

## C&A AGENDA – 04-07-21

### Complete Agenda

- o Non- Recommended Finalist Letter – American Hydro Corporation
- o Recommended Finalists Letter – ANDRITZ HYDRO Corp & GE Renewables US LLC
- o Protest Email from American Hydro Corporation
- o Protest Letter from American Hydro Corporation
- o Protest Acceptance and Response to American Hydro Corporation
- o Email to ANDRITZ HYDRO Corp – Protest and Meeting
- o Email to GE Renewables US LLC – Protest and Meeting
- o City of Tacoma Protest Policy
- o Submittal – American Hydro Corporation
- o PG20-0325F Specification

## **BOARD OF CONTRACTS AND AWARDS AGENDA**

9:00 AM Wednesday, April 7, 2021

Virtual Meeting

### **REGULAR AGENDA**

*Protest submitted by American Hydro Corporation*

PG20-0325F                      Cushman 2 Powerhouse Unit 31, 32 Rebuild Project  
Recommended Finalists:    ANDRITZ HYDRO Corp, Charlotte, NC  
   GE Renewables US LLC, Greenwood Village, CO

*Protest submitted by BHI Energy*

PG20-0325F                      Cushman 2 Powerhouse Unit 31, 32 Rebuild Project  
Recommended Finalists:    ANDRITZ HYDRO Corp, Charlotte, NC  
   GE Renewables US LLC, Greenwood Village, CO

### **CONSENT AGENDA**

#### **GENERAL GOVERNMENT**

N/A

#### **PUBLIC UTILITIES**

N/A



**City of Tacoma**  
Finance Department

March 24, 2021

American Hydro Corporation  
P.O. Box 3628  
York, PA 17402

**VIA E-MAIL:**  
gerry.russell@ahydro.com

Subject: Award Recommendation  
Request for Qualifications Specification No. PG20-0325F - Cushman 2 Powerhouse  
Unit 31, 32 Rebuild Project

Upon review, your submittal in response to the subject solicitation was determined to be non-responsible under RCW 39.04.350 for suspension of your contractor's license and failing to have received training on the requirements related to public works and prevailing wage at the time of submittal. Additionally, the Supplemental Bidder Responsibility Form was not labeled Addendum No. 1 making the submittal non-responsive.

You may request to appeal this award recommendation by emailing [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org) no later than 9:00 AM PST, Friday March 26, 2021. This email must state you are submitting a formal protest and specify the grounds as outlined in the [City of Tacoma Protest Policy](#)\*\*. If you plan to speak to the recommendation, please state the issue(s) you will discuss and provide supporting documentation by this deadline. A late response or no response shall constitute a waiver of these procedures.

If you have questions please contact the City of Tacoma Procurement and Payables Division at 253-502-8468.

Sincerely,

DocuSigned by:

  
Patsy Best

Procurement and Payables Division Manager

cc: David Wagner, PE  
Doreen Klaaskate, Senior Buyer, Finance/Purchasing  
Utility Board Clerk

\* Instructions and deadlines in this letter supersede information that may appear in other City publications or web pages, which may not be as current.

\*\* Located at [www.tacomapurchasing.org](http://www.tacomapurchasing.org).

Formal 200-500 Non Selection

Revised: 09/03/2020

**From:** [Supplier Notifications](#)  
**To:** [gerry.russell@ahydro.com](mailto:gerry.russell@ahydro.com)  
**Subject:** City of Tacoma Request for Qualifications - PG20-0325F  
**Date:** Wednesday, March 24, 2021 10:19:20 AM  
**Attachments:** [PG20-0325F\\_AmericanHydro.docx.pdf](#)

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Good Morning,

Please see the attached letter regarding award of Specification No. PG20-0325F.

Thank you.

Procurement and Payables Division  
Finance Department  
City of Tacoma





**City of Tacoma**  
Finance Department

March 24, 2021

Subject: Notice of Award recommendation  
Request for Qualifications Specification No. PG20-0325F - Cushman 2 Powerhouse  
Unit 31, 32 Rebuild Project

Thank you for your response to the subject specification. The Selection Advisory Committee has completed their review and evaluation of the submittals and the following firms were chosen as finalists:

- ANDRITZ HYDRO Corp Charlotte, NC
- GE Renewables US LLC Greenwood Village, CO

The City will contact the selected firms regarding the next steps.

We appreciate the time and effort put forth in preparing your submittal. If you have questions, please contact the City of Tacoma Procurement and Payables Division at 253-502-8468.

Sincerely,

DocuSigned by:

*Patsy Best*

4C263F53663B44AE...

Patsy Best

Procurement & Payables Division Manager

cc: David Wagner, PE  
Doreen Klaaskate, Senior Buyer, Finance/Purchasing  
Utility Board Clerk

\* Instructions and deadlines in this letter supersede information that may appear in other City publications or web pages.

\*\* Located at [www.tacomapurchasing.org](http://www.tacomapurchasing.org).

**From:** [Supplier Notifications](#)  
**Subject:** City of Tacoma Request for Qualifications - PG20-0325F  
**Date:** Wednesday, March 24, 2021 10:20:48 AM  
**Attachments:** [PG20-0325F Formal RFQ SingleNotification.docx.pdf](#)

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Good Morning,

Please see the attached letter regarding award of Specification No. PG20-0325F.

Thank you.

Procurement and Payables Division  
Finance Department  
City of Tacoma

**From:** [Monticchio, Christopher](#)  
**To:** [Supplier Notifications](#)  
**Cc:** [Peabody, Steve](#); [Hake, Diane](#); [Spadotto, Flavio](#); [Russell, Gerry](#); [Heilman, Jason](#)  
**Subject:** RE: City of Tacoma Request for Qualifications - PG20-0325F  
**Date:** Thursday, March 25, 2021 1:36:07 PM  
**Attachments:** [image001.jpg](#)  
[PRO3971 Cushman 2-SOO Protest Letter.pdf](#)

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To whom it may concern,

Please find attached American Hydro's Formal Protest Letter to the Award Recommendation of the Request for Qualifications Specification No. PG20-0325F - Cushman 2 Powerhouse Unit 31, 32 Rebuild Project.

We appreciate your consideration in this matter and please contact us if you have any questions or require additional information.

**Christopher A. Monticchio, P.E.**

Proposal Leader

T: +1 717 755 5300 ext 100  
M: +1 717 487 6921  
[christopher.monticchio@ahydro.com](mailto:christopher.monticchio@ahydro.com)

American Hydro Corporation  
135 Stonewood Road, PO BOX 3628  
York, Pennsylvania 17402, USA  
[www.ahydro.com](http://www.ahydro.com)



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**From:** Supplier Notifications <[SupplierNotifications@cityoftacoma.org](mailto:SupplierNotifications@cityoftacoma.org)>  
**Sent:** Wednesday, March 24, 2021 1:19 PM  
**To:** Russell, Gerry <[gerry.russell@ahydro.com](mailto:gerry.russell@ahydro.com)>  
**Subject:** City of Tacoma Request for Qualifications - PG20-0325F

You don't often get email from [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org). [Learn why this is important](#)

[Feedback](#)

Good Morning,

Please see the attached letter regarding award of Specification No. PG20-0325F.

Thank you.

Procurement and Payables Division  
Finance Department  
City of Tacoma

March 25, 2021

Procurement and Payables Division - Purchasing  
Tacoma Public Utilities Administration Building North, Main Floor  
3628 South 35th Street  
Tacoma, WA 98409  
253-502-8372 FAX

T +1 717 755 5300  
F +1 717 755 8927

SUBJECT: Formal Protest of Award Recommendation  
Request for Qualifications Specification No. PG20-0325F - Cushman 2 Powerhouse  
Unit 31, 32 Rebuild Project

To Whom It May Concern:

American Hydro (AH) is submitting a Formal Protest to the Award Recommendation letter supplied to us on March 24, 2021, which indicated a "non-responsive" bid by AH. We have noted the three areas of non-responsiveness as specified in the letter as: suspension of our contractor's license, failure to receive the training on the requirements related to public works and prevailing wage and lack of Addendum No. 1 Supplemental Bidder Responsibility Form. American Hydro's position is that each of these items is minor in nature and easily correctable prior to the actual Request for Proposal.

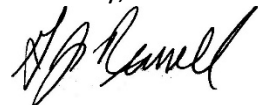
Our Formal Protest is based on RCW 39.04.350 stating that, "(1) Before award of a public works contract...". It is our understanding that we were responding to a Request for Qualifications (RFQ) and not a Request for Proposals (RFP) or Design-Build (DB). Therefore, the requirements stated in RCW 39.04.350 would apply upon being chosen as the supplier from the RFP or DB process. Additionally, we are unable to locate any mention of needing to meet these requirements in the RFQ document. Thus, we kindly ask that the City review the requirements needed for the RFQ process and convey the requirements to all vendors.

Additionally, we have investigated our 'Suspended' contractor's license with the State of Washington. We discovered that due to a delay in receiving our Proof of Insurance for 2021 from our insurance broker, the State had placed our account on 'Suspension' due to a Clerical Late Fee not being paid. We understand that this is a common occurrence experienced by many contractors licensed in the State of Washington because insurance brokers routinely issue proof of insurance later than the State deadlines. We have since paid this fee and are now 'Active'. We have attached supporting documentation showing our updated contractor's license status.

Finally, we acknowledge that the previously submitted Supplemental Bidder Responsibility Form was not labeled Addendum No. 1 and have attached the corrected form as supporting documentation.

We appreciate your consideration in this matter and please contact us if you have any questions or require additional information.

Sincerely,



Gerard J. Russell  
President

cc: Mr. Steve Peabody – American Hydro Corporation

## AMERICAN HYDRO CORPORATION

### Owner or tradesperson

Principals ?

BOARD, JAMES G, PRESIDENT [more...](#)

Doing business as

AMERICAN HYDRO CORPORATION

PO BOX 3628

YORK, PA 17402-3039

717-755-5300

WA UBI No.

601 357 167

Business type

Corporation

Governing persons ?

SELIM A CHACOUR [more...](#)

## License

Verify the contractor's active registration / license / certification (depending on trade) and any past violations. [Questions about licenses?](#)

**Construction Contractor** ?

**Active**

Meets current requirements.

License specialties

GENERAL [What can they do?](#)

License no.

AMERHHC075C2

Effective — expiration

02/22/1993— 07/05/2022

[Report this contractor](#)

**PROJECT: CUSHMAN 2 UNIT 31, 32 REBUILD PROJECT**

**SPECIFICATION NO. PG20-0325F**

**Responsibility Certification Form**

This form shall be completed in its entirety, **submitted with the SOQ response**, and shall be used to demonstrate the Proposer's, or Proposer's Design-Build Team's, experience for the minimum qualifications of the Project. Failure to submit this form is grounds for SOQ rejection.

Qualification of Proposer: Proposer, or Proposer's Proposed Design-Build Team, shall have experience delivering Projects of Similar Scope and Complexity in North America within the last ten (10) years.

**Projects of Similar Scope and Complexity shall be rehabilitation projects for 60Hz, suspended type, vertical, salient pole hydroelectric turbine-generators driven by Francis runners with minimum ratings of 12.6kV and 10MW.**

Proposer's Company Name: American Hydro Corporation

<b>Minimum Experience Criteria</b>		
For each of the experience criteria identified below, please check the appropriate box to indicate that the Proposer, or Proposer's Design-Build Team, has the described experience on Projects of Similar Scope and Complexity.	Yes	No
Refurbished an existing generator that included design, manufacture, installation of a new stator core with improved core clamping, new stator windings, and frame refurbishment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis with the intent of reusing and replacing existing turbine components including scroll case, draft tube, runner, shaft, seals, wicket gates, wear rings, wicket gates, shift ring, bushings, levers, etc. Analysis capabilities include component FEA, fatigue and hand calculations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis of existing generator components including frame, upper and lower brackets, shafts (main and stub), rotor hub, rotor spider and rotor rim and rotor pole to rim connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Refurbished or supervised the refurbishment of the poles for a salient pole hydro generator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed or coordinated the successful disassembly, in-situ and shop machining, welding, reassembly, alignment, balancing and commissioning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed refurbishment and commissioned a turbine pressure relief valve	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Financial Criteria</b>		
For each of the financial criteria identified below, please check the appropriate box to indicate that the Proposer meets the criteria.	Yes	No
Proposer has \$20 million dollar bonding capacity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

By completing and signing this form, the Proposer is certifying the responses marked on the form are true and accurate. The Proposer's failure to disclose the required information or the submittal of false or misleading information will result in the rejection of the Proposer's SOQ.

The information provided herein is true and complete.



Digitally signed by Gerard J Russell  
DN: cn=Gerard J Russell, o=  
ou=American Hydro Corporation,  
email=gerard.j.russell@ahydro.com, c=US  
Date: 2021.03.25 16:16:14 -0400

2021-03-25

Signature of Authorized Representative

Date

Gerard J. Russell, President

Print Name and Title

**From:** [Supplier Notifications](#)  
**To:** ["Monticchio, Christopher"](#)  
**Cc:** [Peabody, Steve](#); [Hake, Diane](#); [Spadotto, Flavio](#); [Russell, Gerry](#); [Heilman, Jason](#)  
**Subject:** RE: City of Tacoma Request for Qualifications - PG20-0325F  
**Date:** Thursday, March 25, 2021 2:12:00 PM

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Thank you.

Your request to protest has been received and is under review.

City of Tacoma  
Procurement and Payables Division  
Finance Department

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**From:** Monticchio, Christopher <christopher.monticchio@ahydro.com>  
**Sent:** Thursday, March 25, 2021 1:36 PM  
**To:** Supplier Notifications <SupplierNotifications@cityoftacoma.org>  
**Cc:** Peabody, Steve <steve.peabody@ahydro.com>; Hake, Diane <diane.hake@ahydro.com>; Spadotto, Flavio <flavio.spadotto@ahydro.com>; Russell, Gerry <gerry.russell@ahydro.com>; Heilman, Jason <jason.heilman@ahydro.com>  
**Subject:** RE: City of Tacoma Request for Qualifications - PG20-0325F

To whom it may concern,

Please find attached American Hydro's Formal Protest Letter to the Award Recommendation of the Request for Qualifications Specification No. PG20-0325F - Cushman 2 Powerhouse Unit 31, 32 Rebuild Project.

We appreciate your consideration in this matter and please contact us if you have any questions or require additional information.

**Christopher A. Monticchio, P.E.**  
Proposal Leader

T: +1 717 755 5300 ext 100  
M: +1 717 487 6921  
[christopher.monticchio@ahydro.com](mailto:christopher.monticchio@ahydro.com)

American Hydro Corporation  
135 Stonewood Road, PO BOX 3628  
York, Pennsylvania 17402, USA  
[www.ahydro.com](http://www.ahydro.com)

**American Hydro**  
A Wartsila Company



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**From:** Supplier Notifications <[SupplierNotifications@cityoftacoma.org](mailto:SupplierNotifications@cityoftacoma.org)>

**Sent:** Wednesday, March 24, 2021 1:19 PM

**To:** Russell, Gerry <[gerry.russell@ahydro.com](mailto:gerry.russell@ahydro.com)>

**Subject:** City of Tacoma Request for Qualifications - PG20-0325F

You don't often get email from [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org). [Learn why this is important](#)

[Feedback](#)

Good Morning,

Please see the attached letter regarding award of Specification No. PG20-0325F.

Thank you.

Procurement and Payables Division  
Finance Department  
City of Tacoma

**From:** [Supplier Notifications](#)  
**To:** [Christopher.Monticchio@Ahydro.com](mailto:Christopher.Monticchio@Ahydro.com)  
**Subject:** City of Tacoma RFQ - PG20-0325F - American Hydro Corporation  
**Date:** Thursday, April 1, 2021 9:28:00 AM  
**Attachments:** [PG20-0325F Protest Response-American Hydro.pdf](#)

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Good Morning,

See the attached letter in response to your request to protest.

Please confirm if you plan to attend the meeting. If you intend to present a response to the protest at the C&A Board meeting; you must send all relevant documentation you want considered by the C&A Board, including any legal briefing, to

[suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org) no later than 9 AM on Monday, April 5, 2021.

Documentation not filed as instructed here will not be considered by the C&A Board.

After 11 AM on Monday, April 5, 2021, you will receive an email with the meeting materials.

Please use the link below to join the virtual Contracts and Awards meeting on Wednesday, April 7, 2021, at 10 AM.

Join Zoom Meeting: <https://us02web.zoom.us/j/87656733753>

Or call: +12532158782,,87656733753# US (Tacoma)

Thank you,

Procurement and Payables Division

Finance Department

City of Tacoma



**City of Tacoma**  
**Finance Department**

March 31, 2021

American Hydro Corporation  
P.O. Box 3628  
York, PA 17402

**VIA E-MAIL/FACSIMILE:**  
Christopher.Monticchio@Ahydro.com

Subject: Request for Qualifications PG20-0325F – Cushman 2 Powerhouse Unit 31, 32 Rebuild Project

The City has received your letter dated March 25, 2021, in which you formally protested the recommendation of City of Tacoma Request for Qualifications PG20-0325F – Cushman 2 Powerhouse Unit 31, 32 Rebuild Project

The grounds on which the City will entertain protests following submittal deadlines are set forth in the City's Purchasing Policy Manual at Section XVII Protests:

**C. Grounds for Protests Following Submittal Deadline.** A bidder/respondent to a City solicitation may, after the submittal deadline, submit a protest involving the following City actions and/or alleging the following grounds:

1. City's rejection of submittal as non-responsive;
2. City's rejection of a bidder as not responsible;
3. Allegations the City failed to follow its published evaluation or scoring process;
4. Allegations the City made mathematical errors;
5. Allegations the City engaged in unlawful bias or discrimination and/or has a conflict of interest in the competitive solicitation process; and/or
6. Allegations the competitive solicitation process as conducted by the City, and/or the resulting award recommendation or award, was arbitrary and capricious or contrary to law.

