GPU Nuclear

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March 21, 1983

Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch No. 5
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Crutchfield:

Subject: Oyster Creek Nuclear Generating Station (OCNGS)
Docket No. 50-219
Environmental Review for Licensing Conversion

In response to your letter of November 5, 1982, GPU Nuclear Corporation reviewed the existing Final Environmental Statement (FES), issued for OCNGS in December 1974, for significant changes to the facility or the environs that would affect the conclusions reached in the FES. That review did not uncover any significant changes that would adversely affect the conclusions originally reached in the FES. However, a number of actions have been undertaken by the licensee that should have positive and beneficial environmental effects.

To facilitate your review of our response we have attached a report which addresses the Summary and Conclusions section of the FES item by item providing comments where appropriate. Specifically, item 7 of the Summary and Conclusions section identifies a number of conditions imposed upon the licensee to protect the environment. Our response provides the status of actions taken to date to comply with those conditions. As noted in the report, of particular interest relating to environmental issues was the issuance of a National Pollutant Discharge Elimination System (NPDES) permit for the facility by the United States Environmental Protection Agency (USEPA) in January 1975 and the filing of a Section 316(a) & (b) Demonstration with the USEPA in May, 1978 to support the continued use of a once through cooling system at the OCNGS. Subsequently, in April 1982 the USEPA delegated the NPDES program including the Section 316 review to the State of New Jersey to be administered by the New Jersey Department of Environmental Protection (NJDEP). Under applicable State regulations, the NJDEP issued to the licensee a New Jersey Pollutant Discharge Elimination System (NJPDES) permit for the OCNGS containing the same effluent limitations and conditions as contained in the federal NPDES permit.

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We trust that this submittal is responsive to your request, however, should you have any questions or require any additional information, please contact Mr. Ronald Lacey, Environmental Licensing Manager at (201) 299-2271 or at our corporate address.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

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SUMMARY AND CONCLUSIONS

1. This action is administrative

   Comment: None

2. The proposed action is the issuance of a full-term operating license to the Jersey Central Power & Light Company for continuing operation of the Oyster Creek Nuclear Generating Station, a nuclear power reactor located 10 miles south of Toms River, NJ in Ocean County. The station has generated power since 1969, under a provisional operating license (Docket No. 50-219).

   The station employs a boiling water reactor nuclear steam supply system to produce up to 1930 megawatts thermal (MWt). A steam turbine-generator uses the heat to provide 620 MW (net) of electric power. The exhaust steam is condensed by once-through cooling using water from Barnegat Bay.

   Comment: None

3. Summary of environmental impact and adverse effects:

   (a) Periodic kills of fish, attracted to the warm discharge canal water, occur during winter shutdowns of the station. The impact of this occurrence on the overall fishery is not significant. (Section 5.5.2)

   Comment: None

   (b) Construction and operation of the intake-discharge canal changed the flows of Oyster Creek and South Branch Forked River from alternating to unidirectional flows, changing the typically estuarine streams to ones of constant bay salinity throughout the canal. Although this has eliminated nursery areas used by many marine organisms this elimination is not a significant impact. (Section 5.5.2)

   Comment: None

   (c) Temperature and salinity changes in the lower portion of Oyster Creek resulting from station construction and operation have caused submarine wooden structures and trashwood in the part of Oyster Creek to harbor a resident breeding marine borer population that spawns at greater frequency than corresponding populations in the bay. This resident breeding population has significant potential for wider spread borer activity than has previously been experienced in the area. (Section 5.5.2)

Response: The licensee's consultant, William F. Clapp Laboratories of Battelle, has conducted an extensive monitoring program on the species composition, distribution, reproduction, and abundance of marine borers in Oyster Creek, Barnegat Bay, and contiguous water since June 1975. Results of this monitoring program are contained in six annual and thirty quarterly reports ("Study of Woodborer Population in Relation to the Oyster Creek Generating Station") submitted to the Nuclear Regulatory Commission from 1975 through 1982.

No evidence supports the contention that the resident marine borer population is causing significant wide spread marine borer activity in Barnegat Bay.

Additional information is supplied in response to 7 (c).

