MEMORANDUM OF AGREEMENT
BETWEEN
THE NEW JERSEY PINELANDS COMMISSION AND THE NEW JERSEY BOARD OF PUBLIC UTILITIES

I. PURPOSE

This Memorandum of Agreement ("MOA") is entered into between the New Jersey Pinelands Commission (the "Commission") and the New Jersey Board of Public Utilities (the "BPU"). The Commission is an independent political subdivision of the State of New Jersey created pursuant to Section 4 of the Pinelands Protection Act, N.J.S.A. 13:18A-1, et seq., and charged with the implementation of the Act and the Pinelands "Comprehensive Management Plan" (the "CMP"), N.J.A.C. 7:50. The Commission is also the planning entity authorized under Section 502 of the National Parks and Recreation Act of 1978. The Commission is authorized by the Pinelands Protection Act at N.J.S.A. 13:18A-6.g. to enter into any and all agreements or contract, execute any and all instruments, and do and perform any and all things necessary, convenient or desirable for the purposes of the Pinelands Commission or to carry out any power expressly given in the Act.

The BPU is an independent political subdivision of the State of New Jersey charged with general supervision of and jurisdiction over New Jersey public utilities including the functions, powers and duties assigned to it pursuant to N.J.S.A. 48:2-1 et seq. and 52:18A-2.1 and is allocated in, but not part of, the Department of Treasury pursuant to Reorganization Plan No. 001-1994.

In order to comply with air quality standards, the New Jersey Department of Environmental Protection ("NJDEP") ordered the B.L. England electrical generation plant at Beesleys Point, Upper Township, Cape May County ("BLE plant") either to cease operations or to repower its existing coal-and oil-fired boilers with natural gas combustion turbine technology to significantly reduce air pollution from the BLE Plant (May 18, 2012 Amended Administrative Consent Order between NJDEP and RC Cape May Holdings, LLC)(2012 AACO). The BLE plant is located within the boundaries of the Pinelands National Reserve, but outside of the State-designated Pinelands Area. The BLE plant is owned and operated by RC Cape May Holdings, LLC and is located within the service area granted to South Jersey Gas (SJG) by the BPU.

To provide the natural gas required to repower the BLE Plant, SJG determined that it would need to construct a new natural gas pipeline to the Plant. Additionally, the need for this new natural gas pipeline provided SJG with the opportunity to address the vulnerability of the entire southernmost portion of its service territory, from the Cape May Gate Station south, which is currently only served by a single-feed supply. SJG, subsequently, submitted a petition to the BPU for its approval to construct an approximately 22-mile, 24-inch natural gas transmission pipeline with a maximum allowable operating pressure of 700 psig. Additionally, on November 6, 2013, SJG also submitted a petition to the BPU seeking a determination and Order pursuant to N.J.S.A. 40:55D-19 that any zoning, site plan review or other municipal land use ordinances or regulations promulgated by the affected municipalities and counties shall not apply to the siting or construction and operation of the proposed gas pipeline.

The proposed gas pipeline would traverse through portions of both the State-designated

Pinelands Area (the "Pinelands Area") and the Pinelands National Reserve (the "PNR") (referred to together herein as the "Pinelands"). With regard to the portion in the Pinelands Area, SJG proposes to construct approximately 15-miles of pipeline beneath existing paved portions and/or disturbed shoulders of Union Road (CR 671), NJ Route 49, Cedar Avenue, Mill Road (CR 557), NJ Route 50, Mt. Pleasant-Tuckahoe Road (CR 664) and New York Avenue. Approximately 10.2 miles of the proposed pipeline would be located within a Forest Area, 2 miles within a Rural Development Area and 2.8 miles in a Pinelands Village. Additionally, approximately 7 miles of the pipeline would traverse through the federally-designated PNR to the BLE plant.

In addition to providing gas to the BLE plant, the portion of the proposed natural gas transmission line to be located within a Forest Area significantly enhances the reliability of SJG's natural gas service system in the southern and eastern portions of its service area (Cape May and Atlantic Counties, respectively.) Currently, SJG services its customers located in Cape May County via an existing 16-inch feeder line. Moreover, an existing 20-inch gas supply pipeline is the major feeder line to the eastern and southern parts of SJG's service territory. Given the current lack of an alternate supply line, a failure in either of these existing pipelines, especially during the cold weather months, could subject up to 140,000 of SJG's existing customers to long-term gas outages, thereby placing the safety and welfare of these customers at risk. The proposed gas pipeline is expected to greatly enhance the reliability of the eastern and southern portions of SJG's service territory by providing an alternative route for gas to be supplied to Atlantic and Cape May Counties. The proposed pipeline would also improve gas supply availability and pressures to feed these areas on peak and near-peak days, thereby potentially reducing the need for additional pipe installations in the future, many of which would likely be located within the Pinelands Area.

The Pinelands CMP defines a natural gas pipeline as "public service infrastructure." N.J.A.C. 7:50-2.11. Although the development of public service infrastructure is a permitted use in a Rural Development Area and a Pinelands Village (N.J.A.C. 7:50-5.26 & 5.27), it is only permitted in a Forest Area if it is intended to primarily serve only the needs of the Pinelands. See N.J.A.C. 7:50-5.23(b)12. Given that the proposed pipeline is intended to serve customers located both inside and outside of the Pinelands, it is evident that the project does not primarily serve only the needs of the Pinelands. As a result, the proposed pipeline is not fully consistent with the permitted use standards for a Forest Area. This MOA is intended to authorize the construction of the portions of the proposed gas pipeline within a Forest Area in accordance with N.J.A.C. 7:50-4.52(c)2. No other deviations of the CMP standards are required, because the proposed gas line is consistent with the development standards set forth in Subchapter 6 of the CMP. With regard to the remaining 7-mile segment of the pipeline located outside of the state-designated Pinelands Area, within the federally-designated PNR, this segment is located outside of the Commission's area of jurisdiction and, therefore, is not covered by this MOA.

II. BACKGROUND

A. The Pinelands Protection Act

The Pinelands Protection Act, N.J.S.A. was enacted in 1979 in response to the National Parks and Recreation Act of 1978's charge for creation of a planning entity and creation of a comprehensive management plant for the Pinelands. 16 U.S.C. §471i(d). In passing the

Pinelands Protection Act, the Legislature noted its concern over the continued viability of the Pinelands Area because of pressures for residential commercial and industrial development and the current pace of random and uncoordinated development and construction in the Pinelands. N.J.S.A. 13:18A-2. Thus, the Legislature found that was necessary to implement the Federal Act and ensure the realization of pinelands protection through the creation of a regional planning and management commission empowered to prepare and oversee the implementation of a comprehensive management plan for the Pinelands Area. Id. The goals for the Pinelands CMP are set forth at N.J.S.A. 13:18A-9. Although the Act establishes the goal of protecting, preserving and enhancing the significant resources throughout the Pinelands Area, the Act provides for a balanced approach between preservation and development. Specifically, in the protection area, the Act directs the Commission, in addition to preserving and maintaining the essential character of the existing pinelands environment to also "encourage appropriate patterns of compatible residential, commercial and industrial development … in order to accommodate regional growth influences in an orderly way." Id.

B. The Pinelands CMP

In order to effectuate the goals of the Pinelands Protection Act, i.e. ensure the long term integrity of the Pinelands environment, while accommodating regional growth influences, the CMP sets forth minimum standards governing the character, location and magnitude of development and use in the Pinelands. N.J.A.C. 7:50-5.21. Likewise, the CMP establishes minimum standards governing development and land use in the Pinelands. N.J.A.C. 7:50, Subchapter 6. For example, these site specific development standards include wetlands and wetland buffer standards (N.J.A.C. 7:50-6.1-6.14), threatened and endangered plant and wildlife standards (N.J.A.C. 7:50-6.27 & 6.33), historic, archaeological, and cultural preservation standards (N.J.A.C. 7:50-6.151-6.157), etc. All of the standards of Subchapter 6 are intended to be implemented by the administration of municipal and county master plans and land use ordinances that are reviewed and certified by the Pinelands Commission in accordance with N.J.A.C. 7:50-4. Id. These standards are minimum standards and the Pinelands CMP permits a municipality, county, State or Federal agency to adopt more restrictive regulations, provided that such regulations are compatible with the goals and objectives of the Plan. Id. Similarly, N.J.A.C. 7:50-3.1(d) provides the flexibility with regard to preparation of local master plans and ordinances.