**NOTE:** Protests not raising any of the grounds listed above shall be rejected by the Procurement and Payables Division manager or will be limited by the Procurement and Payables Division manager to consideration of permissible grounds for protest. Any part of a protest that has been rejected by Purchasing on this basis will not be further considered by the City.

Revised: 02/26/2021

I have carefully reviewed your letter of protest and determined your protest meets C.1. City's rejection of submittal as non-responsive, as listed above.

This matter will come before the C&A Board at **10:00 AM, Wednesday, April 7, 2021**, virtually (link in email)\*. It is anticipated the C&A Board will decide at this meeting whether to endorse and forward the department's recommendation to proceed with next phase of the design build process. Your protest before the C&A Board is strictly limited in scope to issues and documentation related to your March 25, 2021, protest letter. All documentation related to this protest received via [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org) will be provided to all of the interested parties and to the members of the C&A Board prior to the April 7, 2021, meeting.

Please confirm your attendance at the April 7, 2021 meeting and the names and email addresses of attendees who will be present. If you have questions *regarding protest procedures or the C&A Board meeting*, please contact [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org). City of Tacoma protest procedures (Purchasing Policy Manual, XVII, PROTESTS) are available at <http://www.cityoftacoma.org>. The hearing process before the C&A Board is detailed in Section H 3 a-k.

Sincerely,

DocuSigned by: 3/31/2021  
  
4C263F3663B44AE...

Patsy Best  
Procurement and Payables Division Manager

cc: David Wagner, PE  
Doreen Klaaskate, Senior Buyer, Finance/Purchasing  
Chuck Blankenship, Finance, Purchasing Manager  
Martha Lantz, Deputy City Attorney for C&A Board

\*Instructions and deadlines in this letter supersede information that may appear in other City publications or web pages.

**From:** [Supplier Notifications](#)  
**To:** [Darren.Houghton@andritz.com](mailto:Darren.Houghton@andritz.com)  
**Subject:** City of Tacoma RFQ - PG20-0325F - American Hydro Corporation Protest  
**Date:** Thursday, April 1, 2021 10:17:00 AM  
**Attachments:** [2. 2021\\_0325\\_PG20-0325F\\_Protest Letter from American Hydro.pdf](#)  
[PG20-0325F\\_Protest\\_Response-American\\_Hydro-.pdf](#)

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Good morning,

Your firm, ANDRITZ HYDRO Corp, is being recommended to proceed with the next phase of the design build process for PG20-0325F – Cushman 2 Powerhouse Unit 31, 32 Rebuild Project.

The City of Tacoma received the attached protest of the recommendation. As stated in the attached letter to American Hydro Corporation acknowledging their protest, this matter will be heard at a virtual Contracts and Awards (C&A) Board meeting at **10:00 AM on Wednesday, April 7, 2021.**

Please confirm if you plan to attend the meeting. If you intend to present a response to the protest at the C&A Board meeting; you must send all relevant documentation you want considered by the C&A Board, including any legal briefing, to [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org) no later than **9:00 AM, Monday, April 5, 2021.** Documentation not filed as instructed here will not be considered by the C&A Board.

Please use the link below to join the virtual C&A Board meeting on Wednesday, April 7, 2021, at 10:00 AM.

Join Zoom Meeting: <https://us02web.zoom.us/j/87656733753>

Or call: +12532158782,,87656733753# US (Tacoma)

Thank you,

Procurement and Payables Division

Finance Department

City of Tacoma

**From:** [Supplier Notifications](#)  
**To:** [Bruno.kaelin@ge.com](mailto:Bruno.kaelin@ge.com)  
**Subject:** City of Tacoma RFQ - PG20-0325F - American Hydro Corporation Protest  
**Date:** Thursday, April 1, 2021 10:17:00 AM  
**Attachments:** [PG20-0325F Protest Response-American Hydro-.pdf](#)  
[2. 2021 0325 PG20-0325F Protest Letter from American Hydro.pdf](#)

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Good morning,

Your firm, GE Renewables US LLC, is being recommended to proceed with the next phase of the design build process for PG20-0325F – Cushman 2 Powerhouse Unit 31, 32 Rebuild Project.

The City of Tacoma received the attached protest of the recommendation. As stated in the attached letter to American Hydro Corporation acknowledging their protest, this matter will be heard at a virtual Contracts and Awards (C&A) Board meeting at **10:00 AM on Wednesday, April 7, 2021.**

Please confirm if you plan to attend the meeting. If you intend to present a response to the protest at the C&A Board meeting; you must send all relevant documentation you want considered by the C&A Board, including any legal briefing, to [suppliernotifications@cityoftacoma.org](mailto:suppliernotifications@cityoftacoma.org) no later than **9:00 AM, Monday, April 5, 2021.** Documentation not filed as instructed here will not be considered by the C&A Board.

Please use the link below to join the virtual C&A Board meeting on Wednesday, April 7, 2021, at 10:00 AM.

Join Zoom Meeting: <https://us02web.zoom.us/j/87656733753>

Or call: +12532158782,,87656733753# US (Tacoma)

Thank you,

Procurement and Payables Division

Finance Department

City of Tacoma

# City of Tacoma

## **Protest Policy**

Excerpt from Purchasing Policy  
Manual

## **XVII. PROTESTS**

### **A. Purpose and Overview**

1. The purpose of the following protest rules, standards, and procedures is to promote the prudent and proper use of public funds and to provide a fair forum for parties participating in the solicitation and award of City contracts. Subject to the limits and procedures set forth in this Section XVII., all parties who have submitted a bid, proposal, quote, or submittal in response to a solicitation by the City shall have the right to timely protest the City's solicitation process and/or a contract award recommendation made by a department/division.
2. For purposes of this Section XVII., the terms "bid," "proposal," "quote," "submittal," and "solicitation" shall be as defined in TMC 1.06.251. Unless otherwise defined or expressed in this Section, the terms "bid" and "bidders" shall be as defined in TMC 1.06.251 and apply to all protest procedures.
3. Protests involving a request for proposals (RFP), request for qualifications (RFQ), or request for information (RFI) shall be limited to the solicitation and/or evaluation process. No RFP, RFQ, or RFI protest will be accepted when based solely on a challenge to the City's exercise of discretion or judgment in selection of finalist(s) or in making a contract award recommendation.
4. The City is authorized to reject any and all submittals and to cancel any solicitation process. The City's decision to cancel the solicitation process and/or reject all submittals is not subject to protest. (Reference City Charter Section 7.11; TMC 1.06.266 E)
5. Protests involving solicitations, selection of finalist(s), and/or an award recommendation for contracts of \$200,000 or less must be filed with and heard exclusively by the Procurement and Payables Division manager. Protests involving solicitations, selection of finalist(s), and/or an award recommendation for contracts over \$200,000 must be filed with the Procurement and Payables Division manager and are heard by the C&A Board. The decision of the C&A Board may be appealed to the City Council or the Public Utility Board on a quasi-judicial de novo basis on the record below.
6. Protests shall be filed with the Procurement and Payables Division manager according to the timelines, and are limited to the subject matter(s), specified in this Section XVII. A protest not made in the required manner or by the required deadlines set forth below shall not be considered or acted upon by the City – regardless of whether such matter is intended to be a protest to the Procurement and Payables Division manager, to the C&A Board, or as a request for quasi-judicial hearing to the City Council or Public Utility Board.

### **B. Protests Prior To Submittal Deadline – Contracts Over \$50,000.** Objections asserted before submittals are due shall be considered and processed as a formal protest if asserted according to the following rules and procedures:

1. Pre-Submittal protests shall be limited to the following objections:
  - a. The solicitation specifications, minimum qualifications, terms and conditions, or any aspect of the solicitation that is alleged to unduly constrain competition;



- b. The fairness or accessibility of the pre-bid/pre-submittal conference;
  - c. Concerns that the protestor's questions were not fully or properly addressed by the originating division/department or Purchasing;
  - d. Concerns that the solicitation documents did not provide adequate information or contained improper criteria; or
  - e. Any other matter known or that should have been known to interested bidders by reading the solicitation documents.
2. The protestor shall notify, in writing, the Procurement and Payables Division manager of any permissible objection (per subsection B. 1. immediately above) as soon as practical, but no later than 5:00 p.m. three (3) business days before the submittal deadline. Untimely objections shall not be accepted or processed as a protest. Purchasing will promptly forward all timely written objections onto the department/division.
  3. Failure to assert a pre-submittal protest according to the rules and procedures of this subsection B. shall result in the waiver of any further right to protest the matters specified in subsection B. 1. Protests filed later than 5:00 p.m. three (3) business days prior to the submittal deadline will be rejected by Procurement and Payables Division manager or will be limited by Procurement and Payables Division manager to issues that are allowed to be asserted under subsection C. below.
  4. The Procurement and Payables Division manager, in coordination with the originating department/division, will evaluate pre-submittal protests.
    - a. The protesting bidder(s) and recommended awardee(s) shall be advised, in writing, of the Procurement and Payables Division manager's determination on the matter as soon as practicable after a decision (including a decision to reject the protest as improper) is reached.
    - b. The written determination of the protest by the Procurement and Payables Division manager shall:
      - 1) Find the protest lacking in merit and uphold the division/department recommendation; or
      - 2) Find only immaterial or harmless errors in the City's acquisition process and therefore reject the protest; or
      - 3) Find merit in the protest and issue an addendum to correct the confirmed error; or
      - 4) Find merit in the protest and cancel the solicitation.
    - c. If the Procurement and Payables Division manager finds the protest without merit the City may continue the solicitation process.
    - d. No pre-submittal protest shall require the City to extend a submittal deadline or cancel a solicitation request; however, the City reserves the right to do so at the sole discretion of the Procurement and Payables Division manager.

**C. Grounds for Protests Following Submittal Deadline.** A bidder/respondent to a City solicitation may, after the submittal deadline, submit a protest involving the following City actions and/or alleging the following grounds:

1. City's rejection of submittal as non-responsive;
2. City's rejection of a bidder as not responsible;
3. Allegations the City failed to follow its published evaluation or scoring process;
4. Allegations the City made mathematical errors;
5. Allegations the City engaged in unlawful bias or discrimination and/or has a conflict of interest in the competitive solicitation process; and/or
6. Allegations the competitive solicitation process as conducted by the City, and/or the resulting award recommendation or award, was arbitrary and capricious or contrary to law.

NOTE: Protests not raising any of the grounds listed above shall be rejected by the Procurement and Payables Division manager or will be limited by the Procurement and Payables Division manager to consideration of permissible grounds for protest. Any part of a protest that has been rejected by Purchasing on this basis will not be further considered by the City.

**D. Notice of Non-Selection.** Purchasing will issue a Notice of Non-Selection as follows:

- a. For Request for Bids over \$200,000, the notice will be sent to the low bidder(s) not selected for award and the recommended awardee(s) at the time award recommendation is made.
- b. For Request for Bids for public works and improvements over \$50,000, the notice will be sent to the low bidder(s) not selected for award and the recommended awardee(s) at the time award recommendation is made.
- c. For Request for Proposals and Request for Qualifications over \$50,000, the notice will be sent to respondents not selected for further evaluation or contract award at the time finalist(s) is/are selected, prior to negotiations and/or award recommendation(s).

**E. General Requirements for Protests Following Submittal Deadline:**

1. All Protests Shall be in Writing and Specify the Grounds for Protest. A protest shall be in writing, state that the bidder is submitting a formal protest, and specify as the subject of the protest one or more of the grounds set forth in subsection C. above.
2. All Protests Shall be Timely Filed With the Procurement and Payables Division Manager. A protest shall be submitted within the applicable time specified in this subsection G. and H. below, or as directed in a written notice issued by Purchasing. If the protest is not timely received by Purchasing, it will be rejected.

Protests shall be directed to the Procurement and Payables Division manager and may be delivered by hand, e-mail, or facsimile. The City is not responsible for, and does not assure, timely receipt of a protest when delivered anywhere other than to the following address:

Procurement and Payables Division - Purchasing  
Tacoma Public Utilities Administration Building North, Main Floor  
3628 South 35<sup>th</sup> Street  
Tacoma, WA 98409  
253-502-8372 FAX  
[Suppliernotifications@cityoftacoma.org](mailto:Suppliernotifications@cityoftacoma.org)  
Monday-Friday, 8:00 a.m. - 5:00 p.m., excluding legal holidays

**F. Protest Process Exclusive Means.** The rules, standards, and procedures contained in this Section XVII. are the exclusive means by which aggrieved parties may protest the City's solicitation process, the selection of finalist(s) by a department/division, and any award recommendation made by a department/division, Procurement and Payables Division manager, and/or the C&A Board. No person or party may pursue any judicial proceedings challenging the solicitation or award of a contract by the City without first fully exhausting the administrative procedures and remedies specified in this Section XVII.

1. Aggrieved parties (or recommended awardees) shall submit their protest(s) and all inquiries regarding a pending protest to the Procurement and Payables Division manager.
2. Communication by vendors (including their agents, representatives, and associates) with the following City offices, officials, and employees regarding potential and/or pending protests is discouraged and said offices, officials, and employees shall promptly refer all protest communications to the Procurement and Payables Division manager for proper processing and resolution pursuant to this Section XVII.:
  - a. City Manager's office, TPU Director's office, City Council and/or Public Utility Board members; or
  - b. C&A Board members; or
  - c. Any other City personnel who influence or may be seen to influence the contract award process.
3. City personnel shall remain fair, ethical, and unbiased in their approach and decision making throughout the protest process.
4. In the event the protest process is disrupted, circumvented or otherwise not observed, the City reserves the right to reject all bids.

**G. Specific Protest Procedures – Contracts \$200,000 or Less**

1. Matters Subject to Protest, including surplus sales, may be protested to the Procurement and Payables Division manager, whose decision shall be final.
2. Procedure and Deadlines – Protests to Procurement and Payables Division Manager
  - a. Purchasing will issue, by e-mail or fax, a Notice of Non-Selection and option to protest to the Procurement and Payables Division manager as follows:

- 1) For contracts of \$50,001 - \$200,000 for public works and improvements resulting from a Request for Bids, notice is given to the low bidder(s) not selected for award and the recommended awardee(s).
  - 2) For contracts of \$50,001 - \$200,000 resulting from a Request for Proposals or Request for Qualifications, notice is given to all non-selected respondents.
- b. A protesting bidder shall submit in writing to the Procurement and Payables Division manager the basis for the protest and the remedy sought. The protest shall be received by Purchasing no later than two (2) business days (excluding holidays) after issuance of Notice of Non-Selection.
  - c. The Procurement and Payables Division manager, in coordination with the originating department/division, will evaluate such protests.
  - d. The protesting bidder(s) and recommended awardee(s) shall be advised, in writing, of the Procurement and Payables Division manager's determination on the matter as soon as practicable after a decision (including a decision to reject the protest as improper) is reached.
  - e. The written determination of the protest by the Procurement and Payables Division manager shall:
    - 1) Find the protest lacking in merit and uphold the division/department recommendation; or
    - 2) Find only immaterial or harmless errors in the City's acquisition process and therefore reject the protest; or
    - 3) Find merit in the protest and proceed with appropriate action, which may include, but is not limited to, rejecting all bids, re-tabulating or rescoring bids, or otherwise modifying the original award recommendation.
  - f. If the Procurement and Payables Division manager finds the protest without merit the City may continue the bid process or enter into a contract with the recommended bidder if a contract has not been previously signed.

#### **H. Specific Protest Procedures – Contracts Over \$200,000**

1. Protests of recommendations for awards of contracts over \$200,000 shall be filed with to the Procurement and Payables Division manager for processing. Such processing includes review and determination of whether the protest is proper and, if so, scheduling the matter for hearing by the Contracts and Awards Board. The C&A Board will hear the protest and either concur with or reject award recommendation by the department/division prior to presentation of the award recommendation to City Council and/or Public Utility Board for contract award approval.
2. Procedure – Protests to C&A Board
  - a. Purchasing shall, at least three (3) business days prior to the matter being considered by the C&A Board, issue by email or fax a Notice of Non-Selection and option to protest to the C&A Board.
    - 1) For contract of over \$200,000 resulting from a Request for Bids, notice is given to the lowest bidder(s) in price and recommended awardee(s).

- 2) For contract over \$200,000 resulting from a Request for Proposals or Request for Qualifications, notice is given to all non-selected respondents.
- b. Purchasing shall inform those notified of the proper grounds for protest.
- c. Protesting bidders shall submit in writing to Purchasing the basis for the protest and the remedy sought, including all supporting documents the protestor wants considered. The protest must be received by Purchasing no later than 9:00 a.m. two (2) business days after notice is given (effectively, the third business day).
- d. The Procurement and Payables Division manager will review the protest and will reject those determined to be improper, or will limit the protest to proper grounds. Purchasing will inform bidders of any rejected or limited protests.
- e. Purchasing shall schedule a hearing before the C&A Board. Usually the hearing will be at the next scheduled C&A Board, but at the discretion of Procurement and Payables Division manager the hearing could be set for a future C&A Board date.
- f. Purchasing shall provide written notification by fax or e-mail to the protesting party(ies), recommended awardee(s), and department/division of the protest process and timelines.
- g. Purchasing shall provide copies of any written submissions to all parties, including the originating division/department.
- h. The recommended awardee may submit responsive documentation no later than 9:00 a.m. one (1) business day after the notice in f. above is given.
- i. The C&A Board shall not consider any documentation submitted past the deadlines.
- j. A protestor's failure to timely submit a protest to the Procurement and Payables Division manager and/or state permissible grounds for the protest as required shall result in a waiver of further protest rights.
3. Hearing and Recommendation by C&A Board. The C&A Board's hearing of the protest shall proceed as follows:
  - a. The originating department/division will briefly describe the purchase, project, solicitation process, and basis for its award recommendation. The department/division may wish to consult with the Legal Department and request representation at the hearing.
  - b. The protesting party will have up to 10 minutes, or more as allowed by the Board Chair, to state the basis of its protest.
  - c. The recommended awardee, if present, will have up to 10 minutes, or more as allowed by the Board, to state its response to the protest.
  - d. The department/division, protestor, or recommended awardee may reserve a portion of their time for rebuttal.
  - e. The C&A Board may conduct such further inquiry of the parties and of the originating department/division as it deems necessary. The C&A Board will be advised by and may

consult with its Legal Department representative, who may not be the same attorney representing the department/division at the hearing.

