STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCT THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND **DOCKET No. SB-2015-06**

PRE-FILED DIRECT TESTIMONY OF GEORGE BACON

(JUNE 30, 2017)

SUMMARY

George Bacon is a Senior Project Manager for Energy and Industrial Services at ESS Group, Inc. and testifies regarding Clear River Energy Center's ("CREC's") environmental matters, specifically describing and analyzing CREC Revised Water Supply Plan filed with the Board on January 11, 2017, projected water usage, anticipated water balances, features incorporated to reduce overall water use, planned wastewater recycle methods and plans for removal and off-site treatment and disposal of wastewater from the facility. Mr. Bacon also testifies regarding the source of the water supply and equipment planned to treat the water supplied to the Project, as described in the Revised Water Supply Plan. Mr. Bacon, relying on his experience and expertise, the materials provided in support of the application as supplemented, responses to data requests, and the Revised Water Supply Plan, opines on the Project's efforts of maximizing water use efficiency. Mr. Bacon opines that the planned water resources will efficiently support the facility water requirements and that CREC will produce low levels of wastewater for off-site treatment and disposal. Mr. Bacon further opines that the Revised Water Supply Plan will not cause unacceptable harm to the environment.

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS TITLE AND BUSINESS ADDRESS.

A. My name is George Bacon. I am Senior Project Manager for Energy and Industrial Services at ESS Group, Inc. ("ESS"), located at 10 Hemingway Drive, Riverside, RI 02915, although my office is in ESS' Waltham, Massachusetts office.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. My testimony is on behalf of the applicant, Invenergy Thermal Development LLC ("Invenergy"), in support of its application (the "Application") for a license from the Rhode Island Energy Facility Siting Board ("EFSB" or "Board") to construct the Clear River Energy Center project in Burrillville, Rhode Island ("Clear River" or "CREC" or "the Project" or "the Facility").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I received my bachelors of science in chemistry in 1970 from the University of Massachusetts-Lowell (then known as the Lowell Technological Institute). I have more than forty-three (43) years of experience in power industry project development, environmental engineering, and permitting and licensing. Also relevant to my testimony on behalf of Invenergy, I served for a number of years as Stone & Webster Engineering Corporation's

Supervisor of Water Treatment in its home office in Boston. In that role I managed a group of engineers in the development of power generating facility water management systems incorporating a wide range of water and wastewater treatment technologies for both fossil fired (gas/oil/coal) and nuclear fueled electric generating facilities being constructed throughout the United States. Later, while employed by Calpine Corporation, I served as Corporate Director of Water Technology. I managed a group of engineers providing development support for many proposed gas-fired combined cycle electric generating facilities and operational support to Calpine's gas-fired combined cycle generation fleet. That fleet included over 50 gas fired combined cycle electric generating facilities located throughout the United States. Development support included assisting Calpine Development Managers by developing water supply plans for new proposed generating facilities. Support to Calpine's operating fleet consisted of providing water treatment and chemistry consulting support as requested and to apply lessons learned from best practices within the fleet. A detailed description of my educational background and sampling of my professional experience is included in my CV, filed with the Board on September 12, 2016.

Q. PLEASE DESCRIBE YOUR EXPERIENCE PROVIDING TESTIMONY TO REGULATORY COMMISSIONS, BOARDS, AGENCIES OR AS AN EXPERT WITNESS.

A. I have provided testimony previously regarding the development, permitting and licensing for three new electric generating facilities. In the case of the Fremont Energy Center, located in Sandusky Count, Ohio, I provided testimony in a hearing held by the Power Siting Board of the Public Utilities Commission Ohio, addressing a wide range of questions relative to the siting, future operation and potential environmental impacts of a proposed 705 MW gas fired combined cycle electric generating facility. In the case of the Lawrence Energy Center, located