(d) Marinas located in the lower portion of Oyster Creek are sustaining severe physical damage, liability risks, and economic losses from destruction of pilings and other submarine wooden structures due to activity of marine borers that have proliferated as a result of operation of the station. This also represents a threat to valuable recreational resources provided by the marinas. (Section 5.2.3)

Response: Jersey Central Power & Light Company purchased all four (4) marinas located in the lower reaches of Oyster Creek in 1975. During the spring of 1976, untreated (noncreosoted) wood was removed from the marinas by the licensee to reduce the adult teredinid populations and, concomitantly, the number of teredinid larvae that could be released from Oyster Creek to other areas of the Barnegat Bay system.

Additional information is supplied in response to 7 (b).

(e) Erosion of the banks of the canal and transport of suspended solids has caused excessive silting and sedimentation in the lower reaches of the canal. (Section 5.2.2)

Response: In 1975 the licensee completed a stabilization project on the intake and discharge canal banks which has significantly reduced silting and sedimentation in the lower reaches of the canal. Additionally, since 1966 the licensee has conducted periodic hydrographic surveys of the Oyster Creek and Forked River to assess the degree of scouring and siltation which occurs in these water bodies. Such surveys are presently conducted on an annual basis. The results of those surveys are used to determine when maintenance dredging is required. Maintenance dredging was conducted in the Oyster Creek in 1978-79 and is presently scheduled for the Forked River in 1983-84.

Additional information is supplied in response to 7(a).

(f) Impingement on intake screens results in the estimated annual loss of 1 million blue crabs and 24,000 winter flounder, in an area heavily used for sport fishing. The impact of this loss is believed to be significant, and will be the subject of a study program. (Section 5.5.2 and 6.2)

Response: Intensive studies of the species composition and abundance, initial and latent mortality rates, and the effect of impingement losses on the Barnegat Bay populations of impinged organisms have been conducted by the licensee from 1975 through the present. The results of that monitoring program were reported in six annual reports ("Oyster Creek Nuclear Generating Station Ecological Studies Report"), eight progress reports and the 316(a) & (b) Demonstration all of which have been submitted to the USNRC from 1975 through 1982. Although those studies have indicated that the annual loss of blue crabs may exceed the one million predicted in the FES during some years, the predicted annual loss of winter flounder was found to be less than that reported in the FES. In neither case was there any indication that losses resulting from impingement on the traveling screens had any effect on the Barnegat Bay populations of those species. Furthermore, the installation of a modified traveling screen and fish handling system is expected to result in a significant reduction in the number of organisms lost due to impingement. Future studies proposed by the licensee and approved by the USNRC, will be conducted in order to quantify the mitigatory effect of the modified intake screening system.

(g) Annually an estimated 150 tons of zooplankton, 100 million fish larvae, and 150 million fish eggs are lost by passage through the station's condensers. The impact of this loss is believed to be significant, and will be the subject of a study program. (Sections 5.5.2 and 6.2)

Response: Studies of the species composition, abundance, initial, and latent mortality of entrained zooplankton and ichthyoplankton, and the effect of entrainment mortality on the Barnegat Bay populations of those organisms have been conducted by the licensee from 1975 through 1982. The results of those studies were presented in six annual reports ("Oyster Creek Nuclear Generating Station Ecological Studies Report"), eight progress reports and the 316(a) & (b) Demonstration all of which have been submitted to the USNRC from 1975 through 1982. The entrainment studies have shown that although the numbers of planktonic organisms lost during passage through the station's condensers may exceed the predicted number presented in the FES, no significant effect on the Barnegat Bay populations could be demonstrated. Additionally, the licensee has significantly reduced the amount of chlorine used to prevent biofouling in the station's heat exchangers (see response to item 3(1)), thereby reducing the biocidal component of entrainment mortality. Further studies of the initial and latent mortality of entrained organisms have been proposed by the licensee and approved by the USNRC. Those studies will begin subsequent to the 1983 refueling and maintenance outage.

(h) About 80 acres of freshwater marshland and 45 acres of saltwater marshland were lost. The saltmarsh represents a loss of 400 tons/yr of primary productivity to an ecosystem utilized by about 75 species of fish. (Sections 5.5.2 and 8.4)

Comment: None

(i) About 350 acres of pine barrens were disturbed by construction activities and converted to station use. About 290 acres of spoils and cleared areas on the site will remain denuded for many years unless effective restorative action is taken. (Section 4.1)

Response: The licensee has instituted a program to restore those areas disturbed by construction activities which required revegetation. This program is still in progress.

