REQUEST FOR QUALIFICATIONS FOR THE DESIGN, CONSTRUCTION, OPERATION, MAINTAINCE AND/OR FINANCING OF AN ANAEROBIC SLUDGE DIGESTER AND COMBINED HEAT AND POWER SYSTEM FOR THE GLOUCESTER COUNTY UTILITIES AUTHORITY

1.1 Submissions Being Solicited in Fair and Open Process

The Gloucester County Utilities Authority ("Authority") is seeking firms qualified to assist the Authority with the design, construction, operation, maintenance and/or financing of an anaerobic sludge digestor with combined heat and power system at the Authority's Wastewater Treatment Plant located in West Deptford, New Jersey (collectively, the "Project"). Through the issuance of this Request for Qualifications ("RFQ"), the Authority is inviting potential respondents to submit responses to the Authority describing the technical, management, business and/or financial aspects of the plan by which each proposes to design, construct, operate, maintain and/or finance the Project. The selected firm will work with the project team, which includes representatives of the Authority, the Authority's consulting engineers and the Authority's other professional consultants and advisors (collectively, the "Project Team" or "Review Committee").

All respondents are required to submit a proposal for the design and construction of the Project. Respondents may additionally propose financing structures for the payment of the costs of the Project as well as ownership/operating structures for the Project. All responses must comply with the requirements set forth in Sections 3 and 4 below.

The Authority is soliciting submissions under this RFQ in a fair and open process pursuant to *N.J.S.A.* 19:44A-20.4 et seq. and the New Jersey Wastewater Treatment Public Private Contracting Act set forth in *N.J.S.A.* 58:27-19 et seq.

Upon the review of all responses to this RFQ, the Authority will prepare and distribute a Request for Proposals to the respondents it deems most qualified to assist it with the Project prior to making its final selection of a successful firm. The Authority intends to enter into one or more contracts and/or agreements with the respondent who is ultimately selected to assist with the design, construction, operation, maintenance and/or financing of the Project.

Written submissions responding to the requirements contained in this RFQ should be submitted to the following address:

The Gloucester County Utilities Authority 2 Paradise Road West Deptford, New Jersey 08066 Attn: John J. Vinci, Executive Director

To be considered, please submit one (1) original, two (2) hard copies and 10 electronic copies on CD-ROMs of your submission, along with a cover letter, to the above-mentioned address no later than **2:00 p.m.** on Wednesday, January 7, 2015. The members of Authority will review all responses at its next following meeting and select a pool of the most qualified respondents (such determinations to be made in the Authority's sole and absolute discretion), each of which will be asked to respond to a Request for Proposals. Late submissions will not be accepted and will be returned unopened as permitted by law. No oral, written or other form of amendment will be accepted by the Authority after this time, unless requested by the Authority. Please note that the Project Team may choose to interview certain firms who have expressed an interest in submitting a response to this RFQ between December 12, 2014 and December 31, 2014.

The Authority reserves the right to reject any or all submissions, to waive any requirements of the RFQ and to modify or amend, with the consent of the respondent, submissions. All submissions become the property of the Authority. **It is the responsibility of the respondent to monitor the Authority's website**

for updates and responses to questions (www.gcuanj.com). The preparation of an RFQ response shall be at the expense of the respondent. The Authority will not reimburse firms for any costs associated with the preparation or submittal of any response. By responding to this RFQ, you acknowledge and consent to the conditions set forth herein relative to the submission, review and consideration of your response.

1.2 Contact Information

All questions should be addressed in writing no later than **<u>2:00 p.m. on Wednesday, December 31,</u> <u>2014 to</u>**:

> John J. Vinci, Executive Director The Gloucester County Utilities Authority 2 Paradise Road West Deptford, New Jersey 08066 Telephone: (856) 423-3500 Email: jvinci@gcuanj.com

It is the Authority's preference that questions be delivered via email with the subject line titled "GCUA – Digester RFQ Question".

