AmerGen

Michael P. Gallagher, PE
Vice President
License Renewal Projects

Telephone 610.765.5958
www.exeloncorp.com
michaelp.gallagher@exeloncorp.com

An Exelon Company

AmerGen
200 Exelon Way
KSA/2-E
Kennett Square, PA 19348

10 CFR 51
10 CFR 54

5928-08-20158
August 5, 2008

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Three Mile Island Nuclear Station Unit 1
Facility Operating License No. DPR-50
NRC Docket No. 50-289

Subject: Three Mile Island Nuclear Station Unit t License Renewal Application Post-Audit Environmental Information

References: "Three Mile Island Nuclear Station Unit 1 License Renewal Application Environmental Report", submitted 1/8/2008 (AmerGen Letter No. 5928-08-20001)

To facilitate the NRC Staff's review of the Three Mile Island Nuclear Station Unit 1 License Renewal Application (LRA) Environmental Report, AmerGen is submitting certain documents that were requested during a conference call on July 17, 2008. Enclosure A contains a list of these documents, and the documents themselves are contained in Enclosure B.

AmerGen or its contractors did not prepare some of the documents enclosed with this letter, and AmerGen did not control development of such documents. Accordingly, while AmerGen believes the information in these documents to be accurate and complete, we have not verified this and cannot make any specific representation as to its accuracy or completeness. The first page of each such document and its entry in Enclosure A are marked with the designation "Non-AmerGen."

This letter and its enclosures contain no commitments.

A131
NRR

If you have questions, please contact Fred Polaski, Manager License Renewal, at 610-765-5935.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully,

Executed on: 08-05-2008

Michael P. Gallagher
Vice President, License Renewal
AmerGen Energy Company, LLC

Enclosures:

Enclosure A: List of Enclosed Documents
Enclosure B: Documents

cc: Regional Administrator, USNRC Region I, w/ Enclosure A
USNRC Project Manager, NRR - License Renewal, Safety, w/ Enclosure A
USNRC Project Manager, NRR - License Renewal, Environmental, w/ Enclosure A &B
USNRC Project Manager, NRR - TMI Unit 1, w/ Enclosure A
USNRC Senior Resident Inspector, TMI Unit 1, w/ Enclosure A
D. Allard, Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Protection, w/ Enclosure A
Chairman, Board of County Commissioners of Dauphin County, PA, w/ Enclosure A
Chairman, Board of Supervisors of Londonderry Township, Dauphin County, PA, w/ Enclosure A

File No. 08001

Enclosure A
List of Enclosed Documents

Index Number	Document Name	AmerGen/ Non-AmerGEN
1	Department of the Army Permit No. CENAB-OP-RR (AmerGen Energy Company, LLC) 197500083-4, as revised	Non-AmerGen
2	Pennsylvania Department of Environmental Protection Dredging Permit No. 2275724	Non-AmerGen
3	Annual Groundwater Report – Calendar Year 2003 (Tables only) SRBC Project Docket No. 19961102 (Revised) Three Mile Island Unit 1 (TMI 1)	AmerGen
4	Annual Groundwater Report – Calendar Year 2004 (Tables only) SRBC Project Docket No. 19961102 (Revised) Three Mile Island Unit 1 (TMI 1)	AmerGen
5	Annual Groundwater Report – Calendar Year 2005 SRBC Project Docket No. 19961102 (Revised) Three Mile Island Unit 1 (TMI 1)	AmerGen
6	Annual Groundwater Report – Calendar Year 2006 SRBC Project Docket No. 19961102 (Revised) Three Mile Island Unit 1 (TMI 1)	AmerGen
7	Annual Groundwater Report – Calendar Year 2007 SRBC Project Docket No. 19961102 (Revised) Three Mile Island Unit 1 (TMI 1)	AmerGen
8	McSparran, J. and D. Jackson, *Cowanesque Operations Manual*, Susquehanna River Basin Commission Publication No. 157, Prepared in Cooperation with the U.S. Army Corps of Engineers, General Public Utility, and Pennsylvania Power and Light Company, January 1994.	Non-AmerGen

Enclosure B - References

1/10/08
SRE

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

JAN 03 2006

Operations Division

Non-AmerGen

G. E. Chick, Plant Manager
AmerGen Energy Company, LLC
Three Mile Island Nuclear Generating Station
Post Office Box 480
Middletown, Pennsylvania 17057

Dear Mr. Chick:

I am replying to your letter dated December 13, 2005 requesting a third extension of time for the subject Department of the Army permit, file number CENAB-OP-RPA(AMERGEN ENERGY COMPANY, LLC) 197500083-4, issued on February 5, 1975, for maintenance dredging of the intake bay in the Susquehanna River. It has been determined that there have been no significant changes in the attendant circumstances since authorization was granted; therefore, the District has determined that it is not contrary to the public interest to grant an extension of time. Accordingly, general condition (1) of the permit is revised to read as follows:

"The time limit for completing the work authorized ends on December 31, 2015. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached."

All other conditions of the original permit remain in effect. All required State and local authorizations must be secured prior to commencement of work.

Sincerely,

Irwin Garskof
Chief, Pennsylvania Section

CC: DEP Southcentral
Dauphin County Conservation District

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Rec 2/1/00
2/7/00

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

Operations Division JAN 24 2000

Subject: CENAB-OP-RR(Metropolitan Edison Co.)197500083-4
(GPU Nuclear, Inc.)197500083-4
(AmerGen Energy Company, LLC)197500083-4

Mr. J.B. Cotton
Vice President, TMI Unit-1
c/o AmerGen Energy Company, LLC
Route 441 South
P.O. Box 480
Middletown, PA 17057

Dear Mr. Cotton:

I am replying to your letter dated December 22, 1999, requesting that the Department of the Army permit referenced above, which was issued as CENAB-OP-RR(Metropolitan Edison Co.)75-00083-4 on February 5, 1975 and extended on November 4, 1985 and again on September 7, 1995 under the name GPU Nuclear Inc. be transferred to the name AmerGen Energy Company, LLC.

In accordance with your request, the permit is hereby transferred. In future correspondence, please refer to this authorization as shown above.

This verification expires on December 31, 2005. If you find that you need more time to complete the authorized work, a request for reauthorization must be submitted prior to the expiration date.

All other conditions of the original permit remain in effect and adherence shall be strictly maintained.

If you have any questions concerning this matter please call Mrs. Patricia Strong, of this office, at (410) 962-1847.

Sincerely,

Irwin Garskof
Chief, Pennsylvania Section

Enclosure

DOCUMENT CONTROL
CONTROLLED
COPY 9

AmerGen

A PECO Energy/British Energy Company

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057
Phone: 717-944-7621

December 22, 1999
3620-992-020

District Engineer
Baltimore District Office
U.S. Army Corps of Engineers
Post Office Box 1715
Baltimore, MD 21203-1715

Dear Sir or Madam:

SUBJECT: CHANGE OF FACILITY OWNERSHIP NOTIFICATION
MAINTENANCE DREDGING PERMIT
PERMIT NO. CENAB-OP-RR (MET ED CO.) 75-00083-4
THREE MILE ISLAND NUCLEAR STATION (TMINS)

This is to provide the Corps of Engineers with notification of the effective date for transfer of the referenced dredging permit from GPU Nuclear, Inc. to AmerGen Energy Company, LLC (AmerGen). The transfer of the dredging permit shall be effective December 20, 1999. The effective date corresponds to the date of financial closing for the purchase of TMI Unit-1 and the TMI Unit-1 support facilities by AmerGen from GPU Nuclear, Inc. Although GPU Nuclear, Inc. retains ownership of TMI Unit-2, the subject dredging permit covers only maintenance operations at the TMI-1 Screen Intake Structure. There are no maintenance dredging operations associated with TMI Unit-2.

As required by the Corps of Engineers for permit transfers, John B. Cotton, Vice President, TMI Unit-1 for AmerGen has signed page no. 4 of the original permit as the "Transferee". A copy of the signed permit page no. 4 is attached for the Corps of Engineer's files and the original will be retained at the TMI site in the permit file. For information, a copy of the Corp's permit extension letter, dated September 7, 1995, is attached for clarification of the current status of the subject permit. The letter extended NABOP-RR (GPU Nuclear Corp.) 75-0083-R for a ten year period to December 31, 2005. AmerGen will comply with the Corps of Engineer's rules and regulations for dredging activities covered under the referenced dredging permit.

Should the Corps of Engineers have questions concerning the permit transfer or require additional information, please contact Scott R. Cogley, Consultant, Environmental Affairs at (717) 948-8881.

Very Truly Yours,

J. B. Cotton
Vice President, TMI Unit-1

SRC

Attachment

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

PERMIT EXTENSION TO DECEMBER 31, 2005 TRT

Received 9/18/95 pr

OCT 06 1995

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

SEP 07 1995

Operations Division

Subject: CENAB-OP-RR(METROPOLITAN EDISON CO.)75-00083-4

Mr. T.G. Broughton
GPU Nuclear
Three Mile Island Nuclear Generating Station
Post Office Box 480
Middletown, Pennsylvania 17057

Dear Mr. Broughton:

I am replying to your letter dated July 25, 1995 requesting a second extension of time for the subject Department of the Army permit issued on February 5, 1975, for maintenance dredging of the intake bay in the Susquehanna River. During a site visit conducted on September 1, 1995 with Mrs. Patricia Strong of this office and Mr. William Ressler of GPU Nuclear it was determined that there have been no significant changes in the attendant circumstances since authorization was granted, therefore, the District has determined that it is not contrary to the public interest to grant an extension of time. Accordingly, general condition (1) of the permit is revised to read as follows:

"The time limit for completing the work authorized ends on December 31, 2005. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached."

All other conditions of the original permit remain in effect. All required State and local authorizations must be secured prior to commencement of construction.

By Authority of the Secretary of the Army:

Paul R. Wittenfer

Issued for and in behalf of
Colonel Randall R. Inouye, P.E.
District Engineer

for Donald W. Roeseke
Chief, Regulatory Branch

Enclosure

Application Name & No. NABOP-RR(GPU Nuclear Corp.)75-0083-R

Effective Date NOV 4 1985

Expiration Date 31 December 1988

US Army Engineer District, Baltimore
Corps of Engineers
P.O. Box 1715, Baltimore, MD 21203 -1715

DEPARTMENT OF THE ARMY
PERMIT

Referring to written request dated 11 June 1985 for a permit to:

(XX) Perform work in or affecting waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 403);

(XX) Discharge dredged or fill material into waters of the United States upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344);

( ) Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532);

GPU Nuclear Corp.
ATTN: Mr. Tom Grace
P.O. Box 480
Middleton, PA 17057-0191

is hereby authorized by the Secretary of the Army: To extend by 10 years a previously authorized maintenance dredging permit (Metropolitan Edison Co., 75-0083), to dredge to a maximum depth of 6 feet below MLW the area immediately in front of the plant's water intake screens. All dredged material is to be deposited of at an approved upland site.

in the Susquehanna River

at Three Mile Island, Dauphin County, Pennsylvania

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings, give file number or other definite identification marks.)
UNTITLED.

subject to the following conditions:

I. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension, or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States government may consider appropriate, whether or not this permit has been previously modified, suspended, or revoked in whole or in part.

b. That all activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (33 U.S.C. 1344), the Marine Protection, Research and Sanctuaries Act of 1972 (P.L. 92-532, 86 Stat. 1052), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge during its construction or operation, or any pollutant (including dredged or fill material), into waters of the United States, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, or endanger the critical habitat of such species.

e. That the permittee agrees to make every reasonable effort to prosecute the construction or operation of the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife, and natural environmental values.

f. That the permittee agrees that he will prosecute the construction or work authorized herein in a manner so as to minimize any degradation of water quality.

g. That the permittee shall allow the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

h. That the permittee shall maintain the structure or work authorized herein in good condition and in reasonable accordance with the plans and drawings attached hereto.

i. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, state, or local laws or regulations.

j. That this permit does not obviate the requirement to obtain state or local assent required by law for the activity authorized herein.

k. That this permit may be either modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7.

l. That in issuing this permit, the government has relied on the information and data which the permittee has provided in connection with this permit application. If subsequent to the issuance of this permit, such information and data prove to be materially false, materially incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

n. That the permittee shall notify the District Engineer as to when the activity authorized herein will begin. This shall be done as far ahead of beginning the activity as the District Engineer specifics. Also, the District Engineer shall be notified of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not completed on or before 31st day of December, 1995, (ten years from the date of issuance of this permit unless otherwise specified) this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by Congress or other agencies of the Federal Government.

q. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition thereof, he must restore the area to a condition satisfactory to the District Engineer.

r. That if the recording of this permit is possible under applicable state or local law, the permittee shall take such actions as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

s. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

t. That this permit may not be transferred to a third party without prior written notice to the District Engineer, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

u. That if the permittee during prosecution of the work authorized herein, encounters a previously unidentified archeological or other cultural resource within the area subject to Department of the Army jurisdiction that might be eligible for listing in the National Register of Historic Places, the permittee shall immediately notify the District Engineer.

v. That this permit may be summarily suspended, in whole or in part, upon a finding by the District Engineer that immediate suspension of the activity authorized herein would be in the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate: (1) the extent of the suspension, (2) the reasons for this action, and (3) any corrective or preventive measures to be taken by the permittee which are deemed necessary by the District Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of this notice. Within ten days following receipt of this notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether his permit should be reinstated, modified, or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the permit will either be reinstated, modified, or revoked.

w. (This condition applies to permits authorizing placement of fill only) That no building or other structure(s) may be erected on the fill authorized by this permit unless such building or other structure is appropriately identified and described in the plans and drawings attached hereto; that buildings or other structures authorized by this permit, once erected, may not be significantly modified in their outward appearance or torn down and other buildings or structures erected in their place unless a modification of this permit is authorized by the Secretary of the Army or his authorized representative; and that neither the fill itself nor buildings or structures erected in accordance with the plans and drawings attached hereto may be dedicated to any different use than that contemplated at the time of issuance of this permit unless modification of this permit is authorized by the Secretary of the Army or his authorized representative.

II. Special Conditions:

The following Special Conditions are applicable when indicated by an "X":

a. **STRUCTURES IN OR AFFECTING NAVIGABLE WATERS OF THE UNITED STATES:**

X 1. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structure(s) or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

X 2. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

___ 3. That if the display of lights and signals on any structure(s) or work authorized herein is not otherwise provided by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by, and at the expense of the permittee.

X 4. That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure of work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

___ 5. Structures for Small Boats: That permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure(s) permitted herein and the safety of boats moored thereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

b. **MAINTENANCE DREDGING:**

X 1. That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for 10 (ten) years from the date of issuance of this permit (ten years unless otherwise indicated);

X 2. That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

c. DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES:

X 1. That the discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines established pursuant to Section 404(b) of the Clean Water Act and published in 40 CFR 230;

___ 2. That the discharge will consist of suitable material free from toxic pollutants in toxic amounts.

X 3. That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution.

d. DISPOSAL OF DREDGED MATERIAL INTO OCEAN WATER:

___ 1. That the disposal will be carried out in conformity with the goals, objectives, and requirements of the EPA criteria established pursuant to Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, published in 40 CFR 220-228.

___ 2. That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or disposal of the dredged material as authorized herein.

III. OTHER SPECIAL CONDITIONS:

This permit shall become effective on the date of the District Engineer's signature or designee.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

GPU Nuclear Corp. — PERMITTEE

12/23/85 — DATE

The permittee anticipates the construction of the work will begin on open and be completed by open.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Issued for and in behalf of
Colonel Martin W. Walsh, Jr.
District Engineer

for Thomas J. Fitzo III
DONALD W. ROESEKE
Chief, Regulatory Functions Branch

4 Nov. 1985
DATE

Transferee hereby agrees to comply with the terms and conditions of this permit.

Transferee

12/23/85
DATE

John B. Cotton
(Transferee)

12/22/99
(Date)

John B. Cotton, Vice President TMI Unit-1
AmerGen Energy Company, LLC

3630-PM-WQ0016 Rev. 3/98

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER QUALITY PROTECTION
BUREAU OF WATERWAYS ENGINEERING

FOR DEPARTMENT USE ONLY
APR - 4 2000
Date Received
Approved by Department
APR - 4 2000
Approval Date

APPLICATION FOR TRANSFER OF PERMIT[1/] AND SUBMERGED LANDS LICENSE AGREEMENT

Return 4 executed copies each with original signatures to the appropriate office on the attached list.

TO BE COMPLETED BY PRESENT PERMITTEE

Name of Present Permittee: GPU Nuclear, Inc.			Telephone Number: (973) 316-7000
Mailing Address: One Upper Pond Road	City: Parsippany	State: New Jersey	Zip: 07054

☐ A Private Individual ☑ A Corporation ☐ A Partnership ☐ A Government Agency

Type of Permit	Permit Number	Date Issued	Stream	Municipality	County
GP ☐ Obstruction ☑ Dam ☐	2275724	01/13/76	Susquehanna River	Londonderry Twp.	Dauphin

The Original (or a copy) of permit is ☑ Attached ☐ Cannot be produced

Has a bond been posted in connection with this project? ☐ Yes ☑ No

Do you presently hold a submerged lands license agreement? ☐ Yes ☑ No (If yes, please fill out the reverse side also)

AFFIDAVIT[1/]

I Scott L. Guibord being duly sworn according to law depose and say that I ~~(am the permittee)~~ (am an officer of the permittee) ~~(have the authority to make this application for the permittee)~~ named above as the present permittee, that said permittee relinquishes all right, title and interest in said permit, and that the information included in the foregoing application is true to the best of my knowledge and belief. (Inapplicable portions should be crossed out).

