MINUTES OF THE REGULAR MEETING OF THE POWER AUTHORITY OF THE STATE OF NEW YORK

September 28, 1998

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Minutes of the regular meeting of the Power Authority of the State of New York held at the Indian Point 3 Nuclear Power Plant at 11:00 a.m.

Present:	Clarence D. Rappleyea, Chairman
	Hyman M. Miller, Trustee
	Frank S. McCullough, Jr., Trustee*
	Gerard D. DiMarco, Trustee

Trustee Louis P. Ciminelli was excused from attendance.
* Trustee McCullough was present for consideration of items #1 through 8.

Eugene W. Zeltmann	President and Chief Operating Officer
David E. Blabey	Executive Vice President, Secretary and General Counsel
Peter W. Delaney	Executive Vice President and Chief Financial Officer
Robert A. Hiney	Executive Vice President - Project Operations
John F. English	Senior Vice President – Corporate Planning
Philip J. Pellegrino	Senior Vice President – Transmission
Robert L. Tscherne	Senior Vice President – Energy Services and Technology
Vincent Vesce	Senior Vice President - Human Resources
Russell Krauss	Chief Information Officer
Arnold M. Bellis	Vice President - Controller
Daniel Berical	Vice President – Policy and Governmental Affairs
Woodrow W. Crouch	Vice President – Project Management
John M. Hoff	Vice President – Procurement and Real Estate
William Josiger	Vice President – Nuclear Operations and Maintenance
Russell J. Krauss	Vice President – Information Technology
Charles I. Lipsky	Vice President and Chief Engineer – Power Generation
Michael Petralia	Vice President – Public Affairs
Joseph J. Carline	Assistant General Counsel
Gerald C. Goldstein	Assistant General Counsel
Stephen P. Shoenholz	Deputy Vice President - Public Relations
Carmine J. Clemente	Deputy General Counsel
Gary Paslow	Executive Director – Policy Development
Jordan Brandeis	Director – Performance Planning
Thomas F. Dougherty	Director – Nuclear Engineering
Jules G. Franko	Director – Nuclear Procurement
Douglas M. Kerr	Director – Marketing lanning
Robert H. Leonard	Director - Communications
John L. Murphy	Director - Public Information
Carl F. Patrick	Director – Nuclear Policy Information
William Slade	Director – Environmental Programs
James H. Yates	Director – Business Marketing and Economic Development
Shalom Zelingher	Director – Research and Technology Development
Allison Shea	Senior Attorney
James Steets	Manager - Communications
Anne Wagner-Findeisen	Deputy Secretary
Vernadine Quan-Soon	Assistant Secretary
Angela Graves	Assistant Secretary

Chairman Rappleyea presided over the meeting. Executive Vice President, Secretary and General Counsel Blabey kept the Minutes.

1. Approval of the Minutes

The minutes of the Regular Meeting held on August 25, 1998 were approved.

Comments of Chairman and Chief Executive Officer

Chairman Rappleyea welcomed Mr. George Begany, the former mayor of Buchanan, and Mr. Dan Gulley of the Englehard Corporation who were in attendance at the meeting. Assemblywoman Sandra Galef and her aide, Mr. Pedro Vega, were likewise welcomed by the Chairman upon their arrival.

2. Financial Report for the Eight Months Ended August 31, 1998

Messrs. Delaney and Bellis added that the Authority's Operating Reserve balances decreased by $28 million for the month of August due to staff's use of available funds to repay commercial paper obligations of $ 40 million ahead of schedule. Chairman Rappleyea commended staff's progress in expeditiously reducing the Authority's debt, noting that the number of public entities with a similar track record is undoubtedly miniscule.

3. <u>Report from the President and Chief Operating Officer</u>

At President Zeltmann's request, Mr. Krauss briefed the Trustees on the current status and developments in the ongoing Year 2000 Program effort, with particular emphasis on the Authority's two nuclear plants. Mr. Krauss explained that the "Remediation/Conversion" phase of critical, severe and high computer systems at JAF will continue through the upcoming outage since the conditions for testing the compliance of certain system require that the tests be performed when the plant is shut down. Mr. Krauss added that we will adopt a different approach for IP3 so as not to have to wait until its 3d quarter refuel outage. Mr. Krauss further reported that the number of IP3 systems now believed to be Y2K compliant has recently increased from 21 to 36 systems.

President Zeltmann stated that the Authority employees' support of the fund-raising drive by the Juvenile Diabetes Association had been an outstanding success, and had garnered some $27,000 in contributions. President Zeltmann added that well over a hundred NYPA employees had joined him over the weekend to participate in the Foundation's third annual 5K Walk to Cure Diabetes. He thanked all employees NYPA-wide who had contributed to this worthy cause.

4. Power Allocations Under the Power for Jobs Program

The President submitted the following report:

SUMMARY

"The Trustees are requested to approve 102 allocations of available power under the Power for Jobs program to the businesses listed in Exhibits '4-A' and '4-B' which have been recommended for such allocations by the Economic Development Power Allocation Board ('EDPAB').

BACKGROUND

"In July 1997, Governor George E. Pataki and the New York State Legislature approved a program to provide low-cost power to businesses that agree to retain or create jobs in New York State. The Power for Jobs program originally made available 400 megawatts of power; 200 provided from the Authority's James A. FitzPatrick Nuclear Power Project and 200 purchased by the Authority through a competitive bid process. The program was to be phased in over three years, with approximately 133 megawatts being made available each year. In July 1998, as a result of the initial success of the program, Governor Pataki and the Legislature have made an additional 50 megawatts of power available and have accelerated the distribution of the power. Two hundred sixty-six megawatts are now available in Year 1.

"Approved allocations will entitle the customer to receive the power from the Authority pursuant to a sale for resale agreement with the customer's local utility. A separate allocation contract between the customer and the Authority will contain job commitments enforceable by the Authority.

"The program is designed to assist New York State businesses that are at risk of reducing or closing their operations or moving out of State or are willing to expand job opportunities. Small businesses and not-for-profit corporations are also eligible. Businesses are required to create or maintain a specific number of jobs in order to qualify for an allocation. At its December 1997 and January, March and April 1998 meetings the Trustee's approved allocations to 150 businesses under the Power for Jobs program.

DISCUSSION

"In an effort to receive quality applications and to announce the program, advertisements announcing the program were placed in major newspapers and business publications statewide; a direct-mail piece was distributed; regional meetings were hosted around the state; and the program was promoted through television ads within and without the state. To date, over 2,500 inquires have been received and over 1,000 applications have been sent to prospective customers.

"Completed applications were reviewed by EDPAB and recommendations were made based on a number of competitive factors including the number of jobs retained or created, the amount of capital investment in New York State and whether a business is at a competitive disadvantage in New York. 49 applications were deemed highly qualified and presented to the EDPAB for its review on August 26, 1998 and 53 were deemed highly qualified and presented to the EDPAB for its review on September 23, 1998. All remaining applications are still under review and will be considered at a later date.

"As a result of its meeting, the EDPAB recommended that the Authority's Trustees {approve} the allocations to the 66 businesses, 25 small businesses and 11 not-for-profit corporations listed in Exhibits '4-A' and '4-B'. Collectively, these organizations have agreed to create or retain over 33,000 jobs in New York State in exchange for allocations totaling 68.935 megawatts (MW). The allocation contracts will be for a period of three years. The power will be wheeled by the investor-owned utilities as indicated in Exhibits '4-A' and '4-B'. The basis for EDPAB's recommendations is also included in Exhibits '4-A' and '4-B'.

"The Trustees are also requested to approve job commitment revisions to the 20 companies listed in Exhibit '4-C'. These companies had been approved for a Power for Jobs allocation by the Trustees earlier this year. Their allocation was based on their commitment to retain or create jobs as indicated in the application they submitted to EDPAB. Subsequent to Trustee approval but before entering into contract with the Authority, the companies have requested that their job commitment be revised to more accurately reflect their existing employment levels. The revisions are mainly due to confusion in accounting for part time and seasonal employees. The job number changes are insignificant in total and do not require changes to the amount of the allocation.

RECOMMENDATION

"The Director – Business Marketing and Economic Development and the Manager – Business Power Allocations and Compliance recommends that the Trustees approve the allocations of power under the Power for Jobs program to the companies listed in Exhibits '4-A', '4-B' and '4-C'.

"The Senior Vice President – Marketing and Economic Development, the Executive Vice-President Secretary and General Counsel, the Executive Vice-President – Chief Financial Officer, the Executive Vice-President – Project Operations and I concur with the recommendation."

Mr. Yates added that the Trustees are also requested to approve the proposed modifications to job commitment numbers of those recipients whose job commitments had undergone changes since the initial application process and which had negotiated the changes with NYPA staff. In response to questions from the Chairman, Mr. Yates explained that after the allocations proposed for approval today, there would be some 65 MW remaining in the expanded Year 1 Power for Jobs pool for allocation to other applicants.

Chairman Rappleyea noted that the large quantity of proposed Power for Jobs allocations reflects the intensive work efforts of Authority staff, the ESDC, and the PSC.

The attached resolution, as recommended by the President, was unanimously adopted.

WHEREAS, the Economic Development Power Allocation Board has recommended that the Authority approve an aggregate 68.935 MW of allocations of Power for Jobs power to the companies listed in Exhibits "4-A" and "4-B";

NOW THEREFORE BE IT RESOLVED, That to implement such Economic Development Power Allocation Board recommendations, the Authority hereby approves allocations of Power for Jobs power to the companies listed in Exhibits "4-A", "4-B" and as revised in "4-C" (the "Customers"), as submitted to this meeting, and that the Authority finds that such allocations are in all respects reasonable, consistent with the requirements of the Power for Jobs program and in the public interest; and be it further

RESOLVED, That a total of 68.935 MW of power from the James A. FitzPatrick Plant and power purchased by the Authority in a competitive bid process be sold to the utilities that serve such Customers for resale to them for a period of up to three years under the terms of both the Authority's Power for Jobs sale for resale contracts with the utilities and separate allocation contracts between the Authority and such Customers; and be it further

RESOLVED, That the Senior Vice President - Marketing and Economic Development or her designee be, and hereby is, authorized to negotiate, subject to approval of the form thereof by the Executive Vice President, Secretary and General Counsel, to execute any and all documents necessary or desirable to effectuate the foregoing.

5. Power for Jobs - Competitive Procurement

The President submitted the following report:

SUMMARY

"The Trustees are requested to authorize execution of Enabling Agreements with Central Hudson Gas and Electric Corporation ('Central Hudson'), KeySpan Corporation, and Public Service Electric and Gas Company ('PSE&G') permitting the purchase of up to 133.3 MW of firm capacity and energy pursuant to the requirements of the Power for Jobs program.

BACKGROUND

"On July 29, 1997, Governor George E. Pataki signed into law Section 189 of the Economic Development Law and related legislation, which established the Power for Jobs program. The legislation provides lower cost electricity to businesses and not-for-profit corporations throughout the State to stimulate new jobs and create economic opportunities for New Yorkers.

"On July 15, 1998, Governor Pataki signed an amendment to Section 189 of the Economic Development Law and related legislation increasing the amount of power available from 400 MW to 450 MW. The power will be phased in over three years, with 267 MW to be allocated in year one of the program.