1.3 **Pre-Submission Meeting**

There will be a non-mandatory pre-submission meeting on <u>Monday, December 22, 2014 at 10:00</u> <u>a.m.</u> at the offices of the Authority, located at 2 Paradise Road, West Deptford, New Jersey 08066. A tour of the site will be conducted after the meeting. The pre-submission meeting is not mandatory, but all prospective respondents are highly encouraged to attend. Inspection of the site for the Project is allowed and the respondents will be required to rely solely and completely on information it obtains as a basis for responses. If a prospective respondent cannot attend the informational meeting, or if they require more time for their inspections, they may arrange for an opportunity to inspect the site prior to submitting a response by contacting the Authority's Executive Director, John J. Vinci, to schedule an appointment.

1.4 Submission Format

Responses should cover all information requested in Section 4 of this RFQ and should also address services listed in Section 3 and the selection criteria in Section 1.5. Your response must be placed in a sealed envelope and clearly labeled with the title "Anaerobic Digestion Project RFQ Response" and the firm's name and business address. Each response must be accompanied by a letter of transmittal not exceeding two (2) pages. The letter must include the full legal name and business address of the firm.

Submissions which, in the sole judgment of the Authority, fail to meet the requirements of the RFQ or which are in any way conditional, incomplete, obscure, contain additions or deletions from requested information, or contain errors may be rejected. Prior to the submission of responses, erasures or other corrections in the submission must be initialed by a designated signatory of the responding firm. In the event any errors are noticed by the Authority after the submission is opened, the Authority reserves the right, but does not have the obligation, to waive such errors.

Prior to the submission date, a respondent may modify its previously submitted response if a modified submission is either hand delivered to the Authority's Executive Director by or on behalf of an authorized representative of the respondent, or delivered to the Executive Director by certified mail to the address set forth in subsection 1.2 above.

Submissions should provide a straightforward and concise delineation of the respondent proposal and commitment to satisfy the requirements of the RFQ.

The Authority will consider requests to protect proprietary information submitted with responses. The respondent should clearly and specifically label all such material and cite the appropriate law which protects such proprietary information. General requests to protect the entire submission are not acceptable. The Authority shall notify a respondent of any Open Public Records Act (*N.J.S.A.* 47:1A-1 et seq.) request for information that has been designated as proprietary information by the respondent. It is the responsibility of the respondent to defend any such action brought under the Open Public Records Act. Respondents, by submitting their responses, expressly acknowledge and agree that the Authority, its staff and its consultants will assume no liability for any loss, damage, or injury which may result from any disclosure or use of marked data or any disclosure of this or other information to third parties.

1.5 Compliance with Laws

The firm selected shall comply with all applicable federal, state and local statutes, rules and regulations and license requirements. Firms chosen will be required to comply with P.L. 1975 c.127 (affirmative action requirements and license requirements).

1.6 Indemnification

Firms shall be requested to defend, indemnify and hold harmless the Authority, its officers, agents and employees from any and all claims and costs of any nature whether for personal injury, property damage or any other liability arising out of or in any way connected with the any acts or omissions of the respondent or any of its principals, employees or agents under this request for qualification or under any agreement executed with the Authority.

1.7 Subcontractors

If the firm intends to subcontract out any part of the work contained in the scope of this RFQ, the firm shall provide a complete description of the services to be subcontracted, an estimate of the overall amount of work to be subcontracted, the rationale behind the need to subcontract, and a comprehensive description of the proposal and experience of the proposed subcontractor. The Authority reserves the right to disapprove any proposed subcontractor and to revoke previous approval of a subcontractor should the need arise.

1.8 Conflict of Interest

Firms must identify any conflict of interest that may arise from providing services to any member of the Project Team. The Authority reserves the right to: (i) to disqualify any firm or reject any submission at any time solely on the grounds that a real or perceived legal or policy conflict of interest is presented; (ii) to require the firm to take any action or supply information necessary to remove the conflict; or (iii) to terminate any contract arising from this solicitation if any such relationship would constitute or have potential to create a real or perceived conflict of interest that cannot be resolved to Authority's satisfaction.

1.9 Submission as Public Information and Property of Authority

The information submitted in each response may be subject to public disclosure pursuant to State and Federal law. All responses will become the property of the Authority. Responses submitted will not be returned to respondents unless they are received late.