in Lawrence County, Ohio, I provided testimony in a hearing held by the Power Siting Board of the Public Utilities Commission Ohio addressing a wide range of questions relative to the siting, future operation and potential environmental impacts of a proposed 1100 MW gas fired combined cycle electric generating facility. In the case of the Bayonne Energy Center, located in Bayonne, New Jersey, I provided testimony in a hearing held by the New York Public Service Commission regarding an Article VII filing for the construction of a 6.6 mile submerged electric transmission cable interconnecting the proposed 512 MW Bayonne Energy Center ("BEC") located in Bayonne, New Jersey to an existing substation in Brooklyn, New York. This testimony included a "Needs Analysis" for the BEC facility's electric output and the environmental benefits of the facility to New York City.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. To provide testimony regarding CREC's environmental impacts related to the Revised Water Supply Plan ("Water Supply Plan") filed with the Board on January 11, 2017, the projected water usage, anticipated water balances, features incorporated to reduce overall water use, planned wastewater recycle methods and plans for off-site treatment and wastewater disposal from the Facility. I will testify regarding the source of the water supply and equipment planned to treat the water supplied to the Project. I will also testify regarding Section 6.2.3 (Water Use and Wastewater Discharge) of the Application and the Water Supply Plan for the Project.

Q. PLEASE DESCRIBE YOUR FAMILIARITY WITH CREC.

A. As an employee of ESS and as a member of the CREC Project Team, I participated in the environmental planning for the Project since its inception in the fall of 2014. My specific areas of support to the Project focused on the water supply, water treatment, wastewater recycling within the Facility and plans for wastewater treatment and disposal for the Project.

Q. WHAT MATERIALS DID YOU REVIEW AND RELY ON WHEN ANALYZING CREC'S ENVIRONMENTAL IMPACTS?

A. My review of the water supply and wastewater requirements for the CREC was based on a number of engineering analyses/documents developed by CREC's Engineer, HDR, Inc. ("HDR") and continually refined as needed as the Project proceeded through its development process. These HDR analyses/documents included the Project's Heat and Water Balances and Wastewater Composition Projections, setting the overall concept for the Project (a gas fired combined cycle electric generating facility employing dry cooling and using distillate oil as a backup fuel), its projected operating conditions throughout the year, the thermal efficiency of the generating cycle and the Facility's daily fuel use, water use and wastewater flow as identified in these documents.

The Water Balances developed by HDR identified the daily water use and wastewater discharge requirements of the Project at full load operation under the full range of ambient operating conditions expected for the Project site for both gas firing and ultra-low sulfur distillate ("ULSD") firing. HDR also developed a Wastewater Composition Projection of the Facility's wastewater sources which was developed from the chemical analysis of the source water; the Project's planned water treatment and the projected water uses within the Facility as identified in the Water Balances (see Table 3.1 of the Water Supply Plan). The Wastewater Composition Projection is the result of a material balance developed for the Project based on the water quality of the Johnston water supply (Providence Water), the expected demineralized water quality provided by the demineralizer trailers, the projected composition of the various wastewater sources and flows and any treatment of these wastewaters provided within the Facility. This information is shown on Table 3-1 of the Water Supply Plan.

I also relied on the U.S. Environmental Protection Agency ("USEPA") 40 CFR Part 423 - Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category published in the Federal Register on November 3, 2015 and USEPA's Technical Development for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, EPA-821-R-15-007 dated September 2015. In 40 CFR Part 423.17, USEPA developed categorical effluent standards applicable to new Steam Electric Power Generating facilities discharging to Publicly Owned Treatment Works ("POTWs") similar to that planned for CREC. My review of the Project relied on the above documents to analyze CREC's potential environmental impacts relative to water use and offsite wastewater treatment and disposal.

Lastly, I and the CREC Team relied on a safe yield analysis conducted by Pare Engineering in a Water Supply System Management Plan completed for the Providence Water Supply Board (WSSMP; Pare 2010). The results of this safe yield analysis are addressed in Figure 2-3 of the Water Supply Plan. This safe yield analysis projected average and maximum daily water demands for the Providence Water Supply system for 2007, 2015 and 2030.

II. WATER SUPPLY PLAN ANALYSIS

Q. PLEASE EXPLAIN YOUR INVOLVEMENT IN THE DEVELOPMENT OF THE WATER SUPPLY PLAN AND THE METHODOLOGY YOU USED AS PART OF THE PLAN'S DEVELOPMENT.

