



SUSQUEHANNA RIVER  
BASIN COMMISSION

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400 N. Front Street • Harrisburg, PA 17101-7880 • 717-238-0423 • [srbcc.net](http://srbcc.net) • [@SRBCnews](https://twitter.com/SRBCnews)

August 6, 2021

Mr. Eric Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112

Dear Mr. Epstein:

This correspondence is in response to your records request sent via e-mail on July 8, 2021. Your request contained four enumerated requests and we will provide our response to each in turn.

1) Please provide the formal request from the SRBC to Exelon as well as Exelon's response.

In our search, we could not locate a formal request made by Mr. Dehoff. However, we do believe you are referencing the request made by Deputy Executive Director Andrew Gavin to Exelon via letter dated March 11, 2021. Exelon responded to this letter by filing applications for renewal of groundwater withdrawals from Wells A, B and C. These applications and related application materials were provided to you at the FTP site for your prior request. The March 11 letter and Summary Sheets for the applications are provided in response to this request. If you need further access to the FTP site to review the application and attached materials for each of the applications again, please contact me and I will arrange it.

2) Please define the term "reasonable," and provide a definition for the time span cover by the term "foreseeable need".

This is not a request for records. To the degree, a record exists, the Commission's regulations are available on our website under the "Our Work" tab and "Public Reference Manual" item in the drop down menu. The reasonably foreseeable need for the proposed water quantity to be withdrawn, with supporting calculations, is required in regulation at 18 CFR § 806.14(a)(5). The regulatory requirement for reasonably foreseeable need can be found in § 806.23 and the term of the approval in § 806.31. Reasonably foreseeable need will generally cover the term of the docket.

3) Please explain how Three Mile Island is allowed and "expected to continue to exceed commission regulatory thresholds."

This is not a request for records. To the degree, a record exists, the Commission's regulations are available on our website under the "Our Work" tab and "Public Reference Manual" item in the drop down menu. Further, the current docket for the project is provided.

4) In addition, please forward all contracts, documents, and legal opinions in the SRBC's possession that would allow a public utility to allocate, assign, lease or reassign water rights to a separate nuclear reactor [sic], which is owned by a non-bonded limited corporation that is not a public utility per Nuclear Regulatory or Pennsylvania Public Utility Commission statutes.

To the degree this request seeks legal opinions that represent attorney client privileged communications or attorney work product, it is beyond the scope of 18 CFR § 801.14. The only document that exists that would possibly relate to a reassignment of water rights is the contract between Three Mile Island and SRBC, which is provided. Further, the regulations address transfers of projects at CFR § 806.6.

This represents the Commission's complete response to your July 8, 2021 request. Thank you for your interest in the Susquehanna River Basin Commission.

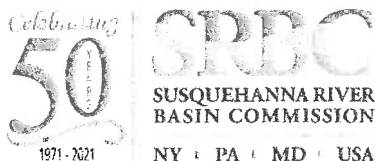
Sincerely,



Paula Ballaron, P.G.

Enclosures

cc: Curt Sebastian, Esq.  
Andrew Gavin



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March 11, 2021

Mr. Daniel Jordan  
Exelon Corporation/Three Mile Island Nuclear Station  
Route 441 South  
P.O. Box 480  
Middletown, PA 17057

Re: Renewal of Docket – Exelon Generation Company, LLC;  
Three Mile Island Generating Station, Unit 1;  
Londonderry Township, Dauphin County, Pennsylvania;  
Commission Docket No. 20110610

Dear Mr. Jordan:

Susquehanna River Basin Commission (Commission) staff is aware that on September 20, 2019, Exelon Generation Company, LLC's (Exelon's) Three Mile Island Generating Station, Unit 1 (Facility) was taken offline and ceased operating for the purpose of generating electric power. On February 18, 2021, you and several of your staff met with Commission staff to discuss continued need for the Facility's groundwater wells and Exelon's desire to seek renewal of those wells operated under Commission Docket No. 20110610 (Docket), with a renewal deadline for submission of applications by May 26, 2021. As you are well aware, the Docket also includes approval for Exelon to withdraw up to 122.800 million gallons per day (mgd) from the Facility's Susquehanna River intake, and consumptively use water from all approved sources up to 19.200 mgd for power plant operation and electric power generation.

Exelon staff indicated water withdrawal and consumptive use quantities are expected to continue to exceed Commission regulatory thresholds, but at a much lower magnitude due to cessation of power generation. **As such, recognizing the change in operations, Commission staff will review the water withdrawal and consumptive use demands, from all sources, based on the Facility's reasonable and foreseeable need to adequately address ongoing decommissioning activities.** This review will be done as part of the groundwater well renewal applications; therefore, Exelon will NOT need to submit separate applications to modify the surface water withdrawal and consumptive use at the Facility. However, if Exelon decides that it does not need to renew its groundwater wells, then applications for modification of the surface water and consumptive use approvals will be required by May 26, 2021.

If you have any questions regarding the above information, please contact Todd Eaby at (717) 238-0423, extension 1234, or via e-mail at [teaby@srbc.net](mailto:teaby@srbc.net).

Sincerely,

Andrew J. Gavin  
Deputy Executive Director

551050.1



## SUSQUEHANNA RIVER BASIN COMMISSION

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Phone (717) 238-0423 • Fax (717) 238-2436  
Web <http://www.srbc.net>

### Groundwater Withdrawal Application Summary

**Source Name:** Well A

**SRBC Pending No.:** 2021-054

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

#### 1.1 Project Sponsor

**Company Name:** Three Mile Island Nuclear Station, Unit 1

**Mailing Address Line 1:** 441 S. P.O.Box 480

**Mailing Address Line 2:**

**City:** Middleton

**State:** PA

**ZIP Code:** 17057

#### Contact Person:

**First Name:** Daniel

**Last Name:** Jordan

**Title:** Site Decommissioning Chem and Env Specialist

**Telephone:** (717) 948-8470

**Fax:**

**Mobile:**

**E-mail:** [daniel.jordan@exeloncorp.com](mailto:daniel.jordan@exeloncorp.com)

#### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

**Projected Design Year:**

**Total Project Water Usage**

**Existing Usage (mgd)**

**Projected Usage  
For Design Year (mgd):**

**Maximum 30-day Average Water  
Demand :**

**Maximum Daily Water Demand :**

**System Capacity :**

#### 1.4 Requested Withdrawal Amount:

**Estimated Daily Hours of Operation per Day (Ex. = 5):**

**Maximum Instantaneous Withdrawal Rate (gpm):**

**Maximum 24-Hour Day (mgd):**

**Maximum 30-Day Average (mgd):**

#### 2.2 Facility Location

Please enter the address of the parcel where the Project Facility is located.

## THREE MILE ISLAND SRBC AQUIFER TEST WAIVER- PROJECT FACILITY DESCRIPTION

- a. Site/Facility name
- b. Anticipated long-term owner and operator, if different
- c. Type of facility
- d. Purpose of the withdrawal
- e. Description of site activities
- f. The requested quantity of the water to be withdrawn
- g. Provide the date operations began at the site or are anticipated to begin

Groundwater industrial/ production supply wells NW-A, NW-B, and NW-C are a groundwater source located at Exelon Generation Company, LLC's Three Mile Island Generating Station at PA-441, Middletown, Dauphin County, Pennsylvania 17057 (the Site). The industrial wells have been operated since 1996. Since 2014, Exelon has provided data to SRBC regarding flow, water elevations, and well depth readings. Exelon Generation Company, LLC is the anticipated long term owner and operator for the project.

The Station consists of two Babcock and Wilcox designed pressurized water reactors (TMI-1 and TMI-2), two steam turbine generators, closed-loop heat-dissipation systems, and associated auxiliary facilities and engineering safeguards. TMI-1 entered commercial service in September 1974, and was shut down in September 2019. TMI-2 entered commercial service in December 1978, but was permanently shut down in March 1979. TMI-2 is presently in a condition referred to as Post-Defueling Monitored Storage.

The groundwater withdrawal application for NW-A, NW-B, and NW-C requests a 30-day average withdrawal rate of 0.099 mgd (69 gpm) and a maximum instantaneous withdrawal rate of 220 gpm. The groundwater withdrawal application also requests that the total system limit for the facility's sources (not including the water purchased from the public water supply system) be decreased from 0.225 mgd to 0.099 mgd, which is a decrease of 0.126 mgd. The 0.126-mgd total system decrease is requested due to the fact that the Station is no longer generating energy and is in the decommissioning process. Supporting this is the fact that in 2020, Exelon averaged around 30,000 gpd with a yearly high of 59,000 gpd.

The well water from industrial wells (NW-A, NW-B, and NW-C) will be used to supply groundwater to plant systems on an as-needed basis. The water has historically been used for various functions including nuclear service non-contact cooling water (safety related system cooling), secondary service non-contact cooling water (non-safety related system cooling), decay heat non-contact cooling water, and reactor building emergency cooling. Additional functions include makeup to the fire service system, river water pump lubrication, and for the production of demineralized water.