2.1 General

The objective of the Authority in seeking responses to this RFQ is to enable it to select a pool of qualified respondents capable of presenting the Authority with options for the design, construction, operation, maintenance and/or financing of the structures and equipment constituting the Project, within the minimum scope of requirements presented in Section 3 below, in a manner that maximizes the operational and financial and operational benefit to the Authority. Each submission will be evaluated in terms of the reasonableness of the claims and/or commitments made, the completeness of the data provided, the reliability of the approach taken, and conformance with the requirements of and the instructions provided in this RFQ. The selected pool of respondents will not be determined solely on the basis of economic factors. Submissions will be evaluated on economic factors and on non-economic factors (including, but not limited to, the respondent's approach and experience).

Additionally, the evaluation will consider experience and reputation in the field, professional expertise, including accreditation, licensing and/or membership in appropriate professional associations, knowledge of the Authority, past performance on other work for the Authority, availability to accommodate any required meetings of the Authority, availability of personnel and other resources to do the work on the schedule set forth by the Authority, designated professional and support staff and location of offices, financial stability and strength of the submitting firm, on-going criminal investigations or litigation, references in general and other factors as demonstrated to be in the best interest of the Authority and other members of the Project Team.

As the members of the Review Committee (as hereinafter defined) shall utilize the criteria set generally above forth above, and more specifically below, in making in selecting a qualified pool of respondents, you are urged to provide sufficient information on the above criteria in your submission.

Selection of the qualified pool shall be based solely on the Review Committee's evaluation of the submissions and the criteria set forth above and below. The Authority reserves the right to interview the respondents and to negotiate the terms and conditions of any submissions to obtain the most advantageous situation for the Authority.

2.2 Initial Screening

A screening of all submissions will be conducted to determine overall responsiveness. Submissions determined to be incomplete or non-responsive will be disqualified.

2.3 Determination of Qualified Respondents

Following the determination of completeness and compliance with submittal requirements, the Authority will review each complete and responsive submission to determine if the minimum qualification requirements ("Minimum Qualification Requirements") set forth in below have been satisfied. Only those submissions which are determined to meet the Minimum Qualification Requirements will be fully evaluated by the Authority. In order to meet the Minimum Qualification Requirements, respondent shall provide information, as required in Section 4.4 (including providing a reference and contact information for each reference facility), demonstrating that the respondent has experience with at least one (1) sludge digester project and CHP at a wastewater treatment plant. Compliance with the Minimum Qualification Requirements will be determined based upon an evaluation of both the past experience of the respondent and

the information on reference projects provided in the submission. A respondent may be a joint venture whose participants collectively meet the Minimum Qualification Requirements.

Additionally, a respondent may organize a team of companies which collectively meet the Minimum Qualification Requirements, however, one member of the team shall be designated as the responsible party whom the Authority may contact with any questions. Once a submission has been received by the Authority, the respondent cannot change or substitute team members without the consent of the Authority.

The Authority may, in its discretion, request clarification from a respondent. In the event any submission does not clearly demonstrate that the respondent has met the Minimum Qualification Requirements, the Authority may decline to review and evaluate such submission.

2.4 Comparative Evaluation Criteria

Submissions will be evaluated based upon: (i) experience; (ii) technical approach to the design of the Project; (iii) overall benefit to the Authority of the management approach to ongoing operation of the Project by the respondent (if the respondent is submitting a plan that includes operation of the Project) and (iv) economic benefit to the Authority of the financial approach to finance the Project (if the respondent is submitting a plan of finance).

2.4.1 Evaluation of Experience

The respondent's experience will be evaluated based on the following factors including, but not limited to: (i) experience designing, permitting, financing, constructing and operating and maintaining (if the respondent is submitting a plan that includes operation and maintenance of the Project) structures, equipment and systems similar to Project; (ii) experience managing projects similar to the Project (if the respondent is submitting a plan that includes operation and maintenance of the Project); (iii) experience in obtaining and providing financing for projects similar to the Project (if the respondent is submitting a plan that includes financing of the Project); and (iv) general expertise, experience and reputation, including key personnel, indicating that the respondent is capable of performing the proposed services indicated in the submission and the depth of experience and success in executing similar projects.

