



City of Holland Michigan  
Board of Public Works

**Combined Cycle Project**

**Prequalification of Bidders  
Engineer, Procure, Construct (EPC) Contract**

**Dated: February 27, 2014**

## 1.0 Introduction

The Holland Board of Public Works (BPW) is currently developing an Engineer, Procure, Construct (EPC) Request for Proposals (RFP) for the installation of a two-on-one (2X1) natural gas fired combined cycle, cogeneration facility (the "Facility") capable of producing nominally 115-130 MW net power at design ambient conditions. Design ambient conditions are 84.4°F dry bulb and 72°F wet bulb at 29.28 inches HgA barometric pressure. The 2x1 plant configuration will consist of two combustion turbine generators (CTGs), two heat recovery steam generators (HRSGs), and a single steam turbine generator (STG). The BPW is purchasing directly the CTGs, HRSGs, and STG and will administratively assign these contracts to the selected EPC contractor. The EPC contractor will be responsible for integrating the major equipment selections with the remaining balance of plant (BOP) design and for the eventual construction of the project, with the BPW retaining full performance and schedule risk associated with the owner furnished equipment (OFE). The contract will initially be open book for a designated period and then later changed to a lump sum, fixed schedule basis.

The BPW is performing a prequalification of potential bidders for the EPC design/build contract. The prequalification process is applicable to potential bidders that have been identified by BPW's U.S. market information, solicitation to the BPW directly by design and construction firms, and the BPW's understanding of firms interested in executing the project. The prequalification process will evaluate the applicant's financial, commercial, and technical capability to perform the scope of work within the respective contract package. The evaluation of the prequalification submittals will result in the determination of a limited number of qualified bidders who will receive the EPC RFP.

BPW reserves the right to disqualify bidders as part of the prequalification process as the see fit so long as disqualifications fall within reason in accordance with the appropriate Michigan legal statues related to bidders on public works for the State of Michigan. The tentative schedule of activities through the contracting process is as follows:

Complete Prequalification	1 <sup>st</sup> QTR 2014
Issue EPC Contract for Bid	2 <sup>nd</sup> QTR 2014
EPC Proposals Received	3 <sup>rd</sup> QTR 2014
EPC Shortlist Evaluation Complete/ Begin Negotiation with Finalists	3 <sup>rd</sup> QTR 2014
EPC Contract Award no later than	4 <sup>th</sup> QTR 2014
Commercial Operation	October 31, 2016

This prequalification document has been developed in order to solicit specific prequalification proposals aligned to the BPW's objectives. The evaluation criteria outlined herein define minimum acceptable levels for critical financial factors, and also describe the key elements to be considered. Prequalification data will be collected based on the questionnaire form included in Appendix A.

Prequalification of applicants forming joint ventures or consortiums will be performed based on the collective resources and experience of each entity within the joint venture provided the following conditions:

- One of the participants, which is responsible for performing the key function of contract management or executing a major portion of the work, shall be nominated as being in charge during the prequalification, bidding period and in the event of an awarded contract, the contract execution. The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all participants of the joint venture.
- A letter of intent to execute a joint venture agreement in the event of a successful bid shall be signed by all participants and submitted with the prequalification application. The joint venture agreement letter of intent shall include the proposed management structure, the contribution of each participant to the joint venture operations, and recourse within the joint venture in the event of default or withdrawal of any participant.
- All partners of the joint venture shall be legally liable, jointly and severable during the bidding process and for the execution of the contract.
- An applicant can submit to pre-qualify individually, or as a participant within a joint venture for the EPC contract package.
- In case of dissolution of a prequalified joint venture prior to invitation to bid, constituent applicants may be reconsidered for prequalification at the discretion of BPW

The financial, commercial, organizational and legal information requested in the appendix shall be submitted for each partner of the joint venture. The engineering, procurement, construction and startup information requested shall be submitted only for the appropriate entity within the joint venture providing the services.

### 1.1 Questions and Clarifications

Questions and requests for clarification shall be directed in writing, via e-mail to:

Name	Email
Carrie Shuler	<a href="mailto:Carrie.Shuler@hdrinc.com">Carrie.Shuler@hdrinc.com</a>
Copy to: Ron Utter	<a href="mailto:ronald.utter@hdrinc.com">ronald.utter@hdrinc.com</a>
Copy to: Dan Nally	<a href="mailto:dnally@hollandbpw.com">dnally@hollandbpw.com</a>

## 1.2 Submission of Qualifications

Submissions of qualifications shall be delivered by e-mail as follows:

Name	Email
Carrie Shuler HDR Engineering Inc. 5405 Data Court Ann Arbor, MI 48108	<a href="mailto:Carrie.Shuler@hdrinc.com">Carrie.Shuler@hdrinc.com</a>
Copy to: Ron Utter HDR Engineering Inc. 5405 Data Court Ann Arbor, MI 48108	<a href="mailto:ronald.utter@hdrinc.com">ronald.utter@hdrinc.com</a>
Copy to: Dan Nally Holland BPW 625 Hastings Avenue Holland, MI 49423	<a href="mailto:dnally@hollandbpw.com">dnally@hollandbpw.com</a>

Qualifications shall be submitted on or before March 14, 2014.