Additional information is supplied in response to 7(1)

(j) About 75 acres of cedar swamp forest, a unique biological habitat, were lost along the transmission line right-of-way. Corridor views of the line are visible from the parkway northbound and three local highways. (Section 5.5.2)

Comment: None

(k) Consumptive use of groundwater and surface water is insignificant. Groundwater quality is not impaired. (Section 3.3, 4.2 and 5.2)

Comment: None

(l) Chemicals discharged with the effluent water are diluted to innocuous levels, with the possible exception of copper and chlorine. (Sections 5.5.2 and 6.2.3.2)

Response: In 1976 the licensee replaced the aluminum-bronze alloy main condenser tubes with titanium tubes thereby removing the source of copper which was a concern in the FES. Any copper residual discharged with the station effluent water should, as with the other chemicals, be diluted to innocuous levels.

Since the issuance of the FES, the USEPA established effluent limitations for the discharge of chlorine from once through cooling systems for steam electric power plants. Those limitations were incorporated into the NPDES permit for OCNGS issued by the USEPA. Additionally, in 1976 the licensee conducted a chlorine demand and minimization study to reduce the station usage of chlorine and subsequent discharge of chlorine residual to the Oyster Creek. Based upon the results of those studies chlorine usage at the station has been significantly reduced from the estimated values presented in the FES, Table 3.9. Information on chlorine usage is presented in the Annual Environmental Operating Reports for the OCNGS submitted to the USNRC in March of 1980, 1981 and 1982.

Additionally, in 1982 the station completed a sewer tie-in with the Lacey Municipal Utilities Authority to handle plant domestic and sanitary wastes and discontinued the operation of and discharge from the OCNGS packaged sewage treatment plant. The on-site sewage treatment plant required chlorination of the discharged effluent, therefore discontinuance of this on-site system enabled the discontinuance of this additional source of chlorine discharge.

NOTE: In 1975, the OCNGS was issued a NPDES permit (No. NJ0005550) by the USEPA, which established effluent limitations for the various water discharges from the station. The permit requires that all discharges be consistent with the terms and conditions of the permit, which became effective on January 31, 1975. In August 1979 the licensee filed a timely reapplication with the USEPA for renewal of the NPDES permit which was scheduled to expire in January 1980. Subsequent to January 1980 the permit was extended by law and remains in full force and affect. Additionally, on March 6, 1982 the State of New Jersey adopted regulations concerning the New Jersey Pollutant Discharge Elimination System and issued to the licensee, effective that same date, NJPDES permit 0005550 for OCNGS. The state NJPDES permit includes the terms and conditions of the federal NPDES permit. On April 13, 1982 the USEPA delegated to NJDEP principal responsibility for administration of the NPDES program and the NJDEP assumed delegation pursuant to the State Water Pollution Control Act.

(m) No significant environmental impacts are anticipated from normal release of radioactive materials. Normal operation with the present gas radwaste system results in an estimated 410 man-rem/yr dose to the 1980 general population within 50 miles. With implementation of the proposed augmented gas radwaste system, this figure is 36 man-rem/yr. Normal background for the same population results in an integrated dose of 563,000 man-rem/yr. (Section 5.4)

Response: On September 9, 1975 the licensee submitted a document entitled "Oyster Creek Radwaste Modification - Conformance to 10 CFR 50, Appendix I" to the USNRC. That document described modifications intended to augment the radwaste systems such that releases of radioactivity are as low as reasonably achievable and within the guidelines of 10 CFR, Appendix I. The licensee submits the Semiannual Effluent Release Report which summarizes all the effluent environmental and meteorological (dispersion) data for each reporting period, including:

1. Liquid and gaseous (for both ground and elevated releases) effluents summarized in USNRC Reg Guide 1.21 format.

2. Solid waste shipment, in USNRC Reg Guide 1.21 format.

3. Meteorological dispersion data in USNRC Reg Guide 1.21 format.

4. Radiological Environmental data in USNRC Reg Guide 4.8 format.

5. All sections are supplemented by explanatory texts that explain methodologies, anomalous environmental data, and related topics.

The Semiannual Effluent Release Reports are submitted by March and September of each year.

(n) The risk associated with accidental radiation exposure is very low.

Comment: None

4. Principal alternatives considered:

- Deferring retirements of fossil-fueled power plants.
- The use of a new oil-fired plant to replace the station.
- Increased use of the station's dilution pump capacity to maintain effluent cooling water below 87°F.
- The use of an ocean intake and discharge system.
- The use of a wet cooling tower with either saltwater or freshwater makeup.
- The use of a cooling lake.
- The use of a spray pond.