Signature of present permittee[3/] — Date: 3/10/00

Scott L. Guibord
Corporate Secretary
Title

Non-AmerGen

Corporate or Government Seal

Not Applicable
Witness Signature[3/]

TO BE COMPLETED BY NEW APPLICANT

Name of New Applicant: AmerGen Energy Company, LLC			Telephone Number: (717) 948-8881
Mailing Address: P. O. Box 480, Middletown	City: PA 17057	State	Zip

Federal ID/Social Security No.				
232921417	☐ A Private Individual	☑ A Corporation	☐ A Partnership	☐ A Government Agency

Statement of Acceptance of Permit: I/We hereby accept the permit herein referred to and agree to be bound by all terms and conditions of said permit.

AFFIDAVIT[1/]

I John B. Cotton being duly sworn according to law depose and say that I ~~(am the applicant)~~ (am an officer or official of the applicant) ~~(have the authority to make this application for the applicant)~~ named above as the new applicant, and that the information included in the foregoing statement is true to the best of my knowledge and belief. (Inapplicable portions should be crossed out)

Signature of new applicant[3/] — Date: 3/3/2000

Vice President, TMI Unit 1
Title

Corporate or Government Seal

Not applicable
Witness Signature and Title (if applicable)[3/]

DOCUMENT CONTROL
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COPY 9

AmerGen

A PECO Energy/British Energy Company

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057
Phone: 717-944-7621

March 22, 2000
5938-2000-036

RECEIVED
MAR 27 2000

Roll 7
558A
251314

Mr. Dennis Stum
Water Management Program
PA Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200

Dear Mr. Stum:

SUBJECT: APPLICATION FOR TRANSFER OF PERMIT
CHANGE OF FACILITY OWNERSHIP NOTIFICATION
DREDGING PERMIT NO. 2275724
THREE MILE ISLAND NUCLEAR STATION (TMINS)

Please find attached four executed copies of the Department's Application for Transfer of Permit form. The completed forms transfer Permit No. 2275724 from GPU Nuclear, Inc. (GPUN) to AmerGen Energy Company, LLC (AmerGen). The transfer of compliance responsibilities for the dredging permit was effective December 20, 1999. The effective date corresponds to the date of financial closing for the purchase of TMI Unit-1 and the TMI Unit-1 support facilities by AmerGen from GPUN.

As background information, Permit No. 2275724 was issued to Metropolitan Edison Company on January 13, 1976, by the Department's Division of Dams and Encroachments. Because the subject permit covered routine maintenance of the station's screen intake structures, GPUN requested an extension of the permit in April 1982. The Department issued an indefinite extension to the permit by letter dated May 21, 1982 (see attached copy of Permit No. 2275724 and the Department's extension letter). A condition of the permit stated that the permit authorization by the Department was contingent upon the approval and permitting by the U.S. Army Corps of Engineers (ACOE). The ACOE permit remains in effect for this project and is effective until December 31, 2005. The ACOE Baltimore District Office was provided notification of the facility ownership change and by letter dated January 24, 2000, authorized the transfer of the ACOE permit to AmerGen. The current ACOE dredging authorization is referenced as CENAB-OP-RR (AmerGen Energy Company, LLC)197500083-4 (see attached copy of ACOE permit transfer authorization and support documentation).

AmerGen will comply with the Department's rules and regulations for dredging activities covered under the referenced dredging permit. However, please be advised that there are several changes to the station operations that should be reflected in the Department's files. First, the TMI Unit-2 Screen Intake Structure has not been operational for many years and there is no routine maintenance dredging of the structure. AmerGen's responsibilities under this permit are limited to dredging at the TMI Unit-1 Screen Intake Structure only. Secondly, the silt that is hydraulically removed from the TMI Unit-1 Screen Intake Structure is pumped only to the onsite settling basin identified as the "Suction Dredge Disposal Basin" (see Figures Nos. 1 and 3 of the attached extension letter). The basin labeled as "Mechanical Dredge Disposal Basin" on the figures is not used for the disposal of any dredge spoils. This basin is part of the station Yard Drainage System and cannot be used for spoils disposition. If mechanical dredging of the area outside of the TMI Unit-1 Intake Structure were required, either the "Suction Dredge Disposal Basin" or an alternate upland location would be used for disposal of the dredge material. Discharges from overflow of the "Suction Dredge Disposal Basin" are covered under the station's NPDES permit, and dewatered silt removed from the disposal basin is dispositioned in accordance with the Department's Waste Management Program requirements.

Finally, the routine maintenance dredging operations for the TMI Unit-1 Screen Intake Structure occur inside the structure and directly in front of the Screen Intake Structure. The suction dredging is performed by underwater divers and has minimal impact on the river outside of the Intake Structure. Similar to past practices under GPUN, AmerGen understands that routine turbidity monitoring is not required for these maintenance activities (see Permit No. 2275724, Conditions for Stream Operations, Item C.). For routine maintenance dredging under the PADEP permit and the ACOE permit, AmerGen will continue to provide advance notice of planned routine maintenance activities as in the past.

Should the Department have questions concerning the completed Application for Transfer of Permit forms or require additional information please contact Scott R. Cogley, Consultant, Environmental Affairs, at (717) 948-8881.

Sincerely,

John B. Cotton

John B. Cotton
Vice President, TMI Unit-1

SRC

Attachments

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

PA Department of Environmental Protection
Application for Transfer of Permit Forms
(4 original executed copies)

Dredging Permit No. 2275724

Three Mile Island Nuclear Station
AmerGen Energy Company, LLC

EK-BWQ-17 9/75

PERMIT NO. 2275724

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

PERMIT

The Department of Environmental Resources, established by the Act of December 3, 1970 (71 P.S. 51 et.seq.), and transferring the functions of the Water and Power Resources Board which, by virtue of Section 1808 of "The Administrative Code," was empowered to exercise certain powers and perform certain duties by law vested in and imposed upon the Water Supply Commission of Pennsylvania, under and by virtue of said Administrative Code and of an act of the General Assembly of the Commonwealth of Pennsylvania, entitled "An act providing for the regulation of dams, or other structures or obstructions, as defined herein, in, along, across, or projecting into all streams and bodies of water wholly or partly within, or forming part of the boundary of, this Commonwealth; vesting certain powers and duties in the Water Supply Commission of Pennsylvania, for this purpose; and providing penalties for the violation of the provisions hereof," approved the twenty-fifth day of June, one thousand nine hundred and thirteen, as amended, hereby issues this permit to:

METROPOLITAN EDISON COMPANY

giving its consent to:

perform maintenance dredging in the existing intake structures and intake channel system of Three Mile Island Nuclear Station at a point along west shore of Three Mile Island in Londonderry Township, Dauphin County.

This permit is issued in response to an application filed with the Department of Environmental Resources on the 3rd day of October A.D. 19 75, and with the understanding that the work shall be performed in accordance with the maps, plans, profiles, and specifications filed with and made part of the application

subject, however, to the provisions of the Act of June 25, 1913, P.L. 555, as amended, and the following conditions, regulations, and restrictions: (YOUR ATTENTION IS DRAWN TO CONDITION NUMBER 11).

1. This permit does not give any property rights, either in real estate or material, nor any exclusive privileges, nor shall it be construed to grant or confer any right, title, easement, or interest, in, to, or over any land belonging to the Commonwealth of Pennsylvania; neither does it authorize any injury to private property nor invasion of private rights, nor any infringement of Federal, State, or local laws or regulation; nor does it obviate the necessity of obtaining Federal assent when necessary;

2. The work shall at all times be subject to supervision and inspection by representatives of the Department, and no changes in the maps, plans, profiles and specifications as approved shall be made except with the written consent of the Department. The Department, however, reserves the right to require such changes or modifications in the maps, plans, profiles, and specifications as may be considered necessary. The Department further reserves the right to suspend or revoke this permit if in its opinion the best interest of the Commonwealth will be subserved thereby;

3. All construction debris, excavated material, brush, rocks, and refuse incidental to this work shall be removed entirely from the stream channel and placed either on shore above the influence of flood waters, or at such dumping ground as may be approved by the Departmen

4. There shall be no unreasonable interference with the free discharge of the river or stream nor with navigation during construction;

5. If future operations by the Commonwealth of Pennsylvania require modification of the structure or work, or if, in the opinion of the Department of Environmental Resources, it shall cause unreasonable obstruction to the free passage of floods or navigation, the permittee shall, upon due notice remove or alter the structural work or obstructions caused thereby, without expense to the Commonwealth of Pennsylvania, so as to increase the flood carrying capacity of the channel or render navigation reasonably free, easy, and unobstructe in such manner as the Department may require; and if, upon the expiration or revocation of this permit, the work shall not be completed, the permittee, at his own expense and to such extent and in such time and manner as the Department may require, shall remove all or any portion of the incompleted work and restore the watercourse to its former condition. No claim shall be made against the Commonwealth of Pennsylvania on account of any such removal or alteration;

6. The permittee shall notify the Department of Environmental Resources when this work is commenced and at least two weeks before the probable time of completion;

7. Within thirty (30) days after the completion of the work authorized in this permit, the permittee shall file with the Department of Environmental Resources, Harrisburg, Pennsylvania, a statement certifying that the work has been performed in accordance with this permit and the approved maps, plans, profiles, and specifications.

8. Performance of the work authorized shall constitute an acceptance of the various conditions contained in the permit; provided that if the permittee fails to file acceptance of the permit in accordance with Condition 11, the permit becomes null and void and the permittee shall remove all works constructed and restore the area in a manner specified by the Department.

9. If this work is not completed on or before the 31st day of December A.D. 19 78, this permit, if not previously revoked or specifically extended, shall cease and be null and void.

10. The permittee shall be required to and shall require his contractor to conform with the following:

1. Reduce by the greatest extent practicable the area and duration of exposure of readily erodible soils;

2. Protect soils by use of temporary vegetation, or seeding and mulching, or by accelerating the establishment of permanent vegetation and completing protected segments of work as rapidly as is consistent with construction schedules;

3. Retard the rate of runoff from the construction site and control disposal thereof;

4. Trap sediment from construction sites in temporary or permanent silt basins to include pump discharges from dewatering operation;

5. Sprinkle or apply dust suppressors to keep dust within tolerable limits on haul roads and at the construction site;

6. Provide temporary bridges or culverts where stream fording is objectionable;

7. Locate borrow areas where pollution from the operation is minimized;

8. Utilize temporary measures to control erosion on construction operations suspended for an appreciable length of time;

9. Provide protection against discharge of pollutants as chemicals, fuel lubricants, sewage etc. into a stream;

10. Locate sanitary facilities away from streams, wells or springs;

11. Conduct operations in such manner to minimize turbidity at and below the construction site so as to meet the turbidity requirements established by the Bureau of Water Quality Management.

11. This permit shall not become effective until and unless the permittee shall file with the Department within thirty (30) days from the date thereof, upon a form furnished by the Department, its written acceptance of the terms and conditions imposed therein. Failure to submit such acceptance will render the permit null and void.

12. The Engineer and the Contractor shall be apprised of all of the provisions and conditions and shall signify their acknowledgement of being so apprised on the form herein attached. Copy of this signed form, together with copy of the permit shall be available for inspection at the project site at all times. Copy of the acknowledgement shall also be forwarded to the office issuing the permit. Failure to have copies of the permit and acknowledgement available for inspection at the project site shall be considered sufficient cause for issuance of a cease and desist order by the authorized Commonwealth personnel.

PERMIT NO. 2275724

Conditions for Stream Operations

A. Throughout the operation you and your operator shall cooperate with the Department of Environmental Resources to protect all water users.

B. The operation shall be conducted in such a manner so as to protect fish life and other aquatic life. This requires full cooperation with the Pennsylvania Fish Commission.

C. No objectionable turbidity in the stream shall be created and the results of daily samples shall be reported weekly to the Department's Regional Office. The sampling shall be done when the dredging operation is at or near its peak. Samples are to be at point within 500 feet upstream and at another no greater than 1000 feet downstream of the operation. Objectionable turbidity occurs when there has been an increase greater than 25 units at any place or 10 units at swimming areas. There shall be no increase at water works intakes.

D. Spoil materials from the water course or on shore operations, including sludge deposits will not be deposited in or immediately adjacent to any water course. They will be deposited on shore in such a manner that sediment runoff and soil erosion are prevented.

E. Litter, refuse and sanitary waste from vessels or other floating craft will not be dumped or discharged in any water course.

F. Litter, refuse and sanitary waste from vessels or other floating craft or on-shore operations will be disposed of on shore in an acceptable manner. Oil and petroleum products are considered to be refuse matter. Spillage of these materials are to be prevented by appropriate control and supervision.

G. Bilges, ballast or waste water pumped from vessels or other floating craft will not be discharged to the water course without prior acceptable removal of oils or toxic compounds.

H. The dredging operations are to be immediately modified to comply with these conditions.

I. Approvals or permits required by law, regulation or ordinance of any Federal, State, County and/or local municipality will be obtained prior to start of this operation.

J. Attention of the permittee is called to Act No. 222, dated July 31, 1970, regarding applicable permits required by the Department of Environmental Resources for operating on streams of the Commonwealth.

K. Attention of the permittee is called to Act No. 225, dated July 31, 1970, and its provisions which requires the reporting to the Pennsylvania Fish Commission of all material subject to payment of a royalty.

SPECIAL CONDITIONS:

A. A through K see attached list.

L. A permit must be secured from the Pennsylvania Fish Commission in Harrisburg, if the use of explosives is required; P.F.C. Waterways Patrolman John E. Stepanski, 548 Schoolhouse Lane, Millersburg, PA 17061 (Phone: 717-692-2293) must be notified when project is started, when explosives are to be used, and when project is completed for final inspection.

M. James Flesher, Operations Chief, Harrisburg Region, Room 1003, Health and Welfare Building, Harrisburg, PA 17120, is to be advised as to the date when work is to commence.

N. This permit is contingent upon the approval/permit of the District Engineer, U.S. Corps of Engineers, Baltimore District, and any stipulations thereon are a part of this permit.

Date JAN 13 1976

DEPARTMENT OF ENVIRONMENTAL RESOURCES

By: V. R. Butler

V. R. Butler, Chief
Division of Dams and Encroachments

ATTEST:

A. J. Arnold

MAY 25 1982

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
P. O. Box 2357, Harrisburg, PA 17120

717-787-6826

May 21, 1982

T.A6/82-098

In reply refer to
RM-DWM
E 2275724

Mr. R. C. Arnold, President
GPU Nuclear
P. O. Box 480
Middletown, PA 17057

Dear Mr. Arnold:

This is in response to your request of April 20, 1982 for a further extension of time on Permit No. 2275724 authorizing maintenance dredging of the existing TMI intake structures and channel system in Londonderry Township, Dauphin County.

Since periodic dredging is a part of the normal maintenance for the structures originally approved, this extension of Permit No. 2275724 authorizes the operation, maintenance and normal repair of the permitted structures conducted within the specifications indicated on the attached drawings and in accordance with the regulations of the Department and conditions of the permit. Any maintenance involving substantial modification or repair of the original specifications will require permit from the Department.

Any future maintenance dredging within the limits of the original specifications will require only notification of such work to DER and those indicated on the original permit.

Sincerely,

Daniel Lenyo

Daniel Lenyo, Chief
Division of Obstructions
and Flood Plain Management

Enclosures

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen SM
An Exelon Company

March 11, 2004
5532-2004-016

Ms. Paula B. Ballaron, P.G.
Project Review and Compliance Section
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102

Dear Ms. Ballaron:

SUBJECT: ANNUAL GROUNDWATER REPORT - CALENDAR YEAR 2003
SRBC PROJECT DOCKET NO. 19961102 (REVISED)
THREE MILE ISLAND UNIT 1 (TMI 1)

Pursuant to Susquehanna River Basin Commission (SRBC) regulation 40 CFR 803.43 and the SRBC project approval docket, please find attached a completed 2003 Annual Groundwater Monitoring Report. The 2003 Annual Report is submitted on the standard report forms as required by the Commission. Also, as requested by the SRBC electronic copies of the completed forms will be submitted as Excel spreadsheets via e-mail to Mr. Todd Hitz. The 2003 Annual Report consists of the following completed forms:

- Summary of Total Groundwater Pumpage - Industrial Wells A, B & C.
- Record of Groundwater Pumpage and Water Levels - Industrial Well A.
- Record of Groundwater Pumpage and Water Levels - Industrial Well B.
- Record of Groundwater Pumpage and Water Levels - Industrial Well C.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (OSF/NOB Well) - Optional non-project reporting.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (Building 48 Well) - Optional non-project reporting.