- f. The C&A Board, at its discretion, may call for a recess to deliberate in closed session before taking action. If the Board chooses a closed session deliberation, it will clear the room of all but Board members and Board's attorney.
- g. At the close of its deliberations the C&A Board will go back on the record and resume the meeting.
- h. The C&A Board's disposition options include, but are not limited to:
  - 1) Voting to accept the department/division's recommendation and to advance that recommendation to the City Council or Public Utility Board.
  - 2) Voting to take other action in light of the protest, including:
    - i. returning the matter to the department/division with instructions to gather additional information and re-submit an award recommendation;
    - ii. recommending the department/division to reject, re-tabulate, or rescore all bids.
- i. Minutes will be kept reflecting the presentation to and recommendation(s) of the C&A Board.
- j. Purchasing, on behalf of the C&A Board, will issue written notice of the C&A Board's decision (including the option to request a quasi-judicial hearing before the City Council/Public Utility Board if aggrieved by the results of the C&A Board decision) to the recommended awardee, all protesting parties, and the department/division on the same day as the C&A Board meeting.
- k. In the event of further appeal, Purchasing will prepare and forward a written summary of the proceedings before the C&A Board, including the reasons for the C&A Board recommendation, to the City Council or Public Utility Board. Purchasing will also forward all of the written materials considered at the C&A Board meeting to the City Council or Public Utility Board and will provide a copy of the summary and written materials to the department/division.

#### 4. Impact of Protest on Award Recommendation Timeframes

Whenever a protest is filed with the C&A Board, award recommendations to the City Council and Public Utility Board will be delayed by one meeting. Exceptions to the delay may be made to the Procurement and Payables Division manager and will be determined on a case-by-case basis. Departments/Divisions should plan accordingly, especially when bid or pricing expiration dates or grant deadlines are involved.

- a. For TPU, award recommendations should be submitted for a C&A meeting scheduled the week prior to the desired Public Utility Board meeting.
- b. For General Government, award recommendations should be submitted for a C&A meeting scheduled two weeks prior to the desired City Council meeting to accommodate delays caused by protests.

## **I. Protests To City Council and/or Public Utility Board**

1. If the C&A Board affirms the department/division recommendation, the protesting party has until 12:00 noon of the second business day after the C&A Board meeting to request a quasi-judicial hearing before the City Council/Public Utility Board.
  - a. For example, if the C&A Board denies a protest at a Wednesday meeting, the request must be delivered by 12:00 noon on Friday.
  - b. The request for quasi-judicial hearing shall be filed with the Procurement and Payable Division manager, and Purchasing will deliver any timely filed requests for quasi-judicial hearings to the City Clerk's office for consideration by the City Council; or to Clerk of the Board, Director of Utilities office, for consideration by the Public Utility Board.
2. Appeals to City Council/Public Utility Board at quasi-judicial hearings are limited in scope to issues and documentation considered by the C&A Board. Questions and comments by City Council members and Public Utility Board members are limited to the same issues and documentation considered by the C&A Board.
3. Summaries of the protest before the C&A Board will be prepared by C&A Board staff (Purchasing) with the assistance of C&A Board legal counsel.
4. Purchasing will assemble the record of the protest before the C&A Board which will consist of at least the following:
  - a. Solicitation documents;
  - b. Submittals in response to solicitations (bids or proposals);
  - c. Documentation department/division relied upon to make award recommendation; and
  - d. Materials presented to C&A Board.
5. Purchasing staff will forward copies of the C&A Board record to:
  - a. The City Clerk's office for appeals to City Council and to the Director of Utilities office for appeals to the Public Utility Board for inclusion in the meeting materials distributed to City Council members or Public Utility Board members, as applicable;
  - b. The originating division/department;
  - c. All parties to the protest; and
  - d. The attorney for the C&A Board.
6. Communication to and from the parties regarding the anticipated process before the City Council or the Public Utility Board shall be generated by and directed to Purchasing.
7. Quasi-judicial hearings are conducted by City Council/Public Utility Board. The Legal Department will provide hearings procedures and guidance as needed to the members of the City Council or the members of the Public Utility Board.

8. The originating department/division and their legal counsel, if desired by the department/division, C&A Board Chair (or designee), and C&A Board's legal counsel, will attend quasi-judicial hearings. In addition, appropriate Purchasing staff will attend to answer City Council or Public Utility Board questions.
9. The C&A Board, by and through its chair, legal advisor, or other appropriate representative will present a summary of the proceedings to date to the City Council or the Public Utility Board and will summarize the issue before the City Council or Public Utility Board.
10. City staff from the originating department/division will be given up to ten minutes to present its contract award recommendation. The legal advisor for requesting department/division may make the presentation on behalf of the department/division or may assist with such presentation as requested.
11. The protestor and recommended contract awardee will each have ten minutes to present, with the protesting party being given the opportunity to reserve a portion of that time for rebuttal.
12. Following testimony, members of the City Council or the Public Utility Board may ask questions, limited in scope to issues and documentation considered by the C&A Board, of City staff and of the parties or their representatives.
13. At the close of the proceedings the City Council or the Public Utility Board at its discretion may retire to a closed session for deliberations.
14. At the close of the deliberations the City Council or the Public Utility Board will make a motion to concur with the recommendation of the C&A Board, to remand to the C&A Board for further consideration, or to take other lawful action.
15. The official result of the quasi-judicial hearing and any further appeal process will be directed by the City Council/Public Utility Board, through the single points of contact:
  - a. City Clerk's office, and/or
  - b. Clerk of the (Public Utility) Board, Director of Utilities office.



## ***Cushman 2 Powerhouse Unit 31 & 32 Rebuild***

### ***Statements of Qualifications***

***For***

***City of Tacoma  
Tacoma Power / Generation***

***By***

***American Hydro Corporation***

***February 23, 2021***

## Table of Contents

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5. Ability to Perform
6. Excellence in Design
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## ***SECTION 1***

### ***CONTRACTOR QUALIFICATION FORM; SUPPLEMENTAL BIDDER RESPONSIBILITY FORM; CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES FORM***

This document contains information, which is copyright of, and is confidential to American Hydro Corporation. It should not be disclosed in whole or in part to parties other than the recipient or used for any purpose other than the specific purpose for which it has been provided, without the written permission of authorized personnel of American Hydro Corporation.

# American Hydro

A Wärtsilä Company

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1. **CONTRACTOR QUALIFICATION FORM; SUPPLEMENTAL BIDDER RESPONSIBILITY FORM;  
CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES FORM**

Specification No. PG20-0325F

Name of Bidder: American Hydro

## State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor  
(Must be in effect at the time of bid submittal):

Number: AMERIHC075C2

Effective Date: 2/22/1993

Expiration Date: \_\_\_\_\_

Current Washington Unified Business Identifier  
(UBI) Number:

Number: 601-357-167

Do you have industrial insurance (workers' compensation) coverage for your employees working in Washington?

☐ Yes ☐ No  
☒ Not Applicable

Washington Employment Security Department Number

Number: 000-834582-02-8

☐ Not Applicable

Washington Department of Revenue state excise tax  
Registration number:

Number: 601-357-167

☐ Not Applicable

Have you been disqualified from bidding any public works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes ☒ No  
If yes, provide an explanation of your disqualification on a separate page.

Do you have a physical office located in the state of Washington?

☐ Yes ☒ No

If incorporated, in what state were you incorporated?

State: PA ☐ Not Incorporated

If not incorporated, in what state was your business entity formed?

State: \_\_\_\_\_

Have you completed the training required by RCW 39.04.350, or are you on the list of exempt businesses maintained by the Department of Labor and Industries?

☐ Yes ☒ No

**PROJECT: CUSHMAN 2 UNIT 31, 32 REBUILD PROJECT**

**SPECIFICATION NO. PG20-0325F**

**Responsibility Certification Form**

This form shall be completed in its entirety, **submitted with the SOQ response**, and shall be used to demonstrate the Proposer's, or Proposer's Design-Build Team's, experience for the minimum qualifications of the Project. Failure to submit this form is grounds for SOQ rejection.

Qualification of Proposer: Proposer, or Proposer's Proposed Design-Build Team, shall have experience delivering Projects of Similar Scope and Complexity in North America within the last ten (10) years.

**Projects of Similar Scope and Complexity shall be rehabilitation projects for 60Hz, suspended type, vertical, salient pole hydroelectric turbine-generators driven by Francis runners with minimum ratings of 12.6kV and 10MW.**

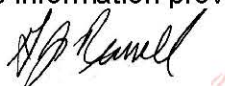
Proposer's Company Name: American Hydro Corporation

## SUPPLEMENTAL BIDDER RESPONSIBILITY FORM

Minimum Experience Criteria		
For each of the experience criteria identified below, please check the appropriate box to indicate that the Proposer, or Proposer's Design-Build Team, has the described experience on Projects of Similar Scope and Complexity.	Yes	No
Refurbished an existing generator that included design, manufacture, installation of a new stator core with improved core clamping, new stator windings, and frame refurbishment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis with the intent of reusing and replacing existing turbine components including scroll case, draft tube, runner, shaft, seals, wicket gates, wear rings, wicket gates, shift ring, bushings, levers, etc. Analysis capabilities include component FEA, fatigue and hand calculations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis of existing generator components including frame, upper and lower brackets, shafts (main and stub), rotor hub, rotor spider and rotor rim and rotor pole to rim connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Refurbished or supervised the refurbishment of the poles for a salient pole hydro generator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed or coordinated the successful disassembly, in-situ and shop machining, welding, reassembly, alignment, balancing and commissioning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performed refurbishment and commissioned a mushroom type, turbine pressure relief valve	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Financial Criteria		
For each of the financial criteria identified below, please check the appropriate box to indicate that the Proposer meets the criteria.	Yes	No
Proposer has \$20 million dollar bonding capacity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

By completing and signing this form, the Proposer is certifying the responses marked on the form are true and accurate. The Proposer's failure to disclose the required information or the submittal of false or misleading information will result in the rejection of the Proposer's SOQ.

The information provided herein is true and complete.	
 <small>Digitally signed by Gerard J. Russell DN: cn=Gerard J. Russell, o=American Hydro Corporation, email=gerard.j.russell@ahydro.com, c=US Date: 2021.02.22 16:05:20 -05'00'</small>	2021-02-19
Signature of Authorized Representative	Date
Gerard J. Russell, President	
Print Name and Title	



City of Tacoma

## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (**January 14, 2021**), that the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

American Hydro Corporation

Bidder

Digitally signed by wartsila:TPE015  
DN: c=GB, o=Bolero International  
Ltd., cn=wartsila:TPE015  
Date: 2021.02.17 21:28:49 -05'00'

Signature of Authorized Official\*

Travis F. Peters

Printed Name

Vice President, Finance and Procurement

Title

February 17, 2021

Date

York

City

Pennsylvania

State

**Check One:**

Individual ☐

Partnership ☐

Joint Venture ☐

Corporation ☒

State of Incorporation, or if not a corporation, the state where business entity was formed:

Pennsylvania

If a co-partnership, give firm name under which business is transacted:

\_\_\_\_\_

*\* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*



## ***SECTION 2***

### ***LETTER OF INTEREST***

This document contains information, which is copyright of, and is confidential to American Hydro Corporation. It should not be disclosed in whole or in part to parties other than the recipient or used for any purpose other than the specific purpose for which it has been provided, without the written permission of authorized personnel of American Hydro Corporation.

## 2. LETTER OF INTEREST

February 23<sup>rd</sup>, 2021

City of Tacoma  
Tacoma Power / Generation

SUBJECT: Cushman 2 Powerhouse - Unit 31 & 32 Rebuild  
RFQ Specification No. PG20-0325F  
Statements of Qualifications Response  
American Hydro Corporation Proposal Number 3971

Dear City of Tacoma,

American Hydro Corporation (AH) is pleased to submit this response to City of Tacoma's request for Statements of Qualifications (SOQ) for Cushman 2 turbine and generator upgrade and refurbishment of two Francis Allis Chalmers turbines. AH has specialized in the upgrade and refurbishment of hydro turbines and hydroelectric plants for over 30 years. We have gained excellent experience with many projects of similar size, scope and complexity to Cushman over the years. We routinely take on the complete scope of turbine/generator refurbishment, field disassembly, machining, component refurbishment, and reassembly, as well as the provision of new and/or refurbishment of ancillary systems and components for many North American hydro owners. We have built a solid reputation in the industry as evidenced by the large number of successfully completed projects and repeat customers.

We believe we are especially well qualified to be selected as the contractor for this project due to our cooperative history of working experience with our customers. We encourage you to contact our customers directly for their experiences in working collaboratively with AH. We look forward to being an active participant in the Design-Build partnership and sharing in the success of the team that will deliver the Cushman 2 Unit 31 & 32 overhauls on time and within the agreed upon budget of the overall project. Of course, this will all be achieved while ensuring that the utmost of safety is maintained throughout the course of the work with a constant eye on delivering the highest quality product.

We are working closely with ABB, Inc. (EPIS Hydro Services) to provide a joint effort for Cushman. ABB will be providing generator related scope items with engineering support from LDV Consultants, while AH will provide turbine and general unit rehabilitation scope. We have coordinated in the SOQ phase to draft a single response. AH, ABB and LDV Consultants are committed to execute this partnership with the same integrity and expertise demonstrated on other hydro projects, power generation, and balance-of-plant projects. The combined project staff will include talented project management, site leadership, technical resources and craft that will drive safety, quality, and productivity.

ABB also brings to the team world-class coil design and manufacturing from its factory in Canada as well as hydro-specialized craft from its US service shops for the assessment, the rehabilitation, and the testing of generator components. The ABB team has developed a network of industry renowned consultants and service providers to cover the full range of services in the required scope of work as outlined in the Request for Qualifications.

The ABB EPIS Hydro Center of Excellence (formerly General Electric Industrial Solutions) team has the proud distinction of being one of the oldest OEMs manufacturing and servicing hydropower equipment for over 100

years. The team, cumulating more than 200 combined years of generator experience in the hydro industry, is uniquely qualified to provide testing, inspection, parts, and repair services to extend the life and improve the performance of hydro facility assets.

LDV Consultants will be contracted for the Electrical Unit Overhaul portion of the project. LDV is based in Chambly, Quebec and has extensive experience in providing engineering solutions for the hydroelectric industry and specific successful experience with other projects. We are confident in ABB and LDV's abilities to perform the generator work necessary for this project and know that this partnership will provide the expertise necessary to complete the project successfully.

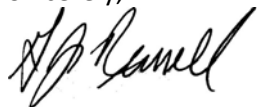
See the Technical Submission portion of this proposal for more details about the intended project team in the Organization Chart and the individual resumes of the key personnel that will be assigned to this project.

The traditional construction method of Design-Bid-Build intentionally separates the owner, the designer and the contractor and relies heavily on rigid specifications and controls. It creates a win-lose-what's- best-for-me, culture. Design-Build is an outcome focused project delivery method. It creates one team and incorporates high levels of collaboration and integration between all participants including the owner, designers and contractors who will be completing the project. It relies on good structured communication amongst all participants. This integrates design with construction and is a relational project approach with risk sharing amongst the all project stakeholders. As communication increases, trust is also enhanced. Design-Build incorporates risk and rewards and promotes what's best for the project as opposed to what's best for me.

After review of the pressure relief valve installed on the Cushman units, AH assumes that the valves operate in new condition, as designed and takes no liability for the risk associated with the operation of the system. Scope for the valve rehabilitation would need to be broken out and awarded separately to a qualified contractor.

For future contact about the RFP please contact Mr. Steve Peabody at: [steve.peabody@ahydro.com](mailto:steve.peabody@ahydro.com)

Sincerely,



Gerard J. Russell  
President

cc: Mr. Steve Peabody – American Hydro Corporation

## ***SECTION 3***

### ***DESIGN-BUILD TEAM QUALIFICATIONS AND PAST PERFORMANCE REFERENCES***

This document contains information, which is copyright of, and is confidential to American Hydro Corporation. It should not be disclosed in whole or in part to parties other than the recipient or used for any purpose other than the specific purpose for which it has been provided, without the written permission of authorized personnel of American Hydro Corporation.

### 3. DESIGN-BUILD TEAM QUALIFICATIONS AND PAST PERFORMANCE REFERENCES

#### Experience and Capabilities – Turbine

AH has supplied over 170 runners in the past ten years. Most of these projects included extensive turbine rehabilitation and/or new turbine components. Many have included turbine disassembly and reassembly, field machining, and working with subcontractors to provide generator components similar in scope to Cushman 2 Unit 31 and 32.

The following projects exhibit similar scope and complexity to the work required for Cushman 2 Units 31 and 32. Additional information regarding experience working in a collaborative team, which includes many of these projects, can be found in Section 5 of our response.

#### **Jordan Dam - Unit 4, Unit 1, Unit 2 – Alabama Power Company**

New 172" Francis runner, new wicket gates, new bottom ring, component rehabilitation, disassembly, reassembly, field machining of brake ring stay ring headcover and bottom ring mounting faces and bores. Supply and install of new governor system and high-pressure servomotors on Unit 1 and Unit 2. Install of High-pressure lift system on Unit 1 and Unit 2. Installation of new aeration piping on Unit 1 and replacement of carbon aeration piping with stainless on Unit 2. Replacement of all generator cooling and water piping with stainless on Unit 1 and Unit 2. Supply of new inspection platform for use on all four units. Replaced generator brake piping with stainless and rebuild of brakes cylinders

#### **Keokuk – Ameren Missouri**

This project included 15, 203 inch 12 MW Francis runners, unit upgrades, new runners, complete turbine refurbishment, field work including field machining, two unit simultaneous outage

#### **Bear Creek – Duke Energy**

One new 63.5" Francis runner, new head cover, new bottom ring, new turbine guide bearing, new wicket gates, new turbine shaft packing box, new gate operating ring, new gate linkage, new servomotor connection rods, new walkways, disassembly and reassembly.