Comment: None

5. The following Federal, State and local agencies were asked to comment on the Draft Environmental Statement, issued in July 1973.

Advisory Council on Historic Preservation
Department of Agriculture
Department of the Army, Corps of Engineers
Department of Commerce
Department of Health, Education and Welfare
Department of Housing and Urban Development
Department of the Interior
Department of Transportation
Environmental Protection Agency
Federal Power Commission
State of New Jersey
Ocean County Commissioners

Comments on the Draft Environmental Statement were received from the following Federal and State agencies:

Department of Agriculture
Department of the Army, Corps of Engineers
Department of Commerce
Department of Health, Education and Welfare
Department of the Interior
Department of Transportation
Environmental Protection Agency
Federal Power Commission
State of New Jersey Department of Environmental Protection

Comments were received also from local citizens and from the applicant.

The text of the agencies comments and those of the applicant and local citizens are appended to this statement.

Comment: None

6. This Final Environmental Statement was made available to the public, to the Council on Environmental Quality, and to the other specified agencies in December 1974.

Comment: None

7. On the basis of the analysis and evaluation set forth in this statement, after weighing the environmental, economic, technical, and other benefits of the station against environmental and other costs, and considering available alternatives, it is concluded that the action called for under NEPA and 10 CFR 51 is the conversion of Provisional Operating License DRP-16 to a full-term operating license subject to the following conditions for protection of the environment:

(a) The applicant will proceed toward completion of the program already underway of canal bank stabilization and related improvements.

Response: Since 1974 the licensee has undertaken extensive canal bank stabilization efforts which have reduced siltation in Oyster Creek. In 1975 the initial program was completed which included lining the intake and discharge canal banks west of U.S. Route 9 and portions of the canal banks east of U.S. Route 9 with riprap, placing smaller stone above the riprap and spraying the stone with AC-20 oil to increase stabilization. The stabilized areas are periodically surveyed and repairs effectuated as needed.

(b) The applicant will within nine months after issuance of this statement or sooner if practicable, (i) clear the discharge canal of trashwood, pilings, bulkheads, and other wood that now harbors a resident breeding population of marine borers, and replace the pilings and bulkheads with structural materials that are not supportive of marine borers or (ii) implement another course of action that will, in the staff's judgment, reasonably be expected to minimize the impact occurring from marine borers in Oyster Creek.

Response: In April and May 1975, just prior to the initiation of William F. Clapp Laboratories woodborer monitoring program, Jersey Central Power & Light Company removed much of the trashwood from the discharge canal that harbored a resident breeding population of marine borers. The licensee also purchased four marinas in Oyster Creek in 1975, and during the spring of 1976, removed untreated wood from the four marinas as noted in 3 (d) above.

The licensee is funding research to determine the feasibility of using chemical attractants to minimize the settling of marine borer larvae on valuable wooden substrate; this work should be completed in 1984-1985.

(c) The applicant will, by December 1975, provide evidence to demonstrate whether station operation is contributing to the spread of marine borer activity in other areas of the Barnegat Bay system.

Response: William F. Clapp Laboratories has conducted an extensive monitoring program on the species composition, distribution, reproduction, and abundance of marine borers in Oyster Creek, Barnegat Bay, and contiguous waters since June 1975. Results of this monitoring program are contained in six annual and thirty quarterly reports ("Study of Woodborer Population in Relation to the Oyster Creek Generating Station") submitted to the Nuclear Regulatory Commission from 1975 through 1982. The following major conclusions on the resident marine borers in Oyster Creek are drawn from these reports:

(1) Operation of the Oyster Creek Nuclear Generating Station, which has modified the temperature and salinity regimes in Oyster Creek, has not enhanced the distribution and abundance of the woodboring molluscs, Bankia gouldi and Teredo navalis. Spawning of these two species in Oyster Creek does not appear to occur at greater frequency than corresponding populations in the bay; consequently, they do not represent a potential source for the spread of borer activity to other areas of the Barnegat Bay system.

(2) The distribution of Teredo bartschi in Barnegat Bay is distinctive, with the species limited primarily to sites within Oyster Creek where water temperatures are elevated an average of 3^{o} - $6^{o}C$ above ambient when the station is in operation. The species has also been recorded at sites in Forked River which receive recirculated warm-water effluent. Because T. bartschi has never been found at control sites beyond the potential influence of thermal discharges from the station and appears to be confined to areas affected by the thermal discharges, it does not have significant potential for spread of borer activity to other regions of Barnegat Bay.