2.4.2 Evaluation of Technical Approach

The technical approach will be evaluated based on factors including, but not limited to, the following: (i) the proposed design of the Project will be evaluated to determine if it will perform as expected to meet or exceed the proposed operation plan; (ii) site utilization; (iii) the quantity and quality of the digested sludge and biogas; (iv) the technical aspects that offer the most advantage to the Authority, and alternatively, those elements that are a disadvantage to the Authority; (v) any impacts on existing Authority operations, (vi) any impacts to the Authority's existing permits; (vii) the likelihood that the proposed project can and will be permitted and implemented; (viii) any proposed guarantees with respect to the characteristics of the digested sludge; (ix) guarantees in connection with the quantity of heat, natural gas and/or electricity that will be produced by the Project; and (x) the proposed plan in the event of a system shutdown.

2.4.3 Evaluation of Plan of Operation (optional)

If respondent elects to include a plan to operate and manage the Project after construction, such submissions will be evaluated based on factors including, but not limited to, the following: (i) feasibility of the respondent's plan of operation; (ii) overall benefit and cost-effectiveness to the Authority; and (iii) risk placed on the Authority.

2.4.4 Evaluation of Plan of Finance (optional)

If respondent elects to submit a plan of finance for the Project, such submissions will be evaluated based on factors including, but not limited to, the following: (i) feasibility of the respondent's plan of finance; (ii) overall financial benefit to the Authority; (iii) risk placed on the Authority; and (iv) allocation of financial risk between the respondent and the Authority.

SECTION 3: Scope of Services

It is the intent of the Authority to solicit Qualification Statements from qualified respondents that have experience with designing, constructing, operating, maintaining and/or financing anaerobic digestion and CHP systems similar in size and scope to the Project, along with the associated work for a complete and functional operating system. The Authority is also accepting submissions from the respondents that include proposals for the ongoing ownership and/or operation of the Project by the respondent after construction is completed, as well as proposals for the financing of the Project. Firms and/or persons responding to this RFQ shall be able to demonstrate that they will have the continuing capabilities to perform these services:

3.1 Scope of Services for the Design and Construction of the Project

The firm or firms ultimately selected to assist the Authority with the Project will be responsible for preparing complete drawings, specifications, project documents and permitting for the construction of Project along with the associated work for a complete and functional operating system.

Site survey documentation to support the Project is available on the Authority's website (www.gcuanj.com) and upon request of a respondent to the Authority. All other engineering services to design and permit the Project shall be provided by the respondent as needed for a complete and functional Project.

The respondent shall submit a conceptual plan as part of its response to this RFQ. The report shall evaluate and recommend an anaerobic digester technology, including mixing, heating systems, heat recovery, gas conditioning, gas storage, sludge storage and sludge pumping as well as evaluation of various combined heat and power ("CHP") technologies, including number and size of engines. Environmental air regulations may require catalytic converters on the engines to control nitrous and sulfurous compounds in the discharge gas. Also, the incoming biogas must be cleaned before it can be burned. At a minimum, the biogas (methane) cleaning processes shall remove condensate water, hydrogen sulfides and siloxanes which can damage the CHP engines.

The response should also address current needs and future expansion capabilities of the proposed plan for the Project. All responses must recommend the size, method, components and configuration of the proposed infrastructure. Currently incinerator ash from the Authority is a disposed at the Gloucester County Improvement Authority Landfill.

The respondent ultimately selected to work with the Authority may be required to prepare and submit preliminary design documents that are at least 30% complete by March 1, 2015 in the event that the Authority elects to finance the Project through the New Jersey Environmental Infrastructure Trust Financing Program ("NJEIT"). The respondent may propose alternate financing methods.

If a respondent is selected, it will be expected to submit design documents (drawings and technical specifications) to the Authority for 30%, 60% and 90% completion of the design of the Project. The

Authority and it's consulting engineers must review and approve all work prior to proceeding past the 60% design phase. The selected firm shall be required to provide a construction cost estimate to the Authority upon reaching 80% design completion. The selected firm may be required to redesign the project at no additional cost to the Authority if the construction cost bid exceeds \$30,000,000. The Authority can waive this redesign requirement if the additional costs are shown and agreed to be beneficial to the Authority over the life of the project.