## 2.0 Project Description

The Facility jobsite ("Site") is located on brownfield property approximately 1 mile northeast of downtown Holland and west of US-31, near the intersection of East 5<sup>th</sup> Street and Fairbanks Avenue. The Site will be accessed from 6th street via connection to Chicago Drive. The Site is approximately 6 miles from the Lake Michigan shoreline. Likely modes of transportation for equipment and material delivery are truck and rail (via the rail spur on the west side of the property). Refer to the maps shown below.

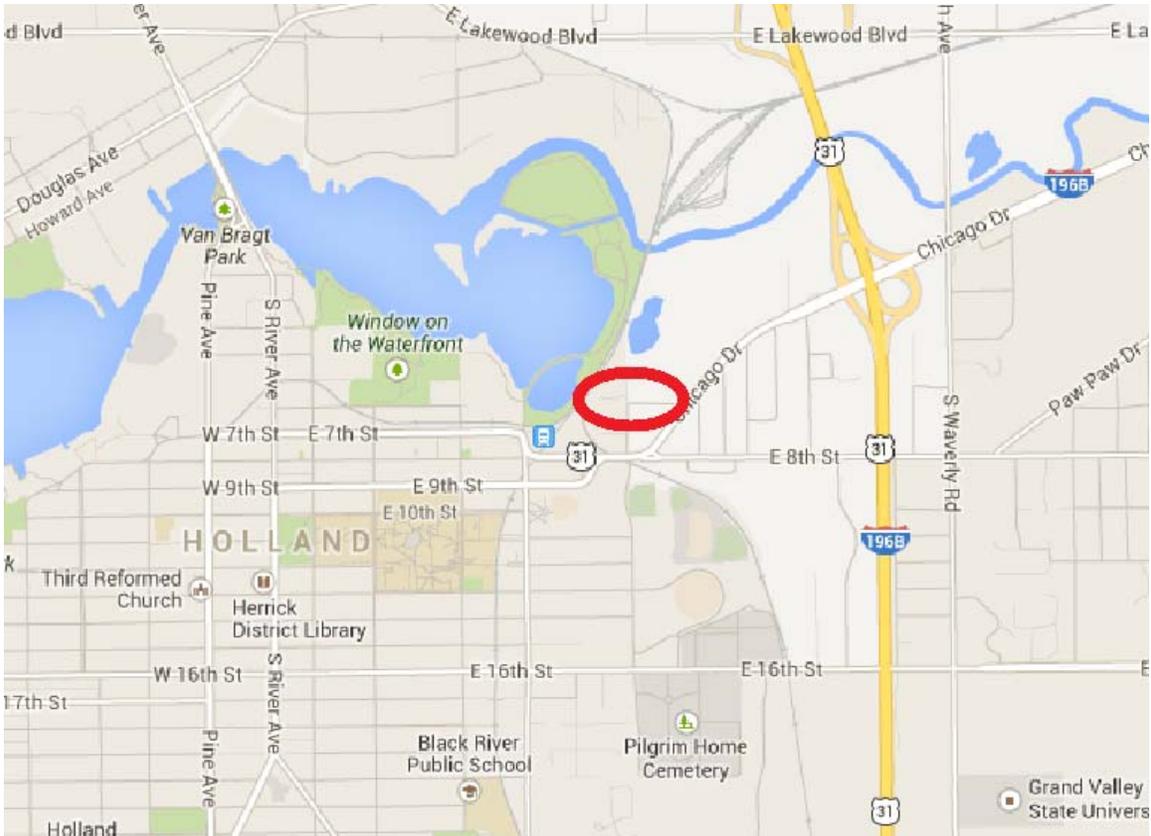


Figure 2-1 Site location maps

The power block will be a 2 x 1 configuration with two CTGs, each exhausting to an HRSG producing steam for a single STG. The Facility will be capable of generating nominally 115 MW to 130 MW of net power output at design (summer) ambient conditions. Combustion turbine inlet air cooling will be employed for enhanced combustion turbine performance when appropriate, depending on ambient conditions.