"The Power for Jobs program makes available up to 450 MW of power, to be phased in over a three-year period. The legislation provides for 225 MW of the power to be made available from the Authority's FitzPatrick plant, and for 225 MW to be purchased from other suppliers pursuant to a competitive procurement process administered by the Authority. For the first year of the program 133.3 MW must be procured from other suppliers.

"At their meeting of January 27, 1998, the Trustees authorized execution of agreements with power suppliers to provide bid power for Power for Jobs for deliveries commencing prior to May 1, 1998. On March 31, 1998, the Trustees approved the Authority's entering into agreements with suppliers to provide bid power for Power for Jobs for deliveries between May 1 and October 31, 1998. This request will cover deliveries of bid power for the period commencing November 1, 1998 and ending April 30, 1999.

The Power for Jobs legislation requires:

- that the competitive procurement process be conducted pursuant to guidelines established by the Economic Development Power Allocation Board ('EDPAB') in consultation with the New York State Department of Public Service;
- that the process provide the least cost power consistent with the goal of providing safe and reliable service; and
- that power available through the competitive procurement process be acquired and transmitted at a price not in excess of the price of FitzPatrick power transmitted to the local utilities.

DISCUSSION

The Bidding Process:

"The competitive procurement process was carried out in accordance with the Guidelines for Competitive Procurement adopted by the EDPAB at its September 18, 1997 meeting.

"On August 4, 1998, a Request for Proposals ('RFP') was issued to over 40 potential bidders identified through a notice announcing the procurement process and a public information campaign. The RFP requested bidders to provide fixed price bids by September 4, 1998, in cents/kWh for the delivery of up to 133.3 MW of firm capacity and energy to interconnections with the seven investor-owned utilities in New York State. Price bids were requested for three time periods: through April 30, 1999; through October 31, 1999; and/or through October 31, 2001. Bidders were required to meet a number of requirements, including demonstrating their capability of delivering the power and energy to the investor-owned utilities, meeting the New York Power Pool Installed Generation Reserve Requirement and providing financial assurances for meeting their obligations.

"On August 19, 1998, a pre-bid conference was held to answer questions from potential bidders.

Bid Evaluation

"Six vendors submitted 16 bids on the deadline of September 4. They were evaluated on the basis of the following criteria:

- whether the bid met the minimum requirements contained in the RFP;

- the price of the capacity and energy as delivered to each investor-owned utility and the impact of the bid on the overall cost of the Power for Jobs power;

- the financial capability of the bidder to carry out the terms of the Enabling Agreement; and

- the environmental impact of the bidder's power supply (Bidders with sources of power supply meeting certain air quality emissions standards were awarded a one mill advantage in the price evaluation).

The evaluation included requests for additional information and clarification from the bidders. A discussion of each of the proposals is below.

Central Hudson Gas and Electric Corporation

"Central Hudson proposed to supply up to 5 MW to the Central Hudson service territory, 30 MW to Con Edison, 20 MW to NYSEG, 20 MW to Niagara Mohawk, and 10 MW to Orange and Rockland, all for the winter '98-'99 capability period. The power would be supplied from Central Hudson's Roseton Generating Station and would not qualify for the environmental credit. Central Hudson was considered capable of meeting the financial requirements of the RFP and has previously been a supplier of Power for Jobs bid power.

KeySpan Corporation as Agent for the Long Island Power Authority

"The KeySpan Corporation, acting as an agent for the Long Island Power Authority, submitted a bid to provide up to 44.6 MW in the Long Island Power Authority ('LIPA') service territory for the winter '98-'99 capability period. The power would be supplied from LIPA's contracts with independent power producers and would not qualify for the environmental credit. KeySpan and LIPA are considered capable of meeting the financial requirements of the RFP.

North American Energy Conservation, Inc.

"North American Energy Conservation, Inc. ('NAEC') is the power marketing subsidiary of York Research Corporation, a publicly traded developer of cogeneration plants in New York City. NAEC proposed to supply 20 MW to Con Edison, 14.7 MW to NYSEG, 29 MW to Niagara Mohawk and 4 MW to Rochester Gas and Electric, all for the winter '98-'99 capability period. NAEC's source of supply would be from its power contract portfolio and would not qualify for the environmental credit. NAEC offered a corporate guarantee from York Research. Subsequent to submission of NAEC's bid, its parent company, York Research, announced that it was exiting the electricity marketing business and the NAEC bid was withdrawn.

Northeast Utilities Service Company

"Northeast Utilities proposed to supply up to 25 MW of system power to the LIPA service territory for a one-year period. System power does not qualify for the environmental credit. Power would be supplied to LIPA via Northeast Utilities' cable under Long Island Sound to Northport, Long Island. Northeast Utilities is considered capable of meeting the RFP's financial requirements.

O'Shanter Resources, Inc.

"O'Shanter Resources, Inc. proposed to provide 7.2 MW of power in the Niagara Mohawk service territory from a 15.25 MW cogeneration plant located in Delevan, New York. Power would be supplied for a period commencing April 1, 1999, continuing through October 31, 2001. The O'Shanter bid was not considered further since the resource would not be available on November 1, 1998 as required, and because the bid price was not lower than the price of FitzPatrick power delivered to Niagara Mohawk as required by the Power for Jobs legislation.

Public Service Electric and Gas Company

"The Public Service Electric and Gas Company ('PSE&G') proposes to provide up to 25 MW to Con Edison, 40 MW to NYSEG, 40 MW to Niagara Mohawk, and 10 MW to Orange and Rockland for the winter '98-'99 capability period. PSE&G's bid requires that a constant block of power be taken within each of the service territories for each of the six months in the capability period. Further, the combined total between NYSEG and Niagara Mohawk cannot exceed 60 MW. Power would be supplied from PSE&G's system supplies and would not qualify for the environmental credit. PSE&G has previously been a supplier of Power for Jobs bid power and is considered capable of meeting the financial requirements of the RFP.

The Recommended Bidders

"Based on the evaluation of the bids and the proposed pricing, it is recommended that Enabling Agreements be executed with: Central Hudson for supplies to the Central Hudson, Con Edison, Niagara Mohawk and NYSEG service territories; KeySpan for supplies to the LIPA service territory; and PSE&G for supplies to the Con Edison and NYSEG service territories.

The recommended bidders, the amounts in MW's and the prices are set forth in Table 1.

“Central Hudson, KeySpan and PSE&G meet the requirements of the RFP, are capable of meeting the financial requirements of the Enabling Agreement and offer the lowest priced bids within the service territories.

The Enabling Agreement

“Enabling Agreements have been negotiated with the recommended bidders. The Enabling Agreements are umbrella agreements that permit the Authority to draw down power from a winning bidder (Qualified Provider) for delivery to one of the investor-owned utility service territories as allocations are recommended by EDPAB and approved by the Authority. This is done by entering into a Transaction which specifies the amount of power and energy, the price, the term, and the delivery point, among other things. In effect, the Enabling Agreements are no-cost options to purchase power that are only exercised as power is needed and a Transaction is initiated. The Authority has no obligation to purchase any power and there are no minimum payments.

“The Enabling Agreement provides that the price bids contained in the Qualified Providers' proposals will be held through April 30, 1999, at which time new bids will be sought. Should a Qualified Provider fail to deliver the power as scheduled by the Authority, the Authority would secure the energy and the Qualified Provider would be liable for any increased cost to the Authority. The Authority can also cancel the Enabling Agreement and bar the Qualified Provider from future Power for Jobs competitive procurement opportunities in the event of non-delivery. Individual Enabling Agreements will remain in effect until April 30, 1999, or until the last Transaction is completed, whichever is later.

FISCAL INFORMATION

“Purchase of capacity and energy from Qualified Providers for the Power for Jobs program will have no net impact on the Authority's finances. The cost of this power will be offset by payments from the investor-owned utilities pursuant to the Purchase and Resale Agreements entered into between the Authority and the investor-owned utilities.

RECOMMENDATION

“The Director - Marketing Planning, the Director - Power Contracts, and the Senior Vice President - Marketing and Economic Development recommend that the Trustees authorize execution of Enabling Agreements with Central Hudson Gas and Electric Corporation, KeySpan Corporation, and Public Service Electric and Gas Company substantially in the form attached hereto as Exhibit “5-A”, and authorize the Senior Vice President-Marketing and Economic Development or her designees to enter into Transactions as contemplated by the Enabling Agreements for the purpose of providing up to 133.3 MW of capacity and energy for the Power for Jobs program.

“The Executive Vice President, Secretary and General Counsel, the Executive Vice President - Power Operations, and I concur with the recommendation.”

Trustee Miller inquired whether Authority staff, following initial review of the bids received, engaged in follow-up discussions with the bidders concerning the merits and proposed pricing of the bids. Mr. Kerr responded in the affirmative, explaining that staff had conducted further discussions and negotiations aimed at ensuring the best quality at the most advantageous prices for the Authority.

The attached resolution, as recommended by the President, was unanimously adopted.

WHEREAS, the Governor of the State of New York signed the Power for Jobs legislation to boost New York State's economy; and

WHEREAS, the legislation directs the Authority to purchase power and energy from other suppliers to provide power for the program, and

WHEREAS, the Authority has carried out a competitive procurement process for such power and energy in accordance with the legislation and the Guidelines for Competitive Procurement adopted by the New York State Economic Development Power Allocation Board;

NOW THEREFORE BE IT, RESOLVED, That the Chairman, the President, the Senior Vice President - Marketing and Economic Development or her designees are, and each of them hereby is, authorized to execute Enabling Agreements with Central Hudson Gas and Electric Corporation, KeySpan Corporation, and Public Service Electric and Gas Company in substantially the form attached hereto as Exhibit "5-A", and to enter into Transactions for the purchase of up to 133.3 MW of capacity and energy as contemplated by the Enabling Agreement.

6. Temporary Assignment of 2,000 kW of Expansion Power

The President submitted the following report:

SUMMARY

"The Trustees are requested to approve the temporary assignment of 2,000 kW of Expansion Power from the Praxair, Inc. facility on Royal Avenue in Niagara Falls to the General Motors Plant in Tonawanda, New York for use by Praxair in supplying compressed dry air to General Motors.

BACKGROUND

"Praxair, Inc. has requested that 2,000 kW of Expansion Power that it is presently using at its Royal Avenue plant in Niagara Falls be temporarily assigned to the General Motors Plant in Tonawanda for use by a joint venture entered into by Praxair and Ingersoll-Rand Corporation. The allocation of 2,000 kW to Praxair was originally approved by the Trustees at their October 25, 1988 meeting, with the requirement that Praxair commit to 68 new jobs. Subsequently, the Authority and Praxair entered into an April 20, 1989 Expansion Power Allocation and Service Agreement for a term ending in the year 2006 or in 2013 if the Authority continues as the Federal Energy Regulatory Commission licensee for the Niagara Power Project. Praxair's job commitment will be maintained during the term of the proposed assignment.