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### Groundwater Withdrawal Application Summary

**Source Name:** Well C

**SRBC Pending No.:** 2021-056

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

#### 1.1 Project Sponsor

**Company Name:** Three Mile Island Nuclear Station, Unit 1

**Mailing Address Line 1:** 441 S. P.O.Box 480

**Mailing Address Line 2:**

**City:** Middleton

**State:** PA

**ZIP Code:** 17057

#### Contact Person:

**First Name:** Daniel

**Last Name:** Jordan

**Title:** Site Decommissioning Chem and Env Specialist

**Telephone:** (717) 948-8470

**Fax:**

**Mobile:**

**E-mail:** [daniel.jordan@exeloncorp.com](mailto:daniel.jordan@exeloncorp.com)

#### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

**Projected Design Year:**  
2031

| Total Project Water Usage             | Existing Usage (mgd) | Projected Usage<br>For Design Year (mgd): |
|---------------------------------------|----------------------|---|
| Maximum 30-day Average Water Demand : | 0.099                | 0.099                                     |
| Maximum Daily Water Demand :          | 0.026                | 0.026                                     |
| System Capacity :                     | 0                    | 0   |

#### 1.4 Requested Withdrawal Amount:

**Estimated Daily Hours of Operation per Day (Ex. = 5):** 15

**Maximum Instantaneous Withdrawal Rate (gpm):** 31

**Maximum 24-Hour Day (mgd):** 0.026

**Maximum 30-Day Average (mgd):** 0.099

#### 2.2 Facility Location

## THREE MILE ISLAND SRBC AQUIFER TEST WAIVER- PROJECT FACILITY DESCRIPTION

- a. Site/Facility name
- b. Anticipated long-term owner and operator, if different
- c. Type of facility
- d. Purpose of the withdrawal
- e. Description of site activities
- f. The requested quantity of the water to be withdrawn
- g. Provide the date operations began at the site or are anticipated to begin

Groundwater industrial/ production supply wells NW-A, NW-B, and NW-C are a groundwater source located at Exelon Generation Company, LLC's Three Mile Island Generating Station at PA-441, Middletown, Dauphin County, Pennsylvania 17057 (the Site). The industrial wells have been operated since 1996. Since 2014, Exelon has provided data to SRBC regarding flow, water elevations, and well depth readings. Exelon Generation Company, LLC is the anticipated long term owner and operator for the project.

The Station consists of two Babcock and Wilcox designed pressurized water reactors (TMI-1 and TMI-2), two steam turbine generators, closed-loop heat-dissipation systems, and associated auxiliary facilities and engineering safeguards. TMI-1 entered commercial service in September 1974, and was shut down in September 2019. TMI-2 entered commercial service in December 1978, but was permanently shut down in March 1979. TMI-2 is presently in a condition referred to as Post-Defueling Monitored Storage.

The groundwater withdrawal application for NW-A, NW-B, and NW-C requests a 30-day average withdrawal rate of 0.099 mgd (69 gpm) and a maximum instantaneous withdrawal rate of 220 gpm. The groundwater withdrawal application also requests that the total system limit for the facility's sources (not including the water purchased from the public water supply system) be decreased from 0.225 mgd to 0.099 mgd, which is a decrease of 0.126 mgd. The 0.126-mgd total system decrease is requested due to the fact that the Station is no longer generating energy and is in the decommissioning process. Supporting this is the fact that in 2020, Exelon averaged around 30,000 gpd with a yearly high of 59,000 gpd.

The well water from industrial wells (NW-A, NW-B, and NW-C) will be used to supply groundwater to plant systems on an as-needed basis. The water has historically been used for various functions including nuclear service non-contact cooling water (safety related system cooling), secondary service non-contact cooling water (non-safety related system cooling), decay heat non-contact cooling water, and reactor building emergency cooling. Additional functions include makeup to the fire service system, river water pump lubrication, and for the production of demineralized water.



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### Groundwater Withdrawal Application Summary

**Source Name:** Well B

**SRBC Pending No.:** 2021-055

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

#### 1.1 Project Sponsor

**Company Name:** Three Mile Island Nuclear Station, Unit 1

**Mailing Address Line 1:** 441 S. P.O.Box 480

**Mailing Address Line 2:**

**City:** Middleton

**State:** PA

**ZIP Code:** 17057

#### Contact Person:

**First Name:** Daniel

**Last Name:** Jordan

**Title:** Site Decommissioning Chem and Env Specialist

**Telephone:** (717) 948-8470

**Fax:**

**Mobile:**

**E-mail:** [daniel.jordan@exeloncorp.com](mailto:daniel.jordan@exeloncorp.com)

#### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

**Projected Design Year:**  
2031

| <b>Total Project Water Usage</b>      | <b>Existing Usage (mgd)</b> | <b>Projected Usage<br/>For Design Year (mgd):</b> |
|---------------------------------------|-----------------------------|---|
| Maximum 30-day Average Water Demand : | 0.099                       | 0.099   |
| Maximum Daily Water Demand :          | 0.044                       | 0.044   |
| System Capacity :                     | 0                           | 0   |

#### 1.4 Requested Withdrawal Amount:

Estimated Daily Hours of Operation per Day (Ex. = 5): 24

Maximum Instantaneous Withdrawal Rate (gpm): 30

Maximum 24-Hour Day (mgd): 0.044

Maximum 30-Day Average (mgd): 0.099

#### 2.2 Facility Location



## THREE MILE ISLAND SRBC AQUIFER TEST WAIVER- PROJECT FACILITY DESCRIPTION

- a. Site/Facility name
- b. Anticipated long-term owner and operator, if different
- c. Type of facility
- d. Purpose of the withdrawal
- e. Description of site activities
- f. The requested quantity of the water to be withdrawn
- g. Provide the date operations began at the site or are anticipated to begin

Groundwater industrial/ production supply wells NW-A, NW-B, and NW-C are a groundwater source located at Exelon Generation Company, LLC's Three Mile Island Generating Station at PA-441, Middletown, Dauphin County, Pennsylvania 17057 (the Site). The industrial wells have been operated since 1996. Since 2014, Exelon has provided data to SRBC regarding flow, water elevations, and well depth readings. Exelon Generation Company, LLC is the anticipated long term owner and operator for the project.

The Station consists of two Babcock and Wilcox designed pressurized water reactors (TMI-1 and TMI-2), two steam turbine generators, closed-loop heat-dissipation systems, and associated auxiliary facilities and engineering safeguards. TMI-1 entered commercial service in September 1974, and was shut down in September 2019. TMI-2 entered commercial service in December 1978, but was permanently shut down in March 1979. TMI-2 is presently in a condition referred to as Post-Defueling Monitored Storage.

The groundwater withdrawal application for NW-A, NW-B, and NW-C requests a 30-day average withdrawal rate of 0.099 mgd (69 gpm) and a maximum instantaneous withdrawal rate of 220 gpm. The groundwater withdrawal application also requests that the total system limit for the facility's sources (not including the water purchased from the public water supply system) be decreased from 0.225 mgd to 0.099 mgd, which is a decrease of 0.126 mgd. The 0.126-mgd total system decrease is requested due to the fact that the Station is no longer generating energy and is in the decommissioning process. Supporting this is the fact that in 2020, Exelon averaged around 30,000 gpd with a yearly high of 59,000 gpd.

The well water from industrial wells (NW-A, NW-B, and NW-C) will be used to supply groundwater to plant systems on an as-needed basis. The water has historically been used for various functions including nuclear service non-contact cooling water (safety related system cooling), secondary service non-contact cooling water (non-safety related system cooling), decay heat non-contact cooling water, and reactor building emergency cooling. Additional functions include makeup to the fire service system, river water pump lubrication, and for the production of demineralized water.



# SUSQUEHANNA RIVER BASIN COMMISSION

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**Docket No. 20110610**

**Approval Date: June 23, 2011**

## **EXELON GENERATION COMPANY, LLC THREE MILE ISLAND GENERATING STATION, UNIT 1**

**Surface Water Withdrawal of up to 122.800 mgd  
from the Susquehanna River;  
Groundwater Withdrawal (30-Day Average) of 0.225 mgd  
from Wells A, B, and C; and  
Consumptive Water Use (Peak Day) of up to 19.200 mgd,  
for Power Plant Operations and Electric Power Generation**

### **Section 1. Approval**

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission determines that no adverse impacts to area surface water or groundwater withdrawals are anticipated by the operation of this project, and that the project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin. Accordingly, the application of the project sponsor requesting a withdrawal and the consumptive use of water in support of the project identified in Section 2, from the source identified in Section 3, is hereby approved by the Commission in accordance with the conditions set forth below.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), Pennsylvania Game Commission (PGC), Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

### **Section 2. Project Information**

Information concerning the project sponsor, water use type, and location are set forth in the table below.

| Project Information     |   |
|-------------------------|---|
| <b>Project Sponsor:</b> | Exelon Generation Company, LLC  |
| <b>Approval Type:</b>   | Surface Water Withdrawal, Groundwater Withdrawal, and Consumptive Water Use |
| <b>Water Use Type:</b>  | Power Plant Operation and Electric Power Generation                         |
| <b>Municipality:</b>    | Londonderry Township  |
| <b>County:</b>          | Dauphin County  |
| <b>State:</b>           | Pennsylvania  |

### Section 3. Source Information

Information concerning the sources of water from which the withdrawals will be made is set forth in the tables below.

| Surface Water Source Information         |  |
|--|--|
| <b>Approved Source:</b>                  | Susquehanna River                          |
| <b>Subbasin:</b>                         | Lower Susquehanna                          |
| <b>Watershed Boundary Dataset (WBD):</b> | 0205030510 (Susquehanna River)             |
| <b>Withdrawal Location (degrees):</b>    | Lat: 40.154722 N Long: -76.727500 W        |
| <b>Water Use Designation:</b>            | Warm Water Fishery (WWF)                   |
| <b>Flow Statistics (cfs):</b>            | Q7-10 = 2,701; Average Daily Flow = 35,396 |
| <b>Special Flow Protection Required:</b> | No   |
| cfs – cubic feet per second              |  |

The surface water withdrawal was in use prior to November 11, 1995, and did not previously require Commission approval. However, the application for increased surface water withdrawal at the facility subjected the existing withdrawal to review and approval under Commission Regulation 18 CFR §806.4(a)(2)(iv).

| Groundwater Source Information           |                                |                  |                    |
|--|--------------------------------|------------------|--------------------|
| <b>Approved Sources:</b>                 | Wells A, B, and C              |                  |                    |
| <b>Subbasin:</b>                         | Lower Susquehanna              |                  |                    |
| <b>Watershed Boundary Dataset (WBD):</b> | 0205030510 (Susquehanna River) |                  |                    |
| <b>Withdrawal Location (degrees):</b>    | Well A                         | Lat: 40.153549 N | Long: -76.726479 W |
|  | Well B                         | Lat: 40.153549 N | Long: -76.726780 W |
|  | Well C                         | Lat: 40.153850 N | Long: -76.726780 W |
| <b>Special Flow Protection Required:</b> | No                             |                  |                    |

#### Section 4. Approved Withdrawal Quantities and Limitations

The surface water withdrawal approved hereunder is subject to the quantitative limits and restrictions set forth in the table below.

| Approved Withdrawal Quantities and Limitations            |                         |
|---|-------------------------|
| <b>Peak Day Withdrawal Amount (mgd):</b>                  | 122.800 (Not to Exceed) |
| <b>Maximum Instantaneous Withdrawal Rate (gpm):</b>       | 85,277 (Not to Exceed)  |
| mgd – million gallons per day<br>gpm – gallons per minute |                         |

The withdrawal is also subject to all other conditions set forth in this docket approval.