Current plant characteristics are as follows:

Design Flow (ADF)	27 MGD
Current Average Daily Flow	19 MGD
Current Peak Wet Weather Flow	40 MGD
Consider for Future ADF	32 MGD
Influent CBOD	200 mg/l
Influent TSS	200 mg/l
Influent TKN	30 mg/l
Effluent CBOD	less than 20 mg/l
Effluent TSS	less than 20 mg/l
Effluent TKN	less than 20 mg/l

Currently, the treatment plant operations at dry weather flows around 18 mgd, resulting in the following solids production. The primary clarifiers waste to gravity thickeners produce a 4-5 % solid (60-90 gpm), which is then sent to the sludge blend tanks. The waste activated sludge off of the secondary clarifiers goes to a gravity belt thickener to produce a 4-5% solid (20- 30 gpm), which is then sent to the sludge blend tanks.

Trucked in waste is directed to the blend tanks with the exception of oils and grease, which are fed directly to the incinerator. A new oil and grease receiving and pumping station will be required to feed oil and grease to the anaerobic digesters.

Total sludge waste from all sources based on current operation and flows is estimated to be 80-120 gpm.

3.2 Scope of Services for the Ownership and/or Operation of the Project (optional)

Respondents may, but are not required to, submit a proposal describing alternative structures with respect to ownership and operation of the Project. For example, the respondent may provide a proposal which assumes that it will own and operate the system or it may provide a proposal which assumes that the Authority will own the system but the respondent will operate the system, or it may submit a proposal addressing each structure. Any proposal for the ownership/and or operation of the Project by the respondent must provide a detailed analysis of the benefit of such proposal to the Authority. Respondent must provide an analysis of the personnel requirements necessary under its proposed ownership/operating structure. If the respondent submits a proposal whereby it will maintain ownership of the Project for a period of time, such proposal must include a \$1.00 Authority buyout option at the end of the specified term.

3.3 Scope of Services for the Financing of the Project (optional)

The Authority has evaluated numerous financing options and is currently contemplating utilizing either: (i) the NJEIT; (ii) the New Jersey Energy Resiliency Bank ("NJERB"); or (iii) a combination of both the NJEIT and NJERB, to finance the Project. While the Authority is currently in favor of these financing options, Respondents may, but are not required to, submit a proposal describing alternative financing options for the Project. Any such proposals should take advantage of all applicable incentives, including performance based incentives, such as rebates, tax incentives, governmental and non-governmental cost offsetting programs and any other environmental attributes available to reduce the installation and operational costs of the Project, if any such incentives are available.

SECTION 4: Submission Requirements

4.1 Timing of Submission; Number of Copies to be Submitted

Sealed submissions must be received by the Authority no later than 2:00 p.m. (Eastern Time) on Wednesday, January 7, 2015. One (1) original, two (2) hard copies and 10 electronic copies on CD-ROMs of the submission shall be delivered to the Authority. Submissions shall be delivered to:

The Gloucester County Utilities Authority 2 Paradise Road West Deptford, New Jersey 08066 Attn: John J. Vinci, Executive Director

Submissions that are not received by the date and time set forth above may be rejected. The Authority will return late rejected submissions to the contractor unopened as permitted by law.

One copy of the submission documents must be clearly marked as the original and must contain the original signature forms and other original documents. The remaining two copies can be reproductions. Respondents shall number each set of documents in sequential order on the upper right corner of each cover. Submissions must be enclosed in a sealed envelope or package bearing the name and address of the respondent. THE NAME OF THE SUBMISSION MUST BE DESIGNATED ON THE OUTSIDE OF THE ENVELOPE OR PACKAGE.

All submissions will remain unopened until the deadline has passed. At such time, all submissions received will be opened and distributed to the Project Team for review.

The delivery of any submission to the Authority on the above date and prior to the time specified herein is solely and strictly the responsibility of the respondent. The Authority shall not, under any circumstances, be responsible for delays caused by the United State Postal Service or any private delivery service, or for delays caused by any other occurrence.

The respondent, by submitting a response, attests to the fact that neither the respondent nor any of its proposed sub-contractors are prohibited from receiving the award under *N.J.S.A.* 34:11-56.38 (regarding State of New Jersey list of debarred contractors and sub-contractors).

4.2 Completeness

The respondent must follow each and all of the instructions set forth in this Section in order for a submission to be deemed responsive to this RFQ. In all cases, the Authority reserves the right to determine, at its sole discretion, whether any aspect of the respondent's submission meets the submission requirements

of this RFQ. The Authority reserves the right to reject any submission which, in its judgment, does not comply with these submission guidelines. In providing the information required within this Section 4, the respondent should emphasize and should be responsive to the evaluation criteria described in this RFQ.

