583
Fairport	210,747,978	84,562,445
Frankfort	12,743,507	3,529,261
Freeport	153,536,336	59,140,900
Greene	18,138,391	10,544,722
Green Island	8,495,444	1,237,107
Greenport	19,799,432	3,900,429
Groton	16,362,360	790,667 ¹
Hamilton	33,189,337	15,674,667 ²
Holley	16,736,740	2,288,818 ¹
Ilion	49,021,342	13,283,562
Jamestown	277,467,000	0 ¹
Lake Placid	62,014,139	35,597,807
Little Valley	16,127,915	2,388,652 ¹
Marathon	10,747,995	4,582,404 ¹
Massena	72,224,986	38,696,019
Mayville	18,302,108	2,787,548 ¹
Mohawk	15,472,750	4,957,152 ¹
Oneida-Madison	12,568,651	358,352 ¹
Otsego	31,256,966	3,061,485
Penn Yan	39,712,591	9,181,337
Philadelphia	5,499,010	1,773,475
Plattsburgh	369,884,586	97,420,483
Richmondville	8,664,928	1,350,980
Rockville Centre	136,301,997	0
Rouses Point	40,767,631	27,679,966
Salamanca	42,357,162	15,607,522
Sherburne	25,182,377	31,198,992
Sherrill	53,486,331	4,781,573
Silver Spring	3,235,252	904,005
Skaneateles	18,665,586	5,517,414
Solvay	291,991,314	80,071,133
Spencerport	44,703,160	5,801,478
Springville	34,719,533	13,997,978
Steuben	52,356,338	2,735,475
Theresa	4,486,350	730,747
Tupper Lake	42,739,306	22,704,773
Watkins Glen	27,701,200	7,794,118
Wellsville	48,240,942	248,392
Westfield	59,159,896	7,774,236
Total	2,727,475,207	712,226,318

¹Total hydro sales to this class of customer is supplied from the Niagara and St. Lawrence-FDR projects.

²Total nuclear sales to this class of customer is supplied from the J.A. FitzPatrick project.

Busbar Prices for Power and Energy Sold to Authority Customers

Niagara / St. Lawrence-FDR Projects—\$1.00 per kw/month and 2.05 mills/kwh.

Replacement Power sales of 445,000 kw to Niagara Mohawk and Expansion Power sales of 250,000 kw to both Niagara Mohawk and New York State Electric & Gas: \$1 kw/month and 2.67 mills/kwh.

Replacement Power Customers:

Airco Carbon, Division of The BOC Group, Inc.
 ARCO Metals Co., American Brass—Buffalo Operations
 Atlas Steel Casting Company
 Bethlehem Steel Corporation
 Buffalo Color Corporation
 Buffalo Forge Company
 Donner-Hanna Coke Joint Venture
 Dresser Transportation Equipment Division, Dresser Industries, Inc.
 Dunlop Tire & Rubber Corporation
 E.I. du Pont de Nemours & Company, Inc.
 FMC Corporation—Specialty Chemicals Division
 General Abrasive Division, Dresser Industries, Inc.
 General Mills, Inc.
 Great Lakes Carbon Corporation
 Hooker Chemicals & Plastics Corporation
 International Multi-Foods Corporation
 Nabisco, Inc.
 Niacet Corporation
 Niagara Falls Water and Waste Water Treatment Plants
 Nitec Paper Corporation
 Occidental Chemical Corporation
 Olin Corporation
 The Pillsbury Company
 Prestolite Battery Division—an Allied Company
 Republic Steel Corporation
 SKW Alloys, Inc.
 Sohio Electro Minerals Company
 Sohio Engineered Materials Company
 Spaulding Fibre Company
 TAM Ceramics, Inc.
 Union Carbide Corporation

Expansion Power Customers:

Airco Carbon, Division of The BOC Group, Inc.
 Airco Industrial Gases, Division of The BOC Group, Inc.
 Arcata Graphics—Buffalo, An Arcata Company
 Bethlehem Steel Corporation
 Carborundum Abrasives Company
 Donner-Hanna Coke Joint Venture
 E.I. du Pont de Nemours & Company, Inc.