DISCUSSION

"In attempting to make a business proposal and bid to supply compressed dry air for General Motors' plant expansion in Tonawanda, Praxair sought the Authority's assistance through a temporary assignment of 2,000 kW of Expansion Power. Praxair and its joint venture partner, Ingersoll-Rand acting as Niject submitted a proposal to supply compressed dry air to General Motors, also a Power Authority customer, from equipment owned, operated and maintained by Niject (Praxair) but located on General Motors plant site. As electricity is a primary cost in the production of compressed dry air the source and resulting cost of electricity could strongly influence General Motors' decision should Praxair provide a portion of its own power needs on General Motors' site with existing hydropower.

"There is a strong trend for manufacturing plants to outsource equipment ownership and operation of materials and products such as compressed dry air. Historically, the manufacturing company did this themselves. Today the majority of projects are done through outsourcing. By including hydropower pricing for electricity in their bid Niject (Praxair) was able to win the business from General Motors. This is a new 15-year contract for Praxair and valued at approximately $20 million. Niject (Praxair) was the winning bidder out of 11 initial bids and four finalists.

"The General Motors substation and delivery point will provide service to compressors owned by Niject (Praxair) but located on the plant site of General Motors. Praxair has shared with us the agreements between Niject (Praxair) and General Motors concerning compensation for and the delivery and use of the 2,000 kW Expansion Power allocation. Based on these agreements the only benefit derived by General Motors would be through the compressed dry air transaction between Niject (Praxair) and General Motors. There will be physical arrangements, such as sub-metering, to ensure that only Praxair's compressors use the hydropower and that under no circumstances does General Motors directly receive any electricity billing benefits of under utilized hydropower kW or kWh.

"Praxair will maintain all existing job commitments and the 2,000 kW is subject to withdrawal in accordance with the job commitment provisions of Praxair's April 20, 1989 Expansion Power Allocation and Service Agreement.

"The term of the temporary assignment will be co-extensive with the existing allocation to Praxair. The Authority, after consultation with Praxair, can recall the allocation from the General Motors Tonawanda Plant upon 90 days notice to Praxair and General Motors, if the Authority determines that the maximum economic development benefit to be derived from this allocation is best achieved by returning the allocation to the Praxair Royal Avenue plant.

"Niagara Mohawk supports this temporary assignment in order to facilitate delivery and billing of the Expansion Power.

RECOMMENDATION

"The Director – Business Marketing and Economic Development recommends that the Trustees approve a temporary assignment of 2,000 kW of Expansion Power from Praxair's Royal Avenue plant in Niagara Falls to the General Motors Plant in Tonawanda for purposes of powering Praxair's compressed dry air equipment located on the General Motors site.

"The Senior Vice President – Marketing and Economic Development, the Executive Vice President, Secretary and General Counsel, and I concur in the recommendation."

The attached resolution, as recommended by the President, was unanimously adopted.

RESOLVED, That a temporary assignment of 2,000 kW of Expansion Power from Praxair, Inc. to a compressed dry air facility operated by a joint venture entered into by Praxair and Ingersoll-Rand Corporation at the General Motors Plant in Tonawanda New York is approved subject to the conditions described in the accompanying Memorandum from the President; and be it further

RESOLVED, That subject to approval of the form by the Executive Vice President, Secretary and General Counsel or his designee, the Senior Vice President – Marketing and Economic Development or her designee be, and hereby is, authorized to negotiate and execute all other documents or agreements necessary or desirable to effectuate the foregoing resolution.

7. Use of Transmission Towers for Wireless Communication Services

The President submitted the following report:

SUMMARY

"The Trustees are requested to approve a 15 year agreement ('Agreement') with Cellular Telephone Company d/b/a AT&T Wireless Services, ('CTC') for the use of space on Authority transmission towers to append antennas for Wireless Communication Services ('WCS').

BACKGROUND

"The Federal Communication Commission ('FCC'), in response to world-wide demand, authorized the auction of the 2GHz microwave frequency range for WCS. WCS technology, although similar to cellular telephone technology, requires more antenna sites to compensate for the lower power levels of the telephone instrument. In 1995, AT&T, the parent of CTC, successfully bid in the FCC auction and acquired licenses to provide service in 19 counties in the Buffalo to Rochester corridor. CTC has operated cellular services in the 5 boroughs and six counties of Nassau, Suffolk, Westchester, Putnam, Rockland and Orange since 1984. In 1995, AT&T acquired licenses to provide service in 19 counties in the Buffalo to Rochester corridor which may result in the installation of WCS equipment on the NATL structures. Other licenses at different frequencies were authorized to providers who will service smaller areas of New York State.

DISCUSSION

"In early summer of 1997, CTC contacted the Authority and expressed interest in installing antennas on some of the Authority's transmission towers in support of CTC's planned WCS system.

"The proposed Agreement is for a 15 year term. The price for the use of the space on the transmission towers during the first five years of the Agreement is $12,000 per tower site, per year, escalated for inflation after the first year. After the first five years, the price for additional structures that CTC identifies will be negotiated by the parties. The transmission tower sites identified by CTC must be concurred with by the Authority. Additionally, CTC will be required to obtain, at its expense, any additional land use rights associated with the installation of the WCS system, including utility services.

"The payments to be received by the Authority under the Agreement are within the market range for such use. Authority staff has researched fees for similar agreements entered into by utilities and has determined that the price is competitive. In addition, CTC has other alternatives for the installation of its WCS system including other utilities' towers and poles in the general vicinity of the Authority's towers, and the use of buildings, watertowers or other structures. As CTC expands its WCS system statewide, maximum use of and additional value from the Authority's tower sites can be achieved.

"The use of transmission towers to append antennas is not inconsistent with the operation and maintenance of the Authority's transmission system. Additionally, the proposed arrangement was reviewed and found to be acceptable from an environmental perspective; however, prior to approval of any specific antenna installation, an environmental evaluation in accord with the State Environmental Quality Review Act will be completed.

"At their meetings of August 27, 1996 and November 26, 1996, the Trustees approved similar agreements with Sprint Spectrum L.P. and Omnipoint Communications Inc., other personal communication systems providers. This agreement, like the agreements with Sprint Spectrum L.P. and Omnipoint do not bar the Authority from allowing other licensed companies access to Authority tower sites.

FISCAL INFORMATION

"Implementation of this Agreement will generate revenue for the Authority.

RECOMMENDATION

"The Director - Communications, the Vice President and Chief Engineer - Power Generation, and the Vice President – Chief Information Officer recommend that the Trustees approve a 15 year agreement with CTC to use space on the Authority's transmission towers for Wireless Communications Services on substantially the terms and conditions as set forth in this memorandum.

"The Senior Vice President - Transmission, the Executive Vice President, Secretary and General Counsel, the Executive Vice President – Project Operations, and I concur in the recommendation."

Trustee McCullough inquired as to measures taken by staff to ensure that NYPA is adequately and competitively compensated for use of its transmission towers. Mr. Leonard explained that subsequent to being approached by CTC, Authority staff investigated the market value of the proposal and concluded that the fee is appropriate. Mr. Blabey added that CTC's use of our towers would not be exclusive and that NYPA would not be precluded from entering into similar agreements with other providers, as it already had with Sprint and Omnipoint. In response to further questions from Trustee McCullough, Mr. Blabey explained that the CTC equipment will not be the responsibility of the Authority. Mr. Hiney added that, as with the earlier agreements, CTC will be responsible for maintaining its own equipment but that only Authority personnel will have access to perform work on the towers.

Trustee Miller asked whether the necessary contractual provisions to hold the Authority harmless have been included so as to relieve the Authority of any liability. Mr. Blabey responded in the affirmative, explaining that such provisions will be included in the agreement at the time it is signed.

The attached resolution, as recommended by the President was unanimously adopted.

RESOLVED, That an agreement between the Authority and Cellular Telephone Company ('CTC') whereby CTC shall have the right to use approved Authority transmission tower sites for CTC's Wireless Communication Services on substantially the same terms and conditions as set forth in the foregoing report of the President be approved; and be it further

RESOLVED, That the Executive Vice President – Project Operations, or his designee be, and hereby is, authorized to execute the aforesaid agreement and to execute such other documents as may be necessary or desirable to effectuate the foregoing, subject to approval of the agreement and such other documents by the Executive Vice President, Secretary and General Counsel.

8. Energy Control Center – Energy Management Computer System Replacement – Additional Capital Expenditure Authorization Request

The President submitted the following report:

SUMMARY

"The Trustees are requested to authorize additional capital expenditures of $ 5.9 million to the current Capital Expenditure Authorization Request ('CEAR') funding of $14.2 million, for enhancements to the replacement Energy Management Computer System ('EMS') for the Energy Control Center ('ECC'). The primary reasons for the increased funding requirements include (1) vendor delays in delivering the original system specified by the Authority; (2) hardware/software and outside programming support staff not originally specified or anticipated by staff which is needed to achieve full EMS functionality; (3) changes that have occurred in the business problem addressed by the EMS, due to the more than five years that have elapsed since the contract was awarded; and (4) changes required to address the advent of the New York Independent System Operator ('NYISO'). Approval of the requested additional funding will insure that the Authority's commercial business interests will continue unimpeded and without financial detriment.

BACKGROUND

"Operations at all Authority generation projects are coordinated from the ECC located at the Frederick R. Clark Energy Center in Marcy, New York. Personnel at the ECC are responsible for controlling generation via voice dispatch and/or automatic generation control ('AGC'), and securely monitoring the Authority's bulk transmission facilities. In addition, the ECC provides data collection and control services to meet the needs of other Authority functions (e.g., customer billing), the New York Power Pool ('NYPP') and other electric energy systems. The merchant functions associated with wholesale power sales and purchases are separately performed by the Energy Resource Management Division, located at the White Plains Headquarters Office, to comply with Code of Conduct requirements mandated by the Federal Energy Regulatory Commission ('FERC').

"The ECC is staffed twenty-four hours a day, 365 days a year. The ECC's responsibilities include coordination of equipment outages, scheduling of water usage at the hydroelectric facilities, energy and water accounting and provision of daily, weekly and monthly operations reports. The ECC scheduling staff is responsible for developing day before preschedules consistent with contractual requirements. The preschedules form the basis of the hourly transactions that are routinely modified on shift. The ECC dispatch staff is responsible for minute-to-minute operation of the Authority's facilities within the interconnected electric system, including accurately dispatching Authority generation at the most economical level, consistent with operating the system in the most reliable manner.

"The primary function of an EMS is to manage, schedule and account for energy transactions with customers and other utilities, as well as to ensure the reliability and integrity of the electric system. The existing EMS located at the ECC was specified in 1975 and installed in 1982. At their meeting of June 25, 1991, the Trustees approved a CEAR for the acquisition of a replacement EMS in the amount of $14.2 million. In June 1993, a contract was awarded to Siemens [1] to deliver the new EMS to the ECC by September 1995, for a fixed price of $9.8 million. [2]

[1] The original bidder was Empros. Siemens acquired Empros shortly before the Authority awarded the contract.
[2] This figure reflects all approved change orders to date.

"The Siemens EMS utilizes a distributed processing architecture based upon IBM RS/6000 RISC workstations. All primary servers are redundant, and are connected by a redundant Local Area Network ('LAN'). While the standard Siemens system served as the basis for the EMS, there are several so-called 'Specials', in addition to the Energy Scheduling and Accounting ('ESA') application, which were custom designed to meet the Authority's needs.