Should the Commission have questions concerning this matter or require additional information please contact Scott R. Cogley, Environmental Chemist at (717) 948-8881 or e-mail at *scogley@amergenenergy.com.*

Sincerely,

G. H. Gellrich
Plant Manager

SRC

Attachments

SUMMARY OF TOTAL GROUND-WATER PUMPAGE

Project Name: **Three Mile Island Nuclear Station Ind. Wells - Docket No. 19961102 (Rev.)**

Names of Sources: **Industrial Well A, Well B and Well C**

Report Period: **2003 Calendar Year Annual Report**

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: Scott R. Cogley 03/11/04

Week Period	Total Pumpage All Sources (gallons)	Week Period	Total Pumpage All Sources (gallons)
01/30/02 to 01/06/03	799,000	08/19 to 08/25	1,236,000
01/07 to 01/13	724,000	08/26 to 09/01	1,257,000
01/14 to 01/20	759,000	09/02 to 09/08	1,203,000
01/21 to 01/27	727,000	09/09 to 09/15	1,203,000
01/28 to 02/03	691,000	09/16 to 09/22	1,193,000
02/04 to 02/10	744,000	09/23 to 09/29	856,000
02/11 to 02/17	698,000	09/30 to 10/06	875,000
02/18 to 02/24	663,000	10/07 to 10/13	867,000
02/25 to 03/10*	1,231,000	10/14 to 10/20	848,000
03/11 to 03/17	677,000	10/21 to 10/27	1,316,000
03/18 to 03/24	755,000	10/28 to 11/03	1,175,000
03/25 to 03/31	874,000	11/04 to 11/10	1,259,000
04/01 to 04/14*	1,635,000	11/11 to 11/17	1,267,000
04/15 to 04/21	804,000	11/18 to 11/24	1,241,000
04/22 to 04/28	776,000	11/25 to 12/01	1,280,000
04/29 to 05/05	607,000	12/02 to 12/08	1,345,000
05/06 to 05/12	725,000	12/09 to 12/15	1,304,000
05/13 to 05/19	691,000	12/16 to 12/22	1,302,000
05/20 to 05/26	873,000	12/23 to 12/29	1,290,000
05/27 to 06/01	951,000	12/30/03 to 01/04/04	1,181,000
06/02 to 06/09	722,000		
06/10 to 06/16	791,000		
06/17 to 06/23	842,000		
06/24 to 06/30	839,000	NOTE: See Well A, B, and C data sheets for individual comments on reported data.	
07/01 to 07/07	935,000		
07/08 to 07/14	767,000		
07/15 to 07/21	860,000		
07/22 to 07/28	708,000		
07/29 to 08/04	921,000		
08/05 to 08/11	651,000		
08/12 to 08/18	1,269,000		

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well A**

Report Period: **2003 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRC 03/11/04

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/30/02 to 01/06/03	372,000	142	08/19 to 08/25	376,000	103
01/07 to 01/13	332,000	38	08/26 to 09/01	397,000	103**
01/14 to 01/20	351,000	38	09/02 to 09/08	343,000	200
01/21 to 01/27	361,000	105	09/09 to 09/15	343,000	112
01/28 to 02/03	370,000	38	09/16 to 09/22	333,000	151
02/04 to 02/10	364,000	41	09/23 to 09/29	451,000	94
02/11 to 02/17	338,000	73	09/30 to 10/06	470,000	172
02/18 to 02/24	310,000	110	10/07 to 10/13	462,000	149
02/25 to 03/10*	681,000	98	10/14 to 10/20	443,000	225
03/11 to 03/17	355,000	80	10/21 to 10/27	456,000	163
03/18 to 03/24	338,000	149	10/28 to 11/03	315,000	82
03/25 to 03/31	403,000	147	11/04 to 11/10	399,000	209
04/01 to 04/14*	802,000	181	11/11 to 11/17	407,000	216
04/15 to 04/21	345,000	96	11/18 to 11/24	381,000	195
04/22 to 04/28	370,000	59	11/25 to 12/01	420,000	223
04/29 to 05/05	291,000	41	12/02 to 12/08	485,000	181
05/06 to 05/12	357,000	54	12/09 to 12/15	444,000	207
05/13 to 05/19	352,000	108	12/16 to 12/22	442,000	214
05/20 to 05/26	421,000	211	12/23 to 12/29	430,000	172
05/27 to 06/01	447,000	200	12/30/03 to 01/04/04	446,000	239
06/02 to 06/09	376,000	184			
06/10 to 06/16	438,000	188			
06/17 to 06/23	396,000	98			
06/24 to 06/30	442,000	195			
07/01 to 07/07	443,000	218			
07/08 to 07/14	362,000	45			
07/15 to 07/21	405,000	75			
07/22 to 07/28	333,000	80			
07/29 to 08/04	430,000	195			
08/05 to 08/11	411,000	110			
08/12 to 08/18	409,000	186			

* Well totalizer and well depth data covers two week period.

** Weekly data recorded inaccurate. Assume depth same as prior recorded measurement for trending.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well B**

Report Period: **2003 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: Scott R. Cogley 03/11/04

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/30/02 to 01/06/03	155,000	140
01/07 to 01/13	149,000	450
01/14 to 01/20	149,000	76
01/21 to 01/27	109,000	143
01/28 to 02/03	76,000	170
02/04 to 02/10	133,000	450
02/11 to 02/17	126,000	450
02/18 to 02/24	113,000	127
02/25 to 03/10*	234,000	157
03/11 to 03/17	146,000	173
03/18 to 03/24	177,000	450
03/25 to 03/31	223,000	450
04/01 to 04/14*	371,000	450
04/15 to 04/21	183,000	191
04/22 to 04/28	172,000	145
04/29 to 05/05	90,000	99
05/06 to 05/12	142,000	143
05/13 to 05/19	123,000	147
05/20 to 05/26	201,000	450
05/27 to 06/01	238,000	450
06/02 to 06/09	143,000	450
06/10 to 06/16	117,000	450
06/17 to 06/23	222,000	168
06/24 to 06/30	184,000	450
07/01 to 07/07	244,000	450
07/08 to 07/14	198,000	122
07/15 to 07/21	221,000	117
07/22 to 07/28	180,000	157
07/29 to 08/04	233,000	450
08/05 to 08/11	173,000	450
08/12 to 08/18	455,000	450

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
08/19 to 08/25	455,000	201
08/26 to 09/01	455,000	201**
09/02 to 09/08	455,000	450
09/09 to 09/15	455,000	450
09/16 to 09/22	455,000	150
09/23 to 09/29	0	138
09/30 to 10/06	0	138
10/07 to 10/13	0	108
10/14 to 10/20	0	483
10/21 to 10/27	455,000	210
10/28 to 11/03	455,000	86
11/04 to 11/10	455,000	469
11/11 to 11/17	455,000	483
11/18 to 11/24	455,000	471
11/25 to 12/01	455,000	100
12/02 to 12/08	455,000	123
12/09 to 12/15	455,000	381
12/16 to 12/22	455,000	386
12/23 to 12/29	455,000	243
12/30/03 to 01/04/04	390,000	402

* Well totalizer and well depth data covers two week period.

** Weekly data recorded inaccurate. Assume depth same as prior recorded measurement for trending.

Flow meter out of service starting with 08/12 to 08/18 period to end of year. Estimate maximum flows assuming pump flow at 45 gpm over 24 hours per day.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well C**

Report Period: **2003 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: 03/11/04

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/30/02 to 01/06/03	272,000	105	08/19 to 08/25	405,000	38
01/07 to 01/13	243,000	20	08/26 to 09/01	405,000	38**
01/14 to 01/20	259,000	20	09/02 to 09/08	405,000	147
01/21 to 01/27	257,000	105	09/09 to 09/15	405,000	115
01/28 to 02/03	245,000	92	09/16 to 09/22	405,000	94
02/04 to 02/10	247,000	22	09/23 to 09/29	405,000	36
02/11 to 02/17	234,000	94	09/30 to 10/06	405,000	94
02/18 to 02/24	240,000	96	10/07 to 10/13	405,000	22
02/25 to 03/10*	316,000	85	10/14 to 10/20	405,000	119
03/11 to 03/17	176,000	32	10/21 to 10/27	405,000	27
03/18 to 03/24	240,000	89	10/28 to 11/03	405,000	18
03/25 to 03/31	248,000	94	11/04 to 11/10	405,000	96
04/01 to 04/14*	462,000	89	11/11 to 11/17	405,000	98
04/15 to 04/21	276,000	87	11/18 to 11/24	405,000	92
04/22 to 04/28	234,000	22	11/25 to 12/01	405,000	101
04/29 to 05/05	226,000	15	12/02 to 12/08	405,000	87
05/06 to 05/12	226,000	13	12/09 to 12/15	405,000	92
05/13 to 05/19	216,000	89	12/16 to 12/22	405,000	92
05/20 to 05/26	251,000	131	12/23 to 12/29	405,000	50
05/27 to 06/01	266,000	105	12/30/03 to 01/04/04	345,000	101
06/02 to 06/09	203,000	92			
06/10 to 06/16	236,000	92			
06/17 to 06/23	224,000	68			
06/24 to 06/30	213,000	92			
07/01 to 07/07	248,000	28			
07/08 to 07/14	207,000	22			
07/15 to 07/21	234,000	22			
07/22 to 07/28	195,000	20			
07/29 to 08/04	258,000	154			
08/05 to 08/11	67,000	87			
08/12 to 08/18	405,000	149			

* Well totalizer and well depth data covers two week period.

** Weekly data recorded inaccurate. Assume depth same as prior recorded measurement for trending.

Flow meter out of service starting with 08/12 to 08/18 period to end of year. Estimate maximum flows assuming pump flow at 40 gpm over 24 hours per day.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (OSF/NOB Well) - Optional non-project well**

Report Period: **2003 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR Cogley 3/16/04 (REVISED from original sign DATE 3/11/04)

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/30/02 to 01/06/03	10,700	Not available.	08/19 to 08/25	353,000	Not available.
01/07 to 01/13	16,600	Not available.	08/26 to 09/01	235,000	Not available.
01/14 to 01/20	13,800	Not available.	09/02 to 09/08	143,000	Not available.
01/21 to 01/27	21,100	Not available.	09/09 to 09/15	238,000	Not available.
01/28 to 02/03	15,200	Not available.	09/16 to 09/22	84,000	Not available.
02/04 to 02/10	16,500	Not available.	09/23 to 09/29	120,000	Not available.
02/11 to 02/17	13,800	Not available.	09/30 to 10/06	353,000	Not available.
02/18 to 02/24	15,500	Not available.	10/07 to 10/13	353,000	Not available.
02/25 to 03/10*	30,300	Not available.	10/14 to 10/20	305,000	Not available.
03/11 to 03/17	13,300	Not available.	10/21 to 10/27	353,000	Not available.
03/18 to 03/24	15,100	Not available.	10/28 to 11/03	88,000	Not available.
03/25 to 03/31	14,000	Not available.	11/04 to 11/10	109,000	Not available.
04/01 to 04/14*	28,000	Not available.	11/11 to 11/17	353,000	Not available.
04/15 to 04/21	13,000	Not available.	11/18 to 11/24	353,000	Not available.
04/22 to 04/28	19,000	Not available.	11/25 to 12/01	353,000	Not available.
04/29 to 05/05	15,300	Not available.	12/02 to 12/08	353,000	Not available.
05/06 to 05/12	16,300	Not available.	12/09 to 12/15	330,000	Not available.
05/13 to 05/19	14,500	Not available.	12/16 to 12/22	353,000	Not available.
05/20 to 05/26	15,400	Not available.	12/23 to 12/29	50,000	Not available.
05/27 to 06/01	70,000	Not available.	12/30/03 to 01/04/04	0	Not available.
06/02 to 06/09	281,000	Not available.			
06/10 to 06/16	128,000	Not available.			
06/17 to 06/23	143,000	Not available.			
06/24 to 06/30	134,000	Not available.			
07/01 to 07/07	353,000	Not available.			
07/08 to 07/14	13,000	Not available.			
07/15 to 07/21	330,000	Not available.			
07/22 to 07/28	164,000	Not available.			
07/29 to 08/04	353,000	Not available.			
08/05 to 08/11	99,000	Not available.			
08/12 to 08/18	336,000	Not available.			

* Well totalizer data covers two week period.

** OSF/NOB well flow data estimated using pump flow (35 gpm) and logged run times for period covering 05/27/03 through 12/29/03. OSF/NOB well was used intermittently as source of water for filling station clearwell. Water not metered when flowing to clearwell.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (Building 48 Well) - Optional non-project well**

Report Period: **2003 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: Scott R. Cogley 03/11/04

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/30/02 to 01/06/03	22,500	Not available.	08/19 to 08/25	55,200	Not available.
01/07 to 01/13	37,500	Not available.	08/26 to 09/01	49,000	Not available.
01/14 to 01/20	34,800	Not available.	09/02 to 09/08	64,000	Not available.
01/21 to 01/27	40,700	Not available.	09/09 to 09/15	66,900	Not available.
01/28 to 02/03	31,400	Not available.	09/16 to 09/22	55,600	Not available.
02/04 to 02/10	36,300	Not available.	09/23 to 09/29	63,400	Not available.
02/11 to 02/17	31,100	Not available.	09/30 to 10/06	64,100	Not available.
02/18 to 02/24	23,100	Not available.	10/07 to 10/13	76,600	Not available.
02/25 to 03/10*	68,700	Not available.	10/14 to 10/20	127,300	Not available.
03/11 to 03/17	32,800	Not available.	10/21 to 10/27	163,000	Not available.
03/18 to 03/24	35,600	Not available.	10/28 to 11/03	158,700	Not available.
03/25 to 03/31	30,700	Not available.	11/04 to 11/10	150,400	Not available.
04/01 to 04/14*	72,000	Not available.	11/11 to 11/17	102,900	Not available.
04/15 to 04/21	30,700	Not available.	11/18 to 11/24	75,600	Not available.
04/22 to 04/28	71,400	Not available.	11/25 to 12/01	57,500	Not available.
04/29 to 05/05	32,900	Not available.	12/02 to 12/08	81,100	Not available.
05/06 to 05/12	35,000	Not available.	12/09 to 12/15	70,700	Not available.
05/13 to 05/19	31,200	Not available.	12/16 to 12/22	67,100	Not available.
05/20 to 05/26	33,600	Not available.	12/23 to 12/29	53,500	Not available.
05/27 to 06/01	37,400	Not available.	12/30/03 to 01/04/04	59,600	Not available.
06/02 to 06/09	43,800	Not available.			
06/10 to 06/16	39,800	Not available.			
06/17 to 06/23	41,200	Not available.	* Well totalizer data covers two week period.		
06/24 to 06/30	49,700	Not available.			
07/01 to 07/07	39,500	Not available.			
07/08 to 07/14	46,400	Not available.			
07/15 to 07/21	56,600	Not available.			
07/22 to 07/28	44,900	Not available.			
07/29 to 08/04	47,100	Not available.			
08/05 to 08/11	49,100	Not available.			
08/12 to 08/18	50,300	Not available.			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

To: <scogley@amergenenergy.com>
cc:
From: "Hitz, Todd" <THitz@srbc.net>
Date: 03/22/2004 11:26:10 AM
Subject: RE: TMI AmerGen - Annual Reports Consumptive Water Use and GroundwaterWithdrawals (Revised)

Scott,

Thank you very much for submitting your annual GW, CU, and SW reports via email. Have a great week.

Todd Hitz, Environmental Specialist

Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102
cell phone: (717) 215-7282
work phone: (717) 238-0425, extension 220
fax number: (717) 238-2436
e-mail address: thitz@srbc.net
SRBC homepage: www.srbc.net

-----Original Message-----
From: scogley@amergenenergy.com [mailto:scogley@amergenenergy.com]
Sent: Tuesday, March 16, 2004 2:22 PM
To: Hitz, Todd
Subject: TMI AmerGen - Annual Reports Consumptive Water Use and GroundwaterWithdrawals (Revised)

Todd,

Please delete the e-mail from 03/15/2003 and replace with this e-mail. There was one minor change made to the Groundwater report for the OSF/NOB
Well - Optional reporting. For the period covering 01/30/02 to 01/06/03
the flow is corrected to 10,700 gallons instead of zero gallons reported on
the form submitted yesterday.

Please find attached files for the 2003 Annual Monitoring for TMI Unit 1.
Annual reports are attached for Consumptive Use (Docket No.19950302) and Groundwater Withdrawals (Docket No. 19961102).

(See attached file: SRBC Annual Report - 2003 Groundwater Withdrawals (short version).xls)

(See attached file: SRBC Annual Report - 2003 Surface Water Consumptive Use
(Short Version).xls)

Any questions please call me at (717) 948-8881. AmerGen will be mailing a

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen
An Exelon Company

February 15, 2005
5532-2005-011

Ms. Paula B. Ballaron, P.G.
Project Review and Compliance Section
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102

Dear Ms. Ballaron:

SUBJECT: ANNUAL GROUNDWATER REPORT - CALENDAR YEAR 2004
SRBC PROJECT DOCKET NO. 19961102 (REVISED)
THREE MILE ISLAND UNIT 1 (TMI 1)

Pursuant to Susquehanna River Basin Commission (SRBC) regulation 40 CFR 803.43 and the SRBC project approval docket, please find attached a completed 2004 Annual Groundwater Monitoring Report. The 2004 Annual Report is submitted on the standard report forms as required by the Commission. The completed forms will be available as Excel spreadsheets for transmittal via e-mail if requested by the Commission. The 2004 Annual Report consists of the following completed forms:

- Summary of Total Groundwater Pumpage - Industrial Wells A, B & C.
- Record of Groundwater Pumpage and Water Levels - Industrial Well A.
- Record of Groundwater Pumpage and Water Levels - Industrial Well B.
- Record of Groundwater Pumpage and Water Levels - Industrial Well C.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (OSF/NOB Well) - Optional non-project reporting.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (Building 48 Well) - Optional non-project reporting.