4.3 Organization and Form of Submission

4.3.1 Organization of Submission

Submissions in response to this RFQ should consist of the following sections:

SECTION I: Executive Summary

SECTION II: Technical Design Approach

SECTION III: Operation/Ownership of Project Proposal (optional)

SECTION IV: Financing of Project Proposal (optional)

4.3.2 Form of Submission

The respondent shall provide the appropriate information required for each section, in accordance with the following content and format requirements:

The responses shall be concise, clear, factual, and complete with a minimum of extraneous material.

The information provided shall identify the section of the RFQ being addressed.

The submission shall be indexed and divided into sections and shall be prefaced with a table of contents.

The submission documents shall be typed or printed (1-1/2 spacing) on 8-1/2-inch x 11-inch paper, except for figures or maps, which must be prepared at a larger size due to scale requirements in order to be legible. Oversize maps and figures greater than 11 inches x 17 inches shall be organized in appendices whenever possible.

4.4 Section I: Executive Summary

4.4.1 General Provisions

The Executive Summary shall summarize, in clear and concise language, the information contained in all other parts of the submission. The Executive Summary should be drafted so that it may be easily understood.

4.4.2 Transmittal Letter and Signature Requirements

Together with each submission, the Authority must receive one transmittal letter on the official letterhead of the respondent acknowledging, among other things, that the respondent has completely reviewed and understands and agrees to be bound by the requirements of this RFQ. Such letter must further state that: (i) all information in support of the submission is current, correct and complete; (ii) all representations made are true; (iii) the submission is provided fairly, without collusion, fraud or any other

action taken in restraint of free and open competition; and (iv) the respondent is not currently suspended or debarred from doing business with any governmental entity. Finally, the letter must designate a contact person for all communications to and from the Authority with respect to this RFQ.

The transmittal letter must be signed by an officer of the respondent who is empowered to sign such material. A certificate attesting to such authorization must be attached to the cover letter. If the respondent is a partnership, the submission shall be signed in the name of each firm by one or more of the general partners. If the respondent is a corporation, the authorized officer shall sign his/her name and his/her title beneath the full corporate name.

4.4.3 Business Registration

The respondent shall include with its submission a Business Registration Certificate as required by *N.J.S.A.* 52:32-44. Business Registration Certificates must also be included with the submission for all participating firms named in the submission. Pursuant to P.L. 2009, C.315, failure to submit a Business Registration Certificate with the submission may be cured as long as the Business Registration Certificate is submitted prior to the final selection of the respondent who will assist the Authority with the Project.

4.5 Technical Design Approach

The information to be provided pursuant to this Section is intended to allow the Project Team to evaluate the respondent's qualifications to design and build the Project. The respondent shall include its proposed design and cost projections for the Project along with any other details such respondent deems to provide the Project Team sufficient information to review and evaluate its submission. All proposed Project designs must, at a minimum meet the technical requirements for the Project listed in Section 3.1 above.

4.5.1 **Prior Experience**

The respondent shall demonstrate its qualifications by citing one or more reference projects in which it has performed services similar to those being proposed hereunder. The respondent shall also describe the differences between the reference projects and its proposal for the Project.

The respondent shall provide the information requested below as it pertains to the reference project offered to demonstrate the appropriate technical experience:

- (i) Location of the reference project;
- (ii) Names and telephone numbers of the owner of the reference project;
- (iii) Names and telephone numbers of municipal or utility references;
- (iv) Facility design capacity;
- (v) A detailed description of the facility, process and equipment employed in performing each function;
- (vi) Number of people employed and job categories for providing the services;
- (vii) Monthly downtime for the reference project and description of each problem during the one year that created more than twenty-four (24) hours of downtime for a single occurrence;
- (viii) History of actual environmental compliance;
- (ix) Respondent's role(s) in project design, permitting, construction, testing, operation and maintenance;
- (x) Electricity/Gas Production History;
- (xi) Digested Sludge Quality and Quantity;

- (xii) Current status of the reference project;
- (xiii) A listing and description of all major permits, licenses and approvals: (a) applied for, and (b) received with respect to each operation;
- (xiv) Any claims, litigation, judgments, notices of violation, or administrative enforcement actions arising out of the construction and/or operation and maintenance of the equipment and/or the operation; and
- (xv) All performance guarantees or requirements (if any) and any failure to meet such guarantees or requirements.