A. The Water Supply Plan was filed with the Board on January 11, 2017. I participated in the development and review of the overall Water Supply Plan. This included reviewing the intended water source, the amount of water available from the water source on an annual basis, the overall concept for water use within the CREC Facility, the intended water treatment

methods to produce process water of a suitable quality for use within the Facility, the plan for wastewater recycling within the Facility and plans for wastewater off-site treatment and disposal.

Q. PLEASE DESCRIBE YOUR METHODOLOGY.

A. My methodology for reviewing the revised HDR water balances was based on my years of experience with the design of a wide range of thermal electric generating facilities and specifically my experience with gas and distillate oil fired combined cycle electric generating facilities under the conditions of a limited water supply. The requirement to design new thermal electric generating facilities for a limited water supply is becoming more common as sites available for new electric generating facilities, especially in New England, that have the requisite infrastructure of high pressure natural gas, adequate electric transmission and a ready supply of water are becoming more difficult to identify. As a result, many of the newly proposed thermal electric generating facilities proposed in New England are dry cooled, which significantly reduces the total amount of water required for a new thermal gas fired combined cycle electric generating facility in comparison to the use of wet cooling.

Water use by any thermal power plant is dictated by the overall energy efficiency of the proposed facility, the nature of the combustion technology used to create the energy, the intended fuel(s), the method or methods for removal of waste heat from the facility, the degree of water recycling within the facility and finally the method or methods for wastewater disposal.

In order to review the HDR seasonal water balances for gas and distillate oil firing included in the Water Supply Plan, I first reviewed the Project's Heat Balances that had been developed for both gas and distillate oil firing for the various operating seasons over the year. The Heat Balances identified the overall concept for the CREC Project – that the Facility is a two unit facility with a combined total nominal output of 800 to 1000 MW in a combined cycle

configuration consisting of two combustion turbine generators, two dedicated Heat Recovery Steam Generators (one per combustion turbine), two steam turbine electric generators (one per combustion turbine) and two independent air cooled heat rejection systems for condensing steam from each steam turbine generator and the combustion turbine's having the capability to be fired by natural gas or distillate oil if required during the winter season.

I reviewed the HDR seasonal water balances and associated wastewater composition projections for the conditions of firing natural gas and distillate fuels which identified the overall water use of the proposed Facility, the individual process uses of water and the intended source of water for each use within the Facility (the source sets the quality and chemistry of the water intended for each use), the intended methods of treatment of the process water makeup to the Facility, the sources and expected composition of wastewater within the overall Facility, the intended amount of wastewater treatment and recycling within the Facility, and finally the volume and expected wastewater composition for wastewaters to be shipped off-site for treatment and disposal.

Lastly annual projections of the total water demand for the Facility were compared to the total safe yield of the proposed water supply to the Project, that being the Providence Water System through a water supply connection to the Town of Johnston.

Q. PLEASE SUMMARIZE THE WATER SUPPLY PLAN.

A. The Water Supply Plan (Plan) was developed after the Pascoag Utility District ("PUD") terminated a Letter of Intent it had with CREC, which eliminated the possible use of water from a previously-contaminated PUD groundwater well as a process water source for the Facility. The Plan provides significant detail as to the quantity of Providence Water to be supplied under a long-term contract from the Town of Johnston, and the proposed methodologies for the

management of both the process water production, process wastewater recycling and process wastewater disposal. The Plan also outlines the method of treatment and disposal of sanitary wastewater that will be generated by the Facility.

The information provided on the methodologies to be used in the Facility identified in the Plan is based on viable alternatives that minimize water consumption for process use and avoids the construction and associated impacts of both a water supply pipeline and a wastewater sewer line for process wastewater disposal, both of which had been proposed in the original Application.