Should the Commission have questions concerning this matter or require additional information please contact Scott R. Cogley, Environmental Chemist, at (717) 948-8881 or e-mail at *scott.cogley@exeloncorp.com.*

Sincerely,

(50)

G. E. Chick
Plant Manager

SRC

Attachments

SUMMARY OF TOTAL GROUND-WATER PUMPAGE

Project Name: **Three Mile Island Nuclear Station Ind. Wells - Docket No. 19961102 (Rev.)**

Names of Sources: **Industrial Well A, Well B and Well C**

Report Period: **2004 Calendar Year Annual Report**

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: D R SC FEB 11, 2005

Week Period	Total Pumpage All Sources (gallons)	Week Period	Total Pumpage All Sources (gallons)
12/29/03 to 01/05/04	1,356,000	07/27 to 08/02	702,000
01/06 to 01/12	1,017,000	08/03 to 08/09	791,000
01/13 to 01/19	1,359,000	08/10 to 08/16	702,000
01/20 to 01/26	979,000	08/17 to 08/23	761,000
01/27 to 02/02	1,302,000	08/24 to 08/30	779,000
02/03 to 02/09	1,347,000	08/31 to 09/06	796,000
02/10 to 02/16	1,343,000	09/07 to 09/13	714,000
02/17 to 02/23	1,342,000	09/14 to 09/20	808,000
02/24 to 03/01	1,336,000	09/21 to 09/27	728,000
03/02 to 03/08	703,000	09/28 to 10/11*	1,459,000
03/09 to 03/15	550,000	10/12 to 10/18	735,000
03/16 to 03/22	735,000	10/19 to 10/25	654,000
03/23 to 03/29	705,000	10/26 to 11/01	756,000
03/30 to 04/05	759,000	11/02 to 11/08	607,000
04/06 to 04/12	760,000	11/09 to 11/15	526,000
04/13 to 04/19	628,000	11/16 to 11/22	591,000
04/20 to 04/26	640,000	11/23 to 11/29	752,000
04/27 to 05/03	748,000	11/30 to 12/06	666,000
05/04 to 05/10	783,000	12/07 to 12/13	627,000
05/11 to 05/17	802,000	12/14 to 12/20	760,000
05/18 to 05/24	895,000	12/21 to 12/27	623,000
05/25 to 05/31	823,000	12/28/03 to 01/03/05	445,000
06/01 to 06/07	778,000		
06/08 to 06/14	753,000	NOTE: See Well A, B, and C data sheets for individual well data.	
06/15 to 06/21	770,000		
06/22 to 06/28	784,000	* Well data covers two-week period.	
06/29 to 07/05	740,000		
07/06 to 07/12	759,000		
07/13 to 07/19	760,000		
07/20 to 07/26	751,000		

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well A**

Report Period: 2004 **Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DR Cogley FEB. 11, 2005

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/29/03 to 01/05/04	446,000	239	07/27 to 08/02	361,000	105
01/06 to 01/12	107,000	177	08/03 to 08/09	409,000	75
01/13 to 01/19	449,000	29	08/10 to 08/16	393,000	198
01/20 to 01/26	69,000	45	08/17 to 08/23	381,000	43
01/27 to 02/02	392,000	193	08/24 to 08/30	395,000	57
02/03 to 02/09	437,000	156	08/31 to 09/06	380,000	59
02/10 to 02/16	433,000	209	09/07 to 09/13	350,000	43
02/17 to 02/23	432,000	151	09/14 to 09/20	393,000	84
02/24 to 03/01	426,000	126	09/21 to 09/27	366,000	253
03/02 to 03/08	405,000	108	09/28 to 10/11*	744,000	253
03/09 to 03/15	386,000	144	10/12 to 10/18	379,000	272
03/16 to 03/22	422,000	138	10/19 to 10/25	379,000	278
03/23 to 03/29	412,000	138 **	10/26 to 11/01	372,000	278
03/30 to 04/05	415,000	110	11/02 to 11/08	358,000	283
04/06 to 04/12	447,000	144	11/09 to 11/15	390,000	200
04/13 to 04/19	417,000	84	11/16 to 11/22	339,000	195
04/20 to 04/26	449,000	117	11/23 to 11/29	373,000	131
04/27 to 05/03	450,000	140	11/30 to 12/06	393,000	274
05/04 to 05/10	434,000	61	12/07 to 12/13	391,000	265
05/11 to 05/17	418,000	237	12/14 to 12/20	391,000	177
05/18 to 05/24	433,000	248	12/21 to 12/27	382,000	170
05/25 to 05/31	417,000	237	12/28/03 to 01/03/05	325,000	195
06/01 to 06/07	408,000	239			
06/08 to 06/14	412,000	251			
06/15 to 06/21	386,000	262			
06/22 to 06/28	386,000	276			
06/29 to 07/05	362,000	68			
07/06 to 07/12	385,000	267			
07/13 to 07/19	370,000	66			
07/20 to 07/26	385,000	242			

* Well data covers two-week period.

** Weekly data recorded inaccurate. Assume depth same as prior week measurement for trending.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well B**

Report Period: **2004 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DR SS FEB. 11, 2005

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/29/03 to 01/05/04	455,000	402
01/06 to 01/12	455,000	368
01/13 to 01/19	455,000	287
01/20 to 01/26	455,000	70
01/27 to 02/02	455,000	379
02/03 to 02/09	455,000	132
02/10 to 02/16	455,000	386
02/17 to 02/23	455,000	240
02/24 to 03/01	455,000	173
03/02 to 03/08	146,000	90
03/09 to 03/15	82,000	240
03/16 to 03/22	154,000	229
03/23 to 03/29	144,000	76
03/30 to 04/05	170,000	180
04/06 to 04/12	155,000	74
04/13 to 04/19	105,000	234
04/20 to 04/26	96,000	236
04/27 to 05/03	148,000	194
05/04 to 05/10	215,000	146
05/11 to 05/17	213,000	414
05/18 to 05/24	231,000	418
05/25 to 05/31	220,000	398
06/01 to 06/07	208,000	398
06/08 to 06/14	216,000	398
06/15 to 06/21	201,000	425
06/22 to 06/28	199,000	428
06/29 to 07/05	191,000	183
07/06 to 07/12	203,000	411
07/13 to 07/19	195,000	187
07/20 to 07/26	191,000	418

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/27 to 08/02	176,000	148
08/03 to 08/09	204,000	164
08/10 to 08/16	158,000	76
08/17 to 08/23	194,000	74
08/24 to 08/30	207,000	132
08/31 to 09/06	212,000	111
09/07 to 09/13	189,000	86
09/14 to 09/20	214,000	201
09/21 to 09/27	189,000	425
09/28 to 10/11*	382,000	409
10/12 to 10/18	207,000	414
10/19 to 10/25	186,000	414
10/26 to 11/01	201,000	437
11/02 to 11/08	122,000	428
11/09 to 11/15	70,000	243
11/16 to 11/22	128,000	238
11/23 to 11/29	191,000	407
11/30 to 12/06	199,000	423
12/07 to 12/13	123,000	432
12/14 to 12/20	185,000	252
12/21 to 12/27	121,000	65
12/28/03 to 01/03/05	60,000	65

* Well data covers two-week period.

General Note: Flow meter out of service until 03/01/2004. Well flow data from 12/29/2003 through 03/01/2004 estimated using pump flow (45 gpm) continuous over 24 hours per day.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well C**

Report Period: **2004 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DR SC FEB. 11, 2005

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/29/03 to 01/05/04	455,000	101
01/06 to 01/12	455,000	25
01/13 to 01/19	455,000	25 **
01/20 to 01/26	455,000	22
01/27 to 02/02	455,000	110
02/03 to 02/09	455,000	22
02/10 to 02/16	455,000	105
02/17 to 02/23	455,000	25
02/24 to 03/01	455,000	27
03/02 to 03/08	152,000	20
03/09 to 03/15	82,000	20
03/16 to 03/22	159,000	22
03/23 to 03/29	149,000	22 **
03/30 to 04/05	174,000	20
04/06 to 04/12	158,000	25
04/13 to 04/19	106,000	20
04/20 to 04/26	95,000	22
04/27 to 05/03	150,000	22
05/04 to 05/10	134,000	22
05/11 to 05/17	171,000	92
05/18 to 05/24	231,000	105
05/25 to 05/31	186,000	27
06/01 to 06/07	162,000	32
06/08 to 06/14	125,000	32
06/15 to 06/21	183,000	119
06/22 to 06/28	199,000	133
06/29 to 07/05	187,000	29
07/06 to 07/12	171,000	32
07/13 to 07/19	195,000	22
07/20 to 07/26	175,000	92

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/27 to 08/02	165,000	20
08/03 to 08/09	178,000	25
08/10 to 08/16	151,000	22
08/17 to 08/23	186,000	20
08/24 to 08/30	177,000	22
08/31 to 09/06	204,000	25
09/07 to 09/13	175,000	20
09/14 to 09/20	201,000	20
09/21 to 09/27	173,000	87
09/28 to 10/11*	333,000	27
10/12 to 10/18	149,000	27
10/19 to 10/25	89,000	27
10/26 to 11/01	183,000	101
11/02 to 11/08	127,000	101
11/09 to 11/15	66,000	22
11/16 to 11/22	124,000	22
11/23 to 11/29	188,000	27
11/30 to 12/06	74,000	34
12/07 to 12/13	113,000	101
12/14 to 12/20	184,000	25
12/21 to 12/27	120,000	22
12/28/03 to 01/03/05	60,000	55

* Well data covers two-week period.

** Weekly data recorded inaccurate. Assume depth same as prior week measurement for trending.

General Note: Flow meter out of service until 03/01/2004. Well flow data from 12/29/2003 through 03/01/2004 estimated using pump flow (45 gpm) continuous over 24 hours per day.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (Building 48 Well) - Optional non-project well**

Report Period: 2004 **Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRS FEB. 11, 2005

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/29/03 to 01/05/04	59,600	Not available.	07/27 to 08/02	41,200	Not available.
01/06 to 01/12	105,600	Not available.	08/03 to 08/09	46,100	Not available.
01/13 to 01/19	53,400	Not available.	08/10 to 08/16	45,800	Not available.
01/20 to 01/26	74,500	Not available.	08/17 to 08/23	54,600	Not available.
01/27 to 02/02	63,700	Not available.	08/24 to 08/30	53,200	Not available.
02/03 to 02/09	61,100	Not available.	08/31 to 09/06	39,400	Not available.
02/10 to 02/16	60,600	Not available.	09/07 to 09/13	56,400	Not available.
02/17 to 02/23	55,700	Not available.	09/14 to 09/20	43,300	Not available.
02/24 to 03/01	43,800	Not available.	09/21 to 09/27	51,500	Not available.
03/02 to 03/08	45,100	Not available.	09/28 to 10/11*	111,300	Not available.
03/09 to 03/15	64,100	Not available.	10/12 to 10/18	55,200	Not available.
03/16 to 03/22	37,000	Not available.	10/19 to 10/25	52,100	Not available.
03/23 to 03/29	66,400	Not available.	10/26 to 11/01	48,500	Not available.
03/30 to 04/05	42,200	Not available.	11/02 to 11/08	45,800	Not available.
04/06 to 04/12	51,500	Not available.	11/09 to 11/15	45,400	Not available.
04/13 to 04/19	53,100	Not available.	11/16 to 11/22	46,200	Not available.
04/20 to 04/26	43,700	Not available.	11/23 to 11/29	45,100	Not available.
04/27 to 05/03	54,700	Not available.	11/30 to 12/06	42,200	Not available.
05/04 to 05/10	45,800	Not available.	12/07 to 12/13	43,200	Not available.
05/11 to 05/17	52,900	Not available.	12/14 to 12/20	42,000	Not available.
05/18 to 05/24	24,100	Not available.	12/21 to 12/27	29,000	Not available.
05/25 to 05/31	37,900	Not available.	12/28/03 to 01/03/05	40,200	Not available.
06/01 to 06/07	36,700	Not available.			
06/08 to 06/14	44,600	Not available.			
06/15 to 06/21	38,800	Not available.	* Well data covers two-week period.		
06/22 to 06/28	47,300	Not available.			
06/29 to 07/05	38,300	Not available.			
07/06 to 07/12	40,300	Not available.			
07/13 to 07/19	42,100	Not available.			
07/20 to 07/26	41,900	Not available.			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (OSF/NOB Well) - Optional non-project well**

Report Period: **2004 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR FEB. 11, 2005

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/29/03 to 01/05/04	0	Not available.
01/06 to 01/12	0	Not available.
01/13 to 01/19	0	Not available.
01/20 to 01/26	0	Not available.
01/27 to 02/02	0	Not available.
02/03 to 02/09	0	Not available.
02/10 to 02/16	0	Not available.
02/17 to 02/23	0	Not available.
02/24 to 03/01	0	Not available.
03/02 to 03/08	0	Not available.
03/09 to 03/15	0	Not available.
03/16 to 03/22	0	Not available.
03/23 to 03/29	0	Not available.
03/30 to 04/05	0	Not available.
04/06 to 04/12	0	Not available.
04/13 to 04/19	0	Not available.
04/20 to 04/26	0	Not available.
04/27 to 05/03	0	Not available.
05/04 to 05/10	0	Not available.
05/11 to 05/17	0	Not available.
05/18 to 05/24	181,300	Not available.
05/25 to 05/31	350,000	Not available.
06/01 to 06/07	350,000	Not available.
06/08 to 06/14	350,000	Not available.
06/15 to 06/21	350,000	Not available.
06/22 to 06/28	350,000	Not available.
06/29 to 07/05	350,000	Not available.
07/06 to 07/12	350,000	Not available.
07/13 to 07/19	350,000	Not available.
07/20 to 07/26	350,000	Not available.

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/27 to 08/02	350,000	Not available.
08/03 to 08/09	350,000	Not available.
08/10 to 08/16	350,000	Not available.
08/17 to 08/23	350,000	Not available.
08/24 to 08/30	350,000	Not available.
08/31 to 09/06	350,000	Not available.
09/07 to 09/13	350,000	Not available.
09/14 to 09/20	350,000	Not available.
09/21 to 09/27	350,000	Not available.
09/28 to 10/11*	700,000	Not available.
10/12 to 10/18	350,000	Not available.
10/19 to 10/25	350,000	Not available.
10/26 to 11/01	350,000	Not available.
11/02 to 11/08	350,000	Not available.
11/09 to 11/15	350,000	Not available.
11/16 to 11/22	350,000	Not available.
11/23 to 11/29	350,000	Not available.
11/30 to 12/06	350,000	Not available.
12/07 to 12/13	350,000	Not available.
12/14 to 12/20	350,000	Not available.
12/21 to 12/27	350,000	Not available.
12/28/03 to 01/03/05	350,000	Not available.

* Well data covers two-week period.

General Note: OSF/NOB well flow data estimated using pump flow (35 gpm) and assumed continuous pumping over period 05/21/2004 through 01/03/2005. OSF/NOB well water used as source water for filling station clearwell. Water flow not metered when flowing to clearwell.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen SM
An Exelon Company

February 14, 2006
5532-2006-007

Ms. Paula B. Ballaron, P.G.
Project Review and Compliance Section
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102

Dear Ms. Ballaron:

SUBJECT: ANNUAL GROUNDWATER REPORT - CALENDAR YEAR 2005
SRBC PROJECT DOCKET NO. 19961102 (REVISED)
THREE MILE ISLAND UNIT 1 (TMI 1)

Pursuant to Susquehanna River Basin Commission (SRBC) regulation 40 CFR 803.43 and the SRBC project approval docket, please find attached a completed 2005 Annual Groundwater Monitoring Report. The 2005 Annual Report is submitted on the standard report forms as required by the Commission. The completed forms will be also be submitted via e-mail to Mr. Todd Hitz as Excel spreadsheets by the date of this letter. The 2005 Annual Report consists of the following completed forms:

- Summary of Total Groundwater Pumpage - Industrial Wells A, B & C.
- Record of Groundwater Pumpage and Water Levels - Industrial Well A.
- Record of Groundwater Pumpage and Water Levels - Industrial Well B.
- Record of Groundwater Pumpage and Water Levels - Industrial Well C.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (OSF/NOB Well) - Optional non-project reporting.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (Building 48 Well) - Optional non-project reporting.

Should the Commission have questions concerning this matter or require additional information please contact Scott R. Cogley, Environmental Chemist, at (717) 948-8881 or e-mail at *scott.cogley@exeloncorp.com.*

Sincerely,

acting for G.E.C.