(d) The applicant will implement by June 1975 a program, approved by the Regulatory Staff, of monitoring and data evaluation of sufficient scope and definition to permit an assessment of the effects of plant operation on the ecosystem of Barnegat Bay.

Response: Between September 1975 and August 1976 the licensee conducted studies, approved by the USNRC, to determine and assess the biological impact of the operation of the OCNGS on the ecosystem of Barnegat Bay. Final reports on those studies were submitted to the USNRC as follows: Volume One (water quality and fin- and shellfish populations) on March 23, 1977; Volume Two (zoo- and ichthyoplankton) on May 31, 1977. Ecological studies are continuing and Annual Ecological Studies Reports are submitted to the USNRC each year.

From 1975 through 1982 the various studies have resulted in the submittal of 38 progress reports and 12 annual reports ("Study of Woodborer Population in Relation to the Oyster Creek Generating Station" and "Oyster Creek Nuclear Generating Station Ecological Studies Report") assessing the effects of plant operation on the ecosystem of Barnegat Bay.

Additionally, with respect to the continued use of a once through cooling system for the OCNGS, the licensee requested from the USEPA the opportunity to present, pursuant to the Federal Water Pollution Control Act Ammendments of 1972, a Section 316(a)--thermal and Section 316(b)-- intake structure Demonstration. By letter dated January 12, 1977 the USEPA approved the proposed Section 316(a) Plan of Study submitted on October 14, 1975 (subject to incorporation of revisions submitted on May 28, 1976 and July 7, 1976) and by letter dated January 13, 1977 the USEPA approved the proposed Section 316(b) Plan of Study submitted on May 2, 1975 (subject to incorporation of revisions submitted on March 10, 1976 and July 7, 1976). Development of those final approved Plans of Study included input and recommendations from the USNRC and the NJDEP.

(e) The applicant will submit by December 1975 for review by the Commission a detailed evaluation of alternative cooling systems that will lead to a selection of the most favorable system from an economic and environmental standpoint, that will not use Barnegat Bay water for once-through cooling, and that will permit implementation of a closed-cycle or ocean intake-discharge cooling system.

Response: On August 15, 1975 the USNRC modified certain conditions originally imposed in the FES revising the required submission date for the Alternate Cooling Water Study from December 1975 to November 1977. By letter dated November 30, 1977 the licensee forwarded to the USNRC a report on the subject st dy.

The results indicated that the total environmental benefit of any of the alternatives are greatly overshadowed by the total environmental, capital, and operating cost associated with that alternative.

Additionally, the licensee, by letter dated May 31, 1978 submitted its Section 316 Demonstration (refer to response to items 7(d) and 7(f) for additional information) to the USEPA, the NJDEP, and by letter dated June 27, 1978 to the USNRC.

(f) If the special program of monitoring and data evaluation referred to in (d) above shows to the satisfaction of the staff that continued operation in the open-cycle mode results in no unacceptable impact, the plant will continue to operate with a monitoring program sufficient to assure that the effects are kept below a level that would be of serious concern over the long term.

Response: On May 31, 1978 the licensee submitted to the USEPA (with copies to the NJDEP and USNRC) the Section 316(a) and (b) Demonstration in fulfillment of the Plans of Study previously approved by the USEPA Regional Administrator (refer to response 7 (d)). That Demonstration addresses the effects of the discharges of the OCNGS on the ecosystem of Barnegat Bay and is the basis for supporting the continued operation of a once through cooling system at the OCNGS.

Since submission of that Demonstration to the USEPA, the Agency has delegated the NPDES permit program, including the review of the OCNGS Section 316 Demonstration, to the NJDEP. To date the NJDEP has not completed its review of the Demonstration.

(g) If the special program of monitoring and data evaluation referred to in (d) above does not show to the Commission's satisfaction that continued operation in open-cycle mode is likely to result in an acceptable level of environmental impact, the applicant will proceed to backfit the alternative cooling system chosen in (e).

Response: Refer to response for items 7 (e) and 7 (f).

(h) When the temperature of the water in the discharge canal exceeds 87°F, measured at the U.S. Route 9 bridge over the discharge canal, two of the station's three dilution pumps will be utilized.