Q. PLEASE ELABORATE ON THE WATER SUPPLY PLAN.

A. The Plan reflects the combined experience of the CREC Project Team to reduce the overall water supply requirement of the CREC Project through the application of standard water treatment technologies to achieve a level of water recycling and limited wastewater production that would be practical and sufficiently flexible in meeting the operating requirements of the CREC Project. The Plan achieves a water supply efficiency that allows the CREC Project to be supplied from remote water supplies (not local Community supplies) via trucks and allows wastewater disposal by trucks to licensed waste water treatment facilities (outside of the Community) able to receive these wastewaters for treatment and disposal.

CREC requires water for use in its steam cycle as follows: high purity demineralized water produced by the demineralizer trailer is used for process makeup to the steam cycle to replace losses from the steam cycle and HRSG blowdown required to maintain HRSG water chemistry. HRSG blowdown is essentially demineralized water with very low levels of steam cycle contaminants which can be is filtered and recycled through the demineralizer trailers for reuse. As an alternative, HRSG blowdown can be flashed, recovering steam and heat

concentrating HRSG blowdown contaminants. Process makeup water is also needed when the unit is required to operate on fuel oil requiring the injection of demineralized water into the combustion turbine ("CT"), combustor to reduce of NOx emissions. Water is also used to assist in power production on hot days through a process called evaporative cooling which evaporates water into the air inlet of a CT lowering the air inlet temperature, increasing the density of the inlet air flow and increasing power production. Evaporative cooling is only employed in the summer when ambient air is less than fully saturated and electricity market conditions support evaporative cooling water use.

Q. PLEASE EXPLAIN THE USE OF TRAILER MOUNTED DEMINERALIZER SYSTEMS.

A. The Plan utilizes trailer mounted demineralizers that are regenerated off-site by the service provider of these trailers to provide a reliable high-quality process supply of demineralized water to the Facility. The use of the trailer mounted demineralizer systems significantly reduces the on-site water use and wastewater production by the Facility. Demineralization technology is a proven technology (since the 1950/1960s) that has been applied throughout the world in many utility and industrial applications to meet the requirements for high quality process makeup water for electric generating facilities. The trailer mounted demineralization system technology being proposed for the CREC has been in use for over 30 years and is readily available in the region. An important advantage of the trailer mounted demineralization system is that it further reduces on-site water uses and generation of wastewater. Although the cost of producing high quality demineralized water by trailer mounted demineralizers is more expensive than a permanently installed on-site water treatment system, the benefits of reduced on-site water demand (by the elimination of on-site waste water

production) and associated on-site wastewater reduction was an important consideration for this Project.

The trailer mounted demineralizers do not transport chemicals but do transport ion exchange resins used to remove dissolved minerals present in potable water supplies such as that provided from the Town of Johnston. The trailer mounted demineralizer systems produce high quality process demineralized water using ion exchange resins to support the day to day operation of a combined cycle electric generating facility. Once the ability of the resin has been exhausted, the resins must be regenerated. This is done at an off-site location at the demineralizer trailer supplier's regeneration facility. Most electric generating facilities install permanent on-site water treatment systems to lower their operating cost. In this case, the benefits of water use reduction, the associated wastewater production reduction and the cost savings associated with the elimination of the water supply pipeline and waste water pipeline that was proposed to connect to the local sewer outweighs the costs associated with the use of the trailer mounted demineralizers.

The Plan relies on the on-site water storage of raw water and demineralized water that is available for use by the Facility to support ultra-low distillate oil firing (if required in the winter) and continues the use of a dry cooling water system to support fully the needs of heat rejection from the Facility.

Q. DO YOU HAVE OTHER COMMENTS ON THE WATER SUPPLY PLAN?

A. Yes. The Water Supply Plan provides detailed descriptions of the water use and recycling methods that will be employed and where alternative approaches may exist. Although the wastewater recycling methods and technologies to be employed at the Facility are not unique, their potential application at any electric generating facility is based on the needs of each facility

to achieve their target water use efficiencies. Most electric generating facility owners approach the application of water recycling based on the volumetric needs of the facility and the availability of water supply and wastewater treatment infrastructure near the site. Many electric generating facilities employ long water supply or wastewater discharge pipelines to secure their water supplies or provide for wastewater treatment and discharge or direct discharge to local surface waters. In this case, CREC has alternatively selected to use trucking to achieve its water supply and its wastewater disposal requirements.