Additionally, the Pinelands CMP provides three mechanisms by which development that is not fully consistent with the standards of Subchapters 5 and 6 may proceed. N.J.A.C 7:50-4.63, 4.64 and 4.52(c)2. Two of these mechanisms involve an outright waiver of the rules. N.J.A.C. 7:50-4.63 & .64. These waivers are intended to provide relief where strict compliance with the terms of the plan creates an extraordinary hardship or where the waiver is necessary to serve a compelling public need. Id. In contrast, the CMP provision that authorizes the Commission to enter into Memoranda of Agreement with governmental entities to authorize development activities that are not fully consistent with strict application of CMP standards does not authorize a "waiver" of those standards. Rather, as evidenced by the requirement that the development proposal contain measures that, at a minimum, afford an equivalent level of protection of the resources of the Pinelands than would be provided through strict application of the standards of the CMP, this MOA provision authorizes the Commission to approve development where compliance with the CMP's objectives and goals is obtained through alternative measures. Consequently, approval of a deviation MOA by the Commission is an acknowledgment that the

proposed development, with its accompanying measures, is consistent with the CMP.

C. The Proposed Route

As discussed above, SJG is proposing to construct an approximately 22-mile, 24-inch natural gas pipeline. The portion of the pipeline within the Pinelands Area will originate in Maurice River, Cumberland County, just outside Millville, at the intersection of Union Road (CR 671) and NJ Route 49 at the location of an existing pipeline. It will then travel along Route 49 through Estell Manor, Atlantic County, into Upper Township, Cape May County. The proposed route avoids the Village of Tuckahoe, by following Cedar Avenue to the intersection of Mill Road (CR 557), turning east to the intersection of Mt. Pleasant-Tuckahoe Road (CR 664) and then travelling south to the intersection with Marshall Avenue, where an interconnection facility is proposed. The proposed route then follows NJ Route 50 to the intersection with Tuckahoe Road (CR662), where it continues east out of the Pinelands Area into the PNR.

Thus, an approximately 15-mile segment of the pipeline will be constructed in the Pinelands Area, 10.2 miles of which will traverse through a Forest Area, 2 miles will traverse through a Rural Development Area and the remaining 2.8 miles will traverse through a Pinelands Village. The totality of this 15-mile segment, however, will be constructed within existing road rights-of-way ("ROW") beneath the existing paved portions and/or disturbed (grassed) shoulders of the above delineated roads. Specifically, approximately 15% of the proposed pipeline will be constructed within the existing paved travel lanes, 19% within the paved road shoulders, 55% within existing grass shoulders and 11% using Horizontal Directional Drilling (HDD), which will be conducted within the paved roadway or road shoulders. Given that the totality of the proposed pipeline project will be constructed in existing paved and disturbed road rights-of-way there will be no new fragmentation of the Forest area.

D. Alternate Routes Considered

SJG conducted an analysis to identify viable routes to provide natural gas to the BLE plant while, at the same time, providing redundancy for the southern and eastern portions of its service area. Identification of alternative routes was limited given the location of existing natural gas transmission infrastructure in relation to SJG's service territory. There are no transmission lines located to the south or east with the necessary volume and pressure to supply the repowering of the BLE. As a result, SJG was limited to transmission infrastructure located to the north and west. As part of its route analysis, SJG ultimately identified three routes that warranted more intensive examination. These routes included the proposed route, and two alternate routes discussed below.

1. Route B – This route would have approached the BLE plant from the west and north. This proposed route was approximately 10.5 miles in length and located entirely within the PNR and outside of the Pinelands Area. However, this route would not have addressed the need for a redundant supply line for the southernmost portion of SJG's territory. This line would have been constructed off of the existing 20 inch supply line that currently serves SJG's customers located in Cape May and Atlantic Counties. Additionally, there were potentially significant environmental impacts associated with this line. Specifically, this route would have impacted approximately 5.2 acres of estuarine wetlands for pipe staging and would also have

resulted in significant impacts to wetland buffers. This route also required an approximately 7,000 linear foot HDD crossing of the Great Egg Harbor. Such a crossing lies at the technological limits of HDD. Although possible, a HDD under the Great Egg Harbor estuary, because of the complexity of the drill, involving multiple curves, and the drill's length, had a concomitant risk of a drilling fluid breakout, which could impact benthic invertebrates, aquatic plants and fish. Lastly, this route also would have significantly impacted the community because of major disruption to homes along School House Road in Egg Harbor Township and the need to temporarily relocate a dozen or more residences at Jefferson Landing on the Great Egg Harbor Bay. In light of the above, SJG rejected this route.

2. Route C – This route would have approached the BLE plant from the west and south through an approximately 29 mile long abandoned railroad right of way that had re-vegetated and is now heavily forested. Use of this proposed route would have required extensive clearing of Pinelands coniferous forest that is habitat for the following threatened and endangered species: Northern Pine Snake, Barred Owl, Cope's Grey tree frog, Black crowned night heron, Swamp pink and Frosted elfin. Additionally, there would also have been almost 2 acres of wetlands directly impacted and the most encroachment into wetland buffers of any of the alternatives evaluated. This route was rejected by SJG for these reasons.

E. Review of Potential Impacts of the Proposed Pipeline Project on the Resources of the Pinelands

The proposed route is also not expected to have any impacts on the environmental resources of the Pinelands or, given that the totality of the proposed pipeline will be constructed in existing paved and disturbed road rights-of-way, give rise to new fragmentation of the Forest area. The proposed route was reviewed by the Commission's regulatory review staff to determine its compliance with the development standards of the Pinelands CMP. As a result of that review, Commission staff determined that the proposed gas pipeline was consistent with all of applicable development standards (Subchapter 6) of the Pinelands CMP.

1. Threatened or Endangered Plants or Animals (N.J.A.C. 7 ;50-6.27 & 6.33): With regard to threatened or endangered plants or animals, SJG submitted, at the Commission staff's direction, three Threatened and Endangered Species Habitat Suitability Assessment and Survey Reports prepared by Trident Environmental Consultants for the project area for the proposed gas pipeline route, the site of the proposed interconnection station and the site of all proposed storage/staging areas, respectively. Based on its review of these reports, staff concluded that the construction of the proposed gas pipeline would not impact threatened or endangered plants or animal species or habitat critical for the survival of a local population of threatened or endangered animal species.

2. Historic, Archaeological and Cultural Resources (N.J.A.C. 7:50-6.151-157): SJG also retained Richard Grubb and Associates, Inc. to conduct a Phase IA Archeological Survey and Historic Architectural Screening and Phase IB-II Cultural Resource Survey for the proposed pipeline. As discussed in these reports, the survey encompassed the project corridor, HDD and jack & bore work areas and proposed storage/staging areas. Stage IB archeological field work was conducted along the roadside adjacent to the linear portions of the project and within seven storage areas with high sensitivity for archaeological resources as assessed in the

Stage IA archaeological survey. Approximately 27,000 linear feet of the proposed pipeline corridor was tested. Additionally, approximately 9.4 acres, high sensitivity portions of proposed staging areas 5, 6, 7, 10, 11 and 14 and the site of the proposed interconnection station, were included within the stage IB testing. Ultimately, two storage areas (areas 7 and 10) were redesigned to avoid areas where archeological resources were found on these sites. With regard to the other site where archeological resources were found, the Burley site, only a portion of which is located in the project area, is bisected by Route 49 and extends further to the southwest of the NJ Route 49 right-of-way, the survey supported the determination that the portion of this site in the project area was not considered eligible for Pinelands designation. Moreover, given that construction work in this area is restricted to the placement of the natural gas pipeline within the shoulder of NJ Route 49, the survey results found that significant archaeological resources would not be impacted by the proposed pipeline construction. Commission staff reviewed the survey reports and concurred with the findings.