"There are seven primary servers and redundant back-ups: Administrator, Applications, Data Link, Communicator, Remote Terminal Unit ('RTU'), Data Acquisition and ESA servers. There are three primary operator workstations with four screens, two training/spare operator workstations also with four screens, six dual screen scheduler consoles, three dual screen programmer/engineer workstations, a visualization mapboard projection system, an internal PC network to support local ECC PC access and there is remote PC access through dial-up modems.

"The primary functions of the EMS are divided between the real-time applications and the ESA application. The real-time functions include data acquisition from three RTU sites, data acquisition from three supervisory control and data acquisition ('SCADA') sites and data exchange between the NYPP and its members. In addition, the Siemens system supports full graphics displays, alarm processing, data processing, supervisory control and full real-time data archiving. There is also an AGC function to automatically control the output of certain Authority generating facilities. The Siemens system also features network applications including model update, state estimator, security analysis, operator power flow and outage scheduling. There is an operator-training simulator that replicates the real-time system for training in both real-time situations as well as ESA functions. The intelligent alarm processor is an expert system to perform alarm filtering as well as implementation of special rules for operations with the Hydro Quebec transmission system.

"The ESA application is a near stand-alone function that utilizes an Oracle database, Forte user and application interface, and a specialized memory mapped file for acquisition and storage of frequently accessed account data values. This critical application is unique to the Authority, and was specially written to address the specific applications and requirements of the Authority. There are over 300 energy schedules that are maintained on an hourly and daily basis. The function of the ESA application is to provide a means of entering the scheduling account information to be used for the determination of hourly facility and total company generation scheduling, and for the acquisition of after-the-fact energy utilization data to be used for billing and energy reconciliation. A three month active database is available on-line before the data is archived to removable storage.

"An emergency control center application is also provided that will allow assumption of all critical functions in the event that the entire primary EMS becomes inoperable, or the ECC becomes uninhabitable. The functions included in the emergency control center include data acquisition from the RTU and SCADA sites, data exchange with the NYPP, AGC and all ESA capabilities.

"EMS systems by their nature are very technically complex. There are only a few enterprises which have the capability to supply such systems domestically. Moreover, in the light of deregulation, the traditional business solutions, which the EMS addresses, are undergoing radical change, which further affects the complexity of the underlying hardware and software systems. Profitability problems have befallen all vendors at one time or another because of technology related issues and the project challenges related to customer driven enhancements. The industry has gradually consolidated and this is likely to continue, since only large transmission and distribution vendors have the financial resources to support the risk profile of the industry.

"Siemens is one of the largest electrical engineering companies in the world and one of the largest suppliers of transmission and distribution products to the electric utility industry. As such, it is believed that Siemens has the financial strength and determination to withstand the ongoing consolidation and profitability concerns of the EMS industry. This is fundamental not only to completing the delivery of the EMS to the Authority, but also with regard to on-going support of the system during its life cycle.

DISCUSSION

"The original delivery of the EMS from Siemens was planned for September 1995. Partial delivery of the system actually occurred in March 1998, and the remainder of the system was delivered in July 1998. Commissioning of the system is currently anticipated to be completed in January 1999.

"Siemens experienced significant delays in the development of their software following the merger with Empros in 1993. Siemens also spent considerable time in meeting the requirements of the Authority's specification, especially for ESA application performance associated with display call-up times and calculation execution times.[3] These combined delays increased the level of effort in Authority personnel support and required a much greater than anticipated time to perform factory acceptance testing.

"In addition, enhancements have been identified from the original specifications that are needed to improve the efficiency of the dispatchers and other users of the EMS, as the Siemens product developed and evolved. The need for the use of outside programming support to supplement existing staff at the ECC became apparent as the system development proceeded and was imperative to ensure that the Authority could complete its portion of the work effort as contemplated in the Siemens' contract.

"There is also a need to accommodate changes in the business problem addressed by the new EMS that were not defined in the original specification, but which are required for operation. Notably this includes application software to accommodate market based energy transactions, including the Power for Jobs program. Because of the uncertainty of the specific date when the ISO will be in full operation, after commissioning of the EMS, the new Energy Management System may need to operate within NYPP as well as the ISO environment. As a result, there is software that needs to be added to the new EMS for operation in the NYPP environment, that was not originally specified in the Siemens' contract.

"Finally, an extensive effort to restructure the electric industry in New York by providing choice at the wholesale and eventually at the retail level is underway. A critical step is to place the NYISO into operation. In order for the NYISO and the associated pricing regime referred to as Locational Based Marginal Pricing ('LBMP') to be successful, the Authority must be able to conduct its commercial activities within the ISO environment, consistent with the tariff and other provisions that will govern ISO operations. This means that there will be a great deal of hardware and software changes required to the Siemens EMS. Market trials with the NYISO are currently scheduled to commence in January 1999, at which time the ECC must be able to perform the full requirements associated with the scheduling and reporting of all energy transactions to the NYISO.

"To assist the Authority in implementing NYISO requirements in a timely fashion, KEMA Consulting was hired as a Project Manager to coordinate efforts within the Authority and with the NYPP and to develop a strategy of implementation. This strategy represents a combination of hardware procurement, and new software development to be performed by a blend of in-house staff, outside programmers, and vendors in order to perform this work in a very short time schedule. The need for this Project Manager is a direct result of the vendor delays in delivery of the EMS. As a result of these delays, the transition to the ISO and the commissioning of the EMS are occurring in tandem as opposed to serially, which would have been the case if the EMS were delivered on

[3] Siemens conducted a six month product search, procured faster user interface software (Forte), developed a memory mapped file structure and retained experts from Oracle and IBM to promote an acceptable solution at an unreimbursed cost of $800,000. In return for this consideration, the Authority waived recovery under the liquidated damages provision of the contract with Siemens.

time. Staff resources at the ECC are inadequate to address both activities simultaneously in the absence of outside assistance. Exhibit '8-A' provides a detailed breakdown of the additional funding requirements estimated by staff to complete the on-going work activities. This includes costs associated with vendor delays in completing the originally contemplated work effort4; implementation of necessary changes to permit enhanced functionality not originally specified, including provision for outside programming support; efforts necessary to accommodate changes in the business problem addressed by the EMS, in view of the more than five years which have elapsed since the contract was awarded to Siemens; and changes related to operation in the NYISO environment. The total additional cost including allowances for contingencies and overhead recovery is $5.9 million.

FISCAL INFORMATION

"Payment will be made from the Authority's Capital Fund.

RECOMMENDATION

"The Senior Vice President – Transmission recommends that the Trustees authorize an additional capital expenditure of $5.9 million for the costs associated with the new Energy Management System.

"The Executive Vice President, Secretary and General Counsel, the Executive Vice President and Chief Financial Officer, the Executive Vice President – Project Operations, and I concur in the recommendation."

Mr. Pellegrino reported that the requested additional authorization of $5.9 million, which represents a 42% increase over the amount of funding approved by the Trustees in 1991, is attributable to four principal causes: first, the vendor did not deliver the system, originally due in 1995, until 1998. Mr. Pellegrino explained that although this type of delay is not unusual in the industry, the lengthy time period which elapsed had given rise to some $2.2 million of additional payroll costs for the Authority, which costs reflects some 37% of the total requested funding increase. Mr. Pellegrino stressed that these funds were not payable to Siemens.

The second reason noted by Mr. Pellegrino was that the acquisition of the EMS triggered unanticipated expenditures for hardware, software and outside expertise amounting to some $1.8 million, or 31% of the additional funding. Mr. Pellegrino explained that of this amount, about $600,000 was needed for retaining outside programming support and expertise.

The third reason underlying the need for additional monies, arises from changes to the Authority's business plan over the last 7 years, and accounts for $300,000 or some 6% of the request. For example, the ongoing transition in New York State to a deregulated electric industry necessitates the creation of an "ISO"

(Independent System Operator), which will replace the New York Power Pool and will change the way NYPA does business at the Energy Control Center, accounts for $1.1 million, or some 18% of the additional funds sought.

Lastly, additional "contingencies" which have arisen over the past several years represent another $500,000 of expenditures, or 8%, of the total requested increase.

Mr. Pellegrino reported that when he assumed his current responsibilities some 15 months ago, and became aware of the delayed delivery of the EMS equipment, he investigated the feasibility of terminating the contract with Siemens and awarding the work to another supplier. He learned that the EMS which Siemens was assembling for NYPA had been ordered with a number of special, custom-designed applications, including an "ESA" (Energy Scheduling and Accounting) application, with which Siemens encountered significant development problems. Mr. Pellegrino explained that delays in the ESA development had been exacerbated by Siemens' 1993 merger with Empros, and that continuing consolidation within the industry means that there were few alternate vendors for NYPA to turn to when Siemens' inability to make timely delivery became apparent.

Mr. Pellegrino reported that he had met with Siemens representatives and negotiated an offset of the liquidated damages provision in the amount of $750,000 against the $800,000 in additional work that Siemens has expended on developing the EMS. Mr. Pellegrino underscored that although the Authority could have terminated the contract three years ago, it would still have been necessary to procure the equipment from another source.

Trustee McCullough expressed strong concern about the timing and size of the current funding request, noting that it is some 50% over the original Trustee authorization. Trustee McCullough noted that he questions staff's decision to not terminate the contract with Siemens and that, in any event, the Trustees should have been fully apprised of the delay in 1995. Trustee McCullough stressed that because the Trustees conduct

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[4] It should be noted that the delay costs listed on Exhibit '8-A' under I. Vendor Delays, are not charges that will be reimbursed to Siemens. Rather these are costs incurred by the Authority primarily for KEMA Consulting and staff payroll charged to the CEAR, which could have

the Authority's business in large part in reliance on staff's recommendations, it is vital that staff keep the Board members abreast of all significant developments, including potential contractual disputes on a timely basis. Mr. Pellegrino expressed staff's apologies. Trustee McCullough further noted that although he is cognizant of the need for the EMS equipment, he believes that had the Trustees been apprised of the delay in 1995, the current situation with Siemens might have been obviated.

Trustee Miller inquired as to why staff had decided against exercising against the bond for the project. Mr. Pellegrino explained that this would have put the project in default and finding an alternate vendor to pick up the work in mid-stream would have likely lead to more delay and was not attractive. He also noted that while the delay has cost NYPA significantly, Siemans has delivered a viable EMS system.

Addressing Trustee McCullough's comments, Mr. Hiney confirmed that the Trustees had not been provided with adequate or timely information, and that staff may have inappropriately relied on the technically "tight" contract specifications for the equipment, which the vendor tried but failed to meet, as well as the fact that the old system was still running. Mr. Hiney noted that new developments in NYPA's business, ranging from the ISO to the Power for Jobs program also had an impact; however, he supported Mr. Pellegrino's decision to await the equipment from Siemens. Chairman Rappelyea stated that Trustee McCullough's observations were meritorious and would be noted for the record.

The attached resolution, as recommended by the President, was unanimously adopted.