The Facility will be designed for a 30 year life. It is anticipated that the Facility will be operated as an intermediate dispatched, cycling plant. Weekday operation with overnight/weekend shutdowns is anticipated, based on typical 16 hour per day, 5 day per week (i.e. 5x16) dispatch profile. The Facility will be designed for up to 300 starts per year; however, the Facility will also be capable of operating continuously at base load.

The dual pressure HRSGs will either be of the drum or once-through type and will utilize selective catalytic reduction (SCR) to reduce the emission of nitrogen oxides (NOx) and oxidation catalysts to reduce the emission of carbon monoxide (CO) and volatile organic compounds (VOCs). A stack damper will be provided to "bottle-up" the HRSGs when the Facility is not in operation in order to minimize HRSG pressure part heat decay.

Plant cooling will be provided using a wet type mechanical draft cooling tower with plume abatement. The STG will be of the fully condensing type with axial exhaust. A deaerating condenser (no external deaerator) will be provided to condense the turbine exhaust steam and remove non-condensables with two 100 percent liquid ring vacuum pumps sized for "hogging" operation (i.e. startup). For "holding" (normal) operation, one of the liquid ring vacuum pumps will be in operation.

Circulating water from the cooling tower will be sent to the condenser via two 50 percent circulating water pumps (each with minimum 60 percent single pump operation runout capability) to condense the steam turbine exhaust. Three 50 percent condensate pumps will be provided to forward the condensate to the feedwater system from the condenser hotwell. Three 100 percent boiler feedwater pumps with variable frequency drives (VFDs) will be provided for the Facility (one per HRSG and one dedicated, cross-tied backup).

The Facility will be designed as an indoor plant with the CTGs, HRSGs, STG, and the majority of the balance of plant (BOP) equipment located indoors. Switchgear will be located indoors and station, aux and generator step-up (GSU) transformers will be located outdoors. There will be a far field noise limit at the property line that is expected to be 50 dBA (investigation ongoing).

Each CTG and the STG will have a dedicated main GSU transformer with a nominal output voltage of 138 kV. In addition, two unit auxiliary transformers (UATs) fed from a tap on the bus between the CTG circuit breakers and the GSU transformers will be provided. Each UAT will have sufficient capacity to operate the entire Facility.

A nominal 45,000 lb/hr auxiliary steam boiler will be provided for the Facility to provide warming/sparging steam when the auxiliary steam system cannot provide such in order to keep the Facility in a "warm" condition during periods of extended shutdown (if such is desired). Additionally, the auxiliary boiler will supply steam for Facility building heating.

The Facility will provide heat for the City of Holland snowmelt system from November through March. The new Facility will replace James De Young (JDY) Unit 3 as the

main snowmelt heat source. Hot circulating water, after exiting the condenser, will be sent to the snowmelt system at approximately 100 °F.

The exterior architectural systems will provide an aesthetically superior, durable enclosure to protect systems and personnel and allow for a controlled interior environment. The exterior architecture of the project will demonstrate a thoughtful design response to the functional needs of the plant process as well as accommodate the existing aesthetics of the surrounding community, with the intent that it will serve as a landmark for the City of Holland and as the centerpiece for the eastern gateway to the downtown Holland area.

The interior of the administration area will include office and support spaces and will be fit-out and finished appropriately. Portions of the Facility, including a viewing corridor or "spine" extending into the plant spaces, will be accessible to the public and will be used to facilitate tours of the Facility.

The Site design will include all site areas in need of restoration after demolition and construction and will be a combination of turf, trees, shrub/perennials and native plant areas. To the greatest extent possible, plant material should be native to the area or region. Site improvements for Facility personnel and community use are incorporated into the design.

See rendering below of the conceptual design of the Facility.



Figure 2-2 Architectural and Site Design Rendering

### **3.0 Evaluation Criteria and Process**

The evaluation process for the qualifications received in response to this request will consist of a quantitative as well as qualitative assessment of the applicant's capabilities. The quantitative assessment will focus on areas of financial, commercial, and technical strength. Qualitative assessments will focus on less tangible areas including engineering, construction, and startup capabilities.

### **3.1 General**

The applicant shall provide contact information to be used by BPW throughout the qualification process for clarification of qualification responses.

### **3.2 Financial**

The applicant's or its guarantor's financial strength is a critical pass/fail evaluation factor. Minimum acceptable levels of net assets and credit worthiness must be satisfied and documented in order to be considered for the EPC Contract package.