#### **John W Keys Unit P5 and P6**

Model tested hydraulic design and furnish and install two new pump impellers for units P5 and P6, rehabilitation of pump components, restacking and rewinding motor stators, disassembly/reassembly

#### **Bear Swamp**

Model test, two new pump-turbine runners, new wicket gates, upper & lower stationary wear rings, stay vane extensions. Rehabilitation of pump-turbine head cover (including structural upgrade), bottom ring, gate operating ring, wicket gate servomotors, gate linkage, turbine & generator guide bearings, thrust bearing, turbine & generator shafts, turbine shaft seal, piping & tubing, fasteners, seals & gaskets, protective devices, and coatings. New motor-generator rotor, including hub, arms, rim, and poles. Field disassembly, welding of stay vane modifications, machining, painting, reassembly, commissioning, and testing.

The attached Identification of Projects Table provides additional requested information on these projects. The resumes of those personnel that are included in the Key Personnel section of this

response have worked on these projects, and many other projects of similar scope and complexity.

ABB Hydro Services (formerly GE Hydro Services) has been servicing hydropower equipment for all OEM's for over 100 years and offers a full range of services designed to extend the life and improve performance of hydro assets:

- Design and Installation services
- Generator Assessment and Repair services
- Hydro parts
- Mechanical services
- Measurement, Testing and Control Solutions



For the generator scope of the Cushman 2 project, the ABB Engineering team would design new stator core and winding components using our dedicated Electromagnetic Design Program. In existence over 30+ years, our design tool is used to calculate all electrical, mechanical, excitation, temperature rises, reactance, time constants parameters, critical to the design of a hydrogenerator to customer and industry specification. Our design engineering and drafting teams realize all drawings required for the manufacturing of new stator core and winding components and the refurbishment of stator frame and rotor poles.

Our strong hydro-expertise helped us design a full range of in-house tools for an optimized and cost-effective planning and execution of our projects. Such tools include, for instance, automated and customized quality assurance reports to provide our site team with the acceptance requirements per design standards when installing new cores, windings, pole removal/re-installation such as what would be required in the Cushman 2 project.

In the manufacturing phase, ABB owns a panel of in-house and outsourced solutions to manufacture and refurbish generator components. ABB's coil manufacturing facility (located in Beloeil, Quebec, Canada) is a world-class manufacturer of hydro generator stator windings and offers a class F insulation system in a wide range of voltages (up to 15 kV). In business since 1987, the Beloeil facility is ISO 9001 certified and manufactures 8,000 - 10,000 stator coils/year. Every coil/bar produced in our facility is assigned a serial number allowing that coil/bar to be tracked through each production step. This tracking system allows data related to coil/bar manufacture to be recorded for each coil/bar including tape types, number of tape layers, batch number, and operator number among other information. Most importantly, our tracking system allows ABB operators to verify compliance to our manufacturing plan. In addition to standard manufacturing tests (coil fit-up in mock stator, tap test, strand test, strand continuity check, surface resistivity, tip-up, surge test, high potential test), additional testing capabilities (Thermal cycling, voltage endurance, partial discharge and dissections) ensure strict compliance to the most-stringent north American and industry accepted standards.



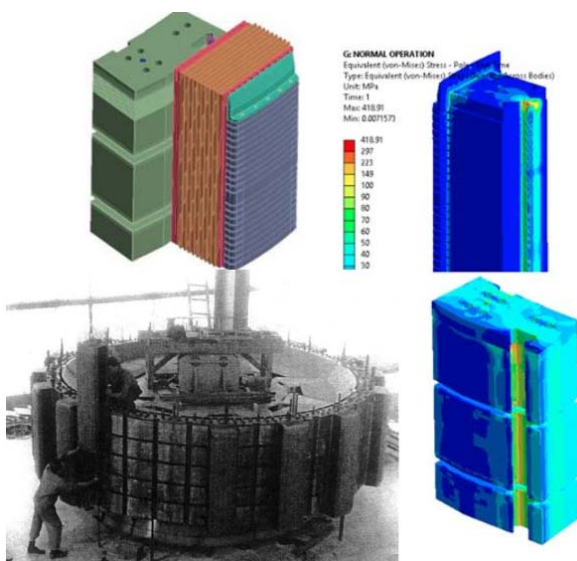
For the stator core portion, ABB uses a panel of US-based suppliers for laser cutting or stamping of stator core laminations. Stator components (laminations, clamping and cooling components) are carefully reversed-engineered to fit an existing stator frame, or designed new to work with a new frame. For the rotor pole portion, ABB works with north American suppliers for the complete refurbishment or for new designs of rotor pole coils and cores. In the case of rotor poles containing asbestos, as it is likely the case in the Cushman 2 project, ABB's suppliers are qualified to abate and reinsulate asbestos-containing poles. As part of the ABB family, the EPIS Hydro team can also provide a wide range of balance of plant solutions, including, but not limited to circuit breakers, switchgear, bus ducts, transformers, and motors.

In the construction phase of the project, ABB will mobilize sea van containers with tooling and equipment specific to the assembly/disassembly task being done on site. Our tooling containers are conveniently stored in Washington state and can be quickly dispatched to the Cushman 2 project site. ABB Field Engineers (FE) manage our daily site operations. Our FEs are ABB employees, constantly trained to our safety, quality standards and site methods with dedicated hydro experience. Our quality program ensures a strict follow-up of the disassembly/assembly activities on site, with a constant communication between our team on site and Engineering. Our FEs are trained to perform the tests commonly required during a stator core restack and rewind. ABB site personnel is composed of experienced winders coming from our ABB service shops around the country and supplemented by technical contractors coming from reputable staffing companies. Every contractor in our team is trained to the ABB safety standards and work methods and gets the site-specific training before starting on the project.



As outlined in the Request for Qualifications, the Cushman 2 project requires finite element analyses (FEA) for the assessment and the re-certification of the highly stressed generator components (shaft, spider, rim, brackets and frame). Additionally, site measurements, vibration analyses will be required to investigate the possible resonance issue with the stator core/frame. Additionally, measurements on the frame and thermal simulation will be required for the conversation from an open air to a totally enclosed water-cooled ventilation. For these advanced analyses, ABB will partner with the LDV team.





With more than 250 years of combined hydro experience, the LDV team has the expertise to perform FEA, fatigue analyses to recertify generator components during the refurbishment of the Cushman 2 units. Working from original drawings (if available) and following a detailed site measurement campaign, LDV will model the highly stressed components and simulate their behavior in normal and fault conditions to evaluate their condition and provide recommendations for repair/replacements. Following a signature vibration survey by ABB and LDV on the existing units, LDV will perform a vibration analysis to study possible resonant frequencies to provide

recommendations for the stator core design as well as frame modification/ new design.

Following dimensional and temperature measurements on the existing frames, a thermal analysis will be conducted to guide design modification or the design of a new frame for the conversion to a totally enclosed water-cooled ventilation.

### Experience and Capabilities – Generator

Since 2004, ABB has worked on more than 120 major generator rebuilt/refurbishment projects of scope similar to the Cushman 2 project. The list of references shown in the next page describes some of the last ABB generator projects over the last 2 years. Many of these involve Allis Chalmers generators in size, design and vintage similar to the ones installed at the Cushman 2 plant. References and contact information are also provided in the list. Additional references and information can be provided upon request.

The table below focuses on 3 projects to showcase ABB and LDV’s experience related to the Cushman 2 project generator work scope. Financials for these projects can unfortunately not be disclosed. The ABB team working on these 3 projects is the same as the one proposed in section 3.



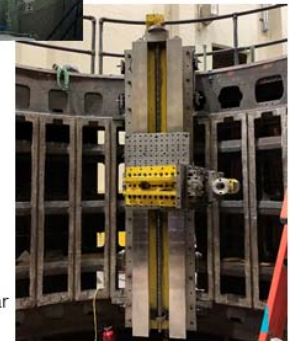
## PG&E Pit 1 Unit #1, Generator restack, rewind and pole refurbishment, USA, CA

2020- ongoing. Contact: Jason Gibson, 530-215-9251.  
*Allis Chalmers generator /38.5 MVA / 257 rpm/ Frame size: 188" OD – 164" ID x 76" Length / 11kV / Stator slots: 252.*

Original scope of work included removal of the existing stator core and winding, rotor pole refurbishment, stator core restack and rewind. Upon removal of the stator core, extensive damage was found on the frame dovetails due to excessive vibration. Additionally, as found frame circularity was not within acceptable tolerance limits. ABB partnered with In-place Machining to Engineer an appropriate repair by machining, shimming and re-positioning the dovetails to improve the surface and circularity condition. Throughout the repairs, daily laser measurements were required to ensure the new core and winding could be installed successfully, meeting all acceptable design requirements. Restack and rewind are currently ongoing



Pit1, Unit 1 during disassembly



Stator frame keybar slot machining



Frame and keybar modification for stacking at Pickwick

## TVA Pickwick Units 2 to 4, Generator restack, rewind and frame modification, USA, TN

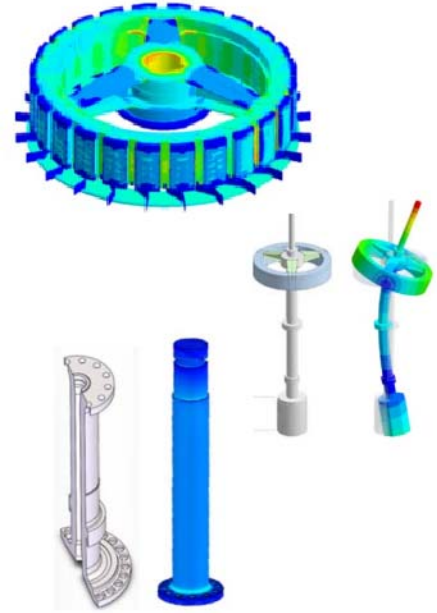
2016- 2019. Contact: G. Barbee, 423-751-2512  
*Westinghouse generator /48 MVA / 82rpm/ Frame size: 380" OD – 358.5 ID x 52" Length / 13.8kV / Stator slots: 432*

Original scope of work included removal of the existing stator core and winding, stator core restack and rewind. Upon removal of the stator core, new core clamping systems were installed on all three units per customer request. ABB partnered with TVA's Mechanical team to weld new keybar/core studs prior to installation of the core and winding. Laser measurements were performed each day throughout the installation to confirm all keybar chord measurements, circularity and verticality were meeting drawing requirements. Installation of all 3 stator cores and windings were executed

## Litostroj Hydro Inc, (Plant & end-user information cannot be disclosed), Engineering assessment and refurbishing of a Kaplan unit, Canada

2019- ongoing. *Details of the unit not disclosed*

LDV supported Litostroj's own engineering team for a refurbishing and uprate project. LDV is handling the refurbished components and is in charge of the electrical design for the generator uprating. The specification also requires performing a design assessment of the reused components and systems. The design assessment of the reused components included: draft tube liner, stay ring, wicket gates, upper and lower brackets, discharge ring, spiral case, operating mechanism, Generator stator frame, Bottom ring, headcover, shaft and rotor. LDV's mandate also consisted in calculating the critical speeds of the unit, the electrical design of the generator uprating and the refurbishment of the reused components under the new uprated conditions.



FEA charts for the project's rotor elements



## Hydro Services Experience List

Year	Customer	Contact	Phone	Site Name / Unit Number / Project Description	OEM
2021	Energy Northwest	T. Haslem	(360) 693-7474	Tieton Unit #1 Generator Test and Inspection, Partial Discharge Repairs	Harbin Electric
2021	Southern Company	K. Turpin	(706) 754-7904	Tallulah Falls #2 Frame Repairs, Restack, Rewind, Pole Refurbishment	GE
2020	DWR	A. Macias	(916) 653-5849	Gianelli Lower Unit Flange Assemblies, Core Studs (3 units)	GE
2020	PG&E	J. Gibson	(530) 335-0210	Pit 7 #2 Stator Restack & Rewind, Pole Refurbishment	Westinghouse
2020	DWR	A. Macias	(916) 653-5849	Gianelli Unit #6 Lower Unit Coils and Laminations	GE
2020	Duke Energy	G. Walker	(919) 495-8480	Walters Unit #2 Rotor Pole Repairs and Refurbishment	Westinghouse
2020	Central Arizona Project (CAP)	J. Terrell	(623) 869-2672	MW#6 Stator Restack & Rewind, Pole Repairs and Refurbishment	Hitachi
2020	PG&E	M. Busby	(530) 520-3228	Pit 3 #3 Stator Restack & Rewind, Pole Refurbishment	GE
2019	Mahi Pono	B. Bauer	(360) 592-5525	Kaheka (3 units) and Paia (1 unit) Test and Inspect	Westinghouse
2019	Brookfield	N. Baker	(207) 616-8886	Williams Unit 1 Stator Rewind, Rotor Clean, Test & Inspect	GE
2019	Brookfield	B Bennett	(304) 640-5002	Hawks Nest Test & Inspect (3 units)	Westinghouse
2019	DWR	A. Macias	(916) 653-5849	Banks Unit 7 Rotor Pole Refurbishment	GE
2019	DWR	A. Macias	(916) 653-5849	Dos Amigos New Rotor Pole Assemblies	ASEA
2019	DWR	A. Macias	(916) 653-5849	Gianelli Unit 4 Upper / Lower Unit Coils and Laminations	GE
2019	Ameren	B. Griffin	(940) 217-4706	Taum Sauk Units #1 & #2 – Test and Inspections	GE
2019	Homer Electric	B. Day	(907) 235-4401	Bradley Lake #2 Test and Inspect	Fuji
2019	TVA	G. Barbee	(423) 751-2512	Pickwick #2 Stator Core Restack/Rewind	Westinghouse
2019	Duke Energy	G. Walker	(919) 495-8480	Walters Unit #1 Rotor Pole Repairs and Refurbishment	Westinghouse
2018	DWR	A. Macias	(916) 653-5849	Gianelli #7 Pole Refurbishment	GE
2018	PG&E	J. Gibson	(530) 335-0210	Pit 1 #2 Stator Core Restack/Rewind/Pole Refurbishment	Allis Chalmers
2018	PG&E	R. Petree	(530) 889-6457	Tiger Creek #1 Stator Core Restack/Rewind/Pole Refurbishment	Westinghouse
2018	SCE	R. Schultz	(626) 302-9696	Big Creek 4 #1 Stator Core Restack/Rewind	Allis Chalmers
2018	SCE	R. Schultz	(626) 302-9696	Poole #1 Stator Core Restack/Rewind	GE
2018	SFWPA	D. Leon	(530) 538-8854	Kelly Ridge #1 Stator Rewind	Allis Chalmers
2018	Alaska Electric (AELP)	C. Yearous	(907) 463-6387	Snettisham #1 Stator Core Restack/Rewind/Pole Refurbishment	GE

## Turbine Manufacturing Facilities

AH has supplied over 325 runners of similar weight and dimension to the runners at Cushman 2 Unit 31 and 32. Since AH has produced over 725 runners in our manufacturing facility ranging in size from 40 inches to over 250 inches.

AH's manufacturing facilities in York, Pennsylvania USA have been established specifically for the manufacturing of turbines and replacement runners up to 400 inches in diameter. Computerization of the manufacturing operation has provided AH with the unique ability to manufacture runners of improved quality.

The AH facility is designed from the ground up to provide a manufacturing environment that produces high quality hydro mechanical components cost effectively and in less time than by conventional means. The plant is located on 36 acres and encompasses 125,000 square feet of office and manufacturing space. With 200 tons of lifting capability, the manufacturing operation has been sized to fully serve its customers from their smallest to their largest requirements. This plant was designed and built exclusively for the manufacture of hydraulic turbines and appurtenances. It is the most modern turbine manufacturing facility in the world with the following capabilities:

- Full-service runner and component manufacturing
- CNC flame cutting
- Wide range of welding processes
- Blasting
- Inventory Control
- Accredited Inspectors
- Fabrication
- Hot forming
- Stress relief
- Painting
- Lean Enterprise
- AWS Certified welding

The AH shop has recently completed a large capital investment for the a new 5-axis machine. With the investment of the 5-axis machine, the machine shop will benefit from a significant increase in efficiency along with increased capabilities previously unknown to AH. We are able to offer additional value to our current and future customer base. The installation is almost complete, and we have started the training and operation of the 5-Axis machine. The new machine is a 3.5-meter portal style, 5-axis machining center with two moving tables. Each of the moving tables is 3m x 5m and has a 25,000 kg weight rating. One of the two tables will also contain a 3m diameter turning table.

AH prides itself on providing turnkey upgrades and refurbishments of hydroelectric plants across the world. Our company was founded upon the concept of restoring aging turbines into exceptional energy producers that surpassed their original performance levels. Hydro plant upgrades are unique opportunities to develop additional generation at a far lower cost than other sources of electric power. Our engineers are trained and experienced to fully optimize your generating capacity by designing, manufacturing and installing new custom designed runners and other components and overhauling the remaining major components of your turbine. From new bearing materials to improved wicket gate linkage to modernizing electrical control systems, our upgrade and rehabilitation programs will extend the life of your turbine and create more capacity and efficiency within the layout of your hydro plant. We take a knowledgeable approach to every turbine upgrade with the goal of giving your plant a second life.