RESOLVED, That additional capital funding is hereby approved to be committed in accordance with the Authority's Expenditure Authorization Procedures for the additional hardware and software related to the Energy Management Computer System Replacement at the Frederick R. Clark Energy Center, to meet in part the requirements of the New York Independent System Operator and such other requirements as specified in the foregoing report of the President in the amounts listed below:

Capital	**Expenditure Authorization**
Energy Management Computer System Replacement	
Current Expenditure Authorization Request	**$ 5.9 million**
Expenditures Previously Authorized	**$14.2 million**
Total Amount Authorized	**$ 20.1million**

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been avoided if the EMS was delivered sooner.

9. Convertible Static Compensator Project - Expenditure Authorization – EPRI/Westinghouse - Award

The President submitted the following report:

SUMMARY

"The Trustees are requested to authorize an expenditure of up to $35 million for procurement and installation of power equipment to relieve transmission line congestion in Central New York State. This improvement will increase the power transfer capability across the critical Utica/Albany transmission corridor known as Central-East ('C-E') by 120 MW, allowing for a total upstate-to-downstate transfer increase of 240 MW. It will also improve the overall reliability and resiliency of the New York State grid. This major transmission system reinforcement includes the Convertible Static Compensator ('CSC'), a power-electronics control device, and the related high voltage equipment at the Marcy 345 kV substation as well as three conventional 135 MVAR capacitor banks at substations in New York State. This authorization also includes approval to award a contract to EPRI/Westinghouse for the CSC technology development and turnkey installation.

BACKGROUND

"Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year.

"Power transfers across New York State, resulting from a concentration of generation in the north and west and load in the Southeast New York ('SENY') metropolitan area, are subject to thermal, voltage, and stability constraints. Consequently, economical power dispatch is hindered and electric commerce is impaired. The C-E interface, encompassing the transmission ties from Utica to Albany, is currently voltage limited at 2850 MW. This limit is highly variable because it is reduced during equipment and/or system outage conditions. The C-E power flow is at its Security Constrained Dispatch limit 25% of the time and within 100 MW of that limit 75% of the time. Continued maximum utilization of the C-E interface is expected due: to (1) SENY load growth projected to be in excess of 3% through the end of the decade; and (2) recent announcements related to the potential siting of new generation or repowering by existing generation at Athens (1080 MW), Bethlehem (400 MW), and at Sithe's Independence Station (750 MW), each of which have planned in-service dates prior to 2003.

"Reliability of the transmission system is of paramount importance in light of deregulation and competition. During 1996 and 1997, the New York State system had 18 major emergencies and 192 alert states due to C-E limitations. This major transmission system reinforcement will enhance the reliability of the system and allow for more flexible and secure operation.

"System studies indicate that the immediate transmission system reinforcement needs are in the form of voltage support and control, and subsequently, both power flow and voltage control capabilities will be required. A hybrid solution consisting of Flexible AC Transmission System ('FACTS') technology and conventional capacitor banks most effectively addresses the evolving reinforcement needs of the NYS transmission system.

"FACTS technology which includes the CSC concept offers the most adaptable means of increasing permissible levels of power transfers while improving the overall security of the grid. FACTS devices combine high-speed solid-state power electronics, microprocessors, powerful computers, advanced automation, state-of-art communications and innovative power system analysis software to provide the most advanced control capabilities on the power system.

"The CSC planned for the Marcy substation is a versatile and multifunctional FACTS control device with five different configurations and several selectable operating modes. The CSC is a new approach to the use of FACTS technology. In its shunt configuration, it will provide dynamic voltage support at Marcy and Central New York. In its series configuration, the CSC will provide the capability to control power flow. The CSC can be used in both the shunt and series configurations simultaneously for both voltage support and power flow control. FACTS is a superior alternative to the siting of new transmission facilities, because it avoids the associated environmental impact and licensing implications.

DISCUSSION

"The Authority teamed up with the Electric Power Research Institute ('EPRI') and conceptualized the CSC FACTS technology. Emphasis was placed on modularity, configurability, and expandability to maximize the use of existing transmission assets in New York State well into the future. Of particular note is the CSC's capability to control power flow simultaneously on two different lines in the same substation by exchanging power between them and routing power from an overloaded line to an underutilized one. This concept would be an industry first and would result in advancing the state-of-the-art FACTS technology to the 4th generation level.

"The Authority and EPRI jointly issued an RFP at the end of April 1997 for the development, procurement and installation of the CSC. The RFP was issued to several major manufacturers. Responses were received in July 1997 from General Electric, Mitsubishi Electric, and Westinghouse.

"A team of experts in FACTS technology was assembled to review the proposals received. The review team consisted of six Authority staff representing major disciplines, one reviewer each from the Tennessee Valley Authority, Western Area Power Administration, and American Electric Power and two reviewers from EPRI. The Westinghouse bid received the highest ranking based on the technology proposed, and the lowest cost. Subsequently, EPRI executed a contract with Westinghouse to provide the associated power electronics technology. It is recommended that the President be authorized to execute a corresponding agreement with EPRI to fund the development and turnkey installation of the CSC Project. The award of a contract(s) covering the procurement and installation of the balance of equipment will be addressed subsequently, following competitive solicitation.

"Scheduled for completion in the 4th quarter of 2000, the +/- 200 MVA dynamic shunt compensation portion of the CSC in conjunction with a 135 MVAR Capacitor bank at NYSEG's Oakdale substation ('Phase I') will provide for increased transmission capacity of 60 MW over the C-E interface. An upstate-to-downstate transfer increase of 120 MW will also be obtained. Subsequently, the addition of the series hardware by 4th quarter 2003 on the Utica-New Scotland and Utica-Coopers Corners lines plus the remaining two capacitor banks at Niagara Mohawk's Edic and New Scotland substations ('Phase II') will provide an additional 60 MW increase in C-E transfer limits. Hence, the total C-E increase will be 120 MW. This corresponds to a total increase of upstate-to-downstate transfer of 240 MW.

"Given the critically constrained nature of the C-E interface, there will be an extraordinary interest in securing the rights to any transfer capability that will be available as a result of implementing the CSC Project. This interest should permit the Authority to market these rights at its discretion up-front, with the ability to recover a portion of its investment cost. The Authority will also have added flexibility to recover the remainder of the associated investment from Independent System Operator ('ISO') operations.

"The rules that will govern the determination of the market value of the incremental transfer capability from transmission reinforcement projects will be affected by the on-going transition to the ISO. However, waiting until there is greater certainty with respect to these matters is not a viable option. The C-E interface problem needs immediate attention. Moreover, most of the cofunding and industry support ($13 million) which has been identified will be lost if project advancement is delayed. This would be devastating to the Project's economics. The Authority would also lose the opportunity to be the acknowledged technology leader, opening the way to others to advance this technology outside of New York State.

"The CSC Project will receive considerable support from regulators because it addresses a primary concern that reliability in a competitive environment must not be undermined and that transmission reinforcement projects should go forward in the face of deregulation. Staff has met on several occasions with the New York Department of Public Service ('PSC') concerning FACTS technology, and in particular to discuss the reliability benefits associated with the CSC Project at the Marcy substation. The PSC staff has expressed considerable enthusiasm for the Project.

"As previously indicated, the Authority has obtained significant industry support and cofunding for this project including EPRI, Westinghouse and 13 utilities throughout the country. Central Hudson is the only New York utility that has offered financial support for the project. The cofunding commitments will reduce the Project cost to the Authority to $35 million. Included in this amount is $6.5 million for engineering, craft labor and construction management, which will be provided by Authority staff.

"Both NYSEG and Niagara Mohawk have received detailed briefings on the Project from Authority staff. Each has agreed to provide access for installation of the capacitor banks at their substations, subject to the execution of satisfactory facility agreements.

"This Transmission Reinforcement Project provides a long term, robust solution to the power transfer limitations of the New York State transmission system. The enhancements to the reliability of the network will be achieved at this critical time of deregulation of the electric power industry. EPRI has indicated to the Authority that the 1996 blackouts affecting the western United States could have been avoided, if FACTS technology had been installed.

<u>FISCAL INFORMATION</u>

"Payments associated with this project will be made from the Capital Fund. After reflecting cofunding commitments from EPRI, Westinghouse, and other industry participants, the net cost to the Authority of implementing the Project is anticipated to be $35 million.

"The ISO Tariff on file with the Federal Energy Regulatory Commission (approval pending) would permit the Authority to include the annual carrying charges on up to $5 million of annual system upgrade and expansion costs in the computation of transmission revenue requirements, for recovery as an uplift charge on all ISO transactions. Consequently, it is planned to include $15 million of CSC Project costs, over a three-year period in the ISO recovery mechanism. The remaining $20 million in project costs are expected to be recovered from the sale of transmission rights to the incremental transfer capability over the C-E interface, which will result from implementing the project. Staff estimates that the Authority can recover this portion of its investment, which is not included in the ISO uplift charge, within 12 years, based on the anticipated value of congestion across the C-E interface and the associated energy flow.

RECOMMENDATION

"The Director - Research and Technology Development, the Senior Vice President - Energy Services and Technology, and the Senior Vice President - Transmission recommend that the Trustees authorize the funding of up to $35 million for the Convertible Static Compensator Project. It is also recommended that the President be authorized to execute a related funding agreement with EPRI, covering the development and turnkey installation of the CSC technology.

"The Executive Vice President, Secretary and General Counsel, the Executive Vice President - Chief Financial Officer, the Executive Vice President - Project Operations, and I concur in the recommendation."

Mr. Pellegrino introduced Mr. Zelingher who has played an important role in securing co-funding for this important technology, which will increase permissible levels of power transfers and improve the overall security of the transmission grid throughout New York State. Mr. Zelingher showed the Trustees a sample of the power-electronics CSC device, and explained that it employs the FACTS technology which combines high-speed solid-state power electronics, microprocessors, powerful computers, advanced automation, state-of-art communications and innovative power system analysis software. In response to questions from Chairman Rappleyea concerning EPRI's role, Mr. Pellegrino explained that EPRI has been working on this issue for 25 years and that its staff worked with Authority personnel to identify a vendor who could make and deliver the technology. He further stated that the overall cost of the undertaking will be no more than $48 million, of which $35 million will be paid by the Authority and which staff anticipates will ultimately be recovered in the form of uplift charges to the ISO and sale of transfer capability rights on the interface.

Trustee Miller questioned why only Central Hudson among the downstate utilities is participating in the funding of the CSC. Mr. Pellegrino responded that although the other utilities have been fully advised of the benefits of the CSC and that Niagara Mohawk and NYSEG have promised cooperation, they have been reticent to date about committing funds. Mr. Pellegrino added that he anticipates their eventual participation. Chairman Rappleyea noted that the issue is being addressed at the NYPP. Mr. Delaney added that the IOUs are interested in a recovery period of 5 to 7 years on their potential investment; however, it appears that the fastest rate of recovery would not be less than 11 years.

Mr. Miller stated that the Authority was meeting its responsibility to the State by participating in this forward looking project and that potential beneficiaries of the project should step-up. Chairman Rappelyea noted that the project would continue NYPA's leading edge role in developing transmission technology.

The attached resolution, as recommended by the President, was unanimously adopted.