#### Section 5. Approved Consumptive Water Use Quantities and Limitations

The consumptive water use approved hereunder is subject to the quantitative limits and restrictions set forth in the table below.

| Approved Consumptive Water Use Quantities and Limitations |  |
|---|--|
| <b>Sources for Project Consumptive Water Use:</b>         | 1. Susquehanna River<br>2. Groundwater Wells A, B, and C   |
| <b>Peak Day Consumptive Water Use Amount (mgd):</b>       | 19.200 (Not to Exceed)   |
| <b>Project Consumptive Water Uses:</b>                    | 1. Cooling Tower Evaporation<br>2. Blowdown Makeup<br>3. Industrial Cooling Evaporation<br>4. Spent Fuel Pool Evaporation<br>5. Instream Evaporation |
| <b>Consumptive Water Use Mitigation Type:</b>             | Release of water for use replacement   |

The consumptive water use is also subject to all other conditions set forth in this docket approval.

#### Section 6. Existing Approved Groundwater Withdrawals

A summary of major conditions applicable to the existing approved groundwater withdrawals are listed in the table below.

| Existing Approved Groundwater Withdrawals |                                 |                       |                        |
|---|---------------------------------|-----------------------|------------------------|
| Source                                    | 30-Day Average Withdrawal (mgd) | Commission Docket No. | Docket Expiration Date |
| Wells A, B, and C                         | 0.225                           | 19961102-1            | 11/26/2021             |

As specified in Condition 16 in Section 8, all conditions of the docket referenced above are superseded by this approval. The approved groundwater withdrawals from the sources identified in Section 3 shall henceforth be subject to all conditions contained herein.

## **Section 7. Standard Conditions**

1. The project sponsor shall comply with all Commission regulations, including metering and reporting requirements contained in Commission Regulation 18 CFR §806.30.
2. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for the withdrawal and all consumptive water use. Following approval, the project sponsor shall execute the plan and complete any installation of meters or other means of measuring withdrawal and consumptive water use, in accordance with the approved schedule. Upon completion, the project sponsor shall certify to the Commission that the metering plan has been implemented.
3. The project sponsor or any other person shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR §808.12.
4. The project sponsor shall keep daily records of the project's withdrawal and consumptive water use and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, if appropriate, approved by Commission staff prior to implementing or modifying existing equipment or procedures.
5. The project's consumptive water use is subject to water mitigation requirements, as per Commission Regulation 18 CFR §806.22(b). To satisfy the Commission's requirements for consumptive water use mitigation, the project participated in the reallocation of storage in the Cowanesque Lake project and, through an agreement with the Commission, sponsored a total of 8,274 acre-feet of storage at the Cowanesque Lake project to mitigate consumptive losses during low flow periods. Of this amount, 4,250 acre-feet of storage are dedicated to mitigating the consumptive use approved at the time the contract was signed. The increased consumptive water use approved herein, in accordance with current Commission mitigation standards, will require an additional estimated 332 acre-feet of storage, for a total of 4,582 acre-feet of storage. Commission staff has determined the necessary storage to be available to the project sponsor.
6. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR §806.25(b).

7. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with 25 PA Code §110.201, Pennsylvania Water Resources Planning Act, Act 220 of 2002.

8. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation 18 CFR §808.

9. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

10. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR §806.32.

11. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

12. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

13. Should the project's approved withdrawals or consumptive uses be expected to exceed the amounts listed herein, the project sponsor is required to make application for modification to this approval at that time.

14. This approval for surface water withdrawal and consumptive use of water is effective until April 19, 2034. This date coincides with the expiration date of Exelon Generation Company, LLC's license (Docket No. 05000289) from the U.S. Nuclear Regulatory Commission. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by October 19, 2033, and obtain Commission approval prior to continuing operation beyond April 19, 2034.

15. The approval for groundwater withdrawal is effective until November 26, 2021. As specified in Commission Regulation 18 CFR §806.31(e), the project sponsor shall submit an application by May 26, 2021, and obtain Commission approval prior to continuing operation of the groundwater wells beyond November 26, 2021.


## Section 8. Special Conditions

16. The Commission previously approved consumptive use and groundwater withdrawal at the facility in Commission Docket Nos. 19950302, 19950302-1, 19961102, and 19961102-1. All conditions and approvals of Commission Docket Nos. 19950302, 19950302-1, 19961102, and 19961102-1 are hereby superseded and rescinded.

17. The Commission previously adopted several resolutions prior to the approval of the above dockets, including Commission Resolution Nos. 82-5, 83-1, 89-12, 90-02, and 91-2, related to mitigation of consumptive use at the project. All provisions of those resolutions not inconsistent herewith shall remain effective.

**CERTIFICATION:** I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on June 23, 2011.

Dated: June 24, 2011

  
Stephanie L. Richardson

SUSQUEHANNA RIVER BASIN COMMISSION CONTRACT

WITH

THE OWNERS OF THE THREE MILE ISLAND NUCLEAR GENERATING STATION

RE: CONSUMPTIVE USE MAKE-UP

THIS AGREEMENT, effective this 30th day of June, 1986, by and among the SUSQUEHANNA RIVER BASIN COMMISSION (the "SRBC") and JERSEY CENTRAL POWER & LIGHT COMPANY, METROPOLITAN EDISON COMPANY and PENNSYLVANIA ELECTRIC COMPANY (each of which shall have several, but not joint, responsibilities under this Contract to the extent of their respective ownership interests in the facility described in the first preamble below, but shall be collectively referred to herein as the "Utilities").

W I T N E S S E T H :

WHEREAS, JERSEY CENTRAL POWER & LIGHT COMPANY, METROPOLITAN EDISON COMPANY and PENNSYLVANIA ELECTRIC COMPANY currently own respectively twenty-five percent (25%), fifty percent (50%) and twenty-five percent (25%), as tenants-in-common, of a nuclear powered steam electric generating facility situated near Middletown, Pennsylvania, along the Susquehanna River, which facility is known as the Three Mile Island Nuclear Generating Station ("TMI"); and

WHEREAS, TMI consists of two (2) units, i.e., Unit 1 ("TMI-1") and Unit 2 ("TMI-2"), but TMI-2 was damaged by a nuclear accident that occurred on March 28, 1979, so that this Contract and the Utilities' several obligations hereunder are limited to TMI-1; and



WHEREAS, Such facility withdraws water from the Susquehanna River for cooling and other processes; and

WHEREAS, A portion of such water is evaporated in the cooling process; and

WHEREAS, The Utilities are required to provide make-up for the consumptive use of water at the facility during certain periods of low flow of the Susquehanna River pursuant to 18 C.F.R. 803.61 of the SRBC's Regulations; and

WHEREAS, It has been determined that the Cowanesque Lake Reservoir (the "Cowanesque Reservoir") constructed and operated by The Department of the Army acting by and through the U.S. Army Corps of Engineers (the "Corps") is the best presently available source of water for TMI-1 consumptive use make-up; and

WHEREAS, The SRBC has determined to undertake to (1) acquire from the Corps water supply storage capacity in Cowanesque Reservoir, (2) construct modifications and other improvements to the Cowanesque Reservoir facility necessary and useful to provide for such storage, (3) acquire and install such meters, gauges and appurtenant equipment necessary and useful for proper management and use of such storage and related water releases, and (4) finance the same, all of which undertakings herein are referred to as the "Project"; and

WHEREAS, The SRBC has determined to undertake the development of expanded recreation facilities at Cowanesque Reservoir in connection with the development of water supply storage capacity; and

WHEREAS, The Utilities desire to exercise their respective rights under this Contract to 34% of the water supply storage acquired by SRBC as described in Article 1 to provide make-up for consumptive use of water at TMI-1.

NOW, THEREFORE, the SRBC and the Utilities, intending to be legally bound hereby, agree as follows:

ARTICLE 1 - SRBC WATER SUPPLY STORAGE CONTRACT WITH THE CORPS

The SRBC will enter into a contract with the Corps substantially in the form attached hereto as Exhibit A (the "Corps Contract") to acquire water supply storage capacity in the Cowanesque Reservoir which the Corps will make available by raising the permanent pool level thereof from an elevation of one thousand forty-five (1,045) feet, to an elevation of one thousand eighty (1,080) feet, above sea level. The amount of such water supply storage capacity is estimated by the Corps and the SRBC to be not less than a total of twenty-four thousand three hundred thirty-five (24,335) acre-feet (the "SRBC's Storage Space").