## IDENTIFICATION OF PROJECTS TABLE

PROJECT NAME AND LOCATION	PROJECT PERFORMANCE REQUIREMENTS AND ACCOMPLISHMENTS	OWNER NAME AND ADDRESS/ CONTACT PERSON	ORIGINAL (O) AND FINAL (F) CONTRACT VALUES	COMPLETION DATES	PROBLEMS, CLAIMS AND RESOLUTION OF EACH
<b>CONTRACT TYPE</b>					
Keokuk Units 6 and 14  Missouri USA  Design/Build	American Hydro has supplied 205” Francis runners, turbine rehabilitation and disassembly/reassembly for 11 units at the Keokuk Plant. The turbine rehabilitation consisted of the non-embedded components including head cover, bottom ring, gate ring, new gate mechanism design, turbine shaft, generator shaft, wicket gates and bearings. Fasteners, bolts, screws and miscellaneous industrial parts. Two additional runners are currently in production	Ameren Missouri St. Louis Resource Center 300 South Lindbergh Blvd. St. Louis, MO 63127  Mr. Matt Ratliff Phone: (314) 957-3401 Email: mratliff@ameren.com	<b>TURBINE:</b> Initial Contract Amount: \$8,262,141 Final Contract Amount: \$8,492,167  <b>FIELD:</b> Initial Contract Amount: \$4,700,000 Final Contract Amount: \$5,194,987  Contract Amount was increased on both contracts due to added scope after contract award.	2016	
Bear Swamp  Massachusetts USA	Model test, two new pump-turbine runners, new wicket gates, upper & lower stationary wear rings, stay vane extensions. Rehabilitation of pump-turbine head cover (including structural upgrade), bottom ring, gate operating ring, wicket gate servomotors, gate linkage, turbine & generator guide bearings, thrust bearing, turbine & generator shafts, turbine shaft seal, piping & tubing, fasteners, seals & gaskets, protective devices, and coatings. New motor-generator rotor, including hub, arms, rim, and poles. Field disassembly, welding of stay vane modifications, machining, painting, reassembly, commissioning, and testing.	Brookfield Renewable Power Bear Swamp Hydro Rowe, MA  Mr. Steve Mockler 508-251-7679 Stephen.mockler@brookfieldrenewable.com	\$45,780,066 (O) \$49,573,532 (as of 10/2020 – but contract is ongoing)	In progress	Contract amount increased due to customer added scope and discovery work.
Bear Creek  North Carolina, USA	One new 63.5” Francis runner, new head cover, new bottom ring, new turbine guide bearing, new wicket gates, new turbine shaft packing box, new gate operating ring, new gate linkage, new servomotor connection rods, new walkways, disassembly and reassembly. .	Duke Energy 526 Church Street Charlotte, NC  Mr. Brian Luffman 980-373-7070 Brian.Luffman@duke-energy.com	\$3,108,774 (O) \$3,202,840(A)  Contract value change is due to adjustments for added discovery work scope – servo motor repairs, draft tube liner repairs	1/2018	External delays due to head gate repairs performed by others. Field machining error, corrected by onsite weld and machining repairs. Headcover sealing/leakage issue, corrected with an additional o-ring.
John W. Keys  Design/Build	Two new pump impellers, rehabilitation of pump components, restacking and rewinding motor stators, disassembly/reassembly	U. S. Bureau of Reclamation Pacific Northwest Region 1150 N. Curtis Road, Suite 100 Boise, ID 83706  Mr. Stephanie Utter (509) 633-6107 (Office) (509) 750-7833 (Cell) sutter@usbr.gov	\$19,910,200 (O)	In progress	

PROJECT NAME AND LOCATION	PROJECT PERFORMANCE REQUIREMENTS AND ACCOMPLISHMENTS	OWNER NAME AND ADDRESS/ CONTACT PERSON	ORIGINAL (O) AND FINAL (F) CONTRACT VALUES	COMPLETION DATES	PROBLEMS, CLAIMS AND RESOLUTION OF EACH
CONTRACT TYPE					
<p>Jordan Dam Unit 1, Unit 2 and Unit 4</p> <p>Alabama USA</p> <p>Design/Build</p>	<p><b>Turbine Components:</b> New 172” Francis runner, new wicket gates, new bottom ring, component rehabilitation including head cover and gate ring, disassembly, reassembly, field machining of brake ring, stay ring, head cover and bottom ring mounting faces and bores. Fasteners, bolts, screws and miscellaneous industrial parts. Supply and install of new governor system and high-pressure servomotors on Unit 1 and Unit 2. Installation of new aeration piping on Unit 1 and replacement of carbon aeration piping with stainless on Unit 2.</p> <p><b>Generator Components:</b> Replacement of all generator cooling and water piping with stainless on Unit 1 and Unit 2. Supply of new inspection platform for use on all four units. Replaced generator brake piping with stainless and rebuild of brakes cylinders. Install of High pressure lift system on Unit 1 and Unit 2.</p>	<p>Alabama Power 600 North 18<sup>th</sup> St., 16N-8180 P. O. Box 2641 Birmingham, AL 35291</p> <p>Mr. Andy Allison 334-224-5636 raalliso@southernco.com</p>	<p><b>Unit 4:</b> Initial Contract Amount: \$6,652,000 Final Contract Amount: \$8,304,436 The contract amount increased due to damaged items discovered during the disassembly which added additional scope to the rehabilitation. Field rates we`re increased due to the requirement of adhering to the Davis Bacon Act wages.</p> <p><b>Unit 1:</b> Initial Contract Amount: \$8,719,450 Final Contract Amount: \$9,372,031 Contract amount was increased due to discovery work and customer added scope</p> <p><b>Unit 2:</b> Initial Contract Amount: \$8,647,500 Final Contract Amount: \$9,654,541 Contract amount was increased because of discovery work and customer added work scope</p>	<p>05/2014</p> <p>12.2017</p> <p>12/2017</p>	<p><b>Unit 4</b> The original scheduled completion date was November 2013. The unit was commissioned in May 2014. Delays in the schedule were caused by additional added scope, a delay in the start of field work due to waiting on primer valves to stop the water flow into the unit; discovery work that found cracks in the generator rotor which required repair, and flooding which occurred on more than one occasion, which delayed the field work.</p> <p><b>Unit 1</b> Thrust runner faces and bore were machined true during rehabilitation but thrust nut was not able to be true cut on the bottom face due to special ACME threads, this required re-machining of the thrust runner top face to match the nut. This caused a slight schedule delay. Piping subcontractor was meeting schedule or quality requirements of the project, contract with this subcontractor was terminated and new subcontractor was hired to complete U1 and do all piping work on U2</p>

					<b>Unit 2</b> The same thrust bearing concern was present due to similar machining during rehab on U2 but a Faro inspection was completed in advance of assembly and determined the fit up would be acceptable. U2 assembly went well.
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## ***SECTION 4***

### ***KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS***

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## 4. KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS

AH is a hydraulic machinery upgrade and rehabilitation project company, with over 90% of AH's projects being upgrade and rehabilitation in nature. As such, project management of modernization projects is a core competence and primary tool for successful collaboration. AH's approach is to have an effective project management organization that leverages project management standards, establishing consistent performance measures, allocating appropriate resources and reducing duplication of effort. AH adheres to knowledge areas outlined in the Project Management Body of Knowledge (PMBOK) and all Project Managers are trained and accredited to this standard.

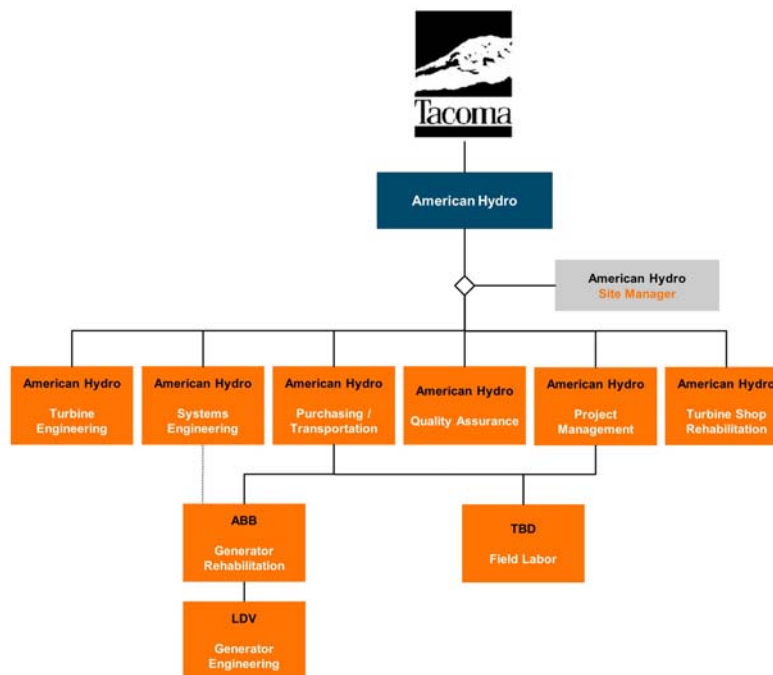
The Project Organization reports directly to the President of AH. Managing the Project Organization is Jason Heilman who operates the Program Management Office (PMO). The PMO's role is to regulate the standard, conduct high level process reviews, create and maintain the project management toolkit, create an ongoing education profile for project managers and drive continuous improvement. The structure of the PMO is to drive governance standards by providing a portfolio, program and project approach to translate strategy into executables delivering increased value, quality, organizational and customer benefits.

There are three primary areas of focus driving continuous improvement of the project management organization: process capability, people capability, and technology capability.

Below is an organization chart of how AH will manage Cushman 2:

AMERICAN HYDRO PROJECT ORG CHART

American Hydro  
A Wärtsilä Company





## **Project initiation**

Upon contract award the Proposal Leader follows our ISO certified procedure for contract acceptance and release to the organization. As part of this procedure the assigned Project Manager takes the lead and the project team is assigned from the functional departments. The Project Manager becomes the primary customer point of contact and takes full project responsibility, including the following areas of coordination:

## **Technical requirements development**

To address the technical aspects of the project, hydraulic, mechanical and systems engineers are assigned to the project. These engineers are responsible for coordinating all technical issues, within their area of expertise, in the scope of work, including the manufacture of turbine generator and exciter components and the site rehabilitation. The Project Engineer takes the project package, the contract and the proposal/contract schedule and identifies all engineering deliverables for the project.

## **Mechanical Engineering**

Responsibilities include contractual deliverables to the customer, engineering deliverables required for all procurement and manufacture of the turbine components, and other new components, component rehabilitation (including the piping and bearings) and field service support for the disassembly/ reassembly and turbine work scope.

## **Systems Engineering**

Responsibilities include contractual deliverables to the customer, engineering deliverables required for all procurement and manufacture of the generator and exciter components, and other component rehabilitation (including the piping and bearings) and field service support for the generator and exciter work scope.

## **Engineering Gate Review Meetings**

The assigned mechanical and systems engineers review the deliverables and, working with engineering management, establish the list of Gate Reviews (Design Reviews) to be conducted during each phase of the project, conceptual design, basic design, detailed design and field service support.

These Design Reviews involve cross-functional teams, including field service, to ensure all aspects of the project are considered at each step of the design. At the conclusion of these reviews, certain aspects of the design are frozen, and the remainder of the design becomes “building blocks” toward completion.

## **Stakeholder management**

Project stakeholder (customer, owner, functional, subcontractors, suppliers, etc.) lines of communication are established, and a communication plan is formulated to match the requirements of the stakeholders. The communication style, format, function, content and frequency are established at this time by the Project Manager in conjunction with the customer.

## **Financial management**

The project is then loaded into the AH financial ERP system for tracking purposes by the Project Manager with the support of a Project Accountant. Once this is complete, the project is loaded into the Primavera P6 Project Scheduling system as well. After a project is loaded into the

Primavera P6 system, the process of resource allocations is begun to ensure the appropriate resources are available at the right times to meet the contract deliverables.

## **Engineering Document Control**

Drawings for AH are controlled through a rigorous review and approval cycle. AH uses the peer review method for individual drawing approvals. Once the approval is obtained, the drawing is placed in the electronic warehouse to be packaged and delivered to the stakeholders by the engineering administration under the supervision of the Project Manager.

Other documentation may initiate within the various functions working on the project. They are all reviewed and approved by the authorized functions, as described further in the Quality Organization description below.

The resumes of AH turbine personnel that are included herein have worked on the projects highlighted in this response, and many other projects of similar scope and complexity. Their roles in this project will be as follows:

*Scott Chronister* –VP Operations – with over 20 years of experience in the hydroelectric industry with design and manufacture of hydro turbines, Scott brings the kind of expertise needed to be responsible for all aspects of manufacturing and welding engineering, supply chain, planning, scheduling and production operations of AH.

*Mark Raschke*- Project Manager – a certified Project Management Professional (PMP), with over 10 years of experience as a project manager, Mark brings the knowledge and expertise needed to manage complex projects. Some of his most recent projects included new runners and turbine rehabilitation, field disassembly and reassembly along with managing subcontracting for generator, governor controls, piping, civil and electrical scope.

*Daniel Moyer* – Project Manager – a certified Project Management Professional (PMP), with over eight years of experience as a project manager with AH, Dan has acquired experience managing many complex projects with extended scope.

*Joe Druck* – Director of Engineering – with almost 30 years of experience working exclusively in the field of hydraulic turbine in engineering design and leadership roles, Joe brings his extensive expertise of engineering solutions to this leadership role.

*Joe Hill* – Manager of Hydraulic Engineering – Joe has been in a leadership role at AH for over 5 years and is responsible for all Hydraulic Engineering design and analysis activities, including runner design, CFD analysis, scale model development, and software development. He has spent his entire 14-year career at AH as a Hydraulic Engineer, starting as a co-op in 2006 working under the founders of AH. He has designed most of the runners that AH has supplied over the last 12 years and has managed all aspects of design and development for several model test programs, including a Francis runner, pump-turbine, and propeller.

*Jeff Jankiewicz* – Field Service Project Manager – starting as a field Millwright, Jeff has grown to be a seasoned and trusted field leader. Working on multiple project sites he has the first-hand experience required to install, align and commission units of varying sizes. He has worked with some of AH's most demanding customers and always provided a successful result.

For the generator portion of the project, ABB will involve the following team members:

*Robert Perron* – COE Senior Manager, with over 30 years of ABB experience in various engineering and leadership roles, Bob brings extensive customer and engineering solution experience to the leadership role of the ABB Hydro COE.

*Ken Troiano* – Ken brings over 30 years of generator experience, including unique leadership in digitization, program management, automation, process, and quality experience to the operations and engineering leadership.

*Sri Arcot* – A talented professional engineer, bringing 19 years of experience of electrical design expertise to hydro generator electrical solution options.

*Ruti Hartana* – An experienced engineer, bringing 40 years of industry experience in generator theory and design to customer solutions.

*James Lambert* – A recent addition to the ABB Hydro COE, bringing 40 years of generator industry mechanical engineering design experience.

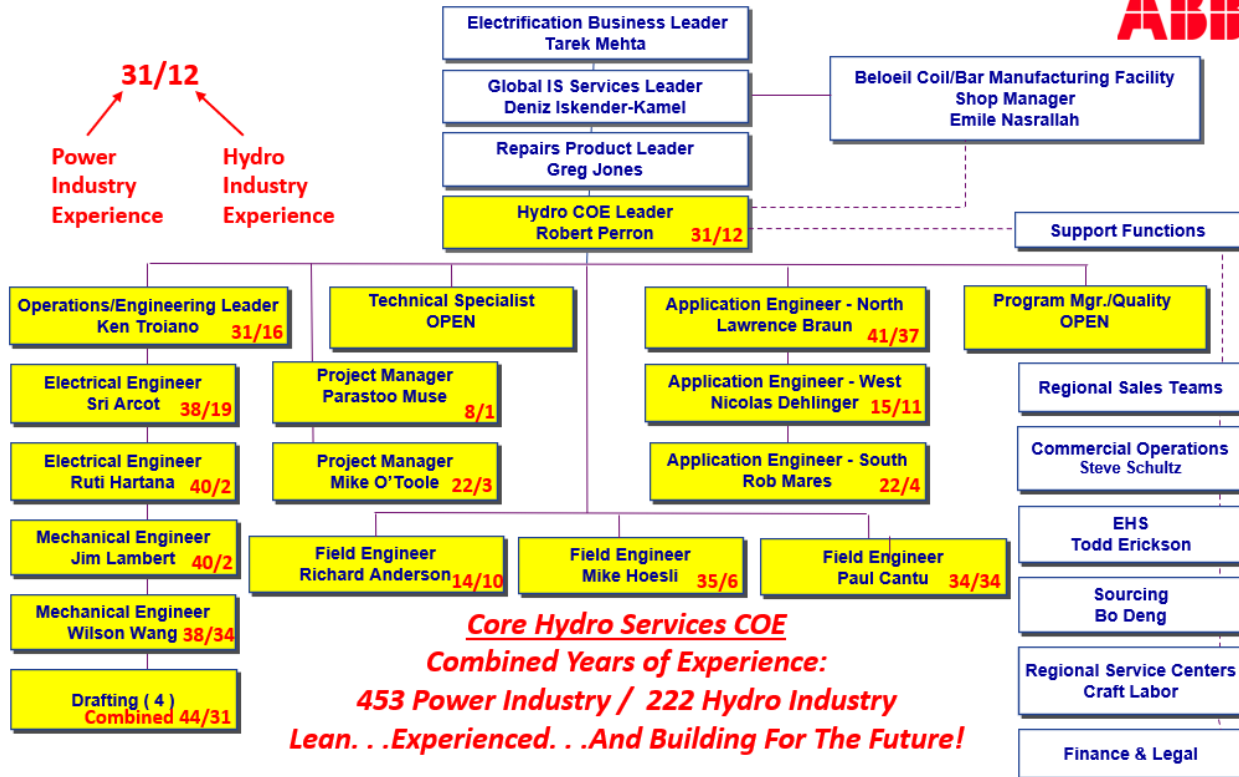
*Wilson Wang* – A talented mechanical engineer, delivering consistent solutions for generator design, Restacking, stator frame modifications for customer manufacturing and site solution needs. Wilson counts over 30 years of hydro experience.