RESOLVED, That capital expenditures are hereby approved to be committed in accordance with the Authority's Expenditure Authorization Procedures for the Convertible Static Compensator Project in the amounts listed below:

Capital	**Expenditure Authorization**
Equipment procurement and installation	**$ 28,500,000**
Engineering, craft labor, construction management and Authority direct / indirects	**$ 6,500,000**
	$ 35,000,000

AND BE IT FURTHER RESOLVED, That the President is authorized, subject to approval of the form thereof by the Executive Vice President, Secretary and General Counsel, to execute an agreement on behalf of the Authority with EPRI for the development and turnkey installation of the CSC.

10. Procurement (Services) Contracts - James A. FitzPatrick and Indian Point 3 Nuclear Power Plants; and Richard M. Flynn Power Project – Awards

The President submitted the following report:

SUMMARY

"The Trustees are requested to approve the award and funding of the multi-year procurement contracts listed in Exhibit '10-A' for the James A. FitzPatrick ('JAF') and Indian Point 3 ('IP3') Nuclear Power Plants, as well as for the Richard M. Flynn Power Project. A detailed explanation of the nature of such services, the basis for the new awards, and the intended duration of such contracts are set forth in the discussion below.

BACKGROUND

"Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year.

"In accordance with the Authority's Expenditure Authorization Procedures, the award of non-personal services contracts in excess of $3,000,000, as well as personal services contracts in excess of $1,000,000 if low bidder, or $500,000 if sole source or non-low bidder, require Trustees' approval.

DISCUSSION

"While the Authority's policy is to use its own staff to perform necessary engineering and craft labor work, there are cases where it is necessary to utilize external contractors or consultants to supplement Authority staff during peak working periods in support of refueling and other outages, or if special expertise is required that is not available within the Authority.

"The terms of these contracts will be more than one year, therefore the Trustees' approval is required. All of these contracts contain provisions allowing the Authority to terminate the services at will, without liability other than paying for acceptable services rendered to the effective date of termination. Approval is also requested for funding all contracts, ranging in estimated value from $40,000 to $700,000. These contract awards do not obligate the Authority to a specific level of personnel resources or expenditures.

"The issuance of multi-year contracts is recommended from both a cost and efficiency standpoint. In many cases, reduced prices can be negotiated for these longer term contracts. Since these services are typically required on a continuous basis, it is more efficient to award longer term contracts than to rebid these services annually.

Contracts in support of the nuclear plants:

"The five contracts with Engineering, **Planning & Management, Inc., EQE International, Science Applications International Corp., Scientech, Inc., and The Risk Research Group (Q-02-2021; PO #'s TBA)** would commence on January 1, 1999, subject to the Trustees' approval. The purpose of these contracts is to provide consulting services for probabilistic safety analyses and reliability studies related to ongoing regulatory commitments in support of IP3 and JAF. Services may include supporting the Authority in: 1) the update and maintenance of the Individual Plant Examination ('IPE') and Individual Plant Examination of External Events ('IPEEE') reports for both nuclear plants; 2) application of risk and reliability technology and Individual Plant Examination ('IPE') results to its nuclear power plants and its work on risk-based regulation; and 3) performing the shutdown risk assessment for both IP3 and JAF. Analyses may include system fault trees, accident sequence event trees, qualification, uncertainty, data analysis (e.g., Bayesian updating, common cause failure, maintenance unavailability, human reliability, and data base preparation), containment performance, and interfacing with the Nuclear Regulatory Commission in defense of an IPE. The five aforementioned firms were the most technically qualified low bidders of seven bids received (in addition to 26 non-responding bidders and notice in the Contract Reporter). The intended term of these contracts is three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total combined amount expected to be expended for the term of the contracts, $500,000.

"The contract with **Centurion Security Inc. (Q-02-2194RH; PO # TBA)** would commence on October 1, 1998, subject to the Trustees' approval. The purpose of this contract is to provide on- and off-site locksmith services, on an 'as required' basis, for IP3. Services include routine and emergency work for the following departments: security, radiological engineering, maintenance, instrumentation and controls, and others as required; some work may also be required in high radiation areas of the facility. Centurion was the sole responding bidder of ten bids solicited, in addition to notice in the Contract Reporter. Since Centurion has provided satisfactory services under a previous contract, and the prices quoted are reasonable, staff recommends proceeding with this award. The intended term of this contract is three years, subject to the Trustees' approval, which is hereby requested. Rates for parts and materials will remain firm for the duration of the contract. Approval is also requested for the total amount expected to be expended for the term of the contract, $114,000.

"The contract with **Lovejoy Controls (C98-I6144)** would commence on October 1, 1998, subject to the Trustees' approval. The purpose of this contract is to provide on-site technical field assistance to support control system troubleshooting, maintenance, repairs and calibration of the Main Boiler Feed Pump turbine control systems and other related turbine equipment, on an 'as required' basis, for IP3. This award is made on a sole source basis, since Lovejoy Controls is the original equipment manufacturer of the new speed control systems that were retrofit into the boiler feed pump drive turbines in 1987. The systems supplied are 21X-series electronic, pneumatic, and hydraulic units that assume boiler feed pump turbine speed control functions. It should be noted that an advertisement was also published in the Contract Reporter, but resulted in no additional proposals. The intended term of this contract is four years, subject to the Trustees' approval, which is hereby requested. Rates will remain firm for the duration of the contract. Approval is also requested for the total amount expected to be expended for the term of the contract, $144,000.

"The contract with **Mitrione & Sons Machines, Inc. (C98-I6160)** would commence on October 1, 1998, subject to the Trustees' approval. The purpose of this contract is to provide machine shop fabrication services on various IP3 plant equipment in the conventional areas of the plant, on an 'as required' basis. Services include onsite and offsite maintenance and repairs. Mitrione was the sole responding bidder (of five bids solicited, in addition to two inquiries resulting from the notice in the Contract Reporter). This is the only local machine shop that has the large milling machines and lathes needed to perform fabrication services on large pieces of equipment. Authority staff does not have the necessary expertise or machine shop equipment to perform these services onsite. The intended term of this contract is three years, subject to the Trustees' approval, which is hereby requested. Rates will remain firm for the duration of the contract. Approval is also requested for the total amount expected to be expended for the term of the contract, $62,000.

"The contract with **Siemens Power Corporation (NFS-98-1; PO # TBA)** would commence on October 1, 1998, subject to the Trustees' approval. Noble metals are being added to the primary coolant (water) in the JAF plant, in order to mitigate stress corrosion cracking of the reactor internals. The purpose of this contract is to evaluate the effect of such noble metal addition on the performance of fuel. This involves surveillance of nuclear fuel assemblies after application of General Electric's NobleChem treatments through the use of visual inspections and oxide thickness measuring equipment. The evaluation will include collection of crud from surfaces, to assess crudding characteristics and to better understand corrosion characteristics. Increased corrosion and/or unusual crudding with increased hydrogen uptake are the chief concerns with extended operation in coolants containing noble metals. Industry experience over many years reveals that corrosion in boiling water reactors depends on burn-up, fuel rod power history, linear power, coolant chemistry, cladding chemistry and microstructure, and crudding characteristics. Siemens was determined to be fully qualified and the low bidder of two bids received (in addition to five non-responding bidders and notice in the Contract Reporter). The intended initial term of this contract is four years (to include inspections after each of three refueling cycles), with an option to extend for two additional years (to include a fourth cycle); this is subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the initial term of the contract, $700,000.

Contract in support of the non-nuclear facilities:

"The contract with **Dun-Rite Maintenance Corp., a New York State certified Minority/Woman-owned Business Enterprise (QA039702, PO # TBA)** would commence on October 1, 1998, subject to the Trustees' approval. The purpose of this contract is to provide for daily cleaning and other related janitorial services on a weekly and monthly basis for the Richard M. Flynn Power Project. The covered areas include office space, locker rooms, and kitchen area. Dun-Rite was the low bidder of five bids received (of which four were in response to a notice in the Contract Reporter). The intended term of this contract is three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, $40,000.

FISCAL INFORMATION

"Funds required to support contract services for JAF, IP3, and the Flynn Project have been included in the 1998 Approved O&M Budget. Funds for subsequent years, where applicable, will be included in the budget submittals for those years. Payment will be made from the Operating Fund.

"Funds required to support contract services for capital projects have been included as part of the approved capital expenditures for those projects. Payment for nuclear projects will be made from the appropriate Nuclear Improvement Fund.

RECOMMENDATION

"The Site Executive Officer - James A. FitzPatrick Nuclear Power Plant, the Site Executive Officer - Indian Point 3 Nuclear Power Plant, the Vice President - Nuclear Engineering, the Vice President - Nuclear Operations, the Regional Manager – Southeast New York, and the Vice President - Procurement and Real Estate recommend the Trustees' approval of the award of multi-year procurement contracts to the companies listed in Exhibit '10-A' and as discussed above.

"The Chief Nuclear Officer, the Executive Vice President, Secretary and General Counsel, the Executive Vice President and Chief Financial Officer, the Executive Vice President - Project Operations, and I concur in the recommendation."

The attached resolution, as recommended by the President, was unanimously adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, the award and funding of the multi-year procurement contracts set forth in Exhibit "10-A" are hereby approved for the period of time indicated, in the amounts and for the purposes listed therein, as recommended in the foregoing report of the President.

11. Procurement (Services) Contracts - James A. FitzPatrick and Indian Point 3 Nuclear Power Plants; and Energy Services & Technology Business Unit Programs - Extensions, Approval of Additional Funding, and Increase in Compensation Ceiling

The President submitted the following report:

SUMMARY

"The Trustees are requested to approve the continuation and funding of the procurement contracts listed in Exhibit '11-A' for the Indian Point 3 ('IP3') and James A. FitzPatrick ('JAF') Nuclear Power Plants, as well as for the Energy Services & Technology Business Unit programs. In addition, the Trustees are requested to approve an increase in the compensation ceiling to $3,763,427 from the previously approved amount of $2,963,427, of the procurement contract with Post Buckley Schuh & Jernigan for consulting services to study the biological and economic impact of power plants on Hudson River fish stocks; an increase in the compensation ceiling to $9,906,000 from the previously approved amount of $5,000,000 of the procurement contract with Black & Veatch; an increase in the compensation ceiling to $30,326,000 from the previously approved amount of $8,000,000, and an increase in compensation ceiling to $11,615,000 from the previously approved amount of $6,000,000, both with Harris Energy Systems for program management and implementation services in support of the SENY Electrotechnologies program and Non-Electric End Use programs, respectively. It should be noted that all funding in support of the three Energy Services & Technology contracts was previously approved by the Trustees for the specific programs; approval is now sought to release and allocate the previously approved funding to each of these three contracts. In addition, all funding will be recovered by the Authority. A detailed explanation of the nature of such services, the reasons for extension, and the projected expiration dates are listed below.

BACKGROUND

"Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year.

"The Authority's Expenditure Authorization Procedures require Trustees' approval when a personal services contract exceeds a cumulative change order value of $500,000, or when a non-personal services or equipment purchase contract exceeds a cumulative change order limit of $3,000,000.

DISCUSSION

"While the Authority's policy is to use its own staff to perform necessary engineering and craft labor work, there are cases where it is necessary to utilize external contractors or consultants to supplement Authority staff during peak working periods in support of refueling and other outages, or if special expertise is required which is not available within the Authority.