3. Wetlands and Wetland Buffers (N.J.A.C. 7:50-6.1-6.14): Wetlands were flagged in the field along the entire route of the proposed pipeline. The flagged limits of wetlands were confirmed in the field by Commission staff. Additionally, the proposed project was designed to avoid potential impacts to wetlands by utilizing existing road rights of way and trenchless technology (jack and bore and HDD) to cross under wetlands and waterways. As a result, there will be no impacts to wetlands as a result of construction of the proposed pipeline. Moreover, with regard to wetland buffers, because the proposed pipeline will be constructed in paved and previously disturbed road rights of way, any impacts would involve, at most, temporary disturbances given such disturbances would be restored to their prior condition.

i. HDD – HDD is a proven technology that has been in use for over 50 years. It is a technology that is used worldwide to install gas mains, water mains, electric lines, etc. It is also the industry standard for installation of such lines in environmentally sensitive areas. HDD permits the pipeline to be drilled underground without surface disturbances of wetlands, buffers or open water bodies. The NJDEP's Freshwater Wetland Protection Act rules, N.J.A.C. 7:7A, contain a General Permit (GP2) for the installation of underground utility lines. Specifically, this General Permit provides:

> "if a utility line is jacked or directionally drilled underground, so that there is no surface disturbance of any freshwater wetlands, transition areas, or State open waters and there is no draining or dewatering of freshwater wetlands, no Department approval is required under this Chapter. Jacking or directional drilling is regulated under this chapter if any disturbance occurs to the ground surface in the freshwater wetlands, transition area, or State open water; for example, if the drilling is conducted from a pit located in freshwater wetland or transition area."

The proposed pipeline project includes four HDDs. These HDDs will occur at Cumberland Pond on Route 49, Tuckahoe River at First Avenue on Route 49 and at the head of River Road on Route 40, and on Mill Creek on Route 49. All of these HDDs, with the exception of the Cumberland Pond drill will occur under concrete structures, i.e. bridge headwalls. The Cumberland Pond drill will occur under the bridge and dam pile. However, all of these drills will be at a depth of at least 37 feet from the bottom of the

water body to the pipe. Additionally, the percentage of the drill occurring under water is a fraction of the total length of the drill (1.03%, 2.18%, 4.37% and 1.88%, respectively).

4. Stormwater Management(N.J.A.C. 7:50-6.84): Stormwater management plans and calculations were submitted to the staff for its review. Based on such review, staff determined that the proposed gas pipeline project was consistent with the stormwater standards of the Pinelands CMP.

F. Need for the Proposed Natural Gas Pipeline

Following the scheduled retirement of the Oyster Creek Nuclear Generating Station ("OCNGS") in Forked River, New Jersey in 2019, the BL England Facility would be the only remaining major electric generation plant along the New Jersey coast. However, absent construction of the proposed natural gas pipeline to repower the BLE plant, the NJDEP 2012 AACO would result in the plant shutting down. As discussed below, shut down of the BLE plant is likely to require the construction of new electrical transmission lines in the Pinelands Area to account for lost generation. Moreover, the southern and eastern portions of SJG's service territory are served by a single-feeder line. As a result, this line is vulnerable to a single contingency failure. The proposed pipeline will provide much needed redundancy to this portion of SJG's service territory.

1. BL England Plant

The BLE plant was one of New Jersey's first power plants. It was built on the Great Egg Harbor Bay in 1963. The plant is comprised of three energy generating units, two of which are coal-fired units and one of which is an oil fired unit. In January 2006, the NJDEP and Conectiv (AC Electric, Conectiv Atlantic Generation, LLC, Conectiv and Pepco Holdings), prior owners of the BLE plant, entered into an Administrative Consent Order (ACO) to resolve allegations by NJDEP that AC Electric had violated certain environmental statutes, including those regulating air emissions. Following the purchase of BLE plant by RC Cape May Holdings, LLC, NJDEP entered into an Amended Administrative Consent Order (AACO), on October 31, 2006, pursuant to which RC Cape May agreed to either repower the BLE plant to meet the air quality performance standards. On January 13, 2010, the parties agreed to a revised timeline by which RC Cape May would either repower the BLE plant or meet the performance standards. Subsequently, RC Cape May decided to repower the plant and requested a revised timeline from DEP. This resulted in execution of the 2012 AACO. Prior to the January 2006 ACO, BLE's air pollution control permits allowed continuous operation of the plant, Units 1, 2 and 3, up to 8,760 hours per year. As a result of the January 2006 ACO and subsequent amendments: 1) Unit 1 was allowed to operate only for only peak reliability periods (between June 1 through September 30 for the years 2008 through 2012); 2) Unit 2 was allowed to operate no more than 4,300 hours per year (the 12-month period from May 1 to April 30); and 3) Unit 3 was permitted to continue to operate as a generating unit.

i. The 2012 AACO

Pursuant to the terms of the 2012 AACO, operation of Unit 1 was required to cease as of September 20, 2013, unless the BLE plant met certain performance standards defined in the

AACO. Irrespective of this, the AACO requires the complete shutdown of Unit 1 by May 1, 2014. The AACO permits limited use of Unit 2 through May 15, 2015. However, use of Unit 2 is limited to no more than 4,300 hours per year during the 12 month period from May 1st through April 30th. In addition, NOx emission reductions are mandated for Units 1 and 2. The 2012 AACO further orders the repowering of the BLE plant by May 1, 2016, with notification of the NJDEP by December 31, 2013 as to whether the BLE plant will be repowered. If the BLE plant will not be repowered, then Unit 2 must be shut down by May 1, 2014. If repowering of the BLE plant will occur, Unit 2 is permitted to continue to operate until at May 1, 2015 at which time operation of Unit 2 must cease until the repowering is completed. Finally, the 2012 AACO provides that if after December 31, 2013, RC Cape May determines that it is unable to complete the repowering of the BLE plant, it must notify NJDEP of that determination by May 1, 2014, and immediately shut down Unit 2. The AACO permits continued operation of Unit 3, the oil-fired boiler, regardless.

ii. Repowering of the BLE Plant

RC Cape May Holding, LLC proposes to permanently shut down coal-fired boiler Unit 1. In addition, RC Cape May intends to replace coal-fired boiler Unit 2 with a natural gas-fired Combined Cycle Combustion Turbine system. RC Cape May also intends to convert the residual oil boiler into a natural gas boiler. An air quality permit was issued by the NJDEP for this repowering project on April 30, 2013.

iii. Need for the BLE Plant

The State's 2011 Energy Master Plan (*"EMP")* expresses a firm goal of promoting a diverse portfolio of new, clean, cost-effective in-state electric generation to ensure a reliable supply of energy and capacity at reasonable rates while advocating for policies that help control electricity costs, maintain system reliability, and adhere to environmental objectives. The proposed natural gas pipeline and the repowering of the BLE plant directly serve these goals. Additionally, the *EMP* specifically acknowledges the challenge of finding base load generation to replace OCNGS and targets the expansion of natural gas-fired power generation as a less carbon-intensive fossil fuel that also comes with significant air quality benefits, including reduced emissions of sulfur dioxide, fine particulates, volatile organic compounds, and greenhouse gases. (See EMP at pgs. 3, 6, 35, 70, 76 & 84). To further this goal, the *EMP* directs State agencies to accelerate the decommissioning of older, less efficient coal- and oil-fired electrical generation plants and to rely more upon natural gas for electricity generation, and to promote the expansion of pipelines to supply natural gas. As discussed below, the repowered BLE plant is expected to supply the majority of its electricity to the Pinelands Area and to provide reliable power generation. The continued operation of the BLE plant is critical to ensuring adequate electric supply to Pinelands Region, New Jersey coastal areas and helps the State directly to achieve the goals of the *EMP*.