ABB integrates various Project Managers, Applications Engineers, Field Engineers, Winders, and additional site personnel on projects based on need and availability. ABB typically manages projects with the following site team:

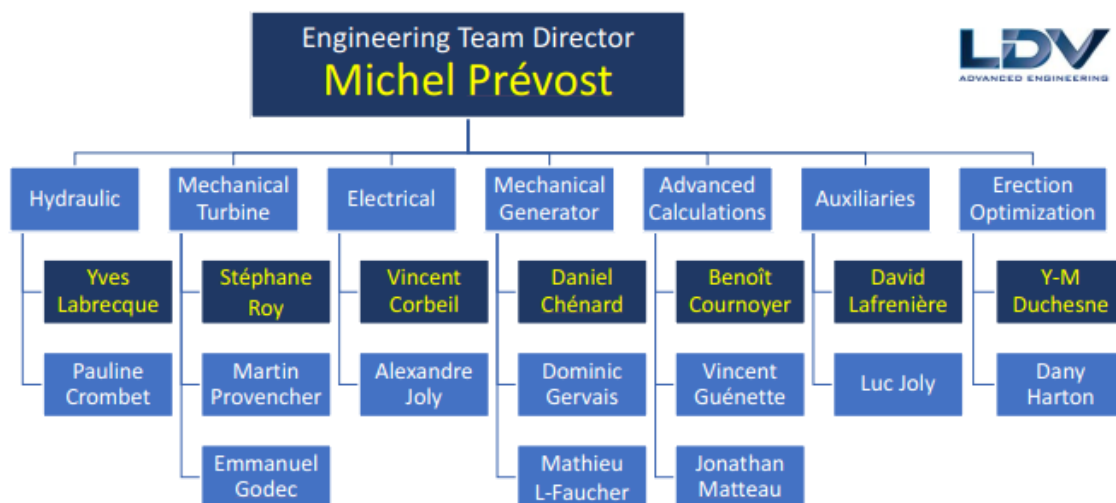
- Field Engineer/Site Manager (2nd FE as needed)
- Winders – (4 to 6 per shift, based upon unit geometry and driven by schedule execution. These are drawn from available talent at various ABB EPIS Hydro Service Shops and cannot be named until dates of project are fully established.). Our ABB winder may be supplemented by technical contractors coming from reputable staffing companies, when needed.

For the Cushman 2 project, ABB will involve Michael O'Toole as a generator project manager, with 22 years of experience in the power industry. Our site FE, acting as the rewind/restack supervisor will be Mike Hoesli, with over 35 years of generator experience. Resumes of most of the team members to be involved in the generator portion are provided below.

A staffing plan table will show the number of personnel per each week of schedule. This is an estimated staffing plan based on the information available at the time of this proposal and subject to change based upon the actual schedule and deliveries agreed upon in the final contract. Please find below an organization chart for the complete ABB EPIS Hydro Services team.



As explained in the previous section, ABB will involve the LDV team for the FEA , fatigue, vibration and thermal analyses to be conducted over the course of the project. The Advanced Calculation team, led by Benoît Cournoyer, with over 25 years of hydro experience as well as Erection Optimization team, led by Yves-Marie Duchesne, counting over 30 years of hydro experience, will be involved in the project. An organization chart of the LDV team is provided below, as well as resumes for the key players in the LDV team.



## RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

NAME	ROLE IN THIS CONTRACT	YEARS EXPERIENCE	
Scott A. Chronister	Vice President of Operations	Total	With Current Firm
		22	22
FIRM NAME AND LOCATION ( <i>City and State</i> )			
American Hydro, York, PA USA			
EDUCATION ( <i>Degree and Specialization</i> )		CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )	
Bachelor of Science in Mechanical Engineering Master of Business Administration			
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )			

## RELEVANT EXPERIENCE

A.	
	<ul style="list-style-type: none"> <li>• Over 20 years of experience in the design and manufacture of hydro turbines.</li> <li>• Participated in the manufacturing of over 180 hydro turbine runner manufacturing projects.</li> <li>• Experienced in the construction of Kaplan, Propeller, and Francis runners and reversible pump turbines and pump impellers.</li> <li>• Worked on mechanical and structural design for runner replacement and component rehabilitation.</li> <li>• Programmed machining and thermal cutting tools.</li> <li>• Performed process planning, scheduling and production control.</li> <li>• Process improvement and design, facilitation of cross functional teams to improve business processes.</li> <li>• Implementation of project management methodology.</li> <li>• Modernization of heavy steel manufacturing to incorporate cutting edge technology.</li> </ul> <p>In his role as the Vice President of Operations, Mr. Chronister is responsible for all aspects of the manufacturing and welding engineering, supply chain, planning, scheduling and production operations of American Hydro's projects being executing in the York facility.</p>

KEY PERSONNEL RESUME					
NAME		ROLE IN THIS CONTRACT		YEARS EXPERIENCE	
Joe Druck		Director of Engineering		TOTAL	WITH CURRENT FIRM
				29	29
FIRM NAME AND LOCATION ( <i>City and State</i> )					
American Hydro York, PA					
EDUCATION ( <i>Degree and Specialization</i> )			CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )		
BSME Bucknell University (1991)			PE registered in the state of Pennsylvania		
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )					
Joe Druck, Branden Krause, Eric Russell, and Robert Rittase, "Design Considerations for the Upgrade of Kaplan and Propeller Turbines," HydroVision 2013, HCI Publications, July 2013					
RELEVANT EXPERIENCE					
A.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Castle Rock Unit 5 (Wisconsin Public Service)				2020
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Complete Kaplan rebuild and overhaul of all major turbine components. Project included new Kaplan blades, hub bushings, blade seals, linkage pins, servo rework, and testing. – Director of Engineering					
B.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Ryan Units 1,4,6 (NorthWestern Energy) – Great Falls, MT				2020
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Vertical Francis runner replacement and overhaul of major components. Scope included new wicket gates (U1 & U6), new bottom ring (U1), bushings, wear pads, seal rings, and facing plates. Finite element analysis of the wicket gates and runner was performed to optimize performance. Responsible for mechanical design of turbine upgrade. – Lead Engineer/Chief Design Engineer					
C.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Pit 4 Powerhouse (Pacific Gas & Electric) – Big Bend, CA				2017
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Runner replacement and complete overhaul of 52 MW vertical Francis unit (U2). Scope included new foundation ring, wicket gates, bushings, wear pads, and refurbishment of all turbine components. Extensive structural finite element analysis was performed for all critical components. Responsible for mechanical design of the turbine upgrade – Chief Design Engineer					
D.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Northfield Mountain – Northfield, MA				2014
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Runner replacement and component overhaul of (4) 300 MW pump turbines including model testing, new runner seal runner design, new wicket gates, shaft rework, and servomotor rebuild. – Lead Engineer/Chief Design Engineer					

KEY PERSONNEL RESUME					
NAME		ROLE IN THIS CONTRACT		YEARS EXPERIENCE	
Joe Hill		Manager of Hydraulic Engineering		TOTAL	WITH CURRENT FIRM
				14	14
FIRM NAME AND LOCATION ( <i>City and State</i> )					
American Hydro, York PA					
EDUCATION ( <i>Degree and Specialization</i> )			CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )		
York College of Pennsylvania, Mechanical Engineering University of Strathclyde, Business Management Certificate			PE registered in the state of Pennsylvania		
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )					
1. Publication: Turbine Upgrade through CFD Analysis and Scale Model Testing of the Keokuk Hydroelectric Plant (Hydrovision, 2012) 2. Advisory panel for Penn State students performing graduate level research for the Hydro Research Foundation					
RELEVANT EXPERIENCE					
A.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Bear Swamp Pump-Turbine Design and Model Test Development, Florida, MA				2020
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
	Lead Hydraulic Engineer for the development of Bear Swamp pump-turbine design. Plant contains two 20 ft diameter, 340 MW, 750 ft net head reversible pump-turbines. Designed runners, wicket gates, stay vane modifications, and seal design, to optimize turbine and pump performance. Performed extensive CFD analysis for optimization and directed an 18-month model test development program. Most notable improvements of the new design: increased output by 15%, greatly improved pump stability, reduced hydraulic thrust with new seal design, increased efficiency, wider operating range, and remarkably smooth operation over a wide range of flow.				
B.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Bankhead Propeller – Bankhead, Georgia				2019
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
	Lead Hydraulic Engineer responsible for runner design and CFD analysis for the 19.5 ft diameter, 56 MW propeller. This blank-sheet runner design was developed using only CFD methods and did not include a model test. AH was contracted to upgrade the runner to improve vibration and operating characteristics, which has been verified by successful operation in the field.				
C.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Otter Rapids – CFD and Model Test Development – Northern Ontario				2009 & 2017
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
	Lead Hydraulic Engineer for the development of runner design and components for plant with four 54 MW, 16.7 ft diameter propeller-type turbines. Performed extensive CFD analysis, designed runners, and directed model testing activities. After completion of the first model test in 2009, new operating requirements led to a second round of model testing in 2017 with completely new and modern runner designs. Role in the 2017 model test was supporting role in design and development.				
D.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	McNary Fish Attraction Turbine – Umatilla, OR				2016
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
	Lead Hydraulic Engineer responsible for runner design, CFD analysis, and field testing. Runner upgrade of 10 MW, 10 ft Francis runner optimized for a wide operating range and excellent cavitation performance. Design was developed using CFD methods only and performance was verified in the field.				
E.	TITLE AND LOCATION ( <i>City &amp; State</i> )				YEAR COMPLETED
	Castle Rock Kaplan – Adams County, WI				2020

	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE
	Lead Hydraulic Engineer responsible for runner design and CFD analysis. Runner upgrade of 9 ft Kaplan runner optimized for a wide operating range, increased output, and excellent cavitation performance. New design was developed using CFD methods only.



## RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

NAME	ROLE IN THIS CONTRACT	YEARS EXPERIENCE	
		TOTAL	WITH CURRENT FIRM
Mark A Raschke	Project Manager	19	6.5

### FIRM NAME AND LOCATION (*City and State*)

American Hydro Corporation (York, Pennsylvania)

### EDUCATION (*Degree and Specialization*)

Bachelor of Science in Mechanical Engineering

### CURRENT PROFESSIONAL REGISTRATION (*State and Discipline*)

Project Management Professional (PMP), *Certified by Project Management Institute (PMI) since 2012*

Professional Engineer (PE), *Licensed in Pennsylvania since 2009*

### OTHER PROFESSIONAL QUALIFICATIONS (*Publications, Organizations, Training, Awards, etc.*)

#### Project Management Institute (PMI)

- 2017-2018 –President, Keystone Chapter Board of Directors
- 2014-2016 – Vice President, Keystone Chapter Board of Directors
- 2013-2014 – York Branch Coordinator, Keystone Chapter Board of Directors
  - Started the York Branch, including building Branch Leadership Committee, securing sponsorships, creating partnerships with host facilities, and arranging speakers for monthly meetings
- 2012-Present – Member

#### American Society of Mechanical Engineers (ASME)

- 2013-2015 – Susquehanna Section Executive Committee
- 1998-Present – Member

Various other professional society memberships, including leadership positions – available upon request

## RELEVANT PROJECTS

	TITLE AND LOCATION ( <i>City &amp; State</i> )	YEAR COMPLETED
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE	
A.	Bear Swamp Pumped Storage Units 1 & 2 (Brookfield) – Rowe, Massachusetts	To be completed 2021
	<p>Project Manager for Engineering, Procurement, Manufacturing, Subcontracting, Field Service.</p> <p>Scope – Engineering of 2 new replacement pump-turbine impellers, including physical model testing and computer-aided analysis of the design. Manufacture of new nose cones, wicket gates, stationary wear rings, and stay vane modification components. Supply of subcontracted design and manufacture of new motor-generator rotor spider, rim, and poles. Refurbished headcover, bottom ring, gate operating ring and linkage, wicket gate servomotor, turbine guide bearing, turbine shaft &amp; shaft seal, piping &amp; tubing, upper &amp; lower guide bearings, thrust bearing, generator shaft, slip rings, brakes &amp; jacks, etc. Pre-disassembly index &amp; signature testing, motor-generator dismantling, pump-turbine dismantling, stay vane modification, field machining, pump-turbine reassembly &amp; testing, motor-generator reassembly &amp; testing, post-assembly hydraulic thrust &amp; signature testing, commissioning &amp; index testing.</p>	

<b>B.</b>	<b>TITLE AND LOCATION (<i>City &amp; State</i>)</b>	<b>YEAR COMPLETED</b>
	Taum Sauk Pumped Storage Building (Ameren) – Farmington, Missouri	2019
	<b>BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE</b>	
	<p>Project Manager for Subcontracting of Building Design and Construction.</p> <p>Scope – Manage subcontracted design and construction of 15,000 square foot workshop building onsite at Taum Sauk facility, which will be used during rehabilitation of Units 1 &amp; 2.</p>	
<b>C.</b>	<b>TITLE AND LOCATION (<i>City &amp; State</i>)</b>	<b>YEAR COMPLETED</b>
	Androscoggin 3 Rehabilitation (Brookfield) – Lewiston, Maine	2017
	<b>BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE</b>	
	<p>Project Manager for Engineering, Procurement, Manufacturing, Subcontracting, and Field Service.</p> <p>Scope – Engineering of new replacement turbine, including stress analysis and fracture mechanics analysis of the design. Manufacture of new hydraulic turbine propeller runner, headcover, wicket gates, and gate operating components. Refurbished turbine shaft, generator shaft, bottom ring, gate operating components, and turbine guide bearing. Startup support.</p>	
<b>D.</b>	<b>TITLE AND LOCATION (<i>City &amp; State</i>)</b>	<b>YEAR COMPLETED</b>
	Bear Creek Unit 1 Rehabilitation (Duke Energy) – Tuckasegee, North Carolina	2017
	<b>BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE</b>	
	<p>Project Manager for Engineering, Procurement, Manufacturing, Subcontracting, and Field Service.</p> <p>Scope – Engineering of new replacement turbine, including stress analysis and fracture mechanics analysis of the design. Manufacture of new Francis hydraulic turbine runner, turbine shaft, headcover, bottom ring, wicket gates, gate operating system, and turbine guide bearing. Field machining of stay ring flanges, refurbishment of gate shaft. Installation, assembly, and alignment of turbine and generator. Testing and startup support.</p>	
<b>E.</b>	<b>TITLE AND LOCATION (<i>City &amp; State</i>)</b>	<b>YEAR COMPLETED</b>
	Jordan Dam Unit 1 Rehabilitation (Alabama Power) – Wetumpka, Alabama	2017
	<b>BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE</b>	
	<p>Project Manager for Engineering, Procurement, Manufacturing, Subcontracting, and Field Service.</p> <p>Scope – New Francis runner, wicket gates, bottom ring, governor system, and hydraulic lift system. Refurbished turbine shaft, headcover, gate operating system, distributor assembly, guide bearings, and thrust bearing. Discharge ring and draft tube field inspection and repairs, including field machining, blasting, and painting. New air admission and miscellaneous piping on site.</p>	
<b>F.</b>	<b>TITLE AND LOCATION (<i>City &amp; State</i>)</b>	<b>YEAR COMPLETED</b>
	Flint River Units 1, 2, & 3 Rehabilitation (Georgia Power) – Albany, Georgia	To be completed 2018
	<b>BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE</b>	
	<p>Project Manager for Engineering, Procurement, Manufacturing, Subcontracting, and Field Service.</p> <p>Scope – New Francis runners and wicket gates for three units, new turbine shaft and hydraulic lift system for one unit. Refurbished headcover, bottom ring, gate operating system, distributor assembly, guide bearings, and thrust bearings for all units. Discharge ring and draft tube field inspection and repairs, including field machining.</p>	

KEY PERSONNEL RESUME			
NAME	ROLE IN THIS CONTRACT	YEARS EXPERIENCE	
Daniel Moyer	Project Manager	TOTAL	WITH CURRENT FIRM
		8	8
FIRM NAME AND LOCATION ( <i>City and State</i> )			
American Hydro Corporation, York, PA			
EDUCATION ( <i>Degree and Specialization</i> )		CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )	
Bachelor of Science and Business Administration in Accounting from Bloomsburg University		Certified Project Management Professional – Pennsylvania Certified Public Accountant - Pennsylvania	
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )			
USACE Construction Quality Management for Contractors Master Certificate in Project Management from Villanova University			
RELEVANT EXPERIENCE			
A.	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Taum Sauk Unit 1 & 2 Pump Storage Refurbishment (Lesterville, MO)		Fall 2019
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE		
Description: Scope includes erecting a building on-site for field machining and refurbishment, converting to a greaseless unit, refurbishing of the stationary and rotating components, disassembly, field machining, and reassembly. Role: Project Manager- The complex logistics and short outage period of this project requires a significant amount of planning and coordination with the project team.			
B.	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Keys P5 & P6 Impeller Replacement and Stator Rewind (Grand Coulee, WA)		Unit 5 – Planned Completion Spring 2020 Unit 6 – Planned Completion Spring 2020
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE		
Description: Two unit replacement project for the United States Bureau of Reclamation. Scope includes new impellers, stator rewind, refurbishment of impeller shaft and stationary components, disassembly, stay vane modification, field machining, and reassembly. Role: Project Manager- The complexity of this project requires significant amount of coordination between the Government, AHC, and our subcontractors.			
C.	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Keokuk Unit 5 and Unit 15 (Keokuk, IA)		2018
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE		
Description: 12 MW Vertical Francis Units: Supply of new runners, new gate stems, and new linkage. Role: Project Manager			
D.	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Nine Mile Unit 1 & Unit 2 Seagulls (Spokane, WA)		2016
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE		
Description: 8 MW Horizontal Seagull Units - Supply of new seagull turbines, generators, HPU's, excitation, switchgear, controls, and on-site technical support.			