The applicant's or its guarantor's long term, senior unsecured debt that is not supported by third-party credit enhancement must be rated BBB- or higher by Standard & Poor's or Baa3 or higher by Moody's Investor Services if the applicant is rated by either agency. In the absence of an agency rating of the applicant or its guarantor, the creditworthiness of applicant or its guarantor will be reviewed based on the financial information requested in the questionnaire.

### **3.3 Commercial**

The general conditions to be included within the EPC Contract bid documents will contain commercial terms and conditions consistent with the contracting approach selected for execution of the project. The contract will be performed open book for a designated period and then later against a fixed schedule and on a fixed lump sum basis with no adjustment for labor or equipment. The open book initial phase is intended to allow BWP involvement in the development of a number of key project items such as the architectural design, landscaping, snowmelt system integration, and noise control features of the Facility. The general conditions will include provisions for liquidated damages for schedule and BOP equipment performance, at rates and caps commensurate with the current market for similar contracts. The awarded EPC Contractor will be required to provide performance security acceptable to BPW, in the form of a performance bond.

### **3.4 Legal**

The applicant's record of litigation and arbitration will be considered in the evaluation. The potential impact of current ongoing legal action will be a consideration of the financial capability evaluation.

### **3.5 Organizational**

Organizational information will be requested in the questionnaire in order to assist in the evaluation. A primary evaluation consideration will be the specific location of each function within the applicant's organization, in addition to the historical working experience of multiple firm arrangements.

### **3.6 Project Management**

Project management attributes to be evaluated include specific project management processes utilized and the supporting project controls. Project controls systems used for cost and schedule reporting will be evaluated for suitability for integration into the overall project and BPW's compatibility. The budget and schedule performance for recent combined cycle power projects, in addition to overall power project experience will be used as evaluation criteria.

### **3.7 Engineering, Architectural, & Site Design**

The applicant's design engineering, architectural, and site design capabilities will be evaluated based on relevant experience, the ability to utilize validated reference

plant designs, skill to execute the architectural and site design vision, available integrated design processes and tools, flexibility to meet BPW's requirements and standards, design documentation and record processes, and quality assurance.

### **3.8 Procurement**

The procurement capability of the applicant will be evaluated based on the experience base of the applicant and the flexibility of the applicant to meet the BPW's input requirements.

The EPC Contract's technical specifications will include general requirements for vendor standardization within the respective scope of supply to insure a single supplier of each item. For example, all pressure switches shall be supplied by the same manufacturer selected from a specified acceptable vendor list.

### **3.9 Safety**

The applicant's construction safety record will be evaluated based on historical performance over the past three years. The presence of a documented safety program that applies to all of the applicant's subcontractors and to its field personnel will be an evaluation criterion.

### **3.10 Construction & Startup**

The applicant's construction capability will be evaluated based on relevant combined cycle power plant experience, labor experience in the region (union or non-union labor is acceptable), quality, schedule performance, and budget performance. The commissioning and startup capability will be evaluated based on relevant project experience, systems, and procedures. The evaluation will also include consideration for past experience working with other project functional team members such as engineering and procurement.

## **4.0 EPC Contractor Scope**

The EPC Contractor scope of supply includes the BOP equipment required to interface with and support the OFE and to provide a complete and fully functional combined cycle installation on the project site. All of the on-site demolition work will be handled by BPW under a separate RFP. A summary of the preliminary EPC Contractor scope is as follows.

- Design, supply, delivery to Site, installation, erection, commissioning, and testing of the complete combined cycle facility
- Professional engineering and design services as needed
- Integration of all equipment including OFE into the plant systems
- All on-site construction including all required construction equipment
- Fuel gas supply, compression, heating, and pressure regulating systems
- Steam systems with all associated ancillaries
- Condensate and feedwater systems
- Auxiliary boiler
- Heat rejection system consisting of wet, mechanical draft cooling tower with plume abatement, surface condenser, and circulating water pumping system
- Auxiliary cooling water system
- City water supply systems
- Fire, service, demineralized, waste, and potable water supply, storage and treatment systems
- Process sampling system for water chemistry control
- Condensate polishing system (if required)