Additionally, New Jersey is located within the heart of the Mid-Atlantic Critical Congestion Area, one of only two such areas in the United States designated by the U.S. Department of Energy (DOE) due to severely inadequate transmission capacity that threatens the reliability of the electrical grid. In 2006 and again in 2009, the DOE, as directed by the Energy Policy Act of 2005, determined that it is critically important to remedy existing congestion problems in New Jersey because the current and projected effects of the congestion are severe. New Jersey—a state located at the extreme eastern edge of the PJM territory—suffers from limited imports of

electricity from the West and South, causing most of the state to face electricity congestion. The state's transmission constraints are made worse by the retirement of several old, inefficient power plants, which has reduced local generation and degraded reliability. *See* U.S. Department of Energy, *National Electric Transmission Congestion Study* (2006 & 2009). The repowering of the BLE plant must be considered against this backdrop.

1) POWERGEM Reports

SJG provided the Commission staff with two reports prepared by POWERGEM, LLC (Power Grid Engineering &Markets) that discussed the anticipated benefit of the repowering of the BLE plant to the Pinelands Area. The initial analysis, which was prepared on May 29, 2012, utilized the PJM 2016 RTEP summer peak flow load model to determine the total load required for the Pinelands Area. This was determined to be 930MW. The analysis then looked at the amount of generation located proximate to the Pinelands Area, both before and after the shutdown of OCNGS. POWERGEM determined that, prior to OCNGS's retirement, there was 1485 MW of generation proximate to the Pinelands Area, which consisted of the OCNGS (615 MW), the repowered BLE plant (570 MW) and several smaller combustion turbines (300 MW). Assuming that the local generation all contributed equally to the Pinelands Area load, POWERGEM found that 38% (570/1485) of the energy generated by the BLE plant would be distributed to address electricity needs (load) in the Pinelands Area. Following closure of OCNGS in 2019, and again assuming equal distribution from all generation sources, POWERGEM found that the BLE plant would supply 65% (570/870) of the energy needed within the Pinelands Area. The report also discussed a prior PJM study that had indicated that the retirement of the OCNGS would result in the need for at least $100 million in new transmission or transmission upgrades and expressed the likelihood that most, if not all, of the new/upgraded transmission would be either within or proximate to the Pinelands Area. It was POWERGEM's opinion that the repowering of the BLE plant would help alleviate some of those potential transmission additions in the Pinelands Area.

SJG submitted an updated analysis from POWERGEM date October 11, 2013. The reason for this update was to take into account retirements of smaller combustion turbines that were scheduled to occur and which would have a direct impact on the prior study results. Additional studies were also performed to determine whether there would be any overloaded circuits proximate to the Pinelands Area due to the retirement of these combustion turbines in conjunction with the retirement of the OCNGS and under the scenario where the BLE plant did not repower. For this analysis, POWERGEM used the PJM 2018 RTEP[1] summer peak flow model that had recently become publicly available. POWERGEM determined the total load within the Pinelands area for the 2018 summer peak flow load would be approximately 933 MW. Under the updated model, and prior to OCNGS's retiring, the total generation proximate to the Pinelands Area was found to be 1277 MW, consisting of OCNGS (615 MW), the repowered BLE plant (570 MW), and several smaller combustion turbines (92 MW). Again assuming that local generation contributed equally to the load within the Pinelands Area, POWERGEM found that the BLE plant would contribute to 45% (570/1277) of the load within the Pinelands Area. After the shutdown of OCNGS, POWERGEM found that the BLE plant's contribution to load in the Pinelands Areas would increase to 86% (570/662).

[1] The PJM 2018 RTEP model included the proposed West Deptford, Woodbridge, Old Bridge and Deepwater natural gas generation projects.

POWERGEM also completed a study using the PJM 2018 RTEP model to determine if there would be any overloaded circuits proximate to the Pinelands Area after the smaller combustion turbines and OCNGS shut down. The study was conducted under two scenarios, with and without the repowering of the BLE plant. This study confirmed that the repowering of the BLE plant is even more critical to the power generation needs of the Pinelands region than first appeared as a result of the additional retirements of the smaller combustion turbines. Specifically, POWERGEM found that based upon PJM's own models of the retirement the BLE plant would negatively impact eight transmission circuits located proximate to the Pinelands Area (Union-Corson 138 kV, Corson-Middle Tap 138 kV, Cumberland to Union 138 kV, Lewis-Minotola 138 kV, Kewis-Dorothy 138 kV, Minotola-Landis 13 kV, Corson-Dennis 138 kV and Dorothy-Deepwater 138 kV). Overloaded circuits are considered transmission violations by the PJM and, therefore, require a solution to avoid the consequences of overloads, including potential blackouts. Additionally, POWERGEM found that the continued retirement of smaller combustion turbines would likely exacerbate the need for transmission upgrades. Significantly, the POWERGEM study found that none of these circuits would be overloaded if the BLE plant was repowered.

2) PJM

According to the PJM Interconnection, LLC (PJM) 2011 Regional Transmission Expansion Plan (RTEP), which annually assesses transmission facilities in New Jersey for compliance with North American Electric Reliability Corporation (NERC) reliability criteria violations, a number of factors continue to impact reliability in New Jersey. PJM *2011 Regional Transmission Expansion Plan,* Book 5, Section 8, p. 143-144. Load growth, power exports to New York City and Long Island, deactivation/retirement of generation resources, sluggish development of new generating facilities, and continued reliance on transmission to meet load deliverability requirements all contribute to existing reliability criteria violations in New Jersey. *Id.* There is a critical need to expand natural gas electric generation within New Jersey, particularly with the impending retirement of the OCNGS Nuclear Generation Facility. See EMP at 79.

2. Reliability of SJG's System

There also is a critical need to improve the reliability of natural gas service to the eastern and southern portions of SJG's service territory. SJG serves approximately 61,000[2] natural gas customers (meters) in Cape May County, 3,300 of which are located in the Pinelands, via an existing 16-inch feeder line. This line is vulnerable to a single-contingency failure. Additionally, a significant portion of SJG's system also is vulnerable to a single contingency failure of SJG's existing 20-inch pipeline from Union Road Station to Estell Manor Station, the primary major supply line to the eastern and southern parts of the SJG service territory. Up to 142,000 customers located east and south of the Union Road Station, 28,700 of which are located in the Pinelands Area, could be vulnerable to a gas outage if this gas supply line is disrupted during winter heating months. SJG reliability modeling shows that if this line were disrupted at winter temperatures, approximately 61,000 customers initially would lose gas service, with the number quickly growing to 120,000 customers when supply from SJG's McKee City LNG

[2] These are gas meters, not individuals. Each meter represents a single facility (single family home, business, hospital, nursing home, etc.) and many more individuals would be affected by a disruption of gas service than suggested by the number of meters. The Commission assumes 3.5 individual per household.

facility is exhausted. The construction of the proposed pipeline will enhance greatly the reliability of the eastern and southern portions of SJG's service territory by enabling an alternative route for gas to be supplied to the coastal areas of Atlantic and Cape May Counties, which no longer would be subject to single contingency failures. The Project also will improve gas supply availability and pressures to feed these areas on peak and near-peak days, thereby potentially reducing the need for additional pipe installations in the future, many of which would likely be located within the Pinelands Area.