	Role: Project Manager – This project required a substantial amount of coordination between the Owner, Consultants, AHC, and Subcontractors to complete the design and installation of the equipment.	
E.	TITLE AND LOCATION ( <i>City &amp; State</i> )	YEAR COMPLETED
	Quinten Luallen Hydroelectric Power Plant (Friant, CA)	2017
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE	
	<p>Description: 8 MW Vertical Francis Unit: Supply of new equipment including turbine (rotating, stationary, &amp; embedded components), generator, penstock shutoff valve, turbine shutoff valve, turbine bypass valve, governor system.</p> <p>Role: Project Manager – This project required a substantial amount of coordination between the Owner, Consultants, AHC, and Subcontractors to complete the design and installation of the equipment.</p>	
F.	TITLE AND LOCATION ( <i>City &amp; State</i> )	YEAR COMPLETED
	Keokuk Unit 6 and Unit 14 (Keokuk, IA)	2016
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE	
	<p>Description: 12 MW Vertical Francis Units: Supply of new runners, new gate stems, new linkage, rehabilitation of stationary components, disassembly, stay vane modification, field machining, and reassembly.</p> <p>Role: Project Manager – This project required great coordination and planning between our manufacturing facility and field installation team. The project team executed well as we were able to complete a (2) unit outage in approximately 10 months.</p>	
G.	TITLE AND LOCATION ( <i>City &amp; State</i> )	YEAR COMPLETED
	Augusta Unit 9 (Augusta, GA)	2018
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE	
	3,500 Hp Horizontal Duplex Unit - Supply of a new turbine and equipment installation.	
H.	TITLE AND LOCATION ( <i>City &amp; State</i> )	YEAR COMPLETED
	Powell River – G1 (Powell River, BC)	2016
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE	
	<p>Description: 14 MW Vertical Francis Unit - Supply of new runner, generator, refurbishment of stationary components and linkage.</p> <p>Role: Project Manager</p>	

KEY PERSONNEL RESUME				
NAME	Jeffrey A. Jankiewicz		YEARS OF HYDRO EXPERIENCE	12
POSITION	Field Service Project Manager		YEARS WITH AMERICAN HYDRO	8
LOCATION	American Hydro, 135 Stonewood Rd., York, PA 17402			
EDUCATION	Georgia Southern University, Statesboro, Georgia			
PREVIOUS EMPLOYMENT	Power Equipment Maintenance			
PROFESSIONAL REGISTRATION, QUALIFICATIONS, PUBLICATIONS, AWARDS				
RELEVANT PROJECTS				
1	PROJECT	Terrora	YEAR COMPLETED	2020
	LOCATION	Lakemont, Georgia	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Inspected and shipped components from site (customer disassembled); Survey of embedded components; Stator alignment; blast and paint.			
2	PROJECT	Taum Sauk Pumped Storage Plant U1 & U2	YEAR COMPLETED	2019
	LOCATION	Annapolis, MO	PROJECT ROLE	Field Service On-Site Project Manager
	BRIEF PROJECT DESCRIPTION			
	Reassembly and alignment of two large vertical pump turbine units.			
3	PROJECT	John Keys Pumping Plant U5 & U6	YEAR COMPLETED	2017 - 2019
	LOCATION	Coulee Dam, WA	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Disassembly, field modifications, reassembly of two large vertical pumping units.			
4	PROJECT	Augusta U9	YEAR COMPLETED	2017
	LOCATION	Augusta, GA	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Installation of a new double runner horizontal Francis unit.			
5	PROJECT	Drop 4	YEAR COMPLETED	2017
	LOCATION	Holtville, CA	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Field machining & discharge ring replacement of a Kaplan unit.			
6	PROJECT	Keokuk Units 6 and 14	YEAR COMPLETED	2016
	LOCATION	Keokuk, IA	PROJECT ROLE	Field Service On-Site Project Manager
	BRIEF PROJECT DESCRIPTION			
	Disassembly, Field Modifications, Reassembly of two large vertical Francis units. Both units completed simultaneously with double shifts and 4 crews.			
7	PROJECT	South Falls Unit 2	YEAR COMPLETED	2015
	LOCATION	Ontario, Canada	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Responsible for installation, alignment, and commissioning of a new horizontal Francis turbine, new generator, new controls systems, and auxiliary systems.			
8	PROJECT	Snoqualmie Units 5 and 6	YEAR COMPLETED	2015
	LOCATION	Washington, USA	PROJECT ROLE	Field Service Rep
	BRIEF PROJECT DESCRIPTION			
	Responsible for assembly of one new vertical and one new horizontal Francis turbine			
9	PROJECT	Moose River, Fortis US	YEAR COMPLETED	2015
	LOCATION	Lyons Falls, NY	PROJECT ROLE	Field Service Rep.
	BRIEF PROJECT DESCRIPTION			
	Alignment and assembly of a vertical Kaplan unit.			

10	PROJECT	Jordan Dam	YEAR COMPLETED	2014
	LOCATION	Alabama, USA	PROJECT ROLE	Field Service Rep.
	BRIEF PROJECT DESCRIPTION			
	Disassembly and reassembly of one vertical Francis turbine			
11	PROJECT	Morony Dam Unit 1	YEAR COMPLETED	2014
	LOCATION	Montana	PROJECT ROLE	Field Service Rep.
	BRIEF PROJECT DESCRIPTION			
	Field Service consultant and field service technical evaluation.			
12	PROJECT	Rocky Mountain Pumped Storage	YEAR COMPLETED	2012
	LOCATION	Rome, GA	PROJECT ROLE	Millwright
	BRIEF PROJECT DESCRIPTION			
	Replace defective parts of machine or adjust clearances and alignment of moving parts. Align machines and equipment, using hoists, jacks, hand tools, squares, rules, micrometers, and plumb bobs. Connect power unit to machines or steam piping to equipment, and test unit to evaluate its mechanical operation.			
13	PROJECT	Parker Dam	YEAR COMPLETED	2008
	LOCATION	California, USA	PROJECT ROLE	Millwright
	BRIEF PROJECT DESCRIPTION			
	Replace defective parts of machine or adjust clearances and alignment of moving parts. Align machines and equipment, using hoists, jacks, hand tools, squares, rules, micrometers, and plumb bobs. Connect power unit to machines or steam piping to equipment, and test unit to evaluate its mechanical operation.			
14	PROJECT	Keokuk	YEAR COMPLETED	2012
	LOCATION	Keokuk, IA	PROJECT ROLE	Millwright
	BRIEF PROJECT DESCRIPTION			
	Replace defective parts of machine or adjust clearances and alignment of moving parts. Align machines and equipment, using hoists, jacks, hand tools, squares, rules, micrometers, and plumb bobs. Connect power unit to machines or steam piping to equipment, and test unit to evaluate its mechanical operation.			

KEY PERSONNEL RESUME			
NAME	Claude “Bud” Ankney	YEARS OF EXPERIENCE	18
POSITION	Quality, Environment, Health & Safety Manager	YEARS WITH AMERICAN HYDRO	5
LOCATION	American Hydro, 135 Stonewood Rd., York, PA 17402		
EDUCATION	Completed Courses at: Millersville University, Harrisburg Area Community College, Trinidad State Junior College (online courses)		
PROFESSIONAL REGISTRATION, QUALIFICATIONS, AWARDS			
<p><b>Environment, Health &amp; Safety Manager</b></p> <ul style="list-style-type: none"><li>♦ <b>Anticipate, identify, and evaluate risk;</b> conducting job safety analysis and risk assessments, management of change and point of work risk assessment.</li><li>♦ <b>Develop hazard control designs, methods, procedures and programs;</b> including lockout/tagout, respiratory protection, fall protection, machine guarding, confined space entry, material handling, fork lift, aerial lift and electrical safety programs.</li><li>♦ <b>Implement, administer and advise others on hazard control programs;</b> conduct EHS compliance training, behavior based safety training, incident investigations and emergency response.</li><li>♦ <b>Measure, audit and evaluate the effectiveness of hazard control programs;</b> QEHS system audits, quality, environment and safety compliance evaluations, safety committee inspections and management reviews.</li><li>♦ <b>Implement, administer and train others on behavior based safety</b> observation/engagement program.</li></ul> <p><b>Key Results:</b></p> <ul style="list-style-type: none"><li>• Implement Core EHS protocols and behavioral based safety programs within York facility and Field Operations.</li><li>• Member of global EHS Standards Best Practice committee. Member of team that assisted in configuring, testing and piloting of global EHS reporting software.</li><li>• Implemented projects to reduced environmental impacts. Hazardous waste output reduced 66%. Electricity consumption reduced 15 % with annual savings of \$30,000.</li></ul>			
SKILLS			
Management of Change ISO/OHSAS Lead Auditor OSHA Authorized General Industry Instructor Safety Committee Lead American Red Cross Authorized Instructor Behavior Based Safety Implementation	Associate Member International Institute of Risk and Safety Management Maintain Compliance Audit Database Corrective/Preventive Action Incident Investigation Core EHS Assessment Auditor NEBOSH International General Certificate in Occupational Health & Safety	EHS Training & Development Assist with IH Sampling EHS Policies & Procedures Wellness Committee Lead Rescue Incident Commander Job Safety Analysis / Risk Assessments ISO 9001 / ISO 14001 : 2015 Audit Transition	
<p><b>Professional Acknowledgements:</b></p> <ul style="list-style-type: none"><li>♦ Associate Member of the International Institute of Risk and Safety Management</li><li>♦ NEBOSH International General Certificate in Occupational Health &amp; Safety</li><li>♦ OSHA authorized General Industry Outreach Trainer</li><li>♦ American Red Cross First Aid/CPR/AED Training Instructor</li><li>♦ Scaffold Training Institute Authorized Instructor</li></ul> <p><b>Professional Development:</b></p> <ul style="list-style-type: none"><li>♦ Complete ongoing training in the areas of Occupational Safety &amp; Health, Industrial Hygiene, and Loss Control.</li></ul> <p><b>Affiliations:</b></p> <ul style="list-style-type: none"><li>♦ International Institute of Risk and Safety Management</li></ul>			



KEY PERSONNEL RESUME					
NAME		ROLE IN THIS CONTRACT		YEARS EXPERIENCE	
Edward P. Kahlbaugh		Quality Engineer/Quality Supervisor		Total	With American Hydro
				20+	1+
FIRM NAME AND LOCATION ( <i>City and State</i> )					
American Hydro Corporation, York, PA					
EDUCATION ( <i>Degree and Specialization</i> )			CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )		
Studied at York College of PA					
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )					
<ul style="list-style-type: none"> <li>Elementary, Intermediate and Advanced Blueprint Reading, Allis-Chalmers</li> <li>Amersham: Administration of Isotope Radiography Safety Programs</li> <li>Tank Car Testing with Acoustic Emission (40 hour course), Physical Acoustics Corporation</li> <li>Basic Level III Refresher Course, ASNT</li> <li>Radiography Level III Refresher Course, ASNT</li> <li>Real Time Radiography (RTR) and Digital Imaging Seminar, Hellier Northeast w/V.J. Technologies</li> <li>ISO 9000:2000 Registered Internal Quality Auditing, Stat-A-Matrix Institute</li> <li>Documenting Your Quality Management System, Stat-A-Matrix Institute</li> <li>Export Compliance, Metso Minerals/Exim Associates</li> <li>Navigating Enforced Compliance, Metso Minerals/Kuehne &amp; Nagel</li> <li>Leadership Development Training – Moore School of Business, Executive Education, USC, Columbia, SC</li> <li>Navigator 18 – Managing for Profitable Growth - IMD, Lausanne, Switzerland</li> <li>Navigator 18 – Leading for Results - IMD, Lausanne, Switzerland</li> </ul>					
Prior certification to ASNT Level 2 – VT, MT, PT, UT; Level 3 – RT; AWS Certified Welding Inspector					
RELEVANT PROJECTS					
A.	TITLE AND LOCATION ( <i>City &amp; State</i> )			YEAR COMPLETED	
	Quality Engineer / Supervisor			Current	
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
	Generate project specific ITP's. Prepare Quality writeups in support of the proposals group. Generate Final Quality Packages for submittal to customers. Coordinate the activities of the quality inspectors and handle issues as they arise. Provide support to the manufacturing group as required.				
B.				YEAR COMPLETED	
	Director, Manufacturing Voith Hydro			2018	
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Responsible for directing and coordinating the activities of the Manufacturing group to obtain optimum efficiency of production operations and maximize profits. Responsible for managing the activities of Machining, Fabrication, Assembly, Manufacturing Engineering, OPEX, Maintenance and Facilities Management.					
C.	TITLE AND LOCATION ( <i>City &amp; State</i> )			YEAR COMPLETED	
	Plant Manager, Metso Minerals			2016	
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE				
Responsible for directing and coordinating the activities of the Manufacturing group to obtain optimum efficiency of production operations and maximize profits. Responsible for managing the activities of Machining, Fabrication, Assembly, Manufacturing Engineering, OPEX, Maintenance and Facilities Management.					



## RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

NAME	ROLE IN THIS CONTRACT	YEARS EXPERIENCE	
Doug Scheid, PMI-SP		TOTAL	WITH CURRENT FIRM
		13 yrs.	7 yrs.
FIRM NAME AND LOCATION ( <i>City and State</i> )			
American Hydro, York, PA			
EDUCATION ( <i>Degree and Specialization</i> )		CURRENT PROFESSIONAL REGISTRATION ( <i>State and Discipline</i> )	
Lock Haven University		PMI – SP Certification	
OTHER PROFESSIONAL QUALIFICATIONS ( <i>Publications, Organizations, Training, Awards, etc.</i> )			
<ul style="list-style-type: none"> <li>Masters Certificate in Project Management - George Washington University</li> <li>Project Leadership, Management and Communications – (Certificate)</li> <li>Contract Management Principles and Practices – (Certificate)</li> <li>Risk Management – (Certificate)</li> <li>Scheduling and Cost Control – (Certificate)</li> <li>P3, P6 Certification, MS Project, SAP R/3, Visual, INDUS, Passport</li> </ul>			
RELEVANT PROJECTS			
<b>A.</b>	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Project Controls Manager – York, PA		Current
	BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE		
Project Controls Manager responsible for all Projects at our York, PA facility.			
<b>B.</b>	TITLE AND LOCATION ( <i>City &amp; State</i> )		YEAR COMPLETED
	Project Controls Engineer III (PCE III) Day & Zimmerman NPS, Lancaster, PA		
	<u>Specific Site Experience:</u>		
	Ginna Nuclear Power Station, NY		2009
	Perry Nuclear Power Station, OH		2009
	Davis-Besse Nuclear Power Station, OH		2009
	Nine Mile Point Nuclear Power Station, NY		2010
	Peach Bottom Nuclear Power Station, PA		2010
	Dresden Nuclear Power Station, IL		2010
	Humboldt Bay – (Decommissioning), CA		2010
	Monticello Nuclear Generating Plant, MN		2010
	Beaver Valley Power Station, PA		2010
	Fort Calhoun Nuclear Power Station, NE		2010
	Salem/Hope Creek Nuclear Power Station, NJ		2011
	Crystal River Nuclear Power Station, FL		2011
	DC Cook Nuclear Power Station, MI		2011
	Westar/ Lawrence Fossil Power Plant, KS		2011
	Cardinal Fossil Power Plant, OH		2011
	Portland Fossil Power Plant, WV		2011
	DuPont Chambers Works, NJ		2008
BRIEF DESCRIPTION (Brief scope, size, etc.) AND SPECIFIC ROLE			
Responsible for oversight of site project controls including but not limited to: Estimating, Procurement, Schedule maintenance, Cost Reporting, Invoicing, Change Management/ Change Control			

**SUMMARY**

Mechanical Engineer with diverse background including equipment/power plant understanding developed as a utility scale generator application engineer, generator design engineer and gas turbine accessories engineer. Experienced with project management, supplier qualification and sourcing quality. 11 years field engineering experience in a naval nuclear environment.

**PROFESSIONAL EXPERIENCE****ABB**

2017- present

Lead Project Manager – Hydro Services. Project Manager for hydro generator rewinds in the US. Responsible for the overall direction, coordination, implementation, execution, control and completion of specific projects ensuring consistency with company processes, contractual commitments and financial goals. Primary customer interface, develop schedules, ensure deliverables fall within the applicable scope and budget. Track project performance.

**General Electric Company**

2007-2017

Senior Generator Application Engineer. Act as the technical authority for generator and accessories new equipment technical proposals for industrial and power generation applications. Responsibilities include flange to flange generator, generator protection relays, batteries, switchgear, excitation and transformers. Managed the definition of scope, price and schedule impacts of all non-standard requests. Collaborate with engineering, product line and commercial ops to put GE in the best possible competitive position and reduce technical and commercial risk. Provide post-bid technical support via bid clarification and face to face customer negotiation meetings.

- Key contributor to successful bids with ExxonMobil, Bechtel and Saudi Electric Co.
- Seamlessly work with local and global technical and commercial teams.
- Leveraged generator design and application engineer process knowledge to influence integration of legacy Alstom products into GE configuration tools.
- Improved legacy GE configuration tools using Six Sigma methods.
- Mentor/train new local and global Application Engineers.

2004-2007

Lead engineer generator engineering group, packaging center. Responsible for mechanical accessories design for medium hydrogen cooled and all air-cooled generators including bearings, fire protection, control hardware, hydrogen systems and foundation interface.

- Project Manager for retrofit/installation of equipment at customer plants coordinating with sourcing, site TA's and plant personnel for successful completion.
- Lead engineer for packaging design for NPI 170A generator.

- Safety Program Management Team member - investigate/correct all generator safety related design issues.
- Supported manufacturing and provided engineering shop support for generator final assembly.
- Updated design practice documents to be in line with current practices.

1996-2004

Lead engineer gas turbine accessories- mechanical components new unit requisition group.  
Responsible for gas turbine enclosures and inlet plenum.

- Supported GE global sourcing to qualify new global suppliers, including first piece qualification inspections and design reviews.
- Supported on site field installation of NPI designs for the first 9H gas turbine at Baglan Bay.

### **General Dynamics –Electric Boat Division**

1984-1996

Senior Engineer - Provided engineering support for material handling equipment for the defueling and dismantlement of the S1C and Kesselring Naval Nuclear prototype training sites and Groton, CT shipyard.