The Authority reserves the right to conduct an investigation of the respondent and its subcontractors' and other team members' (including key individuals) technical qualifications by contacting project references or accessing public information. Additional information may be requested during the technical qualifications review.

4.5.2 Key Project Staff, Resumes and Applicable Experience

The respondent shall provide the relevant qualifications and resumes of all key staff that will be assigned to work on the Project. This submission shall include the key project staff of the respondent, its parent (if applicable), partner firms, and its subcontractors. To the extent applicable, information shall include length of time practicing in profession, licenses and certifications, familiarity with sludge digester facilities permitting, design, construction, testing, operations, maintenance and management, and proposed project leadership. Information for key design personnel shall also demonstrate design experience with facilities on a scale comparable to the services proposed in response to this RFQ. The respondent shall identify any professional engineers and operating personnel that are either (i) currently and appropriately licensed in the State of New Jersey, or (ii) who are expected to become appropriately licensed in the State of New Jersey, to provide the design or operation services for this project.

All resumes required herein of persons with responsibility for this project shall include the person's name, title, current location, history of employment experience with a brief description of relevant responsibilities, titles, employer's name and city and state location, certifications, and education. Dates must be provided for all education, certifications and employment of each employer. The Authority reserves the right to seek and contact references of the named individuals for the purpose of evaluating the individual's past performance.

4.5.3 Technical Description

A detailed technical description of the proposed operation shall be included in the technical proposal and shall contain all of the information needed to convey a clear understanding of its components, configuration, design, layout and operating characteristics. Such information shall include:

- On-site and off-site equipment layout
- Wastewater treatment system/Sludge dryer facility/digestion System/electric or gas System interaction and controls
- Environmental considerations
- Incoming Sludge characteristics
- Capacity of the digester and whether it will be able to handle all of the Authority's Sludge
- Digested Sludge quality and quantity
- Quantity of gas/electricity production, description of how gas/electricity will be supplied to the Authority
- Fire protection
- Sludge receipt, management and transmission operations

- Description of the operation process
- Planned days and hours of operation
- Amount of sludge to be received and processed
- Maintenance facilities
- Noise abatement and control systems
- Dust and odor control systems
- Ambient air monitoring system
- Process flow for all waste streams
- Health and safety program
- Structural supports and foundations along with materials of construction, if applicable
- Proposed modifications to existing Authority facilities
- Expansion capability to meet future flow increases
- Limitations on incoming sludge characteristics, if any

The respondent shall provide a description of the specific technology being proposed, the development and evolution of that technology, and a general plan and flow diagram of the system's configuration. The respondent shall discuss its knowledge of the ability of its proposed system to meet NJDEP permitting and other regulatory requirements. The respondent shall demonstrate that it plans to use equipment which has been previously designed, constructed, acceptance tested, and operated for sludge digestion purposes.

If the respondent intends to use a system which, either in whole or in part, is controlled by patent, license, or franchise rights, such respondent shall demonstrate that it holds the patent rights or has a license or franchise agreement for the specific proposed technology and equipment which has been constructed and operated, and shall submit evidence of contract rights with the license, franchise or patent owner for the authorized use of the technology or equipment. A comprehensive description of the license agreement of the system which the respondent intends to provide, shall be furnished, including the agreement's terms of revocation; and, in addition the respondent shall include in its description the remedial measures which would be followed or taken in the event that its license or franchise is terminated or revoked at any time.

4.5.4 Submission Drawings

As part of the technical response, the respondent shall, at a minimum, provide the drawings as listed below to the extent that the respondent plans to modify the Authority's site and/or existing Authority equipment or structures. Such drawings shall be sufficiently detailed so as to adequately define the proposed equipment, systems, layout, and dimensions of the system. Each technical submission shall include a complete list of all drawings and sketches.

Applicable drawings shall be included as part of the technical submission on fold out pages having a size of 11 inches x 17 inches. In addition, five sets of full size drawings shall be included with the submission and shall have a minimum size of 24 inches x 36 inches. Each drawing shall contain a graphic scale to allow approximation of dimensions on reduced-size drawings.