- Waste treatment collection and treatment systems
- Compressed air system
- Bulk liquid nitrogen storage and supply system
- Aqueous ammonia storage and unloading systems
- Chemical storage and supply systems
- Auxiliary transformers, generator step-up transformers, switchgear, motor control centers, and motor starters
- 138 kV switchyard with switchyard control building (with provision for future addition of a simple cycle combustion turbine)
- Emergency batteries and charging systems including small engine generator
- Uninterruptible power supply system
- Distributed control system
- Continuous emissions monitoring systems (CEMS)
- All instrumentation and control devices for a complete functional system
- Site communication
- Site preparation, excavation, foundations and backfill
- Plant access roads, landscaping, and fencing (Note: Landscaping will be extensive and dictated by BPW's preliminary design)
- Storm water system
- Project buildings and structures including those to enclose the CTGs, HRSGs, STG, overhead cranes, fuel gas compressors, package boiler, electrical equipment, snow melt equipment, administration offices and control room, maintenance shop, warehouse, water treatment equipment, and miscellaneous uses (Note: The buildings exterior will be designed in accordance with BPW's preliminary designs and be designed to use aesthetically superior, durable, low maintenance materials and systems compatible with the Facility's location and function. The design and material selections in the interior building/office areas will be driven by functionality, flexibility, and established Holland BPW architectural standards.)
- Management and control of Site construction and access
- Overhead cranes and hoists
- Plant access including platforming, stairs, ladders, and maintenance aisles
- Construction permits and support of BPW's permits
- Operations and maintenance manuals
- Project as-built drawings and 3-D plant model
- Delivery of BOP equipment to the Site
- Administering major equipment contracts for BPW
- Special tools and spare parts
- Startup, commissioning, and training
- Performance testing

## **5.0 Prequalification Questionnaire**

A questionnaire for the EPC Contract supply is provided in Appendix A. Applicants must provide a completed questionnaire for each prequalification submitted.

The Appendix is formatted to request information from the broadest range of applicants. Separate experience forms are provided for project management, engineering, and construction data collection for instances where an applicant consists of multiple entities. For applications which are based on the project management, engineering, and/or construction across the same experience base, complete each form independently.

The questionnaires are provided with tables to be completed electronically by the applicant. The tables can be expanded as required to provide the requested

information, or the applicant is requested to clearly identify the location of the information in the submittal. Please indicate the applicant name in the header for identification.



**City of Holland Michigan  
Board of Public Works**

**Combined Cycle Project**

**Prequalification of Bidders**

**Appendix A**

**Engineer, Procure, Construct (EPC) Contract  
Questionnaire**

**Applicant Name:**

**A.1 General Information**

Company Name:	<input type="text"/>		
Contact Name:	<input type="text"/>		
Title:	<input type="text"/>		
Mailing Address:	<input type="text"/>		
Telephone Number:	<input type="text"/>	Fax Number:	<input type="text"/>
E-mail Address:	<input type="text"/>		
Describe below the make up of the applicant. Include the firm providing each major portion of the application; engineering, architectural & site design, procurement, construction and startup.			
<input type="text"/>			

**A.1.1 Nature of Business (please provide copy of last Annual Report and Company Brochure)**

<input type="text"/>
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**A.1.2 How long has your Company been engaged in the type of business noted in A.1.1 above?**

<input type="text"/>
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**A.1.3 Legal Status of Business/Company (Check appropriate box)**

Corporation	<input type="checkbox"/>	Date/State Organized:	<input type="text"/>
Partnership	<input type="checkbox"/>	Date/State Organized:	See A.9
Joint Venture	<input type="checkbox"/>	Date/State Organized:	See A.9
LLC	<input type="checkbox"/>	Date/State Organized:	<input type="text"/>
Privately Held	<input type="checkbox"/>	Date/State Organized:	<input type="text"/>
Parent Company	<input type="checkbox"/>		

**Applicant Name:** \_\_\_\_\_

**A.1.4** Are you approved or qualified as?

	<b>YES</b>	<b>NO</b>
Minority Owned (51%)		
Women Owned (51%)		
If yes, with which organization did you receive your business qualification registration? Please provide a copy		

**A.1.5** List your Company's Professional Affiliations and Licenses held.

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**A.1.6** Are you an Equal Opportunity Employer?     Yes    No

**A.1.7** Do you have a written Drug and Alcohol Policy?     Yes    No

**A.1.8** If yes to the above, do you require that subcontractors comply with your Drug and Alcohol Policy?

Yes    No

**A.2 Financial**

**A.2.1** Applicant or its guarantor must provide annual reports, Form 10-K for the past three years. If applicant firm or its guarantor is not public, provide audited financial statements for the past three years. A separate submittal must be completed for each partner of a joint venture or consortium.

**A.2.2** Is the Company listed in Dun and Bradstreet?

Yes       No   

If so, D&B Number:                      Rating:

**A.2.3** Annual Sales Volume: (last four years) USD \$1,000.

Type:	2014 YTD	2013	2012	2011
Total				

Attach a separate sheet to describe as necessary.