G. BPU Jurisdiction and Process

1. BPU's Jurisdiction

SJG is a public utility under BPU's jurisdiction. The authority of the BPU to regulate and supervise public utilities is defined in N.J.S.A. 48:2-13. Specifically, the BPU has "general supervision and regulation of and jurisdiction and control over all public utilities" including their "property, property rights, equipment, facilities and franchises so far as may be necessary for the purpose of carrying out" Title 48. The BPU's authority over utilities extends beyond its express statutory powers and includes incidental powers that the agency needs to fulfill its statutory mandated duties. *A. A. Mastrangelo, Inc. v. Comm'r of Dept. of Envl. Prot.*, 90 N.J. 666, 683-84 (1982). This sweeping grant of power is "intended to delegate the widest range of regulatory power over utilities to the Board." *Twp. of Deptford v. Woodbury Terrace Sewerage Corp.*, 54 N.J. 418, 424 (1969).

Under Title 48, the BPU is charged with approving all utility franchises granted after May 1, 1911. N.J.S.A. 48:2-14. By definition, "a franchise is a privilege of a public nature conferred by government on an individual or corporation to do that 'which does not belong to the citizens of the country generally by common right'." *In re Petition of South Lakewood Water Co.*, 61 N.J. 230, 238 (1972). "In the case of public utilities, it means permission to operate a business, peculiarly of a public nature and generally monopolistic." Ibid.

The BPU has granted SJG a right to provide natural gas service within the southernmost seven counties in New Jersey. The company provides essential gas service to approximately 360,000 homeowners and business customers and operates approximately 6,200 miles of pipeline throughout its service territory. To that end, the BPU regulates SJG's operations including, but not limited to its service quality, customer service and billing practices, safety, construction specifications, accounting, financing and auditing. See N.J.S.A. 48:2-13 et seq., N.J.S.A. 48:3-1 et seq., N.J.S.A. 48:9-5 et seq.

The BPU's jurisdiction over public utilities, such as SJG, is broad. For example, public utility rates may not be changed without Board approval (N.J.S.A. 48:2-21; N.J.A.C.14:1-5.12); a public utility may be ordered to provide safe, adequate and proper service (N.J.S.A. 48:2-23); a public utility may not terminate customers, except in accordance with BPU regulations (N.J.S.A. 48:2-24; N.J.A.C. 14:3-3A.1 et seq.); a public utility must get BPU approval to construct certain major pipelines, such as this one (N.J.S.A. 48:10-2 et seq; N.J.A.C. 14:7-1.4); a public utility may not issue stocks, bonds or other evidence of indebtedness without Board approval (N.J.S.A. 48:3-9; N.J.A.C. 14:1-5.9); a public utility may not mortgage its properties without Board

approval (N.J.S.A. 48:3-7; N.J.A.C. 14:1-5.9): a public utility may not abandon service without BPU approval (N.J.S.A. 48:2-24; N.J.A.C. 14:3-3A.1 et seq.); a public utility may not close a customer service office without Board approval (N.J.A.C. 14:3-5.1); and a public utility may not provide service in a new location without Board approval. (N.J.S.A. 48:2-27; N.J.A.C. 14:3-8.1 et seq.). There is an entire Subchapter of the New Jersey Administrative Code related to construction and installation of gas facilities (N.J.A.C. 14:6-1.1 et seq.).There is also an entire Chapter of Title 48 of the New Jersey Statutes Annotated related to gas companies. (N.J.S.A. 48:9-1 et seq.)

2. BPU Process

The BPU is the State entity charged with regulating public utilities, including but not limited to gas utilities, such as SJG. The Municipal Land Use Law at N.J.S.A. 40:55D-19 authorizes the BPU to order that zoning, site plan review and all other municipal land use ordinances or regulations promulgated under the auspices of Title 40 of the New Jersey Statutes and the Land Use Act shall not apply to a development proposed by a public utility for installation in more than one municipality for the furnishing of service. In order to issue such an order, BPU, upon petition and after a hearing, must decide that the proposed installation of the development in question is reasonably necessary for the service, convenience or welfare of the public. N.J.S.A. 40:55D-19. The phrase "for the service, convenience, or welfare of the public" is not limited to the local group benefited by the zoning ordinance, but rather refers to the whole "public" served by the utility. In re Public Service Electric & Gas Co., 35 N.J. 358, 376-77 (1961). Moreover, the standard of reasonableness does not require that the proposed use be absolute or indispensable, only that it is reasonably necessary for the public service, convenience or welfare. Id. It is the BPU's obligation to weigh all interests and factors in light of the entire factual picture and adjudicate the existence or non-existence of reasonable necessity therefrom. Id.

SJG has filed a number of petitions with the Board regarding the proposed pipeline. In its first petition, South Jersey sought BPU's approval of the Standard Gas Service Agreement (the "Agreement") entered into between South Jersey and R.C. Cape May Holdings. I/M/O South Jersey Gas Co. and RC Cape May Holdings, LLC, Docket No. GO13010052 (Order April 29, 2013). By way of Order dated April 29, 2013, the Board exercised its jurisdiction over SJG and authorized the negotiated rate. The Board found, *inter alia*, that the rates were based on cost of service and the value of service considerations required by SJG's tariff.

In its second petition, South Jersey sought approval to construct the proposed pipeline. I/M/O South Jersey Gas Co. for Authorization to Construct a 24-inch Pipeline, Docket No. GO13030202 (Order June 21, 2013). By way of Order dated June 21, 2013, the Board found, based upon the presentation of evidence and consideration of public testimony at a public hearing, that construction of the proposed pipeline was reasonable and in compliance with all relevant Federal and State requirements. The Board went on to exercise its jurisdiction approving SJG's request to construct the pipeline subject to, inter alia, any future Memorandum of Understanding between the Board and the Pinelands Commission.

Recently, SJG filed a petition with the BPU, on or about November 4, 2013, pursuant to N.J.S.A. 40:55D-19 requesting a determination from the BPU that its proposed construction of the proposed natural gas pipeline was "reasonably necessary for the service, convenience or welfare

of the public and, in accordance thereto, issue an order that zoning, site plan review and all other municipal land use ordinances or regulations promulgated pursuant to Title 40 of the New Jersey Statutes and the Land Use Act shall not apply" to the BLE pipeline development project, affecting New Jersey municipalities in various counties, including Maurice River Township in Cumberland, the City of Estell Manor in Atlantic, and Upper Township in Cape May.

H. Basis for the MOA

The Pinelands CMP (N.J.A.C. 7:50-4.52(c)2) authorizes the Commission to enter into intergovernmental memoranda with any agency of the Federal, State or local government which authorizes such agency to carry out specified development activities that may not be fully consistent with the provisions of the CMP, specifically the land use and environmental standards set forth at N.J.A.C. 7:50-5 and 6. The agency must demonstrate, and the Commission must find, that any proposed development that is not fully consistent with the standards of the CMP is accompanied by measures that will, at a minimum, afford an equivalent level of protection of the resources of the Pinelands as would be provided through strict application of the CMP's standards. Id.

The BPU has jurisdiction over "all services necessary for the transmission and distribution of electricity and gas, including, but not limited to safety [and] reliability." N.J.S.A. 48:2-13.d. Thus, as discussed above, the BPU has exclusive jurisdiction to supervise, regulate and control public utilities in their delivery of safe, adequate and proper service to residences and businesses throughout the State Id. In this capacity, the BPU has issued an order to SJG finding that construction of the proposed pipeline is "reasonable and in compliance with all relevant Federal and State requirements."

Given that BPU is exercising its regulatory authority over SJG, the public utility constructing the pipeline, and will continue to regulate distribution of gas through the pipeline, the construction of the proposed natural gas pipeline is specified development that is being carried out consistent with N.J.A.C. 7:50-4.52. Additionally, SJG, is a public utility, that is subject to the jurisdiction of the BPU. As part of this MOA, BPU is agreeing to require SJG to undertake certain measures, discussed below, that will afford, at a minimum, equivalent levels of protection to the resources of the Pinelands.