G. E. Chick
Plant Manager

SRC

Attachments

SUMMARY OF TOTAL GROUND-WATER PUMPAGE

Project Name: **Three Mile Island Nuclear Station Ind. Wells - Docket No. 19961102 (Rev.)**

Names of Sources: **Industrial Well A, Well B and Well C**

Report Period: **2005 Calendar Year Annual Report**

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR Cogley 2/13/2006

Week Period	Total Pumpage All Sources (gallons)	Week Period	Total Pumpage All Sources (gallons)
12/27/04 to 01/03/05	445,000	07/26 to 08/01	753,000
01/04 to 01/10	665,000	08/02 to 08/08	784,000
01/11 to 01/17	558,000	08/09 to 08/15	596,000
01/18 to 01/24	567,000	08/16 to 08/22	619,000
01/25 to 01/31	415,000	08/23 to 08/29	763,000
02/01 to 02/07	666,000	08/30 to 09/05	769,000
02/08 to 02/14	547,000	09/06 to 09/12	775,000
02/15 to 02/21	587,000	09/13 to 09/19	768,000
02/22 to 02/28	480,000	09/20 to 09/26	633,000
03/01 to 03/07	700,000	09/27 to 10/03	731,000
03/08 to 03/14	530,000	10/04 to 10/10	737,000
03/15 to 03/21	452,000	10/11 to 10/17	700,000
03/22 to 03/28	370,000	10/18 to 10/24	617,000
03/29 to 04/04	410,000	10/25 to 10/31	454,000
04/05 to 04/11	767,000	11/01 to 11/07	356,000
04/12 to 04/18	767,000	11/08 to 11/14	636,000
04/19 to 04/25	746,000	11/15 to 11/21	717,000
04/26 to 05/02	703,000	11/22 to 11/28	558,000
05/03 to 05/09	605,000	11/29 to 12/05	576,000
05/10 to 05/16	687,000	12/06 to 12/12	532,000
05/17 to 05/23	661,000	12/13 to 12/19	599,000
05/24 to 05/30	748,000	12/20 to 12/26	542,000
05/31 to 06/06	636,000	12/27/05 to 01/02/06	331,000
06/07 to 06/13	687,000		
06/14 to 06/20	726,000		
06/21 to 06/27	446,000	NOTE: See Well A, B, and C data sheets for individual well data.	
06/28 to 07/04	396,000		
07/05 to 07/11	467,000		
07/12 to 07/18	604,000		
07/19 to 07/25	512,000		

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well A**

Report Period: **2005 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR Cogley 02/13/2006

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/27/04 to 01/03/05	325,000	195	07/26 to 08/01	386,000	112
01/04 to 01/10	427,000	191	08/02 to 08/08	399,000	278
01/11 to 01/17	319,000	158	08/09 to 08/15	396,000	214
01/18 to 01/24	336,000	161	08/16 to 08/22	381,000	211
01/25 to 01/31	285,000	38	08/23 to 08/29	371,000	68
02/01 to 02/07	377,000	177	08/30 to 09/05	379,000	285
02/08 to 02/14	441,000	184	09/06 to 09/12	383,000	288
02/15 to 02/21	387,000	186	09/13 to 09/19	381,000	302
02/22 to 02/28	367,000	186	09/20 to 09/26	347,000	131
03/01 to 03/07	402,000	265	09/27 to 10/03	365,000	304
03/08 to 03/14	386,000	181	10/04 to 10/10	368,000	288
03/15 to 03/21	320,000	43	10/11 to 10/17	370,000	191
03/22 to 03/28	240,000	43	10/18 to 10/24	338,000	119
03/29 to 04/04	270,000	98	10/25 to 10/31	291,000	181
04/05 to 04/11	431,000	205	11/01 to 11/07	267,000	66
04/12 to 04/18	431,000	221	11/08 to 11/14	335,000	112
04/19 to 04/25	401,000	168	11/15 to 11/21	375,000	195
04/26 to 05/02	433,000	211	11/22 to 11/28	363,000	57
05/03 to 05/09	358,000	82	11/29 to 12/05	341,000	108
05/10 to 05/16	407,000	255	12/06 to 12/12	359,000	172
05/17 to 05/23	370,000	216	12/13 to 12/19	402,000	165
05/24 to 05/30	417,000	216	12/20 to 12/26	321,000	43
05/31 to 06/06	425,000	214	12/27/05 to 01/02/06	228,000	38
06/07 to 06/13	398,000	45			
06/14 to 06/20	359,000	258			
06/21 to 06/27	301,000	75	Well depth readings estimated for 03/28/05, 05/30/05, and 07/04/05 due to inaccurate meter readings.		
06/28 to 07/04	237,000	75			
07/05 to 07/11	280,000	255			
07/12 to 07/18	398,000	260			
07/19 to 07/25	406,000	195			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well B**

Report Period: **2005 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR Cogley 02/13/2006

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/27/04 to 01/03/05	60,000	65	07/26 to 08/01	188,000	74
01/04 to 01/10	113,000	215	08/02 to 08/08	198,000	451
01/11 to 01/17	121,000	264	08/09 to 08/15	103,000	210
01/18 to 01/24	119,000	67	08/16 to 08/22	123,000	169
01/25 to 01/31	67,000	141	08/23 to 08/29	204,000	169
02/01 to 02/07	146,000	229	08/30 to 09/05	205,000	460
02/08 to 02/14	53,000	162	09/06 to 09/12	207,000	465
02/15 to 02/21	101,000	100	09/13 to 09/19	206,000	476
02/22 to 02/28	57,000	201	09/20 to 09/26	154,000	451
03/01 to 03/07	161,000	425	09/27 to 10/03	197,000	476
03/08 to 03/14	83,000	229	10/04 to 10/10	198,000	474
03/15 to 03/21	59,000	109	10/11 to 10/17	177,000	173
03/22 to 03/28	65,000	51	10/18 to 10/24	149,000	266
03/29 to 04/04	94,000	86	10/25 to 10/31	88,000	190
04/05 to 04/11	182,000	414	11/01 to 11/07	51,000	199
04/12 to 04/18	182,000	402	11/08 to 11/14	163,000	273
04/19 to 04/25	181,000	243	11/15 to 11/21	185,000	414
04/26 to 05/02	134,000	418	11/22 to 11/28	104,000	236
05/03 to 05/09	139,000	90	11/29 to 12/05	126,000	261
05/10 to 05/16	186,000	432	12/06 to 12/12	97,000	116
05/17 to 05/23	149,000	423	12/13 to 12/19	105,000	203
05/24 to 05/30	163,000	63	12/20 to 12/26	118,000	178
05/31 to 06/06	0	243	12/27/05 to 01/02/06	0	153
06/07 to 06/13	84,000	72			
06/14 to 06/20	184,000	437			
06/21 to 06/27	0	201			
06/28 to 07/04	0	90			
07/05 to 07/11	0	441			
07/12 to 07/18	0	444			
07/19 to 07/25	0	74			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well C**

Report Period: **2005 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: AR 02/13/2006

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/27/04 to 01/03/05	60,000	55	07/26 to 08/01	179,000	25
01/04 to 01/10	125,000	22	08/02 to 08/08	187,000	200
01/11 to 01/17	118,000	55	08/09 to 08/15	97,000	50
01/18 to 01/24	112,000	20	08/16 to 08/22	115,000	64
01/25 to 01/31	63,000	50	08/23 to 08/29	188,000	29
02/01 to 02/07	143,000	22	08/30 to 09/05	185,000	258
02/08 to 02/14	53,000	22	09/06 to 09/12	185,000	286
02/15 to 02/21	99,000	32	09/13 to 09/19	181,000	281
02/22 to 02/28	56,000	62	09/20 to 09/26	132,000	237
03/01 to 03/07	137,000	179	09/27 to 10/03	169,000	286
03/08 to 03/14	61,000	52	10/04 to 10/10	171,000	272
03/15 to 03/21	73,000	22	10/11 to 10/17	153,000	22
03/22 to 03/28	65,000	22	10/18 to 10/24	130,000	32
03/29 to 04/04	46,000	48	10/25 to 10/31	75,000	22
04/05 to 04/11	154,000	94	11/01 to 11/07	38,000	20
04/12 to 04/18	154,000	25	11/08 to 11/14	138,000	96
04/19 to 04/25	164,000	13	11/15 to 11/21	157,000	170
04/26 to 05/02	136,000	94	11/22 to 11/28	91,000	27
05/03 to 05/09	108,000	25	11/29 to 12/05	109,000	64
05/10 to 05/16	94,000	108	12/06 to 12/12	76,000	22
05/17 to 05/23	142,000	94	12/13 to 12/19	92,000	22
05/24 to 05/30	168,000	94	12/20 to 12/26	103,000	20
05/31 to 06/06	211,000	89	12/27/05 to 01/02/06	103,000	13
06/07 to 06/13	205,000	80			
06/14 to 06/20	183,000	110			
06/21 to 06/27	145,000	32	Well depth readings estimated for 03/28/05, 05/30/05, and 07/04/05 due to inaccurate meter readings.		
06/28 to 07/04	159,000	32			
07/05 to 07/11	187,000	156			
07/12 to 07/18	206,000	168			
07/19 to 07/25	106,000	18			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: ***Plant Site Drinking Water Well (Building 48 Well) - Optional non-project well***

Report Period: **2005 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: S.R. C 02/13/2006

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/27/04 to 01/03/05	40,200	Not available.	07/26 to 08/01	54,900	Not available.
01/04 to 01/10	47,000	Not available.	08/02 to 08/08	69,500	Not available.
01/11 to 01/17	40,200	Not available.	08/09 to 08/15	75,800	Not available.
01/18 to 01/24	44,200	Not available.	08/16 to 08/22	62,300	Not available.
01/25 to 01/31	47,600	Not available.	08/23 to 08/29	49,700	Not available.
02/01 to 02/07	49,100	Not available.	08/30 to 09/05	51,400	Not available.
02/08 to 02/14	65,700	Not available.	09/06 to 09/12	54,900	Not available.
02/15 to 02/21	51,400	Not available.	09/13 to 09/19	62,800	Not available.
02/22 to 02/28	46,900	Not available.	09/20 to 09/26	58,700	Not available.
03/01 to 03/07	50,000	Not available.	09/27 to 10/03	64,200	Not available.
03/08 to 03/14	47,700	Not available.	10/04 to 10/10	60,900	Not available.
03/15 to 03/21	47,700	Not available.	10/11 to 10/17	82,400	Not available.
03/22 to 03/28	47,700	Not available.	10/18 to 10/24	117,400	Not available.
03/29 to 04/04	152,700	Not available.	10/25 to 10/31	205,200	Not available.
04/05 to 04/11	62,500	Not available.	11/01 to 11/07	205,700	Not available.
04/12 to 04/18	40,000	Not available.	11/08 to 11/14	173,500	Not available.
04/19 to 04/25	74,800	Not available.	11/15 to 11/21	84,500	Not available.
04/26 to 05/02	70,600	Not available.	11/22 to 11/28	40,400	Not available.
05/03 to 05/09	57,900	Not available.	11/29 to 12/05	47,300	Not available.
05/10 to 05/16	73,300	Not available.	12/06 to 12/12	41,000	Not available.
05/17 to 05/23	75,300	Not available.	12/13 to 12/19	41,800	Not available.
05/24 to 05/30	65,900	Not available.	12/20 to 12/26	33,800	Not available.
05/31 to 06/06	51,800	Not available.	12/27/05 to 01/02/06	30,500	Not available.
06/07 to 06/13	55,500	Not available.			
06/14 to 06/20	62,500	Not available.			
06/21 to 06/27	50,800	Not available.			
06/28 to 07/04	41,600	Not available.			
07/05 to 07/11	48,900	Not available.			
07/12 to 07/18	48,100	Not available.			
07/19 to 07/25	50,700	Not available.			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (OSF/NOB Well) - Optional non-project well**

Report Period: **2005 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR C 02/13/2006

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
12/27/04 to 01/03/05	252,000	Not available.
01/04 to 01/10	302,000	Not available.
01/11 to 01/17	353,000	Not available.
01/18 to 01/24	353,000	Not available.
01/25 to 01/31	353,000	Not available.
02/01 to 02/07	353,000	Not available.
02/08 to 02/14	353,000	Not available.
02/15 to 02/21	353,000	Not available.
02/22 to 02/28	353,000	Not available.
03/01 to 03/07	353,000	Not available.
03/08 to 03/14	353,000	Not available.
03/15 to 03/21	353,000	Not available.
03/22 to 03/28	202,000	Not available.
03/29 to 04/04	0	Not available.
04/05 to 04/11	252,000	Not available.
04/12 to 04/18	151,000	Not available.
04/19 to 04/25	302,000	Not available.
04/26 to 05/02	151,000	Not available.
05/03 to 05/09	202,000	Not available.
05/10 to 05/16	50,000	Not available.
05/17 to 05/23	202,000	Not available.
05/24 to 05/30	101,000	Not available.
05/31 to 06/06	302,000	Not available.
06/07 to 06/13	353,000	Not available.
06/14 to 06/20	252,000	Not available.
06/21 to 06/27	202,000	Not available.
06/28 to 07/04	353,000	Not available.
07/05 to 07/11	252,000	Not available.
07/12 to 07/18	252,000	Not available.
07/19 to 07/25	353,000	Not available.

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/26 to 08/01	353,000	Not available.
08/02 to 08/08	353,000	Not available.
08/09 to 08/15	353,000	Not available.
08/16 to 08/22	353,000	Not available.
08/23 to 08/29	353,000	Not available.
08/30 to 09/05	252,000	Not available.
09/06 to 09/12	151,000	Not available.
09/13 to 09/19	353,000	Not available.
09/20 to 09/26	353,000	Not available.
09/27 to 10/03	353,000	Not available.
10/04 to 10/10	353,000	Not available.
10/11 to 10/17	353,000	Not available.
10/18 to 10/24	353,000	Not available.
10/25 to 10/31	252,000	Not available.
11/01 to 11/07	0	Not available.
11/08 to 11/14	353,000	Not available.
11/15 to 11/21	353,000	Not available.
11/22 to 11/28	353,000	Not available.
11/29 to 12/05	353,000	Not available.
12/06 to 12/12	353,000	Not available.
12/13 to 12/19	353,000	Not available.
12/20 to 12/26	353,000	Not available.
12/27/05 to 01/02/06	353,000	

General Note: OSF/NOB well flow data estimated using pump flow (35 gpm) and assumed continuous pumping on the days pump in service to clearwell. OSF/NOB well water used as source water for filling station clearwell. Water flow not metered when flowing to clearwell.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

Attachment 2
Example Verification Completion Form
Page 1 of 1

Verification Documentation

Correspondence/Letter number: 5537-2006-007 Origination Date: 01/26/2006

Agency/External Stakeholder: SRBC Submittal Due Date: 03/01/2006

Recipient of Correspondence: Susquehanna River Basin Commission
(name and title if known)

Purpose of Submittal: 2005 Annual Groundwater Withdrawal Report Docket #1996 1102

Originating Office: ☐ Cantera ☐ Kennett Square ☒ Site TMI Unit 1
(specify)

Preparer: S Cogley (print) [signature] (sign) 2/13/2006 (date)

Peer Reviewer: J. Spagnuolo (print) [signature] (sign) 2/13/06 (date)

Certified Mail Return Receipt Requested: ☒ Yes ☐ No

Approvals (check box if applicable)

	Applicable	Date Review Needed	Signature of Reviewer	Date of Review
Site Departments				
Chemistry C Baker	☑	02/14/06	[signature]	2/13/06
Operations	☐			
Engineering	☐			
Regulatory Assurance	☐			
Other: _____ (specify)	☐			
Corporate				
SME/FAM	☐			
Site Management				
Plant Manager CE Chick	☑	02/14/06	[signature] for G.E.C. 2-13-06 ☐ Report Signed and Approved	
Site Vice President	☐			

Attach additional page for comments.

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen SM
An Exelon Company

February 28, 2007
5532-2007-013

Ms. Paula B. Ballaron, P.G.
Project Review and Compliance Section
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102

SUBJECT: ANNUAL GROUNDWATER REPORT - CALENDAR YEAR 2006
SRBC PROJECT DOCKET NO. 19961102 (REVISED)
THREE MILE ISLAND UNIT 1 (TMI UNIT 1)

Dear Ms. Ballaron:

Pursuant to Susquehanna River Basin Commission (SRBC) regulation 40 CFR 803.43 and the SRBC project approval docket, please find attached a completed 2006 Annual Groundwater Monitoring Report. The 2006 Annual Groundwater Monitoring Report is submitted on the standard report forms as required by the Commission. As requested by the SRBC the completed forms will be submitted via e-mail to Mr. Todd Hitz as Excel spreadsheets. The 2006 Annual Groundwater Monitoring Report consists of the following completed forms:

- Summary of Total Groundwater Pumpage - Industrial Wells A, B & C.
- Record of Groundwater Pumpage and Water Levels - Industrial Well A.
- Record of Groundwater Pumpage and Water Levels - Industrial Well B.
- Record of Groundwater Pumpage and Water Levels - Industrial Well C.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (OSF/NOB Well) - Optional non-project reporting.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (Building 48 Well) - Optional non-project reporting.

Should the Commission have questions concerning this matter or require additional information please contact Scott R. Cogley, Environmental Chemist, at (717) 948-8881 or e-mail at *scott.cogley@exeloncorp.com.*

Sincerely,

for T.J.D.

T. J. Dougherty
Plant Manager

TJD/src

Attachments

SUMMARY OF TOTAL GROUND-WATER PUMPAGE

Project Name: **Three Mile Island Nuclear Station Ind. Wells - Docket No. 19961102 (Rev.)**

Names of Sources: **Industrial Well A, Well B and Well C**

Report Period: **2006 Calendar Year Annual Report**

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRS 02/27/2007

Week Period	Total Pumpage All Sources (gallons)	Week Period	Total Pumpage All Sources (gallons)
01/02/06 to 01/09/06	1,013,000	08/01 to 08/07	593,000
01/10 to 01/16	462,000	08/08 to 08/14	405,000
01/17 to 01/23	431,000	08/15 to 08/21	687,000
01/24 to 01/30	378,000	08/22 to 08/28	640,000
01/31 to 02/06	517,000	08/29 to 09/04	468,000
02/07 to 02/13	450,000	09/05 to 09/11	553,000
02/14 to 02/20	559,000	09/12 to 09/18	626,000
02/21 to 02/27	348,000	09/19 to 09/25	681,000
02/28 to 03/06	607,000	09/26 to 10/02	604,000
03/07 to 03/13	484,000	10/03 to 10/09	599,000
03/14 to 03/20	646,000	10/10 to 10/16	634,000
03/21 to 03/27	694,000	10/17 to 10/23	711,000
03/28 to 04/03	443,000	10/24 to 10/30	524,000
04/04 to 04/10	683,000	10/31 to 11/06	582,000
04/11 to 04/17	550,000	11/07 to 11/13	613,000
04/18 to 04/24	767,000	11/14 to 11/20	572,000
04/25 to 05/01	528,000	11/21 to 11/27	539,000
05/02 to 05/08	454,000	11/28 to 12/04	530,000
05/09 to 05/15	607,000	12/05 to 12/11	626,000
05/16 to 05/22	642,000	12/12 to 12/18	505,000
05/23 to 05/29	487,000	12/19 to 12/25	527,000
05/30 to 06/05	455,000	12/26 to 01/01/2007	312,000
06/06 to 06/12	736,000		
06/13 to 06/19	664,000		
06/20 to 06/26	662,000		
06/27 to 07/03	882,000	NOTE: See Well A, B, and C data sheets for individual well data.	
07/04 to 07/10	561,000		
07/11 to 07/17	575,000		
07/18 to 07/24	566,000		
07/25 to 07/31	605,000		

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well A**

Report Period: **2006 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DR SC 02/27/2007