Response: The licensee has installed a temperature monitoring system on a railroad bridge immediately upstream of the U.S. Route 9 bridge. This system continuously monitors and records the temperature in the discharge canal at that location at a point four feet below the surface at mean tide. The licensee has also implemented a dilution pump operation program and procedure to assure operation of required dilution pumps when the discharge canal temperature at the U.S. Route 9 bridge exceeds 87°F during periods of station operation.

Required operation of dilution pumps under these circumstances was made a condition of the station's NPDES permit (Condition 9 (b) 2) issued by the USEPA which became effective January 31, 1975 and also made a condition of the station's Environmental Technical Specifications (Specification 2.1.4.1) issued by the USNRC as Amendment No. 37 to the Technical Specifications on June 6, 1979.

(i) When the ambient temperature of the water is less than 60°F, as measured at the U.S. Route 9 bridge crossing the intake canal, two dilution pumps will be utilized.

Response: On June 6, 1979 the USNRC issued to the licensee Amendment No. 37 to the station's Technical Specification establishing the Environmental Technical Specifications. Specification 2.1.4.2 of those ETS requires the operation of two dilution pumps when the ambient water temperature is less than 60°F. Ambient water temperature is defined by the ETS as the temperature of the intake canal water as measured at the intake structure. Such a requirement was also made a condition (Condition 9(b) 2) of the station's NPDES permit issued by the USEPA which became effective on January 31, 1975.

The licensee has installed a temperature monitoring system at the station's intake structure which continuously monitors and records the ambient water temperature at this location. The licensee has also implemented a dilution pump operation program and procedure to assure operation of required dilution pumps when the ambient water temperature is less than 60°F and the station is operating.

(j) The applicant will install appropriate controls, and employ operating procedures and measures that will mitigate the extent of fish mortalities.

Response: Although the licensee's environmental studies have indicated no significant impacts on the Barnegat Bay system, the loss of fish and shellfish resulting from the operation of the traveling screens at the plant intake, and from cold shock during winter outage was sufficient to warrant the implementation of mitigatory measures. In order to minimize the impact of winter outages, the operation of the station has been modified such that two dilution pumps are operated during the fall fish migration period (see response to item 7(i)) in order to reduce the attraction of migratory fishes to the discharge canal. In addition, the pumping of water into the discharge canal is terminated as soon as possible after a winter shutdown in order to prolong the cooldown of the discharge canal temperature and reduce the possibility of cold shock mortality. Major modifications of the intake traveling screen-fish handling system were initiated in 1977 to reduce the loss of fish and shellfish associated with the station's cooling water intake. Those modifications include: 1) the re-routing of the screenwash flume so that organisms washed off the traveling screens are returned to ambient temperature water in the dilution pump discharge, rather than heated condenser discharge water; 2) the traveling screens and screenwash pumps are in the process of being modified to a Ristroph type fish handling system which should significantly reduce impingement mortalities.

(k) The applicant will employ operating procedures and measures that will minimize mortality of entrained organisms.

Response: The licensee has significantly reduced the amount of chlorine used to prevent biofouling in the station's heat exchangers thereby reducing the biocidal component of entrainment mortality (see response to items 3(g) and 3 (l).

(l) The applicant will take action to revegetate the areas denuded by plant construction.

Response: Considerable effort has been expended by the licensee to revegetate those areas of the plant site denuded by plant construction or used for placement of dredge spoils during construction. The area of the plant site located west of U.S. Route 9 and within the intake and discharge canals is slightly over 100 acres. Approximately 46% of this area is used for permanent structures (buildings, parking lots, roads, and material storage areas), and ,therefore, does not require revegetation. Approximately 42% was left undisturbed or has since been revegetated, and approximately 12% was or has since been disturbed and requires revegetation. A program to have this area revegetated is in progress.

Certain areas adjacent to the OCNGS plant site have also been designated for revegetation efforts (These areas are actually associated with the Forked River Site, Docket No. 50-363). By letters dated September 17, 1981, July 28, 1982 and January 20, 1983 GPUN provided the USNRC updates of the status of these revegetation projects.

(m) If evidence of other harmful effects or irreversible damage due to plant operation is detected, the applicant will provide both an analysis of the problem and a proposed course of action to alleviate the problem.

Response: Because of the various environmental monitoring programs and regulatory requirements, the licensee collects, analyzes and evaluates environmental data to determine the impact, if any, plant operation has had on the surrounding environment. Implementation of any corrective action required to mitigate problems identified would be predicated upon the analysis and evaluation of data collected.