ARTICLE 2 - REGULATION OF AND RIGHT TO USE OF WATER

The regulation of water withdrawn or released from Cowanesque Reservoir as contemplated by the Project shall be the responsibility of the SRBC. SRBC shall acquire in accordance with State laws and regulations, and, if necessary, establish or defend, any and all water rights needed for utilization of the storage provided under this Contract. The Utilities shall not be responsible for diversions by others, nor will they become parties to any controversies involving the use by SRBC of the storage space contemplated by the Project, except as such controversies may affect the operations of TMI-1.

ARTICLE 3 - OPERATION & MAINTENANCE

SRBC shall operate and maintain or cause to be operated and maintained all installations and facilities constructed for the withdrawal and management of water pursuant to the Project and the Expanded Recreation Development, and the Utilities severally shall pay to SRBC their pro rata shares, equal to their respective ownership participation in TMI, of the costs of operation and maintenance as provided in this Contract.

#### ARTICLE 4 - WATER SUPPLY CAPACITY PAYMENTS

The Utilities agree to pay to the SRBC their respective shares of the following sums to be applied for and toward the payment of the costs and expenses identified below with respect to the Project. Such sums to be paid to SRBC are as follows:

(A) Construction Costs.

(1) Specific Construction Costs.

a. The specific construction costs allocated to the SRBC's Storage Space are estimated at \$11,630,000 on the basis of the costs presented in Exhibit B-III. The SRBC is responsible for 100 percent of these costs, and the Utilities shall pay their respective shares of 34% of these costs to the SRBC, to be paid in accordance with the construction placement schedule (Exhibit B-IV), in annual installments prior to the beginning of each Fiscal Year; Provided, however, that the first annual installment shall be paid within twenty-five (25) days of written notice to the Utilities that the Corps is prepared to proceed with construction. Such installments shall be deposited and disbursed pursuant to Article 5, concerning construction. Any funds not obligated during any Fiscal Year will be applied toward the next annual installment.

The estimate of specific construction costs includes the sum of \$1,380,000 in payment of engineering and design costs and supervision and administration costs previously incurred by the Corps. The Utilities, at their option, may pay their aforesaid respective shares of such sum either during the period of construction of such modifications together with interest on the unpaid amount at the rate of 9 1/8% per annum or in whole prior to initiation of construction. In the event the Utilities opt to make such payments during the period of construction, the balance payable may be pre-paid upon 10 days prior notice to the SRBC at any time together with accrued interest to the date of pre-payment.

Should actual costs exceed the specific cost estimates shown on Exhibits B-III and B-IV, the SRBC will bill the Utilities for their respective shares of additional costs. Should the construction period extend beyond the period shown in Exhibit B-IV, the annual installment payment periods shall be extended accordingly.

b. The SRBC shall provide written notice to the Utilities of proposed Project contract modifications or claims in excess of \$50,000 within 10 days of receipt of the proposed modification or claim from the Corps. The SRBC shall provide the Utilities with the approved project modification or claim in excess of \$50,000 within 20 days of the date on which an equitable adjustment of the modification or claim is agreed to by the Corps and its contractor. In the event a modification or claim remains disputed as to price by the Corps or its contractor, the SRBC shall provide the Utilities with the Corps' decision on the modification or claim, within 10 days of receipt thereof by the Corps.

The SRBC represents that under the Corps Contract, the Corps has agreed to provide the SRBC with a reasonable opportunity to review and provide written comments with respect to proposed Project contract modifications or claims estimated to cost in excess of \$50,000. The SRBC shall provide the Utilities with a similar opportunity and shall submit the Utilities' comments to the Corps.

c. If the award of any contract for construction of the specific water supply features as shown on Exhibit B-III would result in the total obligations and expenditures for construction of the specific water supply features to exceed by 10% or more the presently estimated total cost of such features, \$11,630,000, the award of that contract and subsequent contracts shall be deferred, until such time as the SRBC and the Utilities

and the Corps agree to resume construction of the specific water supply features. The SRBC shall consult with the Utilities prior to agreeing with the Corps to resume such construction; Provided, however, that in the event the award of contracts would cause the Utilities' total respective shares under Article 4(A)(1)a to exceed the present estimate thereof by more than 10%, the SRBC shall obtain the consent of the Utilities prior to agreeing with the Corps to resume construction.

(2) Joint Use Construction Costs.

a. The Utilities shall pay to the SRBC, at the times and with interest on the unpaid balance as hereinafter specified, their respective shares of 34% of the amounts stated below which, as shown in Exhibit B-II attached to and made a part of this Contract, constitute a portion of the entire actual amount of the joint-use construction costs, escalated to present day price levels by use of the Bureau of Reclamation Earth Dam Construction Index effective at the beginning of the Fiscal Year in which the contract is approved, allocated to the SRBC's Storage Space. The interest rate to be used for purposes of computing interest on the unpaid balance is 7.69 percent per annum. The SRBC is obligated to pay \$39,414,000 which is 28.08 percent of the total Project joint-use construction costs, and the Utilities shall pay their respective shares of 34% of such costs.

b. The joint-use construction costs allocated to the SRBC's Storage Space indicated in Article 1 is \$39,414,000 on the basis of the costs presented in Exhibit B-II. The Utilities shall pay their aforesaid respective shares of the joint-use construction costs allocated to the SRBC's Storage Space within the life of the Project in annual installments not to exceed 50 years from the date the SRBC is notified by the Corps that the project modification is completed and operational for water supply purposes. The payments shall be in equal consecutive annual installments, the first of which shall be due and payable within 25 days after the Utilities are notified by the SRBC that

the project modification is completed and operational for water supply purposes. Annual installments thereafter will be due and payable on the anniversary date of the date of notification. Except for the first payment which will be applied solely to the retirement of principal, all installments shall be applied first to accrued interest calculated at 7.69% per annum on the Utilities' respective shares of the unpaid balance of joint-use construction costs and then to reduce the Utilities' respective shares of such unpaid balance. The last annual installment shall be adjusted upward or downward when due to assure repayment of all of the Utilities' respective shares of the joint-use construction costs allocated to the SRBC's Storage Space for present demand within 50 years from the above date.

c. A schedule of annual payments for the joint-use construction costs allocated to the SRBC Storage Space is attached as Exhibit C of this Contract. The Utilities' annual payments are 34% of each such annual payment.

(B) Major Replacement and Rehabilitation Costs.

(1) Specific Costs. The SRBC will be required to pay 100 percent of the cost for any major replacement items or Major Rehabilitation Programs of any specific water supply facilities, excluding In-Kind Replacement Recreation Facilities. The Utilities shall pay their respective shares of 34% of the costs of any major replacement items or Major Rehabilitation Programs, excluding In-Kind Replacement Recreation Facilities, for any specific water supply facilities for which the SRBC is responsible. The costs will be paid in advance of the work in lump sum, which sum shall be deposited and disbursed pursuant to Article 5, concerning construction. Funds not obligated during any Fiscal Year will be applied to the next succeeding installment.

(2) Joint-Use Costs. The SRBC will be required to pay 28.08 percent of the cost of any major replacement items or Major

Rehabilitation Programs of joint-use facilities. The Utilities shall pay their respective shares of 34% of the cost for which the SRBC is responsible in connection with any major replacement items or Major Rehabilitation Programs of joint-use facilities. Payment of such costs for major replacement items or Major Rehabilitation Programs shall be made in advance of the work in lump sum, which sum shall be deposited and disbursed pursuant to Article 5, concerning construction. Funds not obligated during any Fiscal Year will be applied to the next succeeding installment.

(3) Notice and Comment. The SRBC represents that under the Corps Contract, the Corps is required to provide the SRBC with reasonable opportunity to review and comment with respect to major replacement items and Major Rehabilitation Programs estimated to cost in excess of \$50,000 prior to their implementation. The SRBC shall provide the Utilities with a similar opportunity and shall submit the Utilities' comments to the Corps.

(4) Inspection. The Corps and the SRBC, together with the Utilities, shall jointly conduct annual inspections of the Project for the purposes, inter alia, of identifying and evaluating future major replacement items and Major Rehabilitation Programs.

(C) Annual Operation and Maintenance Expense.

(1) Specific and Joint-Use Facilities. The Utilities shall pay their respective shares of 34% of the cost of the SRBC's share of Annual Operation and Maintenance Expense with respect to specific water supply facilities and with respect to joint use facilities of the Project. The SRBC's share of Annual Operation and Maintenance Expense with respect to specific water supply facilities and with respect to joint use facilities is presently estimated to be \$207,000 and \$54,000, respectively. The annual amount payable for such Operation and Maintenance

Expense payment will be based on the actual expense for the preceding Fiscal Year or an estimate thereof when actual expense information is not yet available and shall be payable as set forth in the immediately succeeding paragraph.

No later than the fifth day prior to each Fiscal Year during the term of the Contract, the Utilities shall pay either an amount equal to their respective shares of the previous year's first quarterannum payment or twenty-five percent (25%) of the sum of the actual Annual Operation and Maintenance Expense described herein, whichever is greater, and one-third of the balance of such sum no later than the fifth day prior to the beginning of the next three (3) quarterannum periods. Within thirty days after the end of each quarterannum payment period or as soon thereafter as is practicable, the SRBC shall provide the Utilities with a copy of a report on Annual Operation and Maintenance Expense for such quarterannum period.

In the event actual Annual Operation and Maintenance Expense exceeded the sum paid to the SRBC during any annual period, the Utilities within twenty (20) days after receipt of said report for each fourth quarterannum period shall pay over to the SRBC an amount equal to its percent share of such excess, and the quarterannum payments remaining for the annual period next following such annual period may be adjusted accordingly. In the event actual Annual Operation and Maintenance Expense was less than the sum paid by the Utilities during any annual period resulting in an overpayment, the quarterannum payments remaining for the annual period next following annual period may be adjusted accordingly, and such overpayment shall be credited toward the quarterannum payment next due.