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/02/06 to 01/09/06	308,000	103	08/01 to 08/07	364,000	47
01/10 to 01/16	278,000	103	08/08 to 08/14	241,000	52
01/17 to 01/23	313,000	177	08/15 to 08/21	362,000	144
01/24 to 01/30	280,000	144	08/22 to 08/28	381,000	73
01/31 to 02/06	309,000	36	08/29 to 09/04	331,000	61
02/07 to 02/13	338,000	45	09/05 to 09/11	350,000	251
02/14 to 02/20	351,000	47	09/12 to 09/18	385,000	253
02/21 to 02/27	340,000	80	09/19 to 09/25	383,000	193
02/28 to 03/06	367,000	75	09/26 to 10/02	367,000	262
03/07 to 03/13	356,000	71	10/03 to 10/09	378,000	260
03/14 to 03/20	370,000	105	10/10 to 10/16	378,000	191
03/21 to 03/27	388,000	110	10/17 to 10/23	374,000	101
03/28 to 04/03	337,000	43	10/24 to 10/30	338,000	211
04/04 to 04/10	403,000	195	10/31 to 11/06	346,000	232
04/11 to 04/17	387,000	260	11/07 to 11/13	357,000	232
04/18 to 04/24	431,000	188	11/14 to 11/20	380,000	124
04/25 to 05/01	372,000	57	11/21 to 11/27	378,000	108
05/02 to 05/08	309,000	94	11/28 to 12/04	380,000	89
05/09 to 05/15	362,000	47	12/05 to 12/11	330,000	38
05/16 to 05/22	372,000	260	12/12 to 12/18	358,000	158
05/23 to 05/29	366,000	186	12/19 to 12/25	281,000	117
05/30 to 06/05	422,000	216	12/26 to 01/01/2007	192,000	38
06/06 to 06/12	388,000	165			
06/13 to 06/19	375,000	207			
06/20 to 06/26	382,000	205			
06/27 to 07/03	405,000	237			
07/04 to 07/10	380,000	75			
07/11 to 07/17	388,000	98			
07/18 to 07/24	373,000	77			
07/25 to 07/31	400,000	246			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well B**

Report Period: **2006 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DR 8/2 02/22/2007

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/02/06 to 01/09/06	118,000	252	08/01 to 08/07	179,000	162
01/10 to 01/16	93,000	143	08/08 to 08/14	82,000	217
01/17 to 01/23	61,000	425	08/15 to 08/21	150,000	217
01/24 to 01/30	50,000	76	08/22 to 08/28	124,000	148
01/31 to 02/06	106,000	190	08/29 to 09/04	63,000	141
02/07 to 02/13	56,000	220	09/05 to 09/11	108,000	483
02/14 to 02/20	104,000	88	09/12 to 09/18	112,000	483
02/21 to 02/27	8,000	155	09/19 to 09/25	121,000	125
02/28 to 03/06	121,000	86	09/26 to 10/02	129,000	483
03/07 to 03/13	65,000	180	10/03 to 10/09	154,000	483
03/14 to 03/20	137,000	67	10/10 to 10/16	125,000	224
03/21 to 03/27	152,000	402	10/17 to 10/23	168,000	183
03/28 to 04/03	52,000	206	10/24 to 10/30	92,000	478
04/04 to 04/10	137,000	224	10/31 to 11/06	115,000	478
04/11 to 04/17	105,000	432	11/07 to 11/13	131,000	478
04/18 to 04/24	182,000	247	11/14 to 11/20	91,000	222
04/25 to 05/01	76,000	220	11/21 to 11/27	71,000	275
05/02 to 05/08	71,000	67	11/28 to 12/04	70,000	67
05/09 to 05/15	115,000	153	12/05 to 12/11	139,000	160
05/16 to 05/22	151,000	437	12/12 to 12/18	69,000	213
05/23 to 05/29	59,000	220	12/19 to 12/25	116,000	183
05/30 to 06/05	16,000	143	12/26 to 01/01/2007	57,000	153
06/06 to 06/12	171,000	127			
06/13 to 06/19	141,000	67			
06/20 to 06/26	137,000	197			
06/27 to 07/03	151,000	437			
07/04 to 07/10	181,000	167			
07/11 to 07/17	187,000	67			
07/18 to 07/24	193,000	187			
07/25 to 07/31	205,000	483			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well C**

Report Period: **2006 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRSC 02/27/2007

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/02/06 to 01/09/06	587,000	36	08/01 to 08/07	50,000	29
01/10 to 01/16	91,000	20	08/08 to 08/14	82,000	36
01/17 to 01/23	57,000	85	08/15 to 08/21	175,000	92
01/24 to 01/30	48,000	22	08/22 to 08/28	135,000	32
01/31 to 02/06	102,000	20	08/29 to 09/04	74,000	22
02/07 to 02/13	56,000	36	09/05 to 09/11	95,000	378
02/14 to 02/20	104,000	22	09/12 to 09/18	129,000	378
02/21 to 02/27	0	22	09/19 to 09/25	177,000	85
02/28 to 03/06	119,000	20	09/26 to 10/02	108,000	38
03/07 to 03/13	63,000	20	10/03 to 10/09	67,000	27
03/14 to 03/20	139,000	20	10/10 to 10/16	131,000	55
03/21 to 03/27	154,000	92	10/17 to 10/23	169,000	18
03/28 to 04/03	54,000	22	10/24 to 10/30	94,000	378
04/04 to 04/10	143,000	68	10/31 to 11/06	121,000	378
04/11 to 04/17	58,000	22	11/07 to 11/13	125,000	78
04/18 to 04/24	154,000	15	11/14 to 11/20	101,000	38
04/25 to 05/01	80,000	22	11/21 to 11/27	90,000	156
05/02 to 05/08	74,000	57	11/28 to 12/04	80,000	22
05/09 to 05/15	130,000	20	12/05 to 12/11	157,000	18
05/16 to 05/22	119,000	27	12/12 to 12/18	78,000	55
05/23 to 05/29	62,000	32	12/19 to 12/25	130,000	20
05/30 to 06/05	17,000	94	12/26 to 01/01/2007	63,000	20
06/06 to 06/12	177,000	22			
06/13 to 06/19	148,000	22			
06/20 to 06/26	143,000	22			
06/27 to 07/03	326,000	82			
07/04 to 07/10	0	32			
07/11 to 07/17	0	18			
07/18 to 07/24	0	18			
07/25 to 07/31	0	22			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (OSF/NOB Well) - Optional non-project well**

Report Period: **2006 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRCgr 02/27/2007

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/02/06 to 01/09/06	353,000	Not available.	08/01 to 08/07	353,000	Not available.
01/10 to 01/16	353,000	Not available.	08/08 to 08/14	151,000	Not available.
01/17 to 01/23	353,000	Not available.	08/15 to 08/21	302,000	Not available.
01/24 to 01/30	302,000	Not available.	08/22 to 08/28	353,000	Not available.
01/31 to 02/06	353,000	Not available.	08/29 to 09/04	151,000	Not available.
02/07 to 02/13	353,000	Not available.	09/05 to 09/11	151,000	Not available.
02/14 to 02/20	353,000	Not available.	09/12 to 09/18	252,000	Not available.
02/21 to 02/27	353,000	Not available.	09/19 to 09/25	252,000	Not available.
02/28 to 03/06	353,000	Not available.	09/26 to 10/02	202,000	Not available.
03/07 to 03/13	353,000	Not available.	10/03 to 10/09	151,000	Not available.
03/14 to 03/20	353,000	Not available.	10/10 to 10/16	151,000	Not available.
03/21 to 03/27	353,000	Not available.	10/17 to 10/23	202,000	Not available.
03/28 to 04/03	353,000	Not available.	10/24 to 10/30	302,000	Not available.
04/04 to 04/10	353,000	Not available.	10/31 to 11/06	353,000	Not available.
04/11 to 04/17	202,000	Not available.	11/07 to 11/13	252,000	Not available.
04/18 to 04/24	353,000	Not available.	11/14 to 11/20	353,000	Not available.
04/25 to 05/01	353,000	Not available.	11/21 to 11/27	353,000	Not available.
05/02 to 05/08	353,000	Not available.	11/28 to 12/04	353,000	Not available.
05/09 to 05/15	353,000	Not available.	12/05 to 12/11	353,000	Not available.
05/16 to 05/22	252,000	Not available.	12/12 to 12/18	212,000	Not available.
05/23 to 05/29	353,000	Not available.	12/19 to 12/25	353,000	Not available.
05/30 to 06/05	353,000	Not available.	12/26 to 01/01/2007	353,000	Not available.
06/06 to 06/12	353,000	Not available.			
06/13 to 06/19	353,000	Not available.			
06/20 to 06/26	353,000	Not available.			
06/27 to 07/03	202,000	Not available.	General Note: OSF/NOB well flow data estimated using pump flow (35 gpm) and assumed continuous pumping on the days pump in service to clearwell. OSF/NOB well water used as source water for filling station clearwell. Water flow not metered when flowing to clearwell.		
07/04 to 07/10	353,000	Not available.			
07/11 to 07/17	353,000	Not available.			
07/18 to 07/24	353,000	Not available.			
07/25 to 07/31	353,000	Not available.			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (Building 48 Well) - Optional non-project well**

Report Period: **2006 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRC 02/27/2007

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/02/06 to 01/09/06	43,600	Not available.	08/01 to 08/07	96,300	Not available.
01/10 to 01/16	42,700	Not available.	08/08 to 08/14	42,900	Not available.
01/17 to 01/23	40,900	Not available.	08/15 to 08/21	36,500	Not available.
01/24 to 01/30	38,700	Not available.	08/22 to 08/28	34,700	Not available.
01/31 to 02/06	35,300	Not available.	08/29 to 09/04	57,200	Not available.
02/07 to 02/13	31,200	Not available.	09/05 to 09/11	39,600	Not available.
02/14 to 02/20	51,800	Not available.	09/12 to 09/18	40,000	Not available.
02/21 to 02/27	35,900	Not available.	09/19 to 09/25	40,300	Not available.
02/28 to 03/06	37,000	Not available.	09/26 to 10/02	50,700	Not available.
03/07 to 03/13	32,600	Not available.	10/03 to 10/09	44,600	Not available.
03/14 to 03/20	42,200	Not available.	10/10 to 10/16	50,100	Not available.
03/21 to 03/27	47,700	Not available.	10/17 to 10/23	43,100	Not available.
03/28 to 04/03	47,700	Not available.	10/24 to 10/30	39,800	Not available.
04/04 to 04/10	40,900	Not available.	10/31 to 11/06	42,700	Not available.
04/11 to 04/17	37,600	Not available.	11/07 to 11/13	41,700	Not available.
04/18 to 04/24	39,400	Not available.	11/14 to 11/20	45,700	Not available.
04/25 to 05/01	46,700	Not available.	11/21 to 11/27	32,200	Not available.
05/02 to 05/08	38,600	Not available.	11/28 to 12/04	39,100	Not available.
05/09 to 05/15	36,800	Not available.	12/05 to 12/11	41,300	Not available.
05/16 to 05/22	39,500	Not available.	12/12 to 12/18	46,800	Not available.
05/23 to 05/29	39,900	Not available.	12/19 to 12/25	37,700	Not available.
05/30 to 06/05	48,100	Not available.	12/26 to 01/01/2007	123,000	Not available.
06/06 to 06/12	46,900	Not available.			
06/13 to 06/19	53,700	Not available.			
06/20 to 06/26	40,700	Not available.			
06/27 to 07/03	48,400	Not available.			
07/04 to 07/10	34,400	Not available.			
07/11 to 07/17	56,100	Not available.			
07/18 to 07/24	58,200	Not available.			
07/25 to 07/31	51,900	Not available.			

[1] Submit a separate form for each well.

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Attachment 2
Example Verification Completion Form
Page 1 of 1

Verification Documentation

Correspondence/Letter number: 5532-2007-013 Origination Date: 02/15/2007

Agency/External Stakeholder: SRBC Submittal Due Date: FEB. 28, 2007 REGULATORY

Recipient of Correspondence: SRBC Projects Review
(name and title if known)

Purpose of Submittal: 2006 Annual Groundwater Report - Docket # 19961102

Originating Office: ☐ Cantera ☐ Kennett Square ☑ Site TMI Unit 1
(specify)

Preparer: SR Cogley (print) [signature] (sign) 02/27/07 (date)

Peer Reviewer: x T Sipling (print) (K.S. ENV) [signature] SRC Review (sign) 02/27/07 (date)

Certified Mail Return Receipt Requested: ☑ Yes ☐ No

Approvals (check box if applicable)

	Applicable	Date Review Needed	Signature of Reviewer	Date of Review
Site Departments				
Chemistry C Baker	☑	02/27/07	[signature]	2/27/07
Operations	☐			
Engineering	☐			
Regulatory Assurance	☐			
Other: _____ (specify)	☐			
Corporate				
SME/FAM	☐			
Site Management				
Plant Manager TJD	☑	02/26/07	☐ Report Signed and Approved	
Site Vice President	☐			

Attach additional page for comments.

AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen SM
An Exelon Company

2H.103

February 22, 2008
5532-2008-008

Eric R. Roof
Director, Compliance Program
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102-2391

SUBJECT: ANNUAL GROUNDWATER REPORT - CALENDAR YEAR 2007
SRBC PROJECT DOCKET NO. 19961102 (REVISED)
THREE MILE ISLAND UNIT 1 (TMI UNIT 1)

Dear Mr. Roof:

Pursuant to the referenced Susquehanna River Basin Commission (SRBC) project approval docket, please find attached a completed 2007 Annual Groundwater Monitoring Report. The 2007 Annual Groundwater Monitoring Report is submitted on the SRBC standard report forms. As requested, the completed forms will be submitted via e-mail to Mr. Todd Hitz as Excel spreadsheets. The 2007 Annual Groundwater Monitoring Report consists of the following completed forms:

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- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (OSF/NOB Well) - Optional non-project reporting.
- Record of Groundwater Pumpage and Water Levels - Drinking Water Well (Building 48 Well) - Optional non-project reporting.

Should the Commission have questions concerning this matter or require additional information, please contact Scott R. Cogley, Environmental Chemist, at (717) 948-8881 or e-mail at *scott.cogley@exeloncorp.com.*

Sincerely,

T. J. Dougherty
Plant Manager

TJD/src

Attachments

SUMMARY OF TOTAL GROUND-WATER PUMPAGE

Project Name: **Three Mile Island Nuclear Station Ind. Wells - Docket No. 19961102 (Rev.)**

Names of Sources: **Industrial Well A, Well B and Well C**

Report Period: **2007 Calendar Year Annual Report**

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: 02-15-08

Week Period	Total Pumpage All Sources (gallons)	Week Period	Total Pumpage All Sources (gallons)
01/01/07 to 01/08/07	277,000	07/31 to 08/06	573,000
01/09 to 01/15	466,000	08/07 to 08/13	611,000
01/16 to 01/22	331,000	08/14 to 08/20	735,000
01/23 to 01/29	333,000	08/21 to 08/27	522,000
01/30 to 02/05	303,000	08/28 to 09/03	543,000
02/06 to 02/12	329,000	09/04 to 09/10	571,000
02/13 to 02/19	355,000	09/11 to 09/17	697,000
02/20 to 02/26	454,000	09/18 to 09/24	537,000
02/27 to 03/05	373,000	09/25 to 10/01	569,000
03/06 to 03/12	459,000	10/02 to 10/08	579,000
03/13 to 03/19	314,000	10/09 to 10/15	658,000
03/20 to 03/26	451,000	10/16 to 10/22	573,000
03/27 to 04/02	373,000	10/23 to 10/29	367,000
04/03 to 04/09	410,000	10/30 to 11/05	217,000
04/10 to 04/16	473,000	11/06 to 11/12	574,000
04/17 to 04/23	435,000	11/13 to 11/19	668,000
04/24 to 04/30	534,000	11/20 to 11/26	476,000
05/01 to 05/07	467,000	11/27 to 12/03	484,000
05/08 to 05/14	540,000	12/04 to 12/10	419,000
05/15 to 05/21	691,000	12/11 to 12/17	525,000
05/22 to 05/28	511,000	12/18 to 12/24	470,000
05/29 to 06/04	564,000	12/25 to 12/31/2007	271,000
06/05 to 06/11	655,000		
06/12 to 06/18	493,000		
06/19 to 06/25	560,000		
06/26 to 07/02	500,000	NOTE: See Well A, B, and C data sheets for individual well data.	
07/03 to 07/09	698,000		
07/10 to 07/16	432,000		
07/17 to 07/23	438,000		
07/24 to 07/30	549,000		

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well A**

Report Period: **2007 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: 02-15-08

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/01/07 to 01/08/07	166,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*
01/09 to 01/15	253,000	
01/16 to 01/22	217,000	
01/23 to 01/29	196,000	
01/30 to 02/05	194,000	
02/06 to 02/12	250,000	
02/13 to 02/19	249,000	
02/20 to 02/26	276,000	
02/27 to 03/05	229,000	
03/06 to 03/12	275,000	
03/13 to 03/19	188,000	
03/20 to 03/26	250,000	
03/27 to 04/02	212,000	
04/03 to 04/09	219,000	
04/10 to 04/16	264,000	
04/17 to 04/23	253,000	
04/24 to 04/30	312,000	
05/01 to 05/07	303,000	
05/08 to 05/14	350,000	
05/15 to 05/21	429,000	
05/22 to 05/28	369,000	
05/29 to 06/04	381,000	
06/05 to 06/11	381,000	
06/12 to 06/18	363,000	
06/19 to 06/25	403,000	
06/26 to 07/02	353,000	
07/03 to 07/09	369,000	
07/10 to 07/16	285,000	
07/17 to 07/23	330,000	
07/24 to 07/30	314,000	

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/31 to 08/06	314,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*
08/07 to 08/13	358,000	
08/14 to 08/20	372,000	
08/21 to 08/27	360,000	
08/28 to 09/03	374,000	
09/04 to 09/10	381,000	
09/11 to 09/17	350,000	
09/18 to 09/24	368,000	
09/25 to 10/01	366,000	
10/02 to 10/08	371,000	
10/09 to 10/15	325,000	
10/16 to 10/22	336,000	
10/23 to 10/29	224,000	
10/30 to 11/05	203,000	
11/06 to 11/12	326,000	
11/13 to 11/19	337,000	
11/20 to 11/26	368,000	
11/27 to 12/03	342,000	
12/04 to 12/10	326,000	
12/11 to 12/17	294,000	
12/18 to 12/24	275,000	
12/25 to 12/31/2007	176,000	