"Although the firms identified in Exhibit '11-A' have provided effective services, the issues or projects requiring these services have not been resolved or completed and the need exists for continuing these contracts. Trustees' approval is required because the terms of these contracts exceed one year and/or because the cumulative change order limits will exceed the levels authorized by the Expenditure Authorization Procedures in forthcoming change orders. All of the subject contracts contain provisions allowing the Authority to terminate the services at will, without liability other than paying for acceptable services rendered to the effective date of termination.

"These contract extensions do not obligate the Authority to a specific level of personnel resources or expenditures. As the Authority performs more work in-house over the next several years, funding allocated for services performed pursuant to these contract extensions will be correspondingly reduced.

"Extension of each of the contracts identified in Exhibit '11-A' is requested for one or more of the following reasons: 1) additional time is required to complete the current contractual work scope or additional services related to the original work scope; 2) to accommodate an Authority or external regulatory agency schedule change, which has delayed, re-prioritized, or otherwise suspended required services; 3) the original consultant is uniquely qualified to perform services and/or continue its presence, and rebidding would not be practical; or 4) the contractor provides a proprietary technology or specialized equipment at reasonable negotiated rates, which the Authority needs to continue until a permanent system is put in place.

Contracts in support of the nuclear plants – Increase in compensation ceiling:

"The contract with **Post Buckley Schuh & Jernigan (formerly Coastal Environmental; CZ-9117)** has provided for consulting services to calculate the biological and economic impact of power plants on Hudson River fish stocks since September 2, 1987. These calculations were included in a Draft Environmental Impact Statement ('DEIS') prepared jointly by the Authority, Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, and Central Hudson Gas & Electric Company. The DEIS is required for renewal of the State Pollutant Discharge Elimination System ('SPDES') permits covering the Indian Point, Bowline, and Roseton power plants. The New York State Department of Environmental Conservation ('DEC') reviewed the DEIS and determined that the utilities must revise it. At their meeting of December 16, 1997, the Trustees approved an extension of this contract through December 31, 1999 to support this effort. Prior time extensions and additional funding were approved by the Trustees at their meetings of November 22, 1988, September 24, 1991, July 28, 1992, September 28, 1993, December 15, 1994, and June 25, 1996.

"Although the Authority is the lead organization in this effort, all expenditures are shared by the four utilities according to the cost-sharing formula established by the Hudson River Cooling Tower Settlement Agreement. The Authority's share of the total is 22.89%. This program is part of a multi-party environmental arrangement that enabled the utilities operating power plants along the Hudson River to avoid building costly cooling towers. The contract was approved with the understanding that it would need to be extended until the DEIS was fully accepted by the DEC. The DEC considers this consultant to be an important part of the DEIS revision process. The current contract amount is $2,874,937 (of the $2,963,427 previously approved by the Trustees). It is anticipated that an additional $800,000 will be required to complete the analyses for the DEIS and to compile the revised DEIS. This amount represents the total expenditure by all utilities combined; the Authority's share of the additional funding will be approximately $183,120. The Trustees' approval is requested for the additional funding, thus increasing the compensation ceiling to $3,763,427.

Headquarters-issued contracts in support of the nuclear plants:

"The contract with **Allstate Power Vac, Inc. (C97-I6033)** provides for labor, equipment, and materials to perform specialized drain cleaning and video camera inspection services of drain lines, on an 'as required' for IP3. These services are specialized in that a large pressurization truck is used to force pressurized water through 18-inch water lines to free blockages. In addition, if the pressurization method fails, they have a truck with a motorized cable with grapples at the end to force through dense blockages. They have the capability to reach over 150 feet into pipes. The original award, which was competitively bid, became effective on September 10, 1997 for an initial term of one year, with an option to extend for two additional years. A two-year extension is now requested in order to exercise this option. The current contract amount is $76,667; it is anticipated that an additional $50,000 will be required for the extended term. The Trustees' approval is requested to extend the subject contract through September 9, 2000 and to approve the additional funding.

"The contract with **Arkwright Mutual Insurance Company (C97-I6037)** provides for Authorized Nuclear Inspection ('ANI') services in support of the Authority's In-Service Inspection ('ISI') program for IP3. Such ANI services involve the review and inspection of the Authority's compliance with ASME Code Section XI standards vis-à-vis the ISI program that has been submitted to and approved by the Nuclear Regulatory Commission. Services may also include review and inspection of the Authority's activities in conjunction with the: 1) repair or replacement of nuclear components in accordance with the Authority's Repair and Replacement programs; 2) performance of In-Service testing of pumps and valves; 3) construction of new systems in accordance with ASME III; or 4) performing additional inspections for Code related activities, as may be required. The original award, which was competitively bid, became effective on October 1, 1997 for an initial term of one year, with an option to extend for two additional years. A two-year extension is now requested in order to exercise this option. The current contract amount is $50,000; it is anticipated that an additional $141,000 will be required for the extended term. The Trustees' approval is requested to extend the subject contract through September 30, 2000 and to approve the additional funding.

"The contract with **Duke Engineering & Services (S98-00201)** provides for engineering and quality assurance services for the validation of the updated Design Basis Documents ('DBDs') for IP3. This effort is part of the Authority's response to meet requirements of the 10CFR50.54(f) letter to the Nuclear Regulatory Commission. Validation is the process that provides reasonable assurance that design basis information is consistently reflected in the physical plant and those controlled documents used to support plant operations. During validation, the as-built plant and plant documents are validated against design parameters in the DBDs, which are the source documents for validation activities. The objectives of the validation project are to provide reasonable assurance that design requirements are incorporated into design output documents and plant operating documents, and to validate key equipment critical to plant safety versus the design requirements to ensure that the system configuration and functionality are accurately represented by the design documents. Services include validation of 100% of the information contained in the DBDs, including all descriptions, requirements, design features, and attributes (e.g., flow rates, temperature limits, normal and accident positions for components, closure time for valves and interlocks between valves, chain locking for valves, margins, etc.) In addition, the contractor will ensure that all cross-references utilized throughout the DBD are correct, that all modifications listed in the DBD are in fact installed, and that all calculations in the DBD are the latest revisions or are designated as superseded, as necessary. The DBD validation project includes, but is not limited to, work on the following systems: Main Steam, Residual Heat Removal, Auxiliary Feedwater, Service Water, Instrument Air, Safety Injection, Electrical Distribution, Component Cooling Water/Spent Fuel Pit Cooling, Nuclear Instrumentation, Seismic Piping, Chemical Volume and Control, Reactor Protection, Rod Control, Reactor Coolant, HVAC, Containment Integrity, Seismic Buildings and Structures, and Condensate Polishing. The original award became effective on January 13, 1998, for an initial term of one year. A one-year extension is now requested in order to complete the existing work scope as well as additional related work scopes that have been identified. It should be noted that a significant portion of this work was anticipated in the original bid document, with the understanding that it would be the subject of negotiations with the successful bidder as an option at a later date. In addition, Duke was the successful bidder in previous solicitations for this kind of work. Since there is a need to proceed with the additional work now, staff recommends adding the work to this existing Duke contract, rather than bidding out the new tasks, which would not be practical or efficient. This approach is in accordance with the Authority's Guidelines for Procurement Contracts regarding justification of change orders to existing contracts. The additional tasks include, but are not limited to, validation of the following DBDs: radiation and environmental monitoring, fire protection, containment isolation features, accident analysis basis document, and emergency diesel generators/Appendix R diesel generator and containment spray; as well as peer review of the containment spray DBD; and incorporation of Refuel Outage 9 modifications and calculations and new Integrated Technical Specifications into the DBDs. The current contract amount is $520,000; it is anticipated that an additional $1,233,000 will be required for the extended term. Staff negotiated a 7% discount (approximately $90,000) that will be applied to overall project costs incurred during the extended term. The Trustees' approval is requested to extend the subject contract through December 31, 1999 and to approve the additional funding.

"The contract with **Normandeau Associates, Inc. (S97-08064)** provides for the following services in support of the striped bass stock assessment/Atlantic tomcod program for IP3 to meet regulatory requirements: tag and recapture striped bass and Atlantic tomcod in the Hudson River (including equipment rental to perform such services); collect various data on fish characteristics, abundance, etc.; provide data collected during the program in specific format files via electronic information transfer; and prepare reports. The original award, which was competitively bid, became effective on October 14, 1997. The contract was bid for three years and awarded on an expedited basis due to the fall fish migrations when the sampling must be conducted. Trustees' approval is now sought to approve the remaining two years. The current contract amount is $1,261,930; it is currently anticipated that no additional funding will be required for the extended term. It should be noted that, similar to the aforementioned Post Buckley contract, all expenditures for this contract are also shared by the Authority, Con Edison, Orange and Rockland, and Hudson Gas & Electric utilities, according to the cost-sharing formula established by the Hudson River Cooling Tower Settlement Agreement. The Authority's share of the total is 22.89%, which is approximately $288,756. The Trustees' approval is requested to extend the subject contract through October 13, 2000, with no additional funding requested.

"The three contracts with **Crickett Personnel (S97-08516), Dutchess Temps (S97-08515), and Tri-State Employment Services (S97-08517)** provide for secretarial and clerical services to support operations, maintenance, security, training and various other groups throughout the IP3 plant site, as needs dictate. The original awards, which were competitively bid, became effective on November 1, 1997 for a one-year term. A two-month extension is now requested to allow sufficient time for rebidding these services resulting in new multi-year awards. The current contract amounts are: $440,704 for Crickett Personnel, $352,225 for Dutchess Temps, and $17,028 for Tri-State Employment Services. It is anticipated that no additional funding will be required for the extended term. The Trustees' approval is requested to extend the subject contracts through December 31, 1998, with no additional funding requested.

<u>Contract in support of the St. Lawrence Project:</u>

"The contract with **Marine Maintenance & Construction Co. (S97-05259)** provides for diving services for the St. Lawrence – FDR Project, in accordance with Authority specifications. The original award, which was competitively bid, became effective on June 26, 1997, for an initial term of one year, with an option to extend for two additional years. A two-year extension is now requested in order to exercise this option. The current contract amount is $150,000; it is anticipated that no additional funding will be required for the extended term. The Trustees' approval is requested to extend the subject contract through June 25, 2000, with no additional funding requested.

<u>Contracts in support of Energy Services & Technology Programs:</u>

"The contract with **HEC Energy Services (S91-14647)** provides for management and implementation services in support of the Authority's High Efficiency Lighting Program ('HELP'). At their meeting of May 29, 1991, the Trustees approved the original award, which was competitively bid, for a five-year term. The contract became effective on August 1, 1991 with an initial award amount of $8,000,000. The Trustees subsequently approved additional funding for various HELP programs; funding was allocated and committed to this contract as required. At their meeting of June 25, 1996, the Trustees approved an extension through December 31, 1997 as well as additional funding. An interim extension through September 30, 1998 was authorized in accordance with the Authority's Guidelines for Procurement Contracts and Expenditure Authorization Procedures. An additional nine-month extension is now requested to complete the furnishing, delivery and installation of occupancy sensors and lighting controls at the State University of New York at Farmingdale and of motors at the City College of New York. The SUNY Farmingdale project had been delayed for economic reasons. In the interim, the Authority received a transfer of Petroleum Overcharge Restitution ('POCR') funds from New York State to implement energy efficiency projects that benefit the taxpayers of New York. The application of this funding allowed SUNY Farmingdale to proceed with the project and construction began in March 1998. The current contract amount is $99,473,005; it is anticipated that no additional funding will be required for the extended term. The Trustees' approval is requested to ratify the interim extension and to approve the additional extension of the subject contract through June 30, 1999 with no additional funding requested. It should be noted that all of the funding will be recovered by the Authority.