(D) Project Management and Related Costs.

The SRBC will manage the Project. The Utilities shall provide pertinent and available information and data as required by the SRBC to fulfill its Project management responsibilities



contemplated by this Contract. The SRBC's responsibility will include providing all administrative and technical services necessary to achieve the objectives of the Project throughout the period of construction and subsequent operation.

The SRBC will prepare and submit to the Utilities by 15 May of each year a proposed operating budget for Administrative and Technical Services and if deemed necessary by SRBC will submit a proposed capital improvements budget for stream and rain gages and communications equipment. The estimated costs during the construction period and the first year of operation after completion of construction are shown below in D(1) and (2). Approval by the Utilities of a proposed operating budget shall be required for the budget years during construction if the proposed operating budget exceeds the annual estimates set forth below by more than 25% and for any budget year thereafter if the proposed operating budget exceeds the operating budget for the immediately preceding budget year by more than 25%. If it appears, due to unexpected circumstances, that costs in any budget year (1 July-30 June) will exceed 25% of the total proposed budget, SRBC will identify the basis for such increased costs and promptly notify the Utilities. Such notice will request approval to incur added costs sufficient to effectively continue management of the program. The Utilities will respond within 10 working days of receipt of such notice of its disposition of the request.

The SRBC will coordinate its Administrative and Technical Services, to the extent practical, with a designated representative of the Utilities.

(1) Administrative Services - During the period of construction (3 years) and subsequent operation, the SRBC will be responsible for making all Project related fiscal and clerical arrangements including selection of an appropriate bank, establishment of escrow accounts, development of accounting procedures, conduct of audits, review of change orders and other

related fiscal and administrative matters necessary for proper management of the Project. Quarterly reports will be submitted to the Utilities regarding project and escrow account status, payments and other related fiscal and administrative matters.

- a. Cost during construction (annual) - \$19,000.00.
- b. Cost during operations (annual) - \$14,000.00.

(2) Technical Services - The SRBC will be responsible for all technical services related to providing release of water from storage to satisfy the consumptive use make-up requirement. Included will be collection and analysis of precipitation and stream flow and pertinent related data and as necessary issuance of orders to the Corps for initiation or termination of releases. Such efforts will be coordinated with the Utilities and others. The SRBC will review construction change orders, major rehabilitation recommendations and participate in the annual inspection of the overall Cowanesque Lake Project. Quarterly reports will be submitted regarding all work performed by the Commission, including data pertaining to releases, status of storage, problems encountered or anticipated and other related information.

- a. Cost during construction (annual) \$16,000.00.
- b. Cost during operations (annual) \$65,000.00.

(3) Payments. The Utilities shall pay to the SRBC their respective shares of 66% of the annual costs associated with the SRBC's administrative services and their respective shares of 34% of the annual costs associated with the SRBC's technical services in quarterly payments on a budget year basis.

The annual costs set forth in subparagraphs (1) and (2) of this subsection (D) are SRBC's best estimates. The annual amount payable by the Utilities will be based on the actual costs for the budget year or an estimate thereof when actual costs information is not yet available.

For the initial budget year or portion thereof, the Utilities on or before the thirtieth day of notice from SRBC shall pay their respective shares of the estimated costs associated with SRBC's administrative and technical services for the initial budget year; Provided, however, that if the remaining portion of the initial budget year is greater than three months, the Utilities share shall be payable in equal quarterly installments. Thereafter, on or before the fifth day prior to each budget year during the term of this Contract, the Utilities shall pay twenty-five percent (25%) of the sum of the proposed budget of the SRBC for such budget year for services described in subparagraphs (1) and (2), and one-third of the balance of such sum on or before the first day of the next three (3) quarterannum periods. Within thirty days after the end of each budget year or as soon thereafter as is practicable, the SRBC shall provide the Utilities with a copy of a report on such costs.

In the event actual costs for any budget year exceeded the sum collected by the SRBC during such budget year, the Utilities within twenty (20) days after receipt of said report shall pay over to the SRBC an amount equal to their percent share of such excess. In the event actual costs for any budget year were less than the sum paid by the Utilities during such budget year resulting in an overpayment, such overpayment shall be credited toward the quarterannum payment next due.

(E) Prepayment.

Upon thirty (30) days written notice to SRBC, the Utilities have the right to prepay in whole or in part, the outstanding balance of unpaid installments due under Article 4(A)(2). If such prepayment is made in whole, the prepayment shall be comprised of the unpaid balance of the Utilities' respective shares of joint-use construction costs, plus accrued interest, if any, to the date of prepayment. If such prepayment is made in part, the Utilities may elect to reduce either the remaining term of annual payments or the annual payment to be paid for the remaining term.

(F) Delinquent Payments.

(1) Except as provided under subparagraph (F)(2), if the Utilities fail to make any of the aforesaid payments when due, then the overdue payments shall bear interest calculated at the times and in the manner provided in Article 5(F) of the Corps Contract. A fifteen (15) day grace period shall be allowed from the dates such payments are originally due. For example, if the payment is made within one month after being overdue after a fifteen (15) day grace period from the anniversary date of the date of notification for joint use construction costs, one month's interest shall be charged. Thereafter, one month's interest shall be charged for any portion of each succeeding month that the payment is delinquent. This provision shall not be construed as giving the Utilities a choice of either making payments when due or paying interest, nor shall it be construed as waiving any other rights of the SRBC, at law or in equity.

(2) In the event the Utilities fail to make any of the payments under Article 4(D) within thirty (30) days of the due date, such payments shall bear interest at a rate equal to the highest prime rate as published in the Wall Street Journal on the 30th day after such payment is due. Overdue payments shall continue to bear interest until paid.

(G) Adjustment to Project Costs

The costs shown in Article 4(A)(1) of this Contract are based on the Corps' best estimates of the costs associated with the Project. Interim determinations of cost will be made at such intervals as agreed upon by the SRBC and the Corps, after consultation with the Utilities, until such time as the total actual construction costs are determined. All interim cost estimates will take into account the actual, necessary, reasonable and provable costs to the extent they are then known. Such further interim determinations will be performed at such periods so as to keep the Utilities reasonably informed as to the

payments they have agreed to make hereunder in connection with the specific construction costs. The SRBC shall provide promptly to the Utilities such interim construction cost estimates.

#### ARTICLE 5 - CONSTRUCTION FUND

(A) Whenever the Utilities are required by this Contract to pay over monies in advance of actual construction related to the Project or Expanded Recreation Development to be undertaken, such money shall be deposited into a "Construction Fund" which shall be held by the Bank, in trust, for withdrawal by the Corps for the purposes of paying costs of such construction.

(B) The SRBC shall enter into an escrow agreement between the Corps, SRBC and the Bank which shall prescribe, inter alia, the procedure for withdrawals, the estimated schedule of the withdrawals and the manner of securing and investing monies deposited, from time-to-time, in the Construction Fund.

(C) Upon completion of construction related to the Project or Expanded Recreation Development, and payment of costs which were made from Utilities' monies deposited under this Article, the SRBC shall deliver to the Utilities a report from the Corps showing:

- (1) Such completion;
- (2) The date of such completion; and
- (3) Payment of costs of construction with respect thereto and provisions to be made for payment of such costs of construction which remain unpaid.

The SRBC shall pay over to the Utilities their respective shares of the balance including interest remaining, if any, in the escrow fund.

#### ARTICLE 6 - EXPANDED RECREATION DEVELOPMENT PAYMENTS

In consideration of the construction, operation and maintenance, and major replacement items for Expanded Recreation Development facilities provided by the Corps, under the contract

between the Corps and SRBC in the form attached hereto as Exhibit B (the "Recreation Contract"), the SRBC shall be responsible for paying certain sums to the Corps related to the costs and expenses of such facilities.

The Utilities agree to pay to the SRBC their respective shares of 34% of the following sums to be applied for and toward the payment of the costs and expenses identified below for the Expanded Recreation Development facilities. Such sums to be paid to SRBC are as follows:

(A) Construction Costs. The Separable Costs of the Expanded Recreation Development facilities comprise 27.83 percent of the total Separable Costs of both the In-Kind Replacement Recreation Facilities and Expanded Recreation Development facilities. The SRBC's share, fifty percent (50%), of the Separable Costs of the Expanded Recreation Development is estimated to be \$970,000 at October 1985 price level as shown in Exhibit R-I. The Utilities shall pay their respective shares of the SRBC's share of such estimated Separable Costs to the SRBC as follows:

(1) The Utilities' respective shares of the estimated Separable Costs shall be paid in accordance with the construction placement (Exhibit R-II) in annual installments and deposited in advance of construction and disbursed pursuant to Article 5, concerning construction; Provided, however, that the first annual installment shall be paid within twenty-five (25) days of written notice to the Utilities that the Corps is prepared to proceed with construction. The estimate of Separable Costs includes \$340,000 for engineering and design costs and supervision and administration costs incurred by the Corps prior to the date of this Contract of which one-half of this amount, or \$170,000, must be paid by the SRBC. The Utilities' respective shares shall be paid to the SRBC either during the period of construction of the recreation facilities together with interest on the unpaid amount

at the rate of 9-1/8 percent per annum, or in whole without interest prior to the initiation of construction. In the event the Utilities opt to pay such sum during the period of construction, the balance payable may be prepaid upon 10 days prior notice to the SRBC at any time together with accrued interest to the date of prepayment.