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well B**

Report Period: **2007 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: 02-15-08

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/01/07 to 01/08/07	51,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*	07/31 to 08/06	133,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*
01/09 to 01/15	101,000		08/07 to 08/13	166,000	
01/16 to 01/22	54,000		08/14 to 08/20	190,000	
01/23 to 01/29	65,000		08/21 to 08/27	85,000	
01/30 to 02/05	52,000		08/28 to 09/03	89,000	
02/06 to 02/12	35,000		09/04 to 09/10	110,000	
02/13 to 02/19	51,000		09/11 to 09/17	188,000	
02/20 to 02/26	85,000		09/18 to 09/24	92,000	
02/27 to 03/05	69,000		09/25 to 10/01	111,000	
03/06 to 03/12	87,000		10/02 to 10/08	115,000	
03/13 to 03/19	60,000		10/09 to 10/15	187,000	
03/20 to 03/26	95,000		10/16 to 10/22	145,000	
03/27 to 04/02	78,000		10/23 to 10/29	70,000	
04/03 to 04/09	91,000		10/30 to 11/05	8,000	
04/10 to 04/16	102,000		11/06 to 11/12	142,000	
04/17 to 04/23	88,000		11/13 to 11/19	191,000	
04/24 to 04/30	105,000		11/20 to 11/26	79,000	
05/01 to 05/07	100,000		11/27 to 12/03	82,000	
05/08 to 05/14	110,000		12/04 to 12/10	57,000	
05/15 to 05/21	131,000		12/11 to 12/17	134,000	
05/22 to 05/28	68,000		12/18 to 12/24	114,000	
05/29 to 06/04	90,000		12/25 to 12/31/2007	55,000	
06/05 to 06/11	131,000				
06/12 to 06/18	63,000				
06/19 to 06/25	76,000				
06/26 to 07/02	72,000				
07/03 to 07/09	161,000				
07/10 to 07/16	79,000				
07/17 to 07/23	54,000				
07/24 to 07/30	119,000				

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station Industrial Wells - Docket No. 19961102 (Revised)**

Well ID[1]: **Industrial Well C**

Report Period: **2007 Calendar Year Annual Report**

Description of water level measurement point[2]: Water level measurements are from grade (ground level) to ground water depth.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: DRG 02-15-08

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/01/07 to 01/08/07	60,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*	07/31 to 08/06	126,000	*General Well Depth Monitoring and Recording Are Not Required Under Docket No. 19961102*
01/09 to 01/15	112,000		08/07 to 08/13	87,000	
01/16 to 01/22	60,000		08/14 to 08/20	173,000	
01/23 to 01/29	72,000		08/21 to 08/27	77,000	
01/30 to 02/05	57,000		08/28 to 09/03	80,000	
02/06 to 02/12	44,000		09/04 to 09/10	80,000	
02/13 to 02/19	55,000		09/11 to 09/17	159,000	
02/20 to 02/26	93,000		09/18 to 09/24	77,000	
02/27 to 03/05	75,000		09/25 to 10/01	92,000	
03/06 to 03/12	97,000		10/02 to 10/08	93,000	
03/13 to 03/19	66,000		10/09 to 10/15	146,000	
03/20 to 03/26	106,000		10/16 to 10/22	92,000	
03/27 to 04/02	83,000		10/23 to 10/29	73,000	
04/03 to 04/09	100,000		10/30 to 11/05	6,000	
04/10 to 04/16	107,000		11/06 to 11/12	106,000	
04/17 to 04/23	94,000		11/13 to 11/19	140,000	
04/24 to 04/30	117,000		11/20 to 11/26	29,000	
05/01 to 05/07	64,000		11/27 to 12/03	60,000	
05/08 to 05/14	80,000		12/04 to 12/10	36,000	
05/15 to 05/21	131,000		12/11 to 12/17	97,000	
05/22 to 05/28	74,000		12/18 to 12/24	81,000	
05/29 to 06/04	93,000		12/25 to 12/31/2007	40,000	
06/05 to 06/11	143,000				
06/12 to 06/18	67,000				
06/19 to 06/25	81,000				
06/26 to 07/02	75,000				
07/03 to 07/09	168,000				
07/10 to 07/16	68,000				
07/17 to 07/23	54,000				
07/24 to 07/30	116,000				

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (OSF/NOB Well) - Optional non-project well**

Report Period: **2007 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR 02-15-08

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/01/07 to 01/08/07	353,000	Not available.
01/09 to 01/15	353,000	Not available.
01/16 to 01/22	353,000	Not available.
01/23 to 01/29	353,000	Not available.
01/30 to 02/05	353,000	Not available.
02/06 to 02/12	353,000	Not available.
02/13 to 02/19	353,000	Not available.
02/20 to 02/26	353,000	Not available.
02/27 to 03/05	353,000	Not available.
03/06 to 03/12	353,000	Not available.
03/13 to 03/19	353,000	Not available.
03/20 to 03/26	353,000	Not available.
03/27 to 04/02	353,000	Not available.
04/03 to 04/09	353,000	Not available.
04/10 to 04/16	353,000	Not available.
04/17 to 04/23	353,000	Not available.
04/24 to 04/30	353,000	Not available.
05/01 to 05/07	353,000	Not available.
05/08 to 05/14	353,000	Not available.
05/15 to 05/21	353,000	Not available.
05/22 to 05/28	353,000	Not available.
05/29 to 06/04	353,000	Not available.
06/05 to 06/11	353,000	Not available.
06/12 to 06/18	353,000	Not available.
06/19 to 06/25	353,000	Not available.
06/26 to 07/02	353,000	Not available.
07/03 to 07/09	353,000	Not available.
07/10 to 07/16	353,000	Not available.
07/17 to 07/23	353,000	Not available.
07/24 to 07/30	353,000	Not available.

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
07/31 to 08/06	353,000	Not available.
08/07 to 08/13	353,000	Not available.
08/14 to 08/20	353,000	Not available.
08/21 to 08/27	353,000	Not available.
08/28 to 09/03	353,000	Not available.
09/04 to 09/10	353,000	Not available.
09/11 to 09/17	353,000	Not available.
09/18 to 09/24	353,000	Not available.
09/25 to 10/01	353,000	Not available.
10/02 to 10/08	353,000	Not available.
10/09 to 10/15	353,000	Not available.
10/16 to 10/22	353,000	Not available.
10/23 to 10/29	353,000	Not available.
10/30 to 11/05	353,000	Not available.
11/06 to 11/12	353,000	Not available.
11/13 to 11/19	353,000	Not available.
11/20 to 11/26	353,000	Not available.
11/27 to 12/03	353,000	Not available.
12/04 to 12/10	353,000	Not available.
12/11 to 12/17	353,000	Not available.
12/18 to 12/24	353,000	Not available.
12/25 to 12/31/2007	353,000	Not available.

General Note: OSF/NOB well flow data estimated using pump flow (35 gpm) and assumed continuous pumping on the days pump in service to clearwell. OSF/NOB well water used as source water for filling station clearwell. Water flow not metered when flowing to clearwell.

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

RECORD OF GROUND-WATER PUMPAGE AND WATER LEVELS

Project Name: **Three Mile Island Nuclear Station**

Well ID[1]: **Plant Site Drinking Water Well (Building 48 Well) - Optional non-project well**

Report Period: **2007 Calendar Year Annual Report**

Description of water level measurement point[2]: Not available - Water levels are not routinely monitored. Available drinking water well data are reported for information only.

Prepared By: Scott R. Cogley - Environmental Chemist

Signature & Date: SR Cogley 02-15-08

Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]	Week Period	Pumpage (gallons)	Depth to Water (ft.)[3]
01/01/07 to 01/08/07	20,100	Not available.	07/31 to 08/06	67,400	Not available.
01/09 to 01/15	39,700	Not available.	08/07 to 08/13	81,200	Not available.
01/16 to 01/22	40,400	Not available.	08/14 to 08/20	64,800	Not available.
01/23 to 01/29	44,200	Not available.	08/21 to 08/27	63,600	Not available.
01/30 to 02/05	45,900	Not available.	08/28 to 09/03	62,000	Not available.
02/06 to 02/12	44,400	Not available.	09/04 to 09/10	72,700	Not available.
02/13 to 02/19	41,500	Not available.	09/11 to 09/17	74,600	Not available.
02/20 to 02/26	47,200	Not available.	09/18 to 09/24	69,800	Not available.
02/27 to 03/05	47,500	Not available.	09/25 to 10/01	75,700	Not available.
03/06 to 03/12	44,400	Not available.	10/02 to 10/08	69,100	Not available.
03/13 to 03/19	49,000	Not available.	10/09 to 10/15	79,200	Not available.
03/20 to 03/26	47,700	Not available.	10/16 to 10/22	113,100	Not available.
03/27 to 04/02	47,700	Not available.	10/23 to 10/29	176,600	Not available.
04/03 to 04/09	45,200	Not available.	10/30 to 11/05	191,100	Not available.
04/10 to 04/16	49,900	Not available.	11/06 to 11/12	141,100	Not available.
04/17 to 04/23	49,300	Not available.	11/13 to 11/19	85,900	Not available.
04/24 to 04/30	42,900	Not available.	11/20 to 11/26	31,300	Not available.
05/01 to 05/07	42,400	Not available.	11/27 to 12/03	36,200	Not available.
05/08 to 05/14	47,900	Not available.	12/04 to 12/10	52,100	Not available.
05/15 to 05/21	75,300	Not available.	12/11 to 12/17	52,100	Not available.
05/22 to 05/28	84,900	Not available.	12/18 to 12/24	42,900	Not available.
05/29 to 06/04	39,700	Not available.	12/25 to 12/31/2007	24,700	Not available.
06/05 to 06/11	45,500	Not available.			
06/12 to 06/18	48,500	Not available.			
06/19 to 06/25	47,000	Not available.			
06/26 to 07/02	52,000	Not available.			
07/03 to 07/09	41,500	Not available.			
07/10 to 07/16	63,500	Not available.			
07/17 to 07/23	57,900	Not available.			
07/24 to 07/30	53,900	Not available.			

[1] Submit a separate form for each well.

[2] Measuring point could be ground level, top of casing, or some other (please describe), and give correction distance to ground level.

[3] Water levels in wells must be reported as depth to water (not height of water above the pump).

Attachment 2
Example Verification Completion Form
Page 1 of 1

Verification Documentation

Correspondence/Letter number: 5532-2008-008 Origination Date: 02/01/2008
Agency/External Stakeholder: SRBC Submittal Due Date: 02/28/08
Recipient of Correspondence: P. Balloran - SRBC
(name and title if known)
Purpose of Submittal: 2007 Annual Groundwater Use Report
Originating Office: ☐ Cantera ☐ Kennett Square ☑ Site TMI #1
(specify)
Preparer: SR Copley (print) (sign) 02/15/08 (date)
X Peer Reviewer: T. Siglin (print) (Corp. Env. 2/19/08) T. Siglin (sign) 02/18/08 (date) PER E-MAIL SRC 2/19/08
Certified Mail Return Receipt Requested: ☑ Yes ☐ No SRBC Docket #1986102

E-MAIL Spreadsheet TO TODD HITZ - SRBC

Approvals (check box if applicable)

	Applicable	Date Review Needed	Signature of Reviewer	Date of Review
Site Departments				
X Chemistry - Baker	☑	02/20/08		2/19/08
Operations	☐			
Engineering	☐			
Regulatory Assurance	☐			
Other: _____ (specify)	☐			
Corporate				
SME/FAM	☐			
Site Management				
X Plant Manager - TJD	☑	02/22/08	☐ Report Signed and Approved	
Site Vice President	☐			

Attach additional page for comments.

COWANESQUE OPERATIONS MANUAL

Non-AmerGen

SUSQUEHANNA RIVER BASIN COMMISSION

PREPARED IN COOPERATION WITH THE U.S. ARMY CORPS OF ENGINEERS, GENERAL PUBLIC UTILITY, AND THE PENNSYLVANIA POWER AND LIGHT COMPANY

Publication No. 157

SUSQUEHANNA RIVER BASIN COMMISSION

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John R. McCarty, U.S. Alternate

The Susquehanna River Basin Commission was created as an independent agency by a federal-interstate compact* among the states of Maryland, New York, Commonwealth of Pennsylvania, and the federal government. In creating the Commission, the Congress and state legislatures formally recognized the water resources of the Susquehanna River Basin as a regional asset vested with local, state, and national interests for which all the parties share responsibility. As the single federal-interstate water resources agency with basinwide authority, the Commission's goal is to effect coordinated planning, conservation, management, utilization, development and control of basin water resources among the government and private sectors.

*Statutory *Citations: Federal - Pub. L. 91-575, 84 Stat. 1509 (December 1970); Maryland - Natural Resources Sec. 8-301 (Michie 1974); New York - ECL Sec. 21-1301 (McKinney 1973); and Pennsylvania - 32 P.S. 820.1 (Supp. 1976).*

Publication No. 157
January 1994

For additional copies, contact the Susquehanna River Basin Commission, 1721 N. Front Street, Harrisburg, PA 17102-2391, (717) 238-0423.

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INTRODUCTION

Purpose

The purpose of this manual is to describe the procedures to be used for determining the amount and timing of releases from the water supply storage in the Cowanesque Reservoir.

History

In September 1976, the Susquehanna River Basin Commission ("Commission") adopted Regulation 803.61, requiring that all consumptive water users commencing operations after January 23, 1971, and consuming more than 20,000 gpd provide compensation for or suspend consumptive use whenever the natural flow at the point of taking was less than the 7-day, 10-year low flow (Q_{7-10}) plus the amount of consumptive use (C). The Susquehanna Steam Electric Station (SSES), owned by Pennsylvania Power and Light Company (PP&L), and located near Berwick, Pa., and the Three Mile Island Nuclear Station (TMI), owned by General Public Utilities Corporation (GPU) and located near Middletown, Pa., are subject to that regulation.

The Cowanesque Reservoir is located on the Cowanesque River near Lawrenceville, Pa. The reservoir is owned and operated by the U.S. Army Corps of Engineers. On March 15, 1978, Pennsylvania Power and Light Company requested the right to purchase water supply storage in the Cowanesque Reservoir for the purpose of providing consumptive loss makeup for SSES. Subsequently, General Public Utilities requested the right to purchase water supply storage in the Cowanesque Reservoir for consumptive loss makeup for TMI.

In 1978 the Commission and the two power companies requested that the Corps of Engineers investigate the feasibility of providing water supply storage in Cowanesque Lake for the purpose of providing consumptive loss makeup water for the two power plants. The Corps conducted a feasibility study of reallocation of storage in Cowanesque Reservoir between 1979 and 1982. The study concluded that it was feasible to increase the elevation of the permanent pool at Cowanesque to elevation 1,080 ft., to provide 25,600 acre-feet of storage for water supply purposes. In January 1982, the Commission adopted the Corps recommendation into the SRBC Comprehensive Plan.

In order to meet the requirements of the Susquehanna River Basin Compact, and to address the concerns of the local interests, the Commission conducted a series of Special Studies between 1983 and 1986. These studies included development of procedures for determining the amount and timing of releases, and the verification of compliance with the consumptive loss makeup regulation.

Subsequent to the completion of the Special Studies, the Commission recommended to the Corps of Engineers that the storage be reallocated, and formally agreed to function as manager of that storage. Contracts between the Commission and Corps of Engineers and between the Commission and the two power companies were signed on June 30, 1986. The contracts provide for 24,335 acre-feet of storage to be allocated to water supply between elevations 1,011 and 1,080 ft. ngvd. The amount of water supply storage was revised to allow for future sedimentation in the reservoir.

Construction of modifications of the Cowanesque Project began in July 1987. The water supply storage was operational in December 1989, and the water supply pool was filled to elevation 1,080 ft. on April 27, 1990. Construction was complete as of July 1, 1990.

Management Policies

The Commission has adopted the resolutions and policies regarding the management of the water supply storage. The following management principles were included in the Main Report of the Cowanesque Lake Water Storage Project Special Studies.

1. The Commission shall require development of 25,600 acre-ft. of water supply storage at the Cowanesque Project. The amount of storage was subsequently changed to 24,335 acre-ft. in the contracts with the Corps of Engineers and the power companies to allow for future reduction of storage due to sediment deposition.

2. The Commission, as manager of the proposed Cowanesque water supply storage, can allocate the water supply storage in ways consistent with the Compact and in conformance with the consumptive loss makeup regulation and these policy statements, and with the minimum release schedule proposed by the Corps of Engineers.

3. For purposes of developing the operations plan, it will be assumed that both units are in operation at both power plants. The subsequent contract with the owners of TMI states that the contract and the obligations of the owners are limited to only one unit at TMI. GPU has, subsequently, confirmed by correspondence that releases are to be made for only one unit.

4. The operations plan should be designed to minimize, insofar as possible, drawdown of the recreation pool for consumptive loss makeup purposes, consistent with the primary purpose of meeting consumptive loss makeup needs for the two power plants. However, low flow conditions at SSES and/or TMI will periodically require drawdown of the recreation pool to meet

consumptive loss makeup needs. Minimum releases made by the Corps of Engineers may also drawdown the recreation pool in some years regardless of the need for consumptive loss makeup.

5. The plan for managing the water supply storage at Cowanesque Reservoir must be flexible, must satisfy these policy statements, should be adopted as part of the Comprehensive Plan, and should be periodically evaluated and modified as necessary.

6. Commission Resolution 82-5, states that, "Each participating party shall recognize the right of the Commission to reallocate the water supply storage in Cowanesque that is under contract to the Commission to higher uses, as required by the public interest following reasonable notice and subject to appropriate compensation...."