The Plan also provides a complete analysis of the Facility's water demand during both gas and ultra-low sulfur distillate oil firing for all four seasons and includes the associated water balances that highlight the Facility's water uses, intended treatments, the wastewater recycle and the total amount of wastewater that will be generated by the Facility during each season of its operation. The Plan also provides an analysis of the Town of Johnston water supply (supplied from Providence Water) based on an independent Water Supply System Management Plan developed by Pare Engineering for the Providence Water Supply Board in 2010 (WSSMP, Pare 2010).

Q. DID YOU MAKE ANY FINDINGS REGARDING WHETHER THE WATER SUPPLY WILL CAUSE UNACCEPTABLE HARM TO THE ENVIRONMENT? IF SO, PLEASE EXPLAIN.

A. I compared a conservative estimate of the annual water supply requirements of the CREC Facility and the safe yield analysis of the Providence Water Scituate Reservoir Complex (WSSMP; Pare 2010) as supplied through a pipeline to the Town of Johnston. The safe yield analysis had been independently assessed by the Providence Water Supply Board and its engineers. That comparison confirmed that the CREC water demand will not have a negative impact on the Providence Water supply to meet the current and future needs of its customers,

even under the drought conditions used in the WSSMP analysis. Using a conservative analysis of CREC's annual water supply requirements, CREC water use is projected to be 0.04% of the Safe Yield of the Providence Water supply based on Providence Water's analysis of its water supply system.

Q. DO YOU HAVE AN OPINION, TO A REASONABLE DEGREE OF SCIENTIFIC CERTAINTY, REGARDING WHETHER THE WATER SUPPLY PLAN WILL CAUSE UNACCEPTABLE HARM TO THE ENVIRONMENT.

A. Based on my review and the documents I relied on (identified above) it is my opinion that CREC's Water Supply Plan will not cause an unacceptable harm to the environment. The CREC Facility will rely on proven technologies to produce process makeup water suitable for use within the Facility; will produce a wastewater compatible with discharges to POTWs; and will not, based on Providence Water's own analysis of the Safe Yield of its Water's Supply system, negatively impact Providence Water's ability to meet its requirements.

III. WASTEWATER ANALYSIS

Q. PLEASE EXPLAIN YOUR METHODOLOGY.

A. The potential impacts of wastewater discharges from CREC on the environment could result if wastewaters generated by CREC and transported via truck(s) to a licensed POTW for treatment and disposal either would not be treatable by typical POTWs or if specific chemical constituents projected to be present in the wastewater to be generated by CREC could result in impacts on typical POTW operations, such that the POTW treatment facility would not be able to operate within its discharge permit.

My review of the potential impact of CREC wastewater on any licensed waste water treatment facilities or a POTW that would receive wastewaters from CREC first required a review of the Project's Water Balances and projected wastewater composition. This was done to

determine whether the projected sources of wastewater and the projected wastewater composition was consistent with that which would be expected from similarly configured gas fired combined cycle facilities. This review found that the Water Balances flows and projected wastewater composition were consistent with that which would be expected for a combined cycle electric generating facility; that the major water uses and flows and the wastewater sources and flows were consistent with the design of CREC; and that the projected wastewater composition was consistent with the chemistry I expected from the planned generating Facility.

A review of the potential impact of wastewaters from CREC on any potential licensed POTW that received CREC wastewaters via trucking required a comparison of the projected wastewater composition for CREC to the categorical pretreatment standards applicable to new Steam Electric Power Generating Facilities discharging to POTWs, as developed by USEPA in 40 CFR Part 423, published in the Federal Register on November 3, 2015, and specifically the pre-treatment standards developed by USEPA within that regulation. In 40 CFR Part 423.17, USEPA identifies Pre-treatment Standards for new power plants designed to prevent the discharge of any pollutant into a POTW that interferes with, passes through or is otherwise incompatible with the POTW. These pre-treatment standards were developed by USEPA after extensive investigation of operating electric generating facilities in the U.S. which included combined cycle electric generating facilities as documented in USEPA's Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category – September 2015.