1. Measures Proposed to Afford an Equivalent Level of Protection of Pinelands Resources

As discussed above, the proposed natural gas pipeline project is consistent with all applicable standards of the Pinelands CMP, with the exception of the permitted use standards for a Forest Area, N.J.A.C. 7:50-5.23.b.12. As a result, measures that afford, at a minimum, an equivalent level of protection for the Forest Area as would be provided through strict application of the Forest Area permitted use standards must be included as part of the proposed pipeline project. Simply put, these measures must ensure that the intensity of development in this Forest Area does not increase as a result of the proposed pipeline development and that the impacts to the resources of this Forest Area are no greater than would occur if the proposed development were comparable to uses that are permitted in the Forest Area pursuant to N.J.A.C. 7:50-5.23.

1) Land Preservation, Education, Research and Monitoring

Although there are no direct environmental impacts associated with the proposed natural gas pipeline, the intent behind the Forest Management Area use standards is to ensure the long-term integrity of the Pinelands environment by establishing standards governing the character, location and magnitude of development and use of land in this area, while encouraging appropriate patterns of compatible development. N.J.S.A. 13:18A-9.b. and N.J.A.C. 7:50-5.21. As a result one potential concern associated with the construction of the proposed pipeline in a Forest Area is that would create more pressure on the impacted municipalities and the Commission to change the land use and development intensities currently permitted in the Forest Area through which the pipeline would traverse. This, in turn, would provide for increased development (secondary impacts).

In order to provide an equivalent level of protection for the resources of the Pinelands, pursuant to the terms of this MOA, a subsequent Order issued by the BPU and an MOA between the BPU and SJG, the public utility proposing to construct the proposed natural gas pipeline, SJG will be required to contribute eight million dollars ($8,000,000.00) towards Pinelands Area land acquisition and education. Seven million two hundred and fifty thousand dollars ($7,250,000.00) will be placed into the Pinelands Conservation Fund – Land Acquisition account to fund the acquisition of land located adjacent to the site of the proposed pipeline project located in a Forest Area. If all of the targeted lands have not been acquired after three years from the execution of this MOA by the last signatory, all of the targeted lands have not been acquired, then any remaining funds also may be used for acquisition of lands in the southern forested portion of the Pinelands Area, i.e. south of the Atlantic City Expressway.

The acquisition of land along the site of the proposed pipeline within the Forest Area should prevent these secondary impacts from coming to fruition. In addition, given that there are two large areas of State lands (Belleplain State Forest and Peaslee Wildlife Management) in the vicinity of pipeline project site, acquisition of land adjacent to the pipeline would also add additional public open space to these important State holdings. Moreover, expanding the scope of the lands to be acquired after three years to encompass the totality of the southern forest secures two important benefits to the Pinelands Area. First, it ensures that an equivalent level of protection is provided to offset the development of the proposed pipeline in a timely fashion. Second, it will address the potential for additional pipeline projects cutting through the Pinelands Forest Areas, by providing additional funds that can used for the permanent preservation of lands located in Pinelands Forest Areas.

Two hundred and fifty thousand dollars ($250,000.00) of the contribution will be used by the Commission to finance the implementation of a Pinelands education center within the Richard J. Sullivan Center at the Pinelands Commission’s offices. The proposed natural gas pipeline has generated significant interest in the Pinelands and its resources. The design of the Pinelands education center has already been completed, and it will advance the Commission’s mission of educating the public as to the importance of this very special region.

Five hundred thousand dollars ($500,000) of the contribution will be used to the Commission for education or outreach based programs or initiatives such as its World Water Monitoring Day Program, the Pinelands Short Course, Pinelands Research Series, or any other educational

programs that raise awareness and appreciation of the resources in the Pinelands Area or research projects evaluating the resources of the Pinelands Area. Education and research concerning the importance of the Pinelands region is a critical part of the Commission's mission. With these funds, the Commission will be able to continue to conduct quality educational programs that inform thousands of people about the region's unique soil composition, the Kirkwood Cohansey aquifer, its flora and fauna and other environmental and culture attributes that make the Pinelands unique. Additionally, other outreach-based initiatives would further increase awareness of the region's resources and strengthen the Pinelands Protection Program.

2) Air Quality Benefits

In addition to the monetary measures discussed above, one of the most significant benefits afforded by the construction of the proposed pipeline is the repowering of the BLE plant from coal to natural gas. Specifically, the conversion of BLE plant to natural gas will yield both air quality and water quality benefits. Substantial reductions in air emissions from the BLE plant have long been a need of the Pinelands.

The NJDEP first identified the need for reduction in the air emissions generated at the BLE plant in its 1980 *Air Quality Assessment of the New Jersey Pinelands*, in which the plant was identified as a source of air pollution within the Pinelands. Converting the BLE plant to natural gas will dramatically reduce a host of air pollutants, including sulfur dioxide which produces acid rain, nitrogen oxides which produce smog, carbon dioxide which contributes to climate change, and mercury which bioaccumulates in Pinelands fish. Natural gas produces less than ten (10) percent of the criteria air pollutants and hazardous air pollutants produced by coal. The NJDEP, at the Commission staff's request, undertook an air quality modeling analysis to assess the air quality benefits of repowering the BLE plant on the Pinelands Area. Based on that analysis, NJDEP concluded that up to a 40.9% to 41.4% reduction in the maximum existing background 1-hour and 3-hour sulfur dioxide concentrations would occur as a result of the repowering. NJDEP also predicted reductions in the existing background levels of 1-hour nitrogen dioxide (NO_2) concentrations and 2-hour fine particulate ($PM_{2.5}$) in the Pinelands. These reductions in air pollutant emissions and air pollution concentrations over the Pinelands Area are expected to provide the following environmental benefits: 1) less potential for acute and chronic damage to plants due to reduced SO_2 concentrations; 2) less acid rain formation due to reduced SO_2 and NO_X emissions, benefitting plants, lakes, fish and wildlife; 3) reduced ozone damage to plants and vegetation due to lower ozone concentrations as a result of a reduction in NO_X, an ozone precursor; 4) improved visibility over the Pinelands Area and 5) a 94% reduction in allowable mercury emissions that will benefit fish and animals that eat fish, as well as the overall environment.

3) Environmental Conditions

The BPU would also require SJG to comply with construction practices and environmental conditions that would prevent unanticipated impacts from the proposed pipeline project on the resources of the Pinelands Area. These environmental conditions are set forth in Attachment B and includes measures such as 1) the retention of an independent biologist and an independent engineer, both of whom will be approved by the Commission, to monitor construction of the gas pipeline and ensure no adverse impacts occur to the resources of the Pinelands Area during

construction; 2) preparation and Commission approval of a HDD Break Out Contingency Plan to delineate steps that will be taken to contain any break out of bentonite drilling mud; and 3) backfilling of the trenches with excavated soils to prevent incursion of invasive species.

III. AGREEMENTS

A. The BPU agrees that:

1. It will issue an Order to the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. above incorporating the requirements of Paragraphs III.A.1 through 11 of this MOA and the Environmental Conditions set forth in Attachment B.

2. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II. C. above to construct the project in accordance with the list of documents set forth in Attachment A attached hereto and made a part hereof.

3. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. above to satisfy all of the obligations of this MOA and the Pinelands CMP, unless a deviation therefrom is expressly authorized by this agreement.

4. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C above to obtain any and all certificates, licenses, consent, approvals or permits required from any local, State and/or Federal entity prior to commencing construction of the project. No part of this MOA is intended to release the public utility from its responsibility to obtain all other required local, State and/or Federal approvals.

5. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. above to comply with all of the environmental conditions set forth in Attachment B, attached hereto and made a part hereof, and the terms of this agreement.

6. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. above to provide notice to the Pinelands Commission staff seven (7) days prior to commencing any clearing or construction activities for the project.

7. It will require the public utility to deed restrict its entire right of way for the proposed pipeline located in the Pinelands designated Forest Area against any future connections of any kind, including interconnections proposed by the utility.

8. It will require the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. to prohibit the future conversion of this pipeline from transmission of natural gas to oil or any other gas or liquid.