General Mills, Inc.
 General Motors Corporation—Harrison Radiator Division
 Great Lakes Carbon Corporation
 International Multi-Foods Corporation
 Moog, Inc.
 Nitec Paper Corporation
 Occidental Chemical Corporation
 Olin Corporation
 The Pillsbury Company
 Pyron Corporation—A Pacific Tin Company
 Republic Steel Corporation
 SKW Alloys, Inc.
 Sohio Electro Minerals Company
 Sohio Engineered Materials Company
 Spaulding Fibre Company
 TAM Ceramics, Inc.
 Union Carbide Corporation

St. Lawrence-FDR Project

Rates to:

Alcoa—\$3.762/kw/month and 7.444 mills/kwh.

Reynolds Metals Co.—\$3.355/kw/month and 6.629 mills/kwh.

General Motors: \$1/kw/month and 2.67 mills/kwh.

St. Lawrence Seaway Development Corp. and NYS Office of Parks and Recreation: 10 mills/kwh.

Blenheim-Gilboa Project—\$1.90/kw/month.

a) Non-firm pumped storage energy transfers: 5.5 mills/kwh.

b) Economy energy sales: Power Authority and buyer share equally in net savings.

James A. FitzPatrick Plant—\$13.40/kw/month and 9.65 mills/kwh.

Residual energy sales to investor-owned utilities: 9.65 mills/kwh.

Reserve energy sales to investor-owned utilities: rate equal to fuel cost savings.

Poletti/Indian Point 3 Projects—Rates for power and energy sales to customers depend on the service provided as follows:

Service Class	\$/kw/month	Mills/kwh*
General Small		77.62
Commercial & Industrial Redistribution	9.55	37.16
Electric Traction Systems	8.07	43.53
Westchester Street Lighting		69.28
Multiple Dwellings—Redistribution	9.07	41.11
General Large	7.03	41.90
NYC Street Lighting	8.77	43.97
NYC Transit Authority Substation	8.72	41.17
NYC Transit Authority Plant	8.16	44.54
World Trade Center	9.50	41.78
NYC Public Buildings	7.22	43.79
Con Edison	16.20	24.76

*Subject to a monthly energy charge adjustment: base energy cost is 26.349 mills/kwh.

Reserve energy sales are made to Con Edison at a rate equal to its fuel-cost savings.

Residual energy sales are made to Con Edison at a rate equal to the Authority's cost of fuel and maintenance.

Trustees and Officers



Left to right, seated,
John S. Dyson, Richard M. Flynn,
and George L. Ingalls;
standing, James L. Larocca, and
Rolland E. Kidder.



Governor Mario M. Cuomo

John S. Dyson
Chairman

George L. Ingalls
Vice Chairman

Richard M. Flynn
Trustee

James L. Larocca
Trustee

Rolland E. Kidder
Trustee

Leroy W. Sinclair
*President and
Chief Operating Officer*

J. P. Bayne
*First Executive Vice President and
Chief Operations Officer*

Walter T. Kicinski
*First Executive Vice President and
Chief Administrative Officer*

John F. English
*Executive Vice President
System Operations*

Joseph R. Schmieder
*Executive Vice President and
Chief Engineer*

Stephen L. Baum
*Senior Vice President and
General Counsel*

James M. Cunningham
*Senior Vice President
Public Affairs*

Paul J. Early
*Senior Vice President and
Manager of Projects*

Robert A. Hiney
*Senior Vice President
Planning and Marketing*

Robert A. Leopold
*Senior Vice President
Procurement and Contract Administration*

Thomas F. McCrann, Jr.
*Senior Vice President
Finance*

Corbin A. McNeill, Jr.
*Senior Vice President
Nuclear Generation*

Robert G. Schoenberger
*Senior Vice President
Program Development*

Bradley S. Telias
Secretary

Design: Arnold Saks Associates
Major Photography: Glenn Baker,
Costa Manos, Magnum
Printing: Crafon





**New York Power
Authority**

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