**A.2.4** Largest Contract completed to date:

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**A.2.5** Current Backlog:

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**Applicant Name:**

**A.2.6** Current Working Capital:

<input type="text"/>
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**A.2.7** Banking Information:

Name Of Bank	<input type="text"/>
Address Of Bank	<input type="text"/>
Telephone No.	<input type="text"/>
Contact	<input type="text"/>

**A.2.8** Indicate the Company's Bonding Limit and Bonding Rate (total and per single project)

Bonding Limit (Total) (\$)	<input type="text"/>
Bonding Limit (Per Single Project) (\$)	<input type="text"/>
Current Work Bonded (\$)	<input type="text"/>
Bonding Company Name	<input type="text"/>
Bonding Company Address	<input type="text"/>
Bonding Company Telephone	<input type="text"/>
Bonding Company Contact	<input type="text"/>
Bonding Rate	(i.e. \$/1000) <input type="text"/>
Does Bonding Company appear on U.S. Treasury List?	<input type="text"/>

**A.2.9** Is the Company now or has it ever been involved in any bankruptcy or reorganization proceedings?

YES  NO

**A.2.10** Provide a listing of combined cycle contracts (140MW>50 MW) awarded over the past three years, include client, type of plant (include CTG manufacturer/model), scope of work, contractor role (EPC, construction, design, etc.), and in-service date.

Client/Location	Type of Plant/Scope of Work	Contractor Role	In-Service Date
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Applicant Name:**

**A.2.11** Provide a listing of EPC construction contracts awarded and delivered into the State of Michigan, include client, type of plant, scope of work (include CTG manufacturer/model, if applicable), and in-service date.

Client/Location	Type of Plant/Scope of Work	In-Service Date

**A.3 Commercial**

**A.3.1** Applicant will comply with open book converted to lump sum EPC contracting approach.     Yes  No

**A.3.2** Confirm the capability of the applicant to supply the full scope of services identified in Section 4.0 of the Prequalification of Bidders document.

**A.3.3** During the past ten years, what percentage of your power project based revenue has been executed under an EPC contract and what percentage executed under open book?

**A.3.4** Provide commercial terms for liquidated damages rate and caps for schedule, output and other BOP performance related items for EPC, combined cycle power projects completed in the last three years.

Project	Schedule		Aux Load		Other	
	Rate \$/day	Cap % TCP	Rate \$/kW	Cap % TCP	Rate \$/____	Cap % TCP

**Applicant Name:**

**A.3.5** Discuss the proposed approach to provide local Michigan based supplier opportunity.

**A.3.6** Discuss the applicant's proposed approach to completing architectural & site design and executing the design vision. (i.e. How is architect/site team integrated into project team, describe the resources to be used by the team, describe the review/feedback process that will be used with BPW).

**A.3.7** Is your Company, Consortium, or JV willing to offer a performance bond for full EPC Contract value? If not, please provide details in an attachment.

Yes  No

**A.3.8** Please indicate your Company's ability to meet the following insurance coverage at a minimum; these coverage limits may be increased in the final bid package:

- Worker's Compensation (Statutory)
- Employer's Liability (\$1,000,000)
- General Liability (\$2,000,000 each occurrence/\$4,000,000 in the aggregate)
- Automobile (\$1,000,000 combined single limit)
- Professional Liability (\$5,000,000)
- Contractor's Pollution Liability (\$3,000,000)
- Railroad Protective Liability (the form of the policy and limits shall be determined by the railroad company involved)
- Marine Cargo Insurance, "if applicable" (The limits of the coverage shall cover the value of the equipment and parts.)
- Umbrella (\$50,000,000) The limits may be met by a combination of primary and excess coverage.

**A.3.9** Provide a sample Certificate of Insurance identifying all coverages and the minimum limits as indicated in the cover letter to this form. Attach that to this completed form. Is the sample Certificate of Insurance attached?

Yes  No

Applicant Name:

**A.4 Legal**

**A.4.1** Applicants shall disclose: any violations of any state, federal or local laws; violations of any state or federal prevailing wage laws; worker’s compensation or unemployment compensation law, rules or regulations issued to or against the applicant within the past five years.

**A.4.2** Applicants shall provide information on any history of litigation or arbitration resulting from contracts executed in the last ten years or currently under execution. A separate table must be completed for each partner of a joint venture or consortium.

Applicant Name:			
Year	Award For/Against Applicant or Pending	Name of Client, cause of litigation and matter in dispute	Disputed Amount (\$)

**A.4.3** Has your Company denied any request or demand for indemnity within the last five years?

YES  NO

**A.4.4** Has your Company been involved in any legal action within the last three years that was in connection with any alleged Environmental Damage?