9. Any material deviation from or modification to the proposed natural gas pipeline project as delineated in Paragraph II. C. above and the documents listed in Attachment A will require formal application to the Pinelands Commission in accordance with the Pinelands CMP and no clearing or construction activities regarding such deviation may occur until an application has been completed and the Pinelands Commission has approved the deviation or modification.

10. It agrees that the public utility proposing to construct the proposed natural gas pipeline project delineated in Paragraph II.C. above shall contribute a total of eight million ($8,000,000.00) dollars to the Pineland Conservation Fund. This contribution shall be submitted to the Commission within thirty (30) days of execution of this MOA by the last signatory. This contribution shall be dedicated by the Commission as outlined below:

    a. Seven million two hundred and fifty thousand dollars ($7,250,000.00) to be placed in the Pinelands Conservation Fund – Land Acquisition Account. These funds shall be used to fund the acquisition and permanent preservation of the lands set forth in Attachment C for a period of three (3) years following execution of this agreement by the last signatory. At the end of that three (3) year period, all funds remaining in that escrow account and any and all interest accrued to that account shall be utilized for the acquisition of land in the southern forested portions of the Pinelands Area; i.e. forested lands south of the Atlantic City Expressway.

    b. Two hundred and fifty thousand dollars ($250,000 dollars) of which shall be used to finance implementation of a pinelands education center in the Richard J. Sullivan Center at the Pinelands Commission's offices in New Lisbon, New Jersey; and

    c. Five hundred thousand dollars ($500,000) of which shall be used by the Commission for education based initiatives such World Wide Water Monitoring Day, Pinelands Short Course, Pinelands research series or any other education or outreach based initiatives or research projects undertaken by the Commission.

11. It will require the public utility to generate and provide the Pinelands

Commission with biannual (every six months) reports that include the pipeline pressure monitoring reports, monthly visual inspection reports and annual leak surveys for the portions of the newly constructed pipeline located in the Pinelands Area, for the time period commencing upon the first day of operation of the pipeline and continuing in perpetuity. Additionally, it will require the public utility to: 1) notify the Pinelands Commission immediately of any gas leaks or other structural integrity issues with the new pipeline or any other issues with the pipeline that might affect the Pinelands ecosystem; 2) address any issues identified by such monitoring expeditiously; and 3) require the clean-up and restoration of any area impacted, including, but not limited to re-vegetation, habitat creation, environmental remediation, etc.

B. The Pinelands Commission agrees that:

1. Based on its review of the documents listed in Attachment A, the provisions of the Pinelands CMP and the terms of this MOA, including the Environmental Conditions delineated in Attachment B, and with the exception of the standard for which a deviation is being granted pursuant to this MOA, the project as proposed is consistent with the minimum requirements of the Pinelands CMP. The proposed natural gas pipeline project as delineated in Paragraph II. above is deemed approved and no further action by the Commission, or its staff, shall be required regarding the proposed natural gas pipeline project unless there is a deviation from or modification to the proposed natural gas pipeline project as discussed in Paragraph III.A.7 above.

2. The contribution provided in accordance with Paragraph III.A.10. above shall be refundable, less any costs required to restore any cleared or disturbed areas, to the public utility until such time as all applicable appeal periods are exhausted, any challenges to the project are resolved favorably, and significant clearing and soil disturbance activities commence on the proposed natural gas pipeline. Until that time, no monies shall be expended for any purpose.

3. It agrees to use the contribution made by the public utility in accordance with Paragraph III.A.8 above, as follows: 1) $7,250,000 million for land acquisition as delineated in Paragraph III.A.8.a; 2) $250,000 to construct a pinelands education center at its offices in New Lisbon, New Jersey and 3) $500,000 for education based initiatives undertaken by the Commission independently or through the pinelands education center.

C. General Terms

1. No Signatory Party intends to create in any other individual or entity the status of third party beneficiary, and this MOA shall not be construed so as to create such status. The rights, duties, and obligations contained in this MOA shall operate only between the parties

to this MOA, and shall accrue solely to the benefit of the parties to this MOA. The provisions of this MOA are intended only to assist the parties in determining and performing their obligations under this MOA. The parties to this MOA intend and expressly agree that only the parties signatory to this MOA shall have any legal or equitable right to seek to enforce the MOA.

2. Good Faith Cooperation - The parties agree to work cooperatively, and in good faith, to resolve any dispute arising out of the terms of this Agreement.

3. Severability - In the event that any provision of this Agreement shall be determined for any reason to be invalid, illegal or unenforceable in any court of competent jurisdiction, the Parties hereto shall negotiate in good faith to agree to such amendments, modifications or supplements of or to this Agreement or to such other appropriate actions to honor the intentions of the Parties as reflected herein. Notwithstanding any such determination, the determination shall not invalidate or render any other provision of this Agreement unenforceable.

IV. EFFECTIVE DATE AND DURATION

1. In accordance with N.J.S.A. 13:18A-5(h), this MOA shall take effect following the conclusion of the Governor's review period and/or approval of the Pinelands Commission meeting minutes authorizing entry of this MOA and then upon approval and signature by the authorized representative of both parties.

2. This MOA shall remain in a force and effect from its effective date unless one of the following occurs:

   i. It is amended by written consent of both parties; or

   ii. Both parties mutually agree, in writing, to otherwise terminate this agreement.

V. SIGNATURES

NEW JERSEY PINELANDS COMMISSION

Date:_____ By:_____
Nancy Wittenberg, Executive Director

NEW JERSEY BOARD OF PUBLIC UTILITIES

Date:_____ By:_____
, Executive Director

Approved as to form by:

Date:_____ By:_____
, Deputy Attorney General
State of New Jersey

Attachment A
South Jersey Gas Natural Gas Pipeline Project Documents

APPLICATION MATERIALS

Pinelands Comprehensive Management Plan Compliance Statement
Prepared By: Woodard & Curran
Dated: January 31, 2013

Permit Plans:
Consisting of 76 sheets, prepared by Woodard & Curran, and dated as follows:
Sheet G-01 – January 31, 2013; revised June 11, 2013
Sheet G-02 & D-03 & C-100 – January 31, 2013; revised May 17, 2013
Sheets LD-1, AS-1, AS-4, AS-5, AS-22, AS-27, AS-32, AS-35, AS-37-AS-43, AS-46, G-03 & SA-2 – January 31, 2013; revised April 26, 2013
Sheets AS-2 & AS-8 – January 31, 2013; revised May 22, 2013
Sheets AS-3, AS-6, AS-7, AS-9- AS-21, AS-23-AS-26, AS-28-AS-31, AS-33, AS-34, D-1A, D-1B & D-02 – January 31, 2013; revised May 20, 2013
Sheets AS-44, AS-45 & SA-3 – January 31, 2013; revised May 16, 2013
Sheets AS-47 - AS-56, SA-4, SA-5 & C-200, – January 31, 2013; revised June 11, 2013
Sheets D-1C & D-05– January 31, 2013
Sheets D-04A, D-04B & C-AGV-1– April 26, 2013Sheet D-06- April 26, 2013; revised June 11, 2013

Prepared By: Woodward & Curran
Dated: May 2013, Revised June 11, 2013

Threatened and Endangered Species and Cultural Resource Reports:
Threatened and Endangered Species Habitat Suitability Assessment & Survey Report, South Jersey Gas B.L. England Power Plant Supply & Reinforcement Line
Prepared For: Woodard & Curran
Prepared By: Trident Environmental Consultants
Dated: February 4, 2013

Threatened & Endangered Species Habitat Suitability Assessment & Survey Report, South Jersey Gas, Interconnect Station, Block 358, Lots 7-14, Upper Township, Cape May County
Prepared By: Trident Environmental Consultants
Dated: February 4, 2013

Threatened & Endangered Species Habitat Suitability Assessment, South Jersey Gas, B.L. England Power Plant Supply Line Project, Storage Locations
Prepared For: Woodard & Curran
Prepared By: Trident Environmental Consultants
Dated: February 4, 2013

Stage 1A Cultural Resource Survey, South Jersey Gas Pipeline Project, Maurice River Township, Cumberland County, Estell Manor City, Atlantic County, and Upper Township, Cape May County, New Jersey
Prepared For: Woodard & Curran
Prepared By: Richard Grubb & Associates, Inc.
Dated: January 2013
Prepared By: Richard Grubb & Associates, Inc.