This review found that the projected composition of CREC wastewater is fully within the USEPA identified pre-treatment standards for discharges to POTWs without need of further wastewater pre-treatment, other than that already planned at CREC (oil/water separation, and

wastewater equalization). This results from the fact that CREC, as designed, does not employ systems and fuel types identified by USEPA as potentially generating wastewaters with known levels of chemical constituents that have been shown to have impacts on POTW operations. CREC, by employing a dry cooling system as oppose to wet cooling system for heat rejection, and utilizing natural gas as it primary fuel source with ULSD as a backup fuel, does not generate the specific chemical constituents of concern based on USEPA research.

40 CFR Part 423, and specifically Part 423.17, identifies effluent pre-treatment standards that apply to the full range of Steam Electric Generating facilities used in the United States. Only a portion of these are potentially applicable to the CREC Project.

The USEPA, in setting its Steam Electric Power Generating Point Source Category effluent standards, identified specific chemical constituents from specific power plant operations that either would pass through a POTW untreated, and as a result be discharged from a POTW to the environment, or impact operation of a POTW, causing that facility not to operate within its discharge permit requirements. A review of the specific processes identified by USEPA found that CREC, because of its combined cycle design, its reliance on a dry cooling system and its use of natural gas as its primary fuel, does not generate the specific wastewater types identified by the USEPA as having impacts on POTWs, or result in a pass through of POTW treatment plant operations.

Q. DID YOU MAKE ANY FINDINGS REGARDING CREC'S ENVIRONMENTAL IMPACT FROM ITS PRODUCTION, TREATMENT OR DISCHARGE OF WASTEWATER? IF SO, PLEASE DESCRIBE.

A. The results of my review of the projected wastewater composition for the CREC facility found that the projected wastewater composition is consistent with that which would be expected from an electric generating facility similar to that of the CREC Facility using the intended source

water, employing water recycling to the extent intended and that the projected wastewater effluent composition is consistent with the pre-treatment standards identified by USEPA for discharge to POTWs without any additional pre-treatment. The projected wastewater composition is expected to be treatable by any POTW, and is not expected to result in any impact of POTW operations or result in any violation of POTW discharge limits based on the pretreatment standards identified in CFR 423.17.

Q. HAVE YOU REVIEWED THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT'S ("RIDEM") ADVISORY OPINION?

A. Yes.

Q. DO YOU HAVE AN OPINION REGARDING DEM'S ANALYSIS OF CREC'S IMPACT ON THE WASTEWATER?

A. RIDEM's original advisory opinion did not include an analysis of CREC's environmental impact from wastewater discharge based on the CREC Plan. I believe that RIDEM's opinion on the potential environmental impact of CREC's wastewater discharge on POTWs, once developed, will be consistent with the findings above.

IV. <u>CONCLUSIONS</u>

Q. DO YOU HAVE AN OPINION, TO A REASONABLE DEGREE OF SCIENTIFIC CERTAINTY, REGARDING CREC'S IMPACT ON WASTEWATER?

A. Yes. In my opinion, USEPA research as presented in its Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category – September 2015 can be relied on as a definitive resource as to the sources of wastewater and chemical constituents that have impacts on POTW operations receiving wastewaters from Steam Electric Generating facilities. From my review of CREC's water uses and wastewater discharges, it is my opinion that CREC will not have an impact on the environment from the wastewaters generated by the Facility employing the planned wastewater

controls, and that the resulting wastewater will be acceptable for discharge without the need of additional pre-treatment by any POTW that has the capacity to receive and treat these wastewaters.

It is further my opinion, based on my experience and based on reliance on the Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, EPA-821-R-15-007 dated September, 2015, that the above finding would be the same for any alternative natural groundwater or municipal water supply that CREC would propose to use. This is based on my understanding of the chemistry of groundwater and municipal water supplies in the New England area. CREC is compatible by design and by the intended fuels, which will limit environmental impact of its wastewaters on any POTW, as demonstrated by a number of other successfully operating combined cycle electric generating facilities located in the State of Rhode Island currently discharging to existing/operating POTWs.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.