(2) The Separable Costs of the Expanded Recreation Development as shown on Exhibit R-I are based on the Corps' and the SRBC's best estimates. Should updated estimates for these costs exceed those shown, the SRBC will notify the Utilities of their respective shares of those additional funds required for the actual work items performed in each Fiscal Year. Should final actual costs be less than those collected by the SRBC from the Utilities, such sums shall be returned to the Utilities in accordance with Article 5 after determination of final costs for construction for the Expanded Recreation Development facilities.

(3) The SRBC shall provide written notice to and consult with the Utilities with respect to proposed contract modifications, claims or disputes in excess of \$50,000 related to the Expanded Recreation Development facilities at the times and the manner provided in Article 4(A)(1)b.

(B) Major Replacement.

(1) The Corps shall perform any major replacements at the Project, as modified for water supply storage, including the Expanded Recreation Development facilities. The SRBC, however, shall be responsible for paying 100 percent of the cost for any major replacement of Expanded Recreation Development facilities, and the Utilities shall be responsible to pay their respective shares of the SRBC's share. The Utilities' respective shares shall be paid in advance of the work in lump sum which sum shall be deposited and disbursed pursuant to Article 5, concerning construction. The SRBC shall provide written notice to the Utilities of any prospective major replacement estimated to cost

in excess of \$50,000 at the times and in the manner provided in Article 4(B)(3). The SRBC shall provide the Utilities with a similar opportunity and shall submit the Utilities' comments to the Corps.

(C) Operation and Maintenance

(1) Annual O&M Expense associated with recreation development at the Project will be comprised of expenses for existing recreation development, In-Kind Replacement Recreation Facilities, and Expanded Recreation Development. The Annual O&M Expense for the Expanded Recreation Development portion is 19 percent of the total Annual O&M Expense associated with recreation development at the Project. The SRBC shall be responsible for paying 100 percent of the actual Annual O&M Expense associated with the Expanded Recreation Development, presently estimated to cost \$116,000 per year at October 1985 price levels, and the Utilities shall be responsible for paying their respective shares of the SRBC's share. The Utilities' payments shall be payable in the manner and at the times set forth in subparagraph (2) of this subparagraph (c).

(2) On or before the twenty-fifth day after the Utilities are notified by the SRBC that the Expanded Recreation Development facilities are available for useful operation and thereafter on each annual anniversary date thereof during the term of this Contract, the Utilities shall pay their respective shares of the SRBC's portion of the Annual O&M Expense associated with the Expanded Recreation Development facilities for the initial quarterannum period and 25% of such sum no later than the fifth day prior to the beginning of the next three quarterannum periods thereafter. These payments shall be based on actual Annual O&M Expense for recreation at the Project in the Fiscal Year most recently ended, or an estimate thereof when actual expense information is not yet available. Within thirty days after the end of each such quarterannum period or as soon thereafter as is practicable, the SRBC shall furnish a report to



the Utilities showing actual Annual O&M Expense incurred during such quarterannum period. In the event actual Annual O&M Expense exceeded the sum paid by the SRBC during any annual period, the Utilities within twenty days after receipt of said report for each fourth quarterannum period shall pay over to the SRBC an amount equal to the Utilities' respective shares of such excess, and the quarterannum payments remaining for the annual period next following such annual period shall be adjusted accordingly. In the event actual Annual O&M Expense was less than the sum paid by the SRBC during any annual period resulting in an overpayment, the quarterannum payments remaining for the annual period next following such annual period shall be adjusted accordingly, and such overpayment shall be credited toward the quarterannum payment next due.

(D) Adjustments to Reflect Costs. The dollar amounts set forth in this Article 6 are based upon the Corps' and the SRBC's best estimates. The Corps will furnish interim construction cost estimates to the SRBC, on a periodic basis, until such times as the actual construction costs are determined. The SRBC, in turn, shall provide promptly to the Utilities such interim construction cost estimates.

#### ARTICLE 7 - ADJUSTMENT OF UTILITY PERCENTAGES OF STORAGE CAPACITY

(A) In the event that SRBC acquires additional water supply storage space as may be deemed, from time-to-time, to be available in Cowanesque Reservoir, then the SRBC agrees to make equitable reductions to the Utilities' payment obligations under this Contract upon execution of third party contracts with respect to such additional storage space in recognition of the payments to be made by any third party user of such additional project storage space.

(B) In the event the SRBC declines to acquire additional storage space as may be deemed to be available, then payments by

the Utilities under this Contract will be equitably reduced to reflect adjustments, if any, by the Corps to SRBC obligations under the Corps Contract.

(C) If the Utilities or an entity other than the Utilities develop a need or an additional need, as applicable, for water supply storage and the SRBC reasonably determines that such need can be met from the Project, then upon execution of contracts with respect to such need the SRBC agrees to make equitable reductions to the Utilities' payment obligations under this Contract in recognition of payments to be made under such contracts.

#### ARTICLE 8 - COMPLIANCE WITH SRBC REGULATIONS

As long as the Utilities continue to comply with the terms of this Contract, they shall be deemed by SRBC to be in compliance with Section 803.61 of the SRBC's regulations.

#### ARTICLE 9 - OPTIONAL TERMINATION

Upon sixty days' prior written notice to SRBC, and prepayment in whole of the outstanding balance of unpaid obligations and any accrued interest thereon due under Sections (A), (B) and (D) of Article 4 as contemplated by Article 4(E) and continued payment of estimated Annual Operation and Maintenance Expense under Articles 4 and 6 for a period not to exceed five years, the Utilities may terminate this Contract and have no further rights or obligations arising thereunder; Provided that such Utilities' payments shall cease earlier in the event SRBC contracts with a third party for payment of such Annual O&M Expense.

#### ARTICLE 10 - RESIDUAL RIGHTS

The Utilities' rights described herein shall continue for so long as they comply with the provisions of this Contract. The Utilities are hereby granted an option, subject to the requirements of the SRBC regulations, to exercise their

respective rights under this Contract for the purpose of providing make-up for consumptive use at another energy generating facility owned by any of the Utilities; Provided, however, such option shall remain valid only so long as the Utilities continue to comply with the provisions of this Contract.

#### ARTICLE 11 - AUDIT RIGHTS

The Utilities shall have the right to inspect the books and records of the SRBC as they apply to the subject matter of this Contract during normal business hours at the principal office of the SRBC. During the term of this Contract and for not less than three (3) years thereafter, such right may be exercised at any time or from time-to-time (but no more often than annually) on two (2) business days' prior notice to the SRBC.

The SRBC represents that the Corps Contract and Recreation Contract provide for inspection and audit by an authorized representative of the SRBC, at reasonable times, of the accounting and related records of the Corps with respect to the Project and Expanded Recreation Development. Upon request of the Utilities, an authorized representative of the Utilities may accompany and participate with the representative of the SRBC in conducting audits under the Corps Contract and Recreation Contract.

#### ARTICLE 12 - RELEASE OF CLAIMS

The SRBC shall hold and save the Utilities, including their officers, agents and employees, harmless from liability of any nature or kind for or on account of any claim for damages which may be filed or asserted as a result of the withdrawal or releases of water from the Project, made or ordered by the SRBC or as a result of the construction, operation, or maintenance of the water supply facilities or Expanded Recreation Development and appurtenances thereto owned and operated by the SRBC except for damages due to the fault or negligence of the Utilities.

#### ARTICLE 13 - ASSIGNMENT

(A) The Utilities shall not transfer or assign this Contract or any rights acquired thereunder, without prior approval of the SRBC, which approval shall not be unreasonably withheld.

(B) On or after January 1, 1987, in the event SRBC is unable to fulfill its obligations under the Corps Contract for any reason, including the failure of Congress to remove the 6% per annum interest rate limitation payable on obligations of the SRBC (as set forth in the Corps Contract, Article 20), the Corps Contract, subject to approval by the Corps at the option to be exercised by the Utilities and Pennsylvania Power & Light Company, collectively, shall be assigned by SRBC to such companies.

#### ARTICLE 14 - EMERGENCIES

Nothing contained in this Contract, including but not limited to Article 8 hereof, shall interfere with, limit or restrict the SRBC's emergency powers set forth in Section 11.4 of the SRBC Compact.

#### ARTICLE 15 - DISPUTES

Before any party to this Contract may bring suit in any court concerning an issue relating to this Contract, such party must first seek in good faith to resolve the issue through negotiation with the other party.

#### ARTICLE 16 - NOTICES

All notices or other communications required by this Contract to be given by one party to the other shall be given by hand delivery against receipt, confirmed telecommunication or by certified mail, addressed as follows:

(A) if given to the SRBC:

Susquehanna River Basin Commission  
1721 North Front Street  
Harrisburg, Pennsylvania 17102

Attention: Executive Director

(B) if given to the Utilities:

GPU Service Corporation  
P.O. Box 1018  
Reading, Pennsylvania 19601

Attention: Manager - Water Resources

#### ARTICLE 17 - REGULATORY REQUIREMENTS

The Utilities are regulated public utilities whose agreements to assume obligations of the type provided for by this Contract are believed by them to be subject to review and approval by cognizant regulatory agencies, i.e., the New Jersey Board of Public Utilities and, by reason of Chapters 19 and 21 of the Public Utility Code, the Pennsylvania Public Utility Commission. In addition, the Utilities are regulated by the Securities and Exchange Commission, and they believe that this Contract is required to be submitted to and approved by that Commission, as well. Accordingly, this Contract and the obligations of the parties hereunder are subject to the condition precedent that the Utilities receive either a no comment, disclaimer of or approval from the cognizant regulatory agencies, if the Utilities determine that such filings are necessary.

#### ARTICLE 18 - CHANGED CIRCUMSTANCES

This Contract and the Utilities' and SRBC's several obligations hereunder are based upon the state of facts and law in effect on the date this Contract is signed. If such facts and law (excluding administrative rules and regulations of the SRBC) are changed by events beyond their reasonable control, such as but not limited to accidents, acts of God or government (including legislative and rule-making changes and judicial

decisions), this Contract and the Utilities' and the SRBC's several obligations hereunder shall be appropriately reformed so that in the context of such changed circumstances, the operation and effect of this Contract on the affected party shall be just and equitable.