Stage IB/II Cultural Resources Survey, South Jersey Gas Pipeline Project, Maurice River Township, Cumberland County, And Upper Township, Cape May County, New Jersey
Prepared For: Woodard & Curran
Prepared By: Richard Grubb & Associates, Inc.
Dated: May 2013

ATTACHMENT B

Environmental Conditions

General Conditions

1. Any areas disturbed as a result of construction activities shall be graded to natural conditions and seeded with native Pinelands grass species as specified in the plans delineated in Attachment A.

2. Only native Pinelands species as specified by the plans delineated in Attachment A shall be used for re-vegetation purposes.

3. All soils excavated to construct the trenches for installation of the natural gas pipeline shall be removed and stockpiled and then used to backfill the trenches, where appropriate. The topsoil shall be re-used but if soil unsuitable for backfill is encountered it will be removed to a suitable location outside of the Pinelands Area, unless approval to dispose of the excess soil within the Pinelands Area is obtained from the Commission's Executive Director in accordance with Paragraph 7 below. Additionally, either soil from the trenches or suitable native soil will be used to backfill the trench.

4. The use of herbicides for future vegetation management purposes shall be prohibited in any portion of the ROW.

5. The limits of the proposed area of disturbance as depicted on the plans submitted to the Commission and delineated in Attachment A shall be marked in the field using silt fence and orange plastic construction fencing.

6. All vegetation removed during construction shall be lawfully disposed of outside of the Pinelands Area, unless the Executive Director approves the disposition of vegetative material on sites within the Pinelands Area. Such approval must be obtained from the Executive Director prior to the disposition of any vegetative material on sites within the Pinelands Area.

7. No construction debris or excess fill shall be disposed of in the Pinelands Area without the prior approval of the Pinelands Commission's Executive Director.

8. No off-site storage/staging areas (i.e. locations for the storage, temporary or otherwise, of equipment or materials) for the project, beyond those previously reviewed by the Pinelands Commission staff and included within the documents set forth in Attachment A, shall be located within the Pinelands Area unless approved by the Pinelands Commission Executive Director prior to their use.

9. The Pinelands Commission staff shall be permitted to inspect construction activities to ensure compliance with the conditions set forth in this agreement.

10. Any minor modifications to the proposed construction plans for the proposed natural gas pipeline as identified in Attachment A involving development activities that will occur within the Pinelands Area shall be submitted to the Pinelands Commission's Executive Director for review and approval prior to commencing any development activities in such areas, including, but not limited to site preparation.

Cultural Resources

11. All recommendations set forth in the Cultural Resource Survey report entitled Phase IB-II Cultural Resource Survey Report shall be implemented.

12. In the proposed reconfigured storage areas 7 and 10, as identified in the Phase IB-II Cultural Resource Survey report, located adjacent to potential cultural resources ***)***, silt fencing and orange plastic construction fencing shall be installed at the limit of disturbance.

13. If proposed reconfigured storage areas 7and 10 are to be utilized at any point during the construction, the public utility shall have a qualified archeologist present during initial site preparation in order to ensure that the areas where cultural resources were discovered are not disturbed and to observe site preparation for archeological artifacts or potential resources of significance within the project area.

14. In accordance with N.J.A.C. 7:50-6.158(b), if, at any time after construction of the project has commenced, archeological artifacts or resources of potential significance are discovered within the project area or any storage/staging area, the public utility will immediately cease construction activities, notify the Pinelands Commission, and contact its cultural resource consultant to determine the appropriate treatment for such artifacts or resources. Treatment shall include, if possible, shifting of the proposed pipeline route away from the site of the artifacts or resources and any other steps suggested by the cultural resource consultant to protect the archeological artifacts or resources of potential significance.

Wetlands

15. No disposal of soil, excavated or otherwise,, vegetation, piping or any other materials shall be permitted in wetlands or within 300 feet of wetlands ("wetland buffers") during construction. Temporary stockpiling of piping or other materials shall not be permitted in wetlands or wetland buffers unless shown on the approved plans.

16. Appropriate soil conservation measures, such as installation of silt fencing, shall be taken during construction to preclude sediment from entering wetlands.

17. No activities shall occur in wetlands. No activities other than the temporary work depicted on the approved plans shall occur in or wetland buffers.

18. No new or additional storage/staging areas (i.e. locations for the storage, temporary or otherwise, of equipment or materials for the project) shall be located within wetlands or within wetland buffers unless approved by the Pinelands Commission Executive Director prior to utilization of such areas.

19. No culverts or fill may be placed or deposited into wetlands or areas within wetland buffers to create access roads, temporary or otherwise, for the construction of the new pipeline.

20. No refueling shall occur within wetlands or areas within wetland buffers with the exception of refueling on paved roadways and all refueling must include secondary containment..

Threatened or Endangered Species

21. At least one independent biologist, engaged by the public utility and approved by the Pinelands Commission, qualified in the identification of threatened and endangered plants and animals and their habitats, as delineated at N.J.A.C. 7:50-6.27 and 6.33, shall be present during such times and locations where clearing and/or construction activities are being undertaken proximate to habitat identified as suitable for threatened and endangered species. The biologist(s) shall ensure that clearing and/or construction techniques being utilized do not adversely impact any habitat critical to the survival of any threatened and/or endangered species of animals or plants and that any such plants and animals discovered during construction are protected. Additionally, the biologist shall ensure that all threatened and endangered species BMPs identified in the plans delineated in Attachment A are being followed at all times during construction.

22. The biologist shall also work in conjunction with the independent engineer to minimize the down river impacts that may result from a break out during the HDD process. This shall include monitoring of the waterway crossing for any signs of breakout to ensure prompt response.

23. The Pinelands Commission shall be notified immediately if any threatened and/or endangered species of plants or animals or habitat critical to their survival are discovered during construction. All clearing or construction activities in the vicinity of such species or critical habitat shall immediately cease pending direction from the Pinelands Commission Executive Director. During that time, the public utility shall authorize the biologist(s) retained in compliance with Paragraph 11 above to take all possible steps to ensure that such species or critical habitats are protected.

Horizontal Directional Drilling

24. The public utility shall provide the Pinelands Commission's Executive Director with a copy of the Horizontal Directional Drilling (HDD) Break Out Mitigation Contingency Plan proposed to be utilized for all HDDs to be conducted during construction of the pipeline. No HDD activities shall occur until the Executive Director has approved such plan.

25. Appropriate measures, such as installation of silt fence, hay bales, inflatable berm, etc. shall be taken during HDDs to prevent the discharge of bentonite to wetlands, streams or any other water body or beyond the immediate confines of the drill site.

26. The public utility shall have qualified personnel trained in HDD on the site to monitor drill hole pressures and to walk the area in which the HDD is being conducted to identify any potential break outs of bentonite. Additionally, such qualified personnel shall be responsible for immediate implementation of the Mitigation Contingency Plan should a break out occur.

27. Should a bentonite break out occur, the public utility shall immediately cease HDD activities and contain the area of the break out to the smallest feasible area. Additionally, the public utility shall within 24 hours notify the Pinelands Commission's Executive Director of the location of the break and advise as to the response actions being taken to address the break out in accordance with the approved Mitigation Contingency Plan.

28. The public utility shall engage an independent engineer, approved by the Commission to be on site during all phases of HDD and other drilling activities to ensure all such activities are conducted in accordance with all approved plans. The engineer shall be a registered professional engineer and have proven experience in the installation of large diameter pipelines using the HDD method.