"The three contracts with **Black & Veatch (S94-63804), Harris Energy Systems (S94-63805), and HEC Energy Services (S94-63803)** provide for management and implementation services in support of the Authority's SENY Electrotechnologies Program ('EP'). At their meeting of March 29, 1994, the Trustees approved EP for the Authority's SENY customers. EP is a turnkey approach to identifying, procuring and implementing energy efficient electrical technologies that promote economic efficiency for SENY public customers and benefit the environment, often by displacing alternative fueled energy technologies. At their meeting of August 30, 1994, the Trustees approved the award of contracts to the aforementioned implementation contractors for an initial three-year term and release of up to $8,500,000 in funding for the program. The contracts, which were competitively bid, became effective on September 1, 1994. Additional funding was approved by the Trustees at their meeting of July 30, 1996, as part of the authorization to fund energy efficiency services included in the ten-year Long Term Energy Partnership Agreements ('LTEPA') with SENY public customers that had already executed such agreements. Funds were allocated and committed to the subject contracts as services required. At their meeting of December 17, 1996, the Trustees approved an extension to exercise the option in the contracts to extend services for two additional years through August 31, 1999; this was necessitated by design changes and the internal review processes by the customer facilities. A nine-month extension is now requested in order to complete projects in progress at the following facilities: Metropolitan Hospital and Manhattan Family Court by Black & Veatch; Lincoln Hospital, North Central Bronx Hospital, Hunter College, American Museum of Natural History, Brooklyn Supreme Court, One Police Plaza, and Police Academy by Harris Energy Systems; and Bellevue Hospital, 100 Gold Street, Adam Clayton Powell Building, and Queensborough Correctional Facility by HEC Energy Services. No new projects will be assigned under these contracts. A Request for Proposals is being prepared for any such new work. The current contract amounts are: $5,000,000 for Black & Veatch; $8,000,000 for Harris Energy Systems; and $10,000,000 for HEC Energy Services, respectively. It is anticipated that the following additional funding will be required for the extended term: $4,906,000 for Black & Veatch; $22,326,000 for Harris Energy Systems; and $1,471,000 for HEC Energy Services. The Trustees' approval is requested to extend the three subject contracts through June 30, 2000 and to approve the release and allocation of previously approved funding to each of these three contracts, as set forth above. The revised compensation ceilings for the subject contracts will be as follows: $9,906,000 for Black & Veatch; $30,326,000 for Harris Energy Systems; and $11,471,000 for HEC Energy Services. It should be noted that all of the funding will be recovered by the Authority.

"The two contracts with **Goldman Copeland Associates, P.C. (S96-77829) and Harris Energy Systems (S96-77824)** provide for management and implementation services for the Authority's SENY Non-Electric End Use Program ('NEEP'). At their meeting of July 25, 1995, the Trustees approved funding for NEEP, an energy efficiency program that provides a turnkey approach to identifying, procuring, and implementing fossil fuel energy efficiency programs for the Authority's SENY customers as an inducement to enter into long term electricity supply contracts. At their meeting of December 19, 1995, the Trustees approved the award of contracts to the two aforementioned implementation contractors for an initial two-year term, in the combined amount of $16,000,000, with options for up to one-year extensions with the approval of the Chairman and the President. The original awards, which were competitively bid, became effective on January 1, 1996. The contract option to extend for one additional year through December 31, 1998 was subsequently exercised, with the approval of the Chairman and the President, and in accordance with the Authority's Guidelines for Procurement Contracts and Expenditure Authorization Procedures. An 18-month extension is now requested in order to complete projects in progress at the following facilities: Manhattan Criminal Court by Goldman Copeland; and Lincoln Hospital, North Central Bronx Hospital, Hunter College, and Brooklyn Supreme Court by Harris Energy Systems. No new projects will be assigned under these contracts. A Request for Proposals is being prepared for any such new work. The current contract amounts are $4,000,000 for Goldman Copeland and $6,000,000 for Harris Energy Systems, respectively. It is anticipated that the following additional amounts will be required for the extended term: $1,400,000 for Goldman Copeland and $5,615,000 for Harris Energy Systems. The Trustees' approval is requested to extend the subject contracts through June 30, 2000 and to approve the release and allocation of previously approved funding to each of these contracts, as set forth above. The revised compensation ceilings for the subject contracts will be as follows: $5,400,000 for Goldman Copeland and $11,615,000 for Harris Energy Systems. It should be noted that all of the funding will be recovered by the Authority.

<u>Contract in support of Marketing & Economic Development and Transmission Business Units:</u>

"The contract with **Rhema Services, Inc. (S95-76364)** provides for electric rate consulting services, which include assisting Authority staff in addressing key issues impacting the Authority related to electric industry restructuring, and the evolving competitive environment (including the Federal Energy Regulatory Commission ('FERC') Notice of Proposed Rulemaking ('NOPR')), and recent utility restructuring proposals in New York State. The major areas requiring consultant services are to: 1) assist staff in developing the theoretical bases for cost analyses for the Authority's hydroelectric facilities, nuclear fuel and fossil fuel projects; 2) provide staff with technical support in formulating, designing, proposing and implementing Authority production, ancillary service and transmission service rates that meet revenue requirements and which respond to the more competitive marketplace resulting from the federal and state driven industry restructuring; 3) assist staff in utility rate case intervention with advice and expert witness testimony at both the state and federal level; 4) advise the Authority in its regulatory role concerning municipal electric rates; 5) provide staff support in utility and customer negotiations and litigation; and 6) provide staff assistance in other rate and technical matters, such as evaluating the customer impact of Authority rate and electrotechnology proposals. At their meeting of October 31, 1995, the Trustees approved the award of a two-year contract, in the amount of $320,000, with an option to extend for one additional year. The original award, which was competitively bid, became effective November 1, 1995. The contract option to extend for one additional year was subsequently exercised. Due to continuing change and greater than expected levels of activity involving the Authority's open access and transmission tariff requirements and the Public Service Commission's electric utility restructuring, the original amount had proven to be inadequate to complete the required work. Additional funding was approved twice by the President in accordance with the Authority's Expenditure Authorization Procedures to accommodate issues impacting the Authority resulting from utility filings and industry restructuring. An additional two-year extension is now requested to address ongoing key issues impacting the Authority related to open access and industry restructuring at both the state and federal level. The two main areas of support involve 1) litigation with eight municipal and cooperative customers regarding hydroelectric preference power rates, and 2) the defense of the Authority's transmission tariff and revenue requirements and embedded assumptions at forthcoming Federal Energy Regulatory Commission rate hearings. Since Rhema has extensive knowledge and expertise in these areas, has assisted Authority staff in developing current rates and requirements, and is involved in ongoing litigation and rate cases, it would not be practical to rebid these services at this time. The current contract amount is $681,557. It is currently estimated that an additional $480,000 may be required for the extended term. The Trustees' approval is requested to extend the subject contract through October 31, 2000 and to approve the additional funding.

FISCAL INFORMATION

"Funds required to support contract services in support of various Energy Services & Technology programs, as well as JAF, and IP3 have been included in the 1998 Approved Budget. Funds for subsequent years, where applicable, will be included in the budget submittals for those years. Payment will be made from the Operating Fund.

"Funds required to support contract services for capital projects have been included as part of the approved capital expenditures for those projects. Payment for contracts in support of the HELP, Electrotechnologies, and Non-Electric End Use Programs will be made from the Energy Conservation Effectuation and Construction Fund.

RECOMMENDATION

"The Director - Environmental Programs, the Site Executive Officer - James A. FitzPatrick Nuclear Power Plant, the Site Executive Officer - Indian Point 3 Nuclear Power Plant, the Vice President - Nuclear Operations, the Vice President - Nuclear Engineering, and the Vice President - Procurement and Real Estate, recommend the Trustees' approval of the extension and additional funding of the procurement contracts listed in Exhibit '11-A', and of an increase in the compensation ceiling of the contracts with Post Buckley Schuh & Jernigan, Black & Veatch, and two contracts with Harris Energy Systems, as set forth above.

"The Chief Nuclear Officer, the Senior Vice President - Energy Services & Technology, the Senior Vice President – Marketing & Economic Development, the Senior Vice President – Transmission, the Executive Vice President, Secretary and General Counsel, the Executive Vice President and Chief Financial Officer, the Executive Vice President – Project Operations, and I concur in the recommendation."

In response to questions from Trustee Miller, Mr. Tscherne reported that "NEEP" stands for non electric end use programs and that the cost of these programs are part of the enhancements made to maintain sales to SENY customers.

The attached resolution, as recommended by the President, was adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, each of the contracts listed in Exhibit "11-A" is hereby approved and extended for the period of time indicated, in the amounts and for the purposes listed below, as recommended in the foregoing report of the President; and be it further

RESOLVED, That pursuant to the Authority's Expenditure Authorization Procedures, an increase in the compensation ceiling of the contract with Post Buckley Schuh & Jernigan., as well as of the contract with Black & Veatch and two contracts with Harris Energy Systems, be, and hereby are, approved as recommended in the foregoing report of the President, in the amount and for the purpose listed below:

O & M	**Contract Approval (Increase in Compensation Ceiling**	**Projected Closing Date**
Provide consulting services to study the biological and economic impact of power plants on Hudson River fish stock		
Post Buckley Schuh & Jernigan **CZ-9117**		
Additional Funding Requested	**$ 800,000**	**12/31/99**
Previously Authorized Contract Amount	**$2,963,427**	
TOTAL REVISED CONTRACT AMOUNT	**$3,763,427**	
Provide program management and implementation services for the SENY Electrotechnologies Program ('EP'):		
1) Black & Veatch **S94-63804**		
Additional Funding Requested	**$4,906,000**	**06/30/00**
Previously Authorized Contract Amount	**$5,000,000**	
TOTAL REVISED COMPENSATION CEILING	**$9,906,000**	
2) Harris Energy Systems **S94-63803**		
Additional Funding Requested	**$22,326,000**	**06/30/00**
Previously Authorized Contract Amount	**$ 8,000,000**	
TOTAL REVISED COMPENSATION CEILING	**$30,326,000**	
Provide program management and implementation services for the SENY Non-Electric End Use Program ('NEEP')		
Harris Energy Systems **S96-77824**		
Additional Funding Requested	**$ 5,615,000**	**06/30/00**
Previously Authorized Contract Amount	**$ 6,000,000**	
TOTAL REVISED COMPENSATION CEILING	**$11,615,000**	

12. <u>Next Meeting</u>

The Regular meeting of the Trustees will be held on Tuesday, October 27, 1998, at the White Plains office at 11:00 a.m., unless otherwise designated by the Chairman with the concurrence of the Trustees.

Closing

Upon motion made and seconded, the meeting was closed at 12:15 p.m.

David E. Blabey
Executive Vice President, Secretary and
General Counsel

SEPTMINS.98