#### ARTICLE 19 - RIGHTS OF NON-DEFAULTING UTILITIES

If one or more owner(s) of TMI, but less than all owners fail to make payment(s) in accordance with the payment provisions of this Contract, and fail(s) to cure such failure within a reasonable time after receiving notice from SRBC, then the non-defaulting owner(s) shall have the option but not the obligation of assuming the payment obligations of the defaulting owner(s). If the non-defaulting owner(s) do not exercise the option to assume the payment obligations, the SRBC may terminate this Contract without any further obligations to the non-defaulting owner(s), and in the event of such termination the non-defaulting owner(s) will not have any further payment obligations hereunder to the SRBC.

#### ARTICLE 20 - DEFINITIONS

To the extent capitalized terms are used but not defined in this Contract, they shall have the same definitions as found in the Corps Contract or the Recreation Contract, as applicable.

IN WITNESS WHEREOF, the parties have executed this Contract  
as of the day and year first above written.

WITNESS:

*W. H. Hanning*

JERSEY CENTRAL POWER & LIGHT COMPANY

By: *W. H. Hanning*  
Title: President

WITNESS:

*W. H. Hanning*

METROPOLITAN EDISON COMPANY

By: *W. H. Hanning*  
Title: President

WITNESS:

*W. H. Hanning*

PENNSYLVANIA ELECTRIC COMPANY

By: *W. H. Hanning*  
Title: President

ATTEST:

*W. H. Hanning*  
Secretary

SUSQUEHANNA RIVER BASIN COMMISSION

By: *Robert H. Biles*  
Title: Executive Director

SEAL

EXHIBIT B-I  
LAKE STORAGE  
COWANESQUE LAKE

| <u>FEATURE</u> | <u>ELEVATION<br/>(FT., NGVD)</u> | <u>USABLE<br/>STORAGE<br/>(AC-FT)**</u> | <u>PERCENTAGE OF<br/>WATER<br/>STORAGE</u> | <u>USEABLE<br/>STORAGE</u> |
|----------------|----------------------------------|---|--|----------------------------|
| Flood Control  | 1117.0-1080.0                    | 55,710                                  | -  | 64.29                      |
| Water Storage  | 1080.0-1010.96                   | 30,940                                  | 100.00                                     | 35.71                      |
| Commission     |                                  |   |  |                            |
| Storage Space  |                                  | (24,335)                                | (78.65)                                    | (28.08)                    |
| Conservation   |                                  |   |  |                            |
| Storage Space  |                                  | <u>(6,605)</u>                          | (21.35)                                    | (7.63)                     |
| Total          |                                  | 86,650*                                 |  |                            |

\* Total Project storage is 86,700 acre-feet of which 50 acre-feet are below the outlet tunnel invert of 1010.96 feet NGVD, leaving 86,650 acre-feet of usable storage.

\*\* Estimated storage remaining after 100 years of sedimentation from the date the Project was operational.



# EXHIBIT B-II

## ALLOCATION OF JOINT-USE WATER SUPPLY COSTS COWANESQUE LAKE

| <u>ITEM</u>  | <u>COST</u>                  |
|--|------------------------------|
| 1. <u>JOINT-USE CONSTRUCTION COSTS</u>   |                              |
| a. Original Costs  |                              |
| Existing Project total construction cost   | \$106,031,000                |
| Construction cost of specific recreation facilities  | <u>\$-3,800,000</u>          |
| Construction cost of joint-use facilities  | \$102,231,000                |
| b. Escalated Joint-Use Construction Costs  |                              |
| Escalated cost (from midpoint of construction, Jan 1978, to Oct 1985) using the Bureau of Reclamation Earth Dam Construction Index 140/102 x \$102,231,000 | \$140,363,000                |
| c. Joint-Use Construction Cost Allocated to Water Supply (Oct 1985)  |                              |
| $\$140,363,000 \times \frac{24,335}{86,650} = \$140,363,000 \times 28.08\%$  | \$39,414,000                 |
| 2. <u>ANNUAL JOINT-USE COSTS</u>   |                              |
| a. Interest and Amortization   |                              |
| $\$39,414,000 \times 0.073211$ (factor based on 50 repayments, 49 with interest at 7.69%)  | \$2,885,533.98               |
| b. Joint-Use Operation and Maintenance of Existing Project   |                              |
| $\$192,000 \times 28.08\%$ <sup>1/</sup>   | \$54,000                     |
| c. Total Annual Joint-Use Cost (Oct 1985)  | \$2,939,533.98 <sup>2/</sup> |

1/ Annual O&M expenses for the joint-use dam and appurtenances comprise 76 percent (\$252,000 x 76% = \$192,000) of the total O&M expenses for these features. The Commission's share of the joint-use O&M expense is 28.08 percent.

2/ See Exhibit B-III for specific water supply costs.

# EXHIBIT B-III

## DETERMINATION OF SPECIFIC WATER SUPPLY COSTS<sup>1/</sup>

### COWANESQUE LAKE

| <u>ITEM</u>   | <u>COST</u>                      |
|---|----------------------------------|
| <b>1. <u>SPECIFIC CONSTRUCTION COSTS</u></b>  |                                  |
| Reservoir Clearing  | \$790,000                        |
| Reservoir Slope Modification  | 1,270,000                        |
| Intake Tower Extension  | 1,345,000                        |
| Access Ramps Relocation   | 690,000                          |
| In-Kind Replacement Recreation <sup>2/</sup>  | 3,860,000                        |
| Wildlife Mitigation   | 920,000                          |
| Cultural Mitigation   | <u>105,000</u>                   |
| <b>SUBTOTAL</b>   | <b>\$8,980,000</b>               |
| Engineering and Design  | 1,920,000                        |
| Supervision and Administration  | <u>730,000</u>                   |
| <b>TOTAL SPECIFIC CONSTRUCTION COST</b>   | <b>\$11,630,000<sup>5/</sup></b> |
| <b>2. <u>SPECIFIC ANNUAL OPERATION AND MAINTENANCE COSTS</u></b>                          |                                  |
| a. O&M expense associated <sup>3/</sup> with in-kind replacement recreation <sup>2/</sup> | \$141,000                        |
| b. Wildlife Mitigation measures   | 6,000                            |
| c. Specific water supply features <sup>4/</sup>   | <u>60,000</u>                    |
| <b>TOTAL SPECIFIC ANNUAL O&amp;M COST</b>   | <b>\$207,000</b>                 |

<sup>1/</sup> October 1985 price levels

<sup>2/</sup> Construction costs for in-kind replacement recreation facilities comprise 72.17 percent of the total first costs of both in-kind replacement and expanded recreation facilities ( $72.17\% \times \$5,350,000 = \$3,860,000$ ). Remaining costs for recreation facilities (27.83%) are allocated to expanded recreation development and are addressed in a separate contract.

<sup>3/</sup> Annual O&M expenses for in-kind replacement recreation facilities comprise 23 percent of the total O&M costs for all recreation facilities ( $23\% \times \$613,000$ ). Remaining O&M costs for recreation facilities are allocated to existing recreation development (58 percent, to be paid by the Government) and to expanded recreation development (19 percent, to be paid by the Commission under separate contract).

4/ Annual O&M expenses for specific water supply features comprise 24 percent of total O&M expenses for the dam and appurtenances (\$252,000). Remaining O&M expenses for the dam and appurtenances (76 percent of total O&M expenses for the dam and appurtenances) are considered to be joint-use costs and are shared according to percentages established in Exhibit B-II.

5/ Costs expended prior to signature of this contract are \$1,380,000 and are to be repaid with interest during the construction period or without interest prior to construction.

EXHIBIT B-IV

CONSTRUCTION PLACEMENT SCHEDULE

|                       |                           |
|-----------------------|---------------------------|
| PRIOR TO CONSTRUCTION | \$1,380,000 <sup>1/</sup> |
| FISCAL YEAR 1986      | \$1,400,000               |
| FISCAL YEAR 1987      | \$4,500,000               |
| FISCAL YEAR 1988      | <u>\$4,350,000</u>        |
| TOTAL                 | \$11,630,000              |

<sup>1/</sup> To be repaid with interest during the construction period or without interest prior to construction.

TOTAL ESTIMATED ANNUAL COST TO COMMISSION FOR USE OF  
WATER SUPPLY STORAGE (RECAPITULATION)<sup>1/</sup>

ITEM

|    |  |                |
|----|--|----------------|
| 1. | <u>INTEREST AND AMORTIZATION FOR JOINT-USE</u>     |                |
|    | <u>CONSTRUCTION COST ALLOCATED TO WATER SUPPLY</u> |                |
|    | (\$39,414,000 X 0.073211)                          | \$2,885,533.98 |

|  |          |
|--|----------|
| Specific Water Supply Features<br>(100% x (24% x \$252,000)) | \$60,000 |
|--|----------|

|                             |                |           |
|-----------------------------|----------------|-----------|
| TOTAL ESTIMATED ANNUAL COST | \$3,146,533.98 | <u>2/</u> |
|-----------------------------|----------------|-----------|

2/ Total estimated annual cost does not include any interest and amortization for construction cost of specific water supply facilities.

EXHIBIT R-II

CONSTRUCTION PLACEMENT SCHEDULE

PRIOR TO CONSTRUCTION

\$ ~~340,000~~<sup>1/</sup> *170,000*

FISCAL YEAR 1986

~~1,000,000~~

*500,000*

FISCAL YEAR 1987

~~600,000~~

*300,000*

FISCAL YEAR 1988

0

TOTAL

\$1,940,000

*970,000*

<sup>1/</sup> One-half of the amounts shown are to be paid by the Commission.