7. Commission Resolution 83-8 states that the opportunity for other water supply users to share equitably in the water supply storage acquired in the Cowanesque Project shall be preserved.

These policy principles were modified by Commission Resolution 89-12, which adopted the following release plan.

1. Whenever the natural flow at Wilkes-Barre is less than or equal to Q_{7-10}+C (868 cfs), a release will be made in the amount of C+25 cfs, or 85 cfs, whichever is greater, for the first three days. If streamflow at Wilkes-Barre is still less than Q_{7-10}+C, the amount of release will be C+5 cfs, for the duration of the period when flows at Wilkes-Barre are less than Q_{7-10}+C.

2. Whenever the natural flow at Harrisburg is less than or equal to Q_{7-10}+C (2,565 cfs), a release will be made in the amount of C+40 cfs, for the first three days. If streamflow at Harrisburg is still less than Q_{7-10}+C, the amount of release will be C+5 cfs, for the remaining duration of the period when flows at Harrisburg are less than Q_{7-10}+C.

3. During periods when surcharge releases are required simultaneously for both locations, the maximum release will be 125 cfs.

These policy principles will be revised, if necessary, based on experience and future needs.

Basic Principles of Management Plan

The Commission will determine the timing and magnitude of releases, and will provide appropriate instructions to the Corps of Engineers. The Corps of Engineers will operate the gates in order to provide the requested releases in accordance with established water quality guidelines.

The plan includes the following elements:

1. The criteria for determining when to begin and end releases, and the amount of the release.

2. Procedures for collecting and processing data for the purpose of determining whether to begin and end the release, and the amount of the release.

3. Procedures for coordination with the Corps of Engineers, USGS, PP&L, and GPU.

PROCEDURES FOR MANAGING WATER SUPPLY STORAGE

Criteria for Determining When to Make Releases

The Q_{7-10} was computed for the period of record through 1985 and 1986 at Wilkes-Barre and Harrisburg, respectively. The resulting Q_{7-10} values are shown in Table 1, along with design values of C, and a triggering flow value. The triggering flow shown in the table is the sum of the Q_{7-10} and Raystown reservoir releases. The appropriate trigger level for beginning releases shall be determined by adding the value of the actual consumptive use, C, to the values shown in the column labeled triggering flow in Table 1.

Table 1. Flow Parameters

Stream Gage (power plant)	7-Day, 10-Year Low Flow	Design Consumptive Use	Q_{7-10}+C cfs	Triggering Flow cfs	Tracking Flow cfs
Wilkes-Barre (SSES)	814	54	868	814+C	1,200
Harrisburg (TMI)	2,543	22	2,565	2,663+C[1] 2,943+C[2]	3,500

[1] During period May 15 to November 15
[2] During period November 15 to May 15

Releases will be directed by SRBC to replace consumptive water use for the SSES site and/or the TMI site whenever the streamflow at the Wilkes-Barre and/or Harrisburg gage is equal to or less than triggering flow shown in Table 1. The releases shall begin on the day when the instantaneous observed flow first becomes less than the triggering level at the respective gage.

Determination of Reservoir Adjustments

Most reservoirs in the basin release flows that are close to inflow during low flow conditions, so that the effect of reservoir operations on river flows is negligible. The major exception is the Raystown Reservoir. The Harrisburg Q_{7-10} was calculated from

about 100 years of record, unadjusted for any reservoir releases including Raystown, which as only been in operation since 1975. There were sufficient low flow events in the Harrisburg record that Raystown's effects are negligible in raising the Harrisburg trigger level. Therefore, adjusting the Harrisburg gage trigger flow for the Raystown release is appropriate.

The Corps of Engineers releases 200 cfs from the Raystown reservoir during the period May 15 to November 15 whenever the inflow is less than 200 cfs and the pool elevation is less than 786 ft ngvd. During the remainder of the year, the release is 480 cfs whenever the inflow is less than 480 cfs and the pool elevation is less than 786 ft ngvd. The resulting average augmentation is estimated to be 120 cfs during the summer period, and 400 cfs during the winter period. Therefore, the trigger level for making releases from Cowanesque to meet consumptive use makeup needs at Harrisburg will be increased by 120 cfs during the summer period, and 400 cfs during the winter period.

The Sunbury Fabridam, which is located on the Susquehanna River near Sunbury, and is owned and operated by Pennsylvania Department of Environmental Resources, has the potential to have a very significant effect on flows downstream, if the dam is deflated or reinflated during periods when consumptive use makeup releases from Cowanesque are being considered or actually occurring. Pa. DER has been requested to notify the Commission when either condition occurs. These instructions will be further formalized. Since the change in operation of this dam is expected to affect flows at Harrisburg for only brief periods, a simple procedure for adjusting the observed Harrisburg hydrograph for the effect of these flows is believed to be adequate. In the absence of significant rainfall that affects flows at Harrisburg, the rate of decline of the Harrisburg hydrograph immediately prior to deflation or reinflation can be assumed to continue during the affected period. Observed hydrographs at Sunbury and Harrisburg that show the effect of deflation of the Fabridam during 1988 are shown in figures 1 and 2.

Changes in release rates at other state and federal reservoirs may occur as a result of drawdown to winter pool or for maintenance activities. Procedures for determining the effects of these releases on flows at either target gage will be developed as needed. Such releases may result in modification or suspension of the required consumptive use makeup releases at the discretion of the Commission.

Tracking Flows

When observed average daily streamflows at the respective location are less than the tracking flow shown in Table 1, the Commission staff will begin keeping detailed records for that event and stream gage. The detailed record keeping includes: recording the observed average daily streamflow for the previous day; recording the latest instantaneous observed streamflow; recording consumptive use data from the respective power company; and determining whether the streamflow is less than the triggering level.

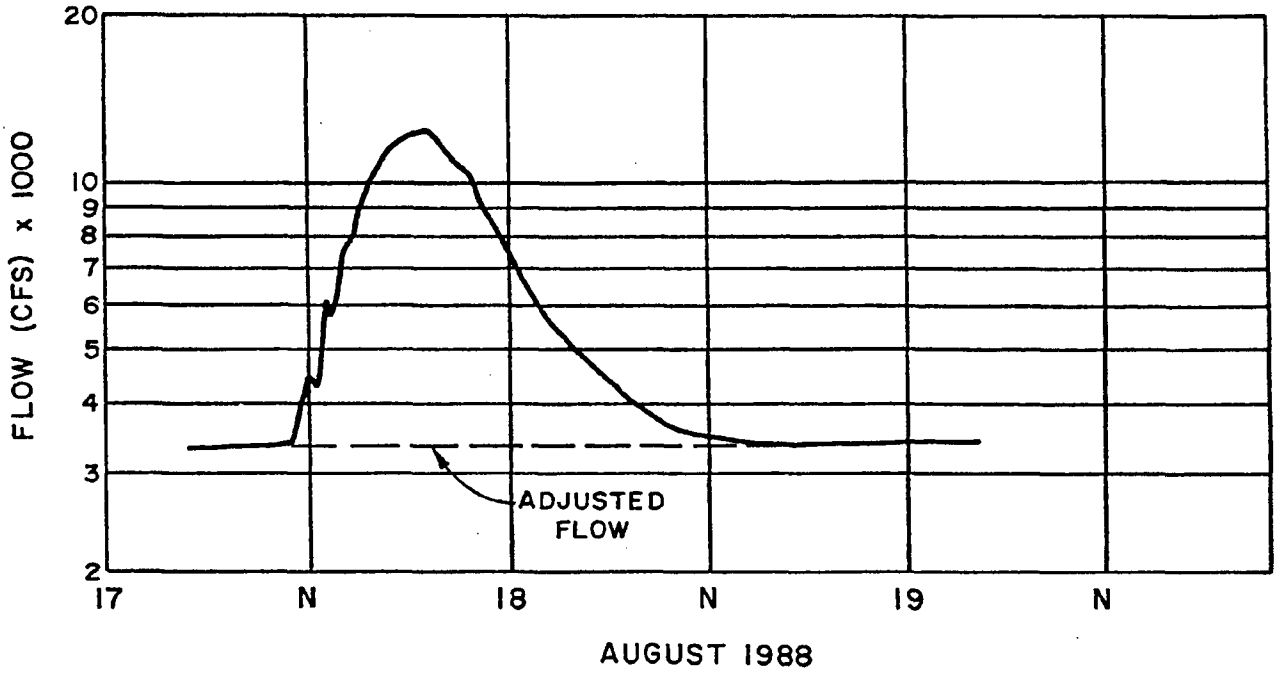

Figure 1. Hydrograph at Sunbury Showing Rise Due to Fabridam

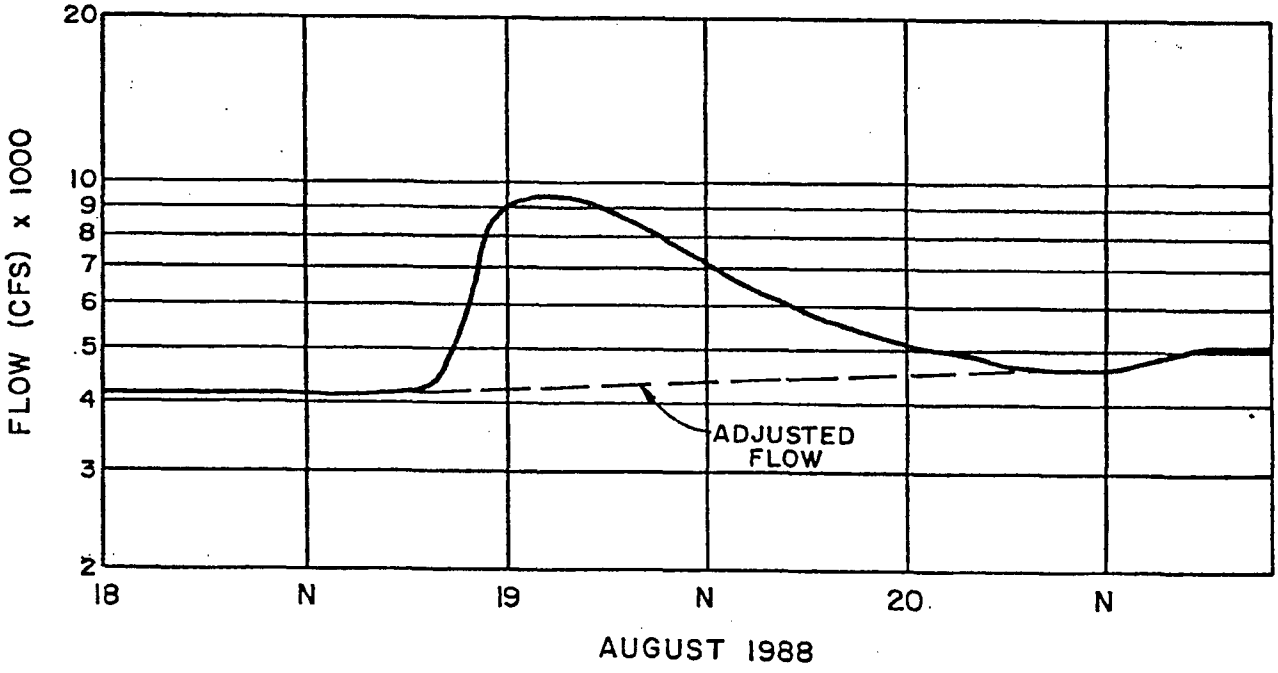

Figure 2. Hydrograph at Harrisburg Showing Rise Due to Fabridam

Amount of Release

The amount of the release will be equal to the consumptive use plus amounts to allow for surcharge flow needed to initially fill the channel and offset transit losses.

For SSES:

For the first 3 days after beginning a release: C+25 cfs; and
For the duration of the period: C+5 cfs.

For TMI:

For C+40 cfs for the first 3 days; and
For the duration of the period: C+5 cfs.

If surcharge releases are required simultaneously for both locations, the maximum release will be 125 cfs.

Consumptive Use Data Acquisition

During the period when streamflows are less than the tracking level flow, the design consumptive use will be used to determine whether the flows are approaching the triggering level flow. When flows approach the triggering level flow shown in Table 1, the power company will be requested to provide the current consumptive use and their best estimate whether the consumptive use will change significantly in the next several days. Consumptive use data will be based on meter readings or calculation methods, as mutually agreed upon by the Commission and the power company.

Streamflow Data Acquisition

Observed streamflow data will be obtained from the U.S. Geological Survey (USGS), Pennsylvania District Automatic Data Processing System (ADAPS) computer data base. If the streamflow data is not available in ADAPS, the USGS will be contacted to obtain current readings, either directly from the satellite downlink or from backup sites. If only stage data is available for the previous day, midnight, noon, and midnight stage readings will be used to compute the average daily flow.

Data Analysis Procedures

The Commission staff will keep an operations log for each event. The operations log will include stream flow, reservoir release and consumptive use data, and the releases made during the drought period.

COORDINATION

In order to carry out the operations of the water supply storage, data will be needed from the two power companies, the Corps of Engineers Baltimore District, and USGS. The key contacts are shown in Table 2.

With the Corps of Engineers, Baltimore District

The Commission staff will notify the Corps of Engineers by telephone when the detailed record keeping has commenced or ended. During that period, the Corps will advise the Commission of the level of storage in the Cowanesque Reservoir as of the beginning of the day, and any plans to change releases from Cowanesque Reservoir. The Corps will also advise the Commission staff of any plans to change the releases from any of the reservoirs in the basin that may impact the consumptive use management operations.

The Commission staff will notify the Corps by 3:00 p.m. if there is a need to begin or end a water supply release, or make any change in the magnitude of the release. The Corps will make the necessary changes in gate settings at their convenience, but not later than midnight of the same day.

The amount of the release will be determined from gate settings and rating curves, and verified by using data for the USGS stream gage on the Cowanesque River at Lawrenceville, which is a short distance downstream from the dam.

The Commission staff will furnish written confirmation of any instructions to the Corps the same day. Only changes will be confirmed in this manner.

The Corps of Engineers will furnish to the Commission staff an accounting of the storage used, including backup computations and data, at a mutually agreed upon interval, and in a mutually agreed upon form, during or following any occurrence of releases from the Commission's storage space.

The Corps will notify the Commission staff immediately if the amount of storage remaining is less than or equal to 10 percent of the total Commission Storage Space.

In accordance with the contract, the Corps will have the sole responsibility for determining the level at which the water will be withdrawn, and controlling the quality of releases.

The Corps will furnish records of the amount of water stored in the Project and the amount allocated to the Commission storage space, as provided in the contract.

Table 2. Key Contacts

Agency/Contact	Telephone Number
Baltimore District Corps of Engineers	
Chief of Division of Water Management	(410)962-4893
Susquehanna River Basin Commission	
Chief Engineer	(717)238-0423
Executive Director	(717)238-0422
U.S. Geological Survey Harrisburg Subdistrict	
District Chief	(717)730-6910
Chief of Operations	(717)730-6908
Susquehanna Basin Data Section	(717)730-6980
Pennsylvania Power and Light	
Mr. Jerry Fields	(610)774-7889
General Public Utilities	
Mr. Jan C. Phillips	(610)375-5827
Miscellaneous Data Sources	
Operator Sunbury Fabridam	(717)286-7880

With the Power Companies

The Commission staff will notify the respective power company whenever detailed record keeping is started and ended for that plant.

The Commission staff will notify the respective power company by telephone on the same day, or on the first working day following, if there is a change in the amount of the release being made for that plant.

With U.S. Geological Survey

Since rating curves change over time, and since the current rating curve may not include low flows, there may be a need for additional flow measurements when flows reach the tracking level. Procedures for making those flow measurements are incorporated in a contract between the Commission and USGS

SRBC INTERNAL OPERATIONS

The operational sequence for data processing and decision making is as follows:

1. If streamflows are less than the tracking level flow at either Wilkes-Barre or Harrisburg, retrieve the current streamflow data for that gage. If either the average daily value for the previous day, or the latest instantaneous value of streamflow is less than the tracking level flow shown in Table 1, begin detailed data collection for that plant and initiate coordination with USGS, Corps of Engineers and the respective power company.

2. The following procedure applies when determining whether to make a consumptive use makeup release for SSES. Retrieve streamflow data for the Wilkes-Barre gage, and determine average daily flow for the previous day. Determine whether adjustments for operation of other reservoirs are necessary. If flow is not approaching the triggering level the design, consumptive use (Table 1) may be used. If flow is approaching the triggering level, request consumptive use data from PP&L. Enter average daily flow, latest instantaneous flow, and consumptive use into the operations log.

3. The following procedure applies when determining whether to make a consumptive use makeup release for TMI. Retrieve streamflow data for the Harrisburg gage, and determine average daily flow for the previous day. Contact the operator of the Sunbury Fabridam to determine whether any changes in operations are planned, if necessary. Determine whether adjustments for operations of other reservoirs are necessary. If flow is not approaching the triggering level the design, consumptive use (Table 1) may be used. If flow is approaching the triggering level flow, request consumptive use data from GPU. Enter average daily flow, latest instantaneous flow, and consumptive use into the operations log.

4. If the streamflow is less than or equal to the triggering level flow shown in Table 1 plus the amount of the consumptive use, notify the Corps of Engineers to begin making releases. Notify the appropriate power company that releases have been started. Notification should be by telephone and confirmed by letter. Changes in releases should be handled the same way.

5. If a release has been started, and the flow becomes greater than the triggering level flow, the release should be discontinued. Notify the Corps of Engineers by telephone and confirm with a letter. Notify the respective power company by telephone and confirm with a letter.

6. Detailed record keeping should continue until the flow has become greater than the respective tracking level flow shown in Table 1.

The final decision as to whether to begin, change the amount, or end the release will be made by the Chief Engineer or his designee.

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