YES  NO

If yes, please provide details and results of claim:

**A.4.5** Has your Company defaulted on, or been terminated on any contract within the last five years?

YES  NO

If yes, please describe description of events:

Applicant Name:

**A.4.6** Taxpayer ID No.

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**A.5 Organizational**

**A.5.1** Describe the overall project execution structure, including where and how each of the major activities will be conducted, include engineering, architectural & site design, procurement, shop inspection, off-site construction/fabrication, field construction and startup. Indicate the company and office location for each function.

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**A.5.2** Is your Company part of a Consortium or Joint Venture? Please describe below, including past experience working together on prior power generation or other projects along with point of contact/reference for said experience. Include the firm providing each major portion of the project: engineering, architectural & site design, procurement, construction and startup.


**A.5.3** Consortium or JV Partner Experience & Background (complete for each Partner/project)

Number of Projects completed together (power)	
DOR (division of responsibilities)	<i>Provide high-level summary</i>
Project Outcome	

**A.6 Project Management**

**A.6.1** Describe the project management structure, procedures and systems including cost and schedule systems. For joint ventures indicate the party or parties responsible for overall project management and provide an organization chart of the project structure.

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**Applicant Name:**

**A.6.2** Complete Table A-1 for all combined cycle projects managed in the last ten years, or currently in process. Indicate the client name and contact, plant, location, MW capacity, fuel type, combustion turbine/steam turbine manufacturer, HRSG manufacturer, engineer(s), architectural & site design firms, constructor(s), commercial operation date, contract value, performance security type and value.

**A.6.3** Indicate your firm's reference project which most closely represents the City of Holland Michigan BPW Combined Cycle Project and the associated contracting approach.

**A.6.4** Provide a description of the project controls tools utilized, indicating commercial software packages used for cost and schedule development and reporting.

**A.6.5** Describe how project performance is monitored within the organization(s).

**A.6.6** For each project referenced above in A.2.10 and A.2.11, provide contract versus actual contract schedule performance data.

Client Name	Plant Name/ Location	Contract Schedule Months (FNTP to COD)	Actual Schedule Months (FNTP to COD)

**A.7 Engineering, Architectural & Site Design**

**A.7.1** Complete Table A-2 for all combined cycle units designed in the last ten years, or currently in process. Indicate the client name and contact, plant, location, MW

**Applicant Name:**

capacity, fuel type, combustion turbine / steam turbine manufacturer, HRSG manufacturer, constructor(s) and commercial operation date.

**A.7.2** Provide a listing of the number of individuals by discipline that the applicant employs in their fossil power division. Break down by mechanical, chemical, electrical, control, civil, structural and then by type such as engineer or designer.

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**A.7.3** Does your firm have an ISO certified quality program?  Yes  No

**A.7.4** Indicate the ISO certifications maintained.

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**A.7.5** If an ISO certified quality system is not maintained, provide a brief description of the basis for the program.

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**A.7.6** Identify applicant's experience in executing power plant or similar facilities where architectural & site design are essential attributes of the project.

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**A.8 Procurement**

**A.8.1** Describe the equipment procurement, sourcing and manufacturing selection process.

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**A.8.2** Typically what percentage of your work/scope of supply would come from Michigan based companies?

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**A.9 Construction**

**A.9.1** Provide Interstate Experience Modification Rate (EMR) for the three most recent years.

Year	EMR
2013	
2012	
2011	

**A.9.2** Provide OSHA injury and illness data for the three most recent years.

	2013	2012	2011
Fatalities			
OSHA recordable incidents			

**Engineer, Procure, Construct (EPC) Questionnaire**

**Applicant Name:** \_\_\_\_\_

Lost work day incidents			
Total lost work days			
Total hours worked			

**A.9.3** Has an OSHA inspection been performed in the past five years?  Yes  No

**A.9.4** Were any OSHA inspections in response to complaints?  Yes  No

**A.9.5** Were any OSHA citations issued as a result of inspections?  Yes  No

**A.9.6** If OSHA citations have been issued, describe below.

**A.9.7** Does your firm have a written safety program manual?  Yes  No

**A.9.8** Does each field employee receive a safety manual?  Yes  No

**A.9.9** Does your firm have a safety policy statement from an officer?  Yes  No

**A.9.10** Does your firm have a disciplinary process for enforcement of the safety program?  Yes  No

**A.9.11** Does management set corporate safety goals?  Yes  No

**A.9.12** Are subcontractors prequalified for health and safety performance?  Yes  No

**A.9.13** Provide subcontractor safety prequalification criteria below.

**A.9.14** Complete Table A-3 for all combined cycle projects constructed in the last ten years, or currently in process. Indicate the client name and contact, plant, location, MW capacity, fuel type, combustion turbine / steam turbine manufacturer, HRSG manufacturer, engineer(s), commercial operation date, contract value, performance security type and value. Provide a description of the scope contracted.