<sup>2/</sup> Costs expended for engineering and design and supervision and administration prior to signature of this Contract are \$340,000. One-half, or \$170,000 of this amount is to be repaid by the Commission, either with interest during the construction period, or without interest prior to construction.



## EXHIBIT C

## WATER SUPPLY AMORTIZATION PAYMENT SCHEDULE

INVESTMENT: \$ 39414000  
 INTEREST RATE: 7.69 %  
 PAYMENT PERIOD: 50 YEARS

| PAYMENT<br>NUMBER | ANNUAL<br>PAYMENT | PAYMENT TO<br>INTEREST | PAYMENT TO<br>PRINCIPAL | BALANCE<br>DUE |
|-------------------|-------------------|------------------------|-------------------------|----------------|
| 1                 | 2885533.98        | 0.00                   | 2885533.98              | 36528466.02    |
| 2                 | 2885533.98        | 2809039.04             | 76494.94                | 36451971.08    |
| 3                 | 2885533.98        | 2803156.58             | 82377.40                | 36369593.67    |
| 4                 | 2885533.98        | 2796821.75             | 88712.23                | 36280881.45    |
| 5                 | 2885533.98        | 2789999.78             | 95534.20                | 36185347.25    |
| 6                 | 2885533.98        | 2782653.20             | 102880.78               | 36082466.48    |
| 7                 | 2885533.98        | 2774741.67             | 110792.31               | 35971674.17    |
| 8                 | 2885533.98        | 2766221.74             | 119312.24               | 35852361.93    |
| 9                 | 2885533.98        | 2757046.63             | 128487.35               | 35723874.59    |
| 10                | 2885533.98        | 2747165.96             | 138368.02               | 35585506.56    |
| 11                | 2885533.98        | 2736525.45             | 149008.52               | 35436498.04    |
| 12                | 2885533.98        | 2725066.70             | 160467.28               | 35276030.76    |
| 13                | 2885533.98        | 2712726.77             | 172807.21               | 35103223.55    |
| 14                | 2885533.98        | 2699437.89             | 186096.09               | 34917127.46    |
| 15                | 2885533.98        | 2685127.10             | 200406.88               | 34716720.58    |
| 16                | 2885533.98        | 2669715.81             | 215818.17               | 34500902.41    |
| 17                | 2885533.98        | 2653119.40             | 232414.58               | 34268487.83    |
| 18                | 2885533.98        | 2635246.71             | 250287.27               | 34018200.56    |
| 19                | 2885533.98        | 2615999.62             | 269534.36               | 33748666.21    |
| 20                | 2885533.98        | 2595272.43             | 290261.55               | 33458404.66    |
| 21                | 2885533.98        | 2572951.32             | 312582.66               | 33145822.00    |
| 22                | 2885533.98        | 2548913.71             | 336620.27               | 32809201.73    |
| 23                | 2885533.98        | 2523027.61             | 362506.37               | 32446695.37    |
| 24                | 2885533.98        | 2495150.87             | 390383.11               | 32056312.26    |
| 25                | 2885533.98        | 2465130.41             | 420403.57               | 31635908.69    |
| 26                | 2885533.98        | 2432801.38             | 452732.60               | 31183176.09    |
| 27                | 2885533.98        | 2397986.24             | 487547.74               | 30695628.35    |
| 28                | 2885533.98        | 2360493.82             | 525040.16               | 30170588.20    |
| 29                | 2885533.98        | 2320118.23             | 565415.75               | 29605172.45    |
| 30                | 2885533.98        | 2276637.76             | 608896.22               | 28996276.23    |
| 31                | 2885533.98        | 2229813.64             | 655720.34               | 28340555.89    |
| 32                | 2885533.98        | 2179388.75             | 706145.23               | 27634410.66    |
| 33                | 2885533.98        | 2125086.18             | 760447.80               | 26873962.86    |
| 34                | 2885533.98        | 2066607.74             | 818926.24               | 26055036.63    |
| 35                | 2885533.98        | 2003632.32             | 881901.66               | 25173134.96    |
| 36                | 2885533.98        | 1935814.08             | 949719.90               | 24223415.06    |
| 37                | 2885533.98        | 1862780.62             | 1022753.36              | 23200661.70    |
| 38                | 2885533.98        | 1784130.88             | 1101403.09              | 22099258.61    |
| 39                | 2885533.98        | 1699432.99             | 1186100.99              | 20913157.62    |
| 40                | 2885533.98        | 1608221.82             | 1277312.16              | 19635845.46    |
| 41                | 2885533.98        | 1509996.52             | 1375537.46              | 18260307.99    |
| 42                | 2885533.98        | 1404217.68             | 1481316.29              | 16778991.70    |
| 43                | 2885533.98        | 1290304.46             | 1595229.52              | 15183762.18    |
| 44                | 2885533.98        | 1167631.31             | 1717902.67              | 13465859.51    |
| 45                | 2885533.98        | 1035524.60             | 1850009.38              | 11615850.13    |
| 46                | 2885533.98        | 893258.87              | 1992275.10              | 9623575.03     |
| 47                | 2885533.98        | 740052.92              | 2145481.06              | 7478093.97     |
| 48                | 2885533.98        | 575065.43              | 2310468.55              | 5167625.41     |
| 49                | 2885533.98        | 397390.39              | 2488143.59              | 2679481.83     |
| 50                | 2885533.98        | 206052.15              | 2679481.83              | 0.00           |





EXHIBIT R-I

ESTIMATED SEPARABLE FIRST COST  
FOR EXPANDED RECREATION DEVELOPMENT  
AT COWANESQUE LAKE<sup>1/</sup>

|   |                           |
|---|---------------------------|
| Total Estimated Cost of Both In-Kind Replacement and Expanded Recreation Facilities | \$5,350,000               |
| I. <u>Access and Circulation</u>  |                           |
| A. Roads  | (\$696,000)               |
| B. Parking  | (\$1,167,000)             |
| C. Boat Launching Devices   |                           |
| Surfaced Ramps  | (\$133,000)               |
| D. Boat Piers (Fixed or Floating)   | (\$30,000)                |
| E. Walks  | (\$207,000)               |
| F. Ramps  | (\$12,000)                |
| II. <u>Structures</u>   |                           |
| A. Sanitation   |                           |
| 1. Comfort Stations   | (\$735,000)               |
| 2. Washhouse  | (\$133,000)               |
| 3. Bathhouse  | (\$361,000)               |
| B. Shelters   |                           |
| 1. Picnic   | (\$135,000)               |
| C. Swimming Beaches   | (\$410,000)               |
| D. Snack Bars   | (\$120,000) <sup>2/</sup> |
| E. Maintenance and Operation  |                           |
| 1. Garages  | (\$120,000) <sup>3/</sup> |
| III. <u>Utilities</u>   |                           |
| A. Water Supply   | (\$289,000)               |
| 1. Wells  |                           |
| 2. Treatment Plant  |                           |
| 3. Storage  |                           |
| 4. Distribution   |                           |
| 5. Fountain and Outlets   |                           |
| B. Sewage and Wastewater Disposal   |                           |
| 1. Treatment Plants   | (\$193,000)               |
| C. Electrical   |                           |
| 1. Lighting   | (\$95,000)                |
| IV. <u>Site Preparation</u>   |                           |
| A. Clearing and Grubbing  | (\$111,000)               |
| B. Tree Planting/Shrub Planting   | (\$96,000)                |
| C. Turf Establishment   | (\$36,000)                |
| V. <u>Park Furniture</u>  |                           |
| A. Picnic Tables  | (\$92,000)                |
| B. Campfire Circles   | (\$7,000)                 |

|  |                           |
|--|---------------------------|
| VI. <u>Play Facilities</u>   | None                      |
| VII. <u>Signs</u>  |                           |
| A. Entrance-Directional-marker   | (\$5,000)                 |
| B. Traffic Control   | (\$2,000)                 |
| VIII. <u>Interpretive Guidance and Media</u>   | None                      |
| IX. <u>Protection, Control, Health and Safety</u>  |                           |
| A. Protection and Control  |                           |
| 1. Gate and Barricades   | (\$2,000)                 |
| 2. Entrance Stations<br>(Ranger Station)   | (\$163,000)               |
| Engineering & Design, Supervision and Admin.   | <u>\$1,621,000</u>        |
| Total Estimated Separable First Cost of<br>Recreation Facilities   | \$6,971,000               |
| A. Amount of Total Estimated Separable Cost<br>Allocated to In-Kind Replacement Recreation<br>to be Paid by Water Supply Purchaser Under<br>Separate Contract (72.17%) | \$5,031,000               |
| B. Amount of Total Estimated Separable First<br>Cost Allocated to Expanded Development<br>(27.83%)   | \$1,940,000 <sup>4/</sup> |
| (1) NON-FEDERAL SHARE (50%)  | \$ 970,000                |
| (2) FEDERAL SHARE (50%)  | \$ 970,000                |

<sup>1/</sup> Costs are at October 1985 price levels.

<sup>2/</sup> An existing snack bar is located at the existing Corps operated and maintained recreation area which must be relocated due to the inclusion of water supply storage in the project. The costs noted are being charged to the water supply purchaser.

<sup>3/</sup> A small maintenance garage is needed at the relocated recreation area since the relocated recreation area is on the opposite side of the lake from the existing Corps operated and maintained recreation area, a distance of about 10 miles. The costs noted are being charged to the water supply purchaser.

<sup>4/</sup> Costs expended prior to signature of this contract were \$340,000 for engineering and design and supervision and administration. One-half, or \$170,000, of this amount is to be repaid with interest during the construction period, or without interest prior to construction.