- 1. General Arrangement Drawing(s) drawings showing the arrangement of equipment. In addition to equipment arrangement, the drawings shall show equipment and cross sections, access walkways, and clear space requirements for maintenance. The space requirements for material storage, control room, administrative areas, etc. shall be identified.
- 2. Enlarged Plans and Cross Sections drawings showing enlarged plans and cross sections of the proposed Project.

3. Flow and Mass Balance Diagram – a flow and mass balance diagram(s) shall be provided to depict the quantities of sludge processed through the Project.

4.5.5 Environmental Emissions Data

The respondent shall provide a narrative description of both uncontrolled and controlled emissions, including, but not limited to, air, dust, noise, odor, and residuals.

4.5.6 Major Equipment Items

The respondent shall submit a listing of manufacturer names and technical descriptions and specifications for each of the major equipment items or systems proposed for use in the Project. A complete list of all equipment shall be provided in the submission, including the description, location, capacity, and various applicable ratings. The listing shall identify a quantity for each item. The respondent shall also provide a narrative description of each major equipment component indicating its expected performance, characteristics, its materials of construction, and the ability of such equipment to meet minimum applicable environmental performance requirements. For the major components, the respondent shall produce or use vendor-supplied data sheets providing information for this equipment and shall submit the data sheets with the response.

For equipment proposed for which no manufacturer's technical sheet has been provided, the respondent shall provide its own technical sheet consistent in format, content, and level of detail as set forth in the typical manufacturer's data sheets.

4.5.7 Odor and Air Emissions Control

The submission must include a discussion on the approach that will be implemented to comply with odor and air emissions requirements and performance standards. In particular, the submission must include descriptions of odor and air emissions control processes, odor control equipment and anticipated emission levels.

4.5.8 Implementation Schedule

The respondent shall include a schedule in its submission for the development and installation of the Project. The schedule shall show major development milestones such as obtaining major permits, obtaining financing and design functions, procurement, installation of major equipment and systems, construction activities, start-up of the Project, and testing. All major milestones shall be identified on this schedule as applicable.

4.5.9 Maintenance, Repair and Replacement Plan

The respondent shall submit a schedule of preventative maintenance, repair and replacement programs and activities outlining its commitment to minimize Project downtime and address potential issues related to seasonal variation. The respondent shall also identify all anticipated scheduled maintenance, repair and replacement activities exceeding \$10,000 (in 2015 dollars).

4.5.10 Acceptable Sludge

Respondents shall indicate in this section of the submission their requirements for the quality parameters of the sludge necessary for the intended purposes ("Acceptable Sludge").

4.5.11 Plan in Event of System Shutdown

Respondents shall address what would happen in the event that the Project had to be shutdown for any reason.

4.6 Section IV: Ownership/Operation of the Project Proposal (Optional)

If the respondent elects to provide a proposal for the ongoing ownership and/or operation of the Project, it shall provide such information necessary for the Authority to determine the strength of such proposal. Respondents are requested to include in their submission all information necessary to permit the Project Team to make an informed evaluation under the factors stated in Section 3.2 as well as a discussion regarding the mitigation of costs that the Authority would incur if the respondent were to own and/or operate the Project after its construction. The Authority will evaluate both the magnitude of the economic benefit proposed as well as the nature of such benefits. The respondent shall, therefore, provide a clear discussion of the benefits proposed. Any explanatory text the respondent wishes to include pertaining to its plan to own and/or operate the Project after construction should be included here.

4.7 Section IV: Financing of the Project Proposal (Optional)

If the respondent elects to provide a proposal for the financing of the Project, it shall provide such information necessary for the Authority to determine the strength of such economic proposal. Respondents are requested to include in their submission all information necessary to permit the Project Team to make an informed evaluation under the factors stated in Section 3.3 as well as a discussion regarding the mitigation of costs that the Authority would incur in connection with the implementation of the respondents suggested financing methodology (e.g., permit modifications). The Authority will evaluate both the magnitude of the economic benefit proposed as well as the nature of such benefits (e.g., guaranteed versus contingent). The respondent shall, therefore, provide a clear discussion of the benefits proposed. Any explanatory text the respondent wishes to include pertaining to its proposal for financing the Project should be included here.