**A.9.15** For each combined cycle project referenced above, provide contract versus actual construction schedule performance data. For each client/plant, provide documentation of extension requests, contractual fines and penalties imposed, history of claims for extra work and any contract defaults with an explanation of the reason for the default and how the default was resolved.

Client Name	Plant Name/ Location	Contract Schedule Months (mobilization to COD)	Actual Schedule Months (mobilization to COD)

**Engineer, Procure, Construct (EPC) Questionnaire**

**Applicant Name:**


**A.9.16** What percentage of the overall EPC construction activity is anticipated to be self-performed?

**A.9.17** Provide a listing of potential subcontracts for construction and engineering.

**A.9.18** Describe the construction approach proposed for this project.

**A.9.19** Provide a listing of construction projects completed under the proposed construction approach within the Midwest region in the past five years.

**A.9.20** Describe labor recruiting, training and retention programs.

**A.9.21** Identify if the project would be executed as union or non-union and if union, any union affiliations and the date of expiration of any associated labor agreements.

**A.10 Startup**

**A.10.1** Describe the organization providing commissioning and startup services. Include the staff resources source (internal or external), estimated number of field staff and home office support.

**A.10.2** Summarize the methodology and processes to be used to coordinate the commissioning and startup activity with engineering, construction and BPW.

**Applicant Name:**

**A.10.3** Does your firm have a full-time dedicated operations and maintenance training staff?  Yes  No

**A.10.4** Describe the operations and maintenance training program provided for similar projects. Include a course outline.

### **A.11 Switchyard**

**A.11.1** Describe the organization providing switchyard design and procurement services. Include the staff resources source (internal or external), estimated number of staff in the high voltage electrical design area.

**A.11.2** Describe the organization providing switchyard construction services. Include the staff resources source (internal or external), estimated number of staff in the high voltage electrical construction organization.

**A.11.3** Describe the organization providing switchyard commissioning and testing services. Include the staff resources source (internal or external), estimated number of staff in the high voltage electrical testing organization.

**A.11.4** Summarize the methodology and processes to be used to coordinate the switchyard design/construction with the power block design/construction and BPW.

**A.11.5** Complete Table A-4 for substations 138 kV and above designed and constructed in the last five years, or currently in process for each entity proposed (provide separate table for each applicable subcontractor/partner if applicable). Indicate the client name and contact, substation, location, voltage, configuration, constructor(s) and in service date.

**City of Holland Michigan  
Board of Public Works**

**Combined Cycle Project**

**Prequalification of Bidders**

**EPC Contract  
Questionnaire**

**DATA FORMS**

Applicant Name:

**TABLE A-1  
Project Management Experience**

<b>Client Name/ Contact Person</b>	<b>Plant Name/ Location/ Capacity MW</b>	<b>Fuel Type</b>	<b>CTG / STG Manufacturer</b>	<b>HRSG Manufacturer</b>	<b>Engineer</b>	<b>COD</b>	<b>Contract Value</b>	<b>Surety Type and Value</b>

Applicant Name:

**TABLE A-2  
Engineering, Architectural & Site Design Experience**

<b>Client Name/ Contact Person</b>	<b>Plant Name/ Location/ Capacity MW</b>	<b>Fuel Type</b>	<b>CTG / STG Manufacturer/ Model, Type</b>	<b>HRSG Manufacturer</b>	<b>Constructor(s)</b>	<b>COD</b>	<b>Steam Cycle Description</b>

Applicant Name:

**TABLE A-3  
Construction Experience**

Client Name/ Contact Person	Plant Name/ Location/ Capacity MW	Fuel Type	CTG / STG Manufacturer	HRSG Manufacturer	Engineer	COD	Contract Value	Surety Type and Value
<b>Contracted Scope:</b>								
<b>Contracted Scope:</b>								
<b>Contracted Scope:</b>								
<b>Contracted Scope:</b>								

Applicant Name:

**TABLE A-4  
Substation/Switchyard Engineering and/or Construction Experience**

<b>Client Name/ Contact Person</b>	<b>Station Name/ Location/Voltage</b>	<b>Substation Configuration</b>	<b>Engineer</b>	<b>Constructor(s)</b>	<b>In Service Date</b>	<b>Contract Value</b>	<b>Contracting Method (EPC or other)</b>
<b>Contracted Scope:</b>							
<b>Contracted Scope:</b>							
<b>Contracted Scope:</b>							
<b>Contracted Scope:</b>							