- Project Manager/Lead Engineer for procurement and start-up of 9 capital equipment projects.
- Project Manager/Lead engineer to overhaul and upgrade the SIC (Windsor, CT) refueling crane. Performed field inspections, prepared technical specifications to solicit competitive bids, interfaced with and oversaw several vendors during the upgrade work.
- Lead Engineer for technical spec and purchase of capital equipment required for refueling of the S8G prototype at the Kesselring site.
- Implemented improvements in rigging equipment to meet current work.
- Refined the facility equipment preventative maintenance program to be more in line with current company contracts.

### **Additional Skills/Training**

Six Sigma Green Belt Certified  
ISO auditor  
Failure Modes Effects Analysis

Root Cause Analysis  
Cost out  
Process improvement

Grove Hydraulic Crane Scho  
Detroit Diesel School

### **EDUCATION**

Bachelor's degree in Mechanical Engineering Technology, State University of NY Institute of Technology at Utica/Rome, Utica, NY

### **COMMUNITY SERVICE**

President, Bikeatoga, a bicycle advocacy group based in Saratoga Springs, NY

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**CAREER OBJECTIVE**

Electrical engineering position involved in the design and testing of electric machinery

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**CORE COMPETENCIES / SKILLS**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| • Electromagnetic Design      | • Data Analysis and Statistics    |
| • Ventilation Design          | • Design For Six Sigma (DFSS)     |
| • Design Tools and Techniques | • Project Management              |
| • Test and Validation         | • Technical Mentor and Instructor |

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**SUMMARY OF QUALIFICATION**

Senior electrical engineer with extensive experience in energy and power industries, including electric machine design (electromagnetic and ventilation), generator factory running test, generator component designs and upgrades for Power Services business, power transmission and distribution product design, and power system analysis/study. Experienced in teaching generator design courses, and power systems & energy courses (PSEC).

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**PROFESSIONAL EXPERIENCE****ABB HYDRO SERVICES, Schenectady, NY**

*Senior Engineer, Dec. 2018 – Present*

- Responsible for electromagnetic design of hydro generators of all prototypes/OEMs to support ABB Hydro Services business. Refurbished and redesigned major components of generators such as Stator Rewind, Stator Restack (for new stator core), and Rotor Pole Refurbishment.
- Responsible for proposal designs during ITO phase, and creating proposal technical/engineering documentation including Technical Clarifications and Exceptions.
- Responsible for generator uprate studies to increase the MW rating of existing nameplate, with upgrading major components such as stator core and stator winding/coil during proposal (ITO) and requisition (OTR) phase.
- Responsible for engineering deliverables (component design, component and part drawings and Bill of Material/BOM) during requisition (OTR) phase

**GE POWER, Schenectady, NY**

*Senior Electrical Engineer, Aug. 2003 – Oct. 2018*

- Electromagnetic and ventilation engineer for GE generators of all prototypes and sizes, ranging from 30 MW air-cooled and 200 MW hydrogen-cooled designs to over 1000 MW large steam turbine (LSTG) designs, and up to 1500 MW Nuclear generator designs.
- Responsible for electromagnetic and ventilation design of GE legacy generators to support CM&U (Conversion, Modification and Upgrades) of GE Power Services business. Refurbished and redesigned major components of generators such as Stator Rewind (for liquid-cooled and conventionally-cooled stator bars), field rewind, exchange field and replacement field.
- Responsible for generator uprate studies to increase the MW rating of existing nameplate, with upgrading major components such as stator core and winding, rotor and field winding, heat-exchange cooler, excitation system and accessories during proposal (ITO) and requisition (OTR) phase.
- Special assignment to support the Multi-Vendor Services (MVS) business for non-GE (Competitor) generators.
- Responsible for electromagnetic and ventilation engineer for special Nuclear generator uprate/upgrade program. Completed successfully numerous generator refurbishment of eight Nuclear Customers, including new and redesigned replacement fields with new nameplate ratings uprated up to 30% more power.
- Mentored new engineers located in US and outside US.



- Six Sigma quality program certified. Use of statistical methods to improve quality and producibility.
- Experienced with Microsoft Word, Excel, and Power Point.

### **GE ENERGY, Schenectady, NY**

*Senior Engineer and Requisition Manager, Nov. 1996 – July 2003*

- Electromagnetic engineer responsible for GE Large Steam Turbine Generators (LSTG).
- Requisition manager responsible for design and customer fulfillment for Huaneng Dezhou Coal Power Plant Customer and Baglan Bay CCGT Power Plant Customer.
- Test engineer responsible for generator factory running tests for Customers such as TEPCO and EPDC in Japan, Akzo Delesto in Netherland, Baglan Bay in England, and CAPCO in HongKong.
- Taught generator design courses.

### **GE POWER SYSTEM ENGINEERING, Schenectady, NY**

*Senior Application Engineer, Oct. 1989 – Oct. 1996*

- Power transmission product such as HVDC and Series Capacitors.
- Distribution system product such as shunt capacitors, transformers and underground cables and surge arresters.
- Power system planning and studies.
- Test engineer to test power distribution products (underground cables and surge arresters) at High Voltage Laboratory in Philadelphia, PA.
- Taught Power Systems & Energy Courses (PSEC) for Energy Utilities engineers inside and outside US.

## **EDUCATION**

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### **LOUISIANA STATE UNIVERSITY, Baton Rouge, LA**

*Ph.D. in Electrical Engineering, 1989*

Concentration: Power Engineering, Power Electronics and Control Systems

### **LOUISIANA STATE UNIVERSITY, Baton Rouge, LA**

*M.S. in Electrical Engineering, 1985*

Concentration: Power and Computer Engineering

### **TRISAKTI UNIVERSITY, Jakarta, Indonesia**

*B.S. in Electrical Engineering, 1982*



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Roswell, Georgia 30075

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email: jamesolambert@gmail.com

## **James (Jim) Oldham Lambert – P.E.**

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**Objective**      Engineering consulting work in the electric power industry utilizing my extensive experience in generator technology

**Experience**      2019 – ABB, Senior Mechanical Engineer

June 2009 – June 2018 **General Electric Company (GE)**

**Technical Leader - Generator Application Engineering** – Marietta, GA

Lead global team of application engineers providing technical proposals for generator refurbishment, upgrades and uprates on turbine generators. Assign projects to team members to achieve efficient productivity. Review technical proposals and resolve customer and commercial issues. Interface with design engineering teams to create optimal technical offerings. Advise the new product design teams to target offerings towards customer requirements. Present at customer conferences. Mentor engineers. Support integration of Alstom engineers into team. Organize technical training sessions for engineers and commercial teams. Create application guidelines to improve quality.

Jan 2004 – June 2009 **GE - Senior Generator Application Engineer** - Marietta, GA

Provide technical proposals for generator refurbishment, upgrades and uprates for GE and other OEM designs. Present technical offerings at customer conferences. Interface with design and commercial teams during proposal process. Mentor less experienced engineers on design process. Perform generator uprate and reliability studies.

Jan 2001 – Jan 2004 **GE - Senior Generator Product Service Engineer** – Marietta, GA

Provide technical solutions to generator issues at customer sites during initial commissioning and warranty period. Provide technical recommendations to resolve customer issues on global fleet of turbine generators.

June 1998 – Jan 2001 **GE - Staff Engineer Aircraft Engine Fuel Systems**– Evendale, OH

Cognizant design engineer for the hydro-mechanical unit for the CFM56-7 engine. Fuel system project engineer during conceptual design of the CF34-10 engine.

Feb 1997 - June 1998 **GE - Six Sigma Black Belt – Generator Engineering** –

Schenectady, NY

Complete six sigma projects and mentor green belts on their six sigma projects associated with generator design and manufacturing.

July 1995 – Feb 1997 **GE - Senior Design Engineer Generator Rotor COE** –

Schenectady, NY

Design rotor coils, insulation system, wedge system and retaining ring for new generators utilizing electromagnetic design programs. Resolve manufacturing and supplier issues.

March 1994 – July 1995 **GE - Senior Design Engineer Generator Stator COE** -

Schenectady, NY

Support production of new generators. Design stator bar shape, slot and end winding support systems utilizing electromagnetic design programs. Resolve manufacturing and supplier issues.



May 1991 – March 1994 **GE - Electrical Design Engineer Generator Engineering –**  
Schenectady, NY

Design stator bar shape, slot and end winding support systems utilizing electromagnetic design programs. Support drafting team for technical drawing creation. Hold design reviews for new generators.

Jan 1990 – May 1991 **GE - Generator Technical Support Engineer –** Schenectady, NY

Support generator service centers to improve quality. Issue design documentation to stator coil shops. Perform stator core testing. Design non-GE rotor insulation systems for service centers.

Oct 1987 – Dec 1989 **U.S. Government – Appropriate Technology Volunteer –** Guatemala

Work with local Guatemalan government agencies to promote efficient ceramic, brick and clay wood burning stoves.

Nov 1984 – Sept 1987 **GE - Design Engineer Controls - Aircraft Engine –** Lynn, MA

Cognizant design engineer for F404 exhaust nozzle actuators, fuel recovery drain system, T700 engine fuel valve. Design fuel control relocation components and throttle cable for A6F engine.

April 1982 – Nov 1984 **GE - Factory & Field Engineer - Generator Engineering–**Lynn, MA

Resolve manufacturing and customer issues on frames 5, 6 & 7 size gas turbine generators.

June 1980 – April 1982 **GE - Field Engineer -** Charleston, WA & Pittsburgh, PA

Perform turbine alignment and valve outages on steam turbines and maintenance on generators.

**Education**      1976-1980    **University of Pittsburgh at Johnstown -** Johnstown, PA  
**Bachelor of Science in Mechanical Engineering Technology, Magna Cum Laude**

**Professional**    **Professional Engineering License (#075889–inactive) – New York**  
**3 x U.S. Patents**

**Interests**  
Hiking, mountain biking, road cycling, kayaking  
Model airplanes  
USATF Certified Track and Cross Country Coach  
Head Coach Lassiter Junior Track and Cross Country 2009 - 2013  
Lassiter HS Track and Cross Country Booster Club President 2015 - 2016  
Lassiter HS Marching Band Roadie 2011 – 2015



**'SRI' SRINIVASAMURTHY K ARCOT M.S., P Eng.,**

2352 Mountland Dr., Peterborough, Ontario K9K 1W4, Canada.

Email : aksm777@gmail.com

**OBJECTIVE:** A challenging role in Hydro Generator Engineering Services.

**PROFESSIONAL PROFILE:**

- Fluent in Electro-Magnetic Designs and other tools.
- Have worked designs for many OEM units for Refurbishments.
- Professional in ITO / OTR activities
- Have worked on Bar winding designs as well as Coil winding designs.
- Managed and delivered on time the drawings and Bill of Materials.
- Continue to train and co-ordinate with Drafting team for on time deliverables.
- Six Sigma certified.

**TECHNICAL SKILLS:**

- Strong technical knowledge- Electro-Magnetics, Design and Development of Generators and motors.
- Professional approach in problem solving, proven design and implementation skills etc.
- Accomplished computer knowledge and skills -FORTRAN, C and MS office packages
- Thorough knowledge of the AC Generators both in Electrical and Mechanical aspects

**EMPLOYMENT HISTORY:**

**ABB – EPIS Hydro COE**

**July 2018 - till date**

**General Electric - Hydro COE, Hydro Service Engineering 2011 – 2018.**

- Electro-Magnetic designs for Hydro Services of many OEMs
- Knowledge on ITO / OTR process.
- Responsible for Design, drawing deliverables on time.
- Proposals and technical reviews on projects
- Reviews on QAR/NCR reports.
- Final test report reviews.

**General Electric Canada, Large Motor and Generator**

**2008 – 2011.**

- Designed on Many Nuclear vertical motors – Nine Mile Point, Fermi, Fitzpatrick, Bruce Power, Cooper, Oyster Creek, Vermont Yankee, and others.
- Worked on lot of motor and generator upgrade.
- Feasibility study for upgrades and re-conditioning of units.
- Many spare stators and rotors were designed for customers.
- Involved with service shops for many rewinds.





### **General Electric Canada, Hydro COE**

**2002- 2008.**

- Design on new unit proposals and refurbishment activities.
- Successfully completed Weldon Frequency Conversion project from 50 Hz to 60 Hz from design to installation.
- Completed Stator refurbishment on GM Shrum Unit U4 with Bar winding for BC Hydro.
- Worked on Bulb units for upgrading.

### **Kirloskar Electric Co Ltd, Bangalore India**

**1983-2002.**

- Lead the total responsible role for the design and development of AC generators in low /medium voltage and in high voltage range
- Responsible for computer codes developments for electrical and mechanical design calculations -Faster response to the market enquiries
- Coordinated and contributed on critical issues for material planning, process control, quality and manufacturing departments for faster through puts
- Completely responsible for certification of the products- KEMA, Netherlands for 'CE' accreditation for the complete range of AC Generators

### **SIGNIFICANT ACHIEVEMENTS:**

- Suggested and demonstrated the process of joint less winding in main stator coils which eliminated joint brazing process leading to substantial savings and better reliability.
- Changed the pattern of welding from continuous to zig- zag welding in frame/body fabrication of AC Generators. This process leads better through put time.
- Introduced of high-density magnets in machines for the positive residual to eliminate on site complaints of generators.
- Modified the Vent-figure design in large machines for obtaining highly improved cooling and lesser temperature rise.
- Incorporated the joint less winding in exciter armature for reduction of copper, overhangs and their bulging problems, which lead to improved quality and reliability.

### **MAJOR GENERATOR PROJECTS:**

- AC Generators for Hydro projects.
- High frequency AC Generators (400 Hz) for aircraft and communication applications up to 150 kVA.
- Armatures with wire winding design up to 1250kVA ratings.
- AC Generators for 50/60 Hz, 3-ph/1-ph, 12 leads arrangement up to 100kVA.
- AC Generators for on-board application in naval applications complying the stringent specifications of SES/NSS standards.
- Frequency converter sets for atomic power plants (50-60Hz) up to 750 kVA.
- AC Generators for Defense applications featuring up to 625 kVA with 12 leads, bar winding for 440/220 V for 60Hz and 415 V for 50 Hz.
- AC Generators with single bearing design for compact DG sets up to 2000 kVA with different SAE combinations.
- Special AC Generators for sub-zero temp applications, severe environmental conditions, Tractor driven applications, Railways, Steam Turbines.



**Benoît COURNOYER**, P. Eng, M.A.Sc.

MECHANICAL ENGINEER, OIQ NO. 115751

25+ YEARS OF EXPERIENCE

450 447-1111, ext. 239 / [benoit.cournoyer@ldvconsultants.ca](mailto:benoit.cournoyer@ldvconsultants.ca)

## ENGINEERING EXPERIENCE

### ➤ LDV ADVANCED ENGINEERING (Chambly)

Title : **Senior Mechanical Engineer – Hydro** ..... 2020 to present

- Roles :
- Guide technical decisions related to Hydro proposals and contracts
  - Assist with Hydro-related advanced calculations
  - Assist with Hydro-related vibration and noise issues
  - Act as extraordinary Project Engineer in case of delicate technical situations
  - Participate in the technical orientations and development of the company

Title : **Numerical Simulation Director** ..... 2016 to 2020

- Roles :
- Supervise and manage a team of engineers specialized in finite element analysis
  - Participate in the energy and numerical simulations business development plan
  - Act as technical advisor for strategic situations and mentor to junior engineers

### ➤ GE RENEWABLE ENERGY – HYDRO, formerly ALSTOM (Sorel-Tracy)

Title : **Team Manager – Numerical Calculation in Mechanics** ..... 2012 to 2016

- Roles :
- Supervise and manage an engineering team specialized in numerical simulations
  - Manage the finite element analysis performed externally
  - Participate in the engineering team technical expertise development
  - Assume the role of technical leader for critical or litigious technical issues

Title : **Mechanical Expert - Generators & Turbines** ..... 2007 to 2012

- Roles :
- Guide the technical choices related to the tender, contract and service teams
  - Act as extraordinary project engineer in case of delicate or litigious contractual situations
  - Participate in the global technical orientations and development of the company

### ➤ ALSTOM (Sorel-Tracy)

Title : **Project Engineer, USA projects - Turbines** ..... 2001 to 2007

- Roles :
- Ensure the complete technical supervision and management of multi-unit projects up to 100 MW
  - Act as the main interface with clients, project directors, draftsmen, buyers, shops, site crew, etc.

Titre : **Mechanical Design Engineer - Generators & Turbines** ..... 1997 to 2001

- Roles :
- Design of turbogenerators, synchronous condensers, hydraulic generators & turbines
  - Site interventions

## TEACHING EXPERIENCE

### C.E.G.E.P. de Trois-Rivières

**Vibration and noise analysis** ..... January to May 1996

### Université de Sherbrooke

**Vibration Elements** .....September to December 1994 / January to April 1995

## DIPLOMAS

### Sherbrooke University

**Master Degree in mechanical engineering:** Mechanical Vibration..... 1995

Grant Holder from *Institut de Recherche en Santé et Sécurité au Travail* (I.R.S.S.T.)

**Mechanical engineering degree** ..... 1992

### Université du Maine, Le Mans (France)

**Diplôme d'Études Approfondies (graduate studies):** Applied Acoustic..... 1994

## PROFESSIONAL ACCREDITATIONS

NAFEMS: Composites FEA ..... 2018

NAFEMS: Fatigue & Fracture Mechanics in FEA ..... 2017

ASME: Design by Analysis – Master Class Series 121 ..... 2015

VibroSystM: Vibration Monitoring - Data Analysis & Diagnostic ..... 2014

École Polytechnique Fédérale de Lausanne: Hydraulic Machines Specialization..... 2008

Bently Nevada: Machinery Diagnostics ..... 2000

Decibel Consultants: Dynamic Balancing..... 1997

## SCIENTIFIC PUBLICATIONS & PRESENTATIONS

Solving Rotor structural issues at Matahina.....CEATI, 2019

Assessing the impact of cyclic loading on generator's life ..... Hydrovision, 2016

Assessing the impact of cyclic loading on generator's life ..... Hydrovision, 2016

The ultimate mechanical test of hydro units: the runaway speed test ..... Hydrovision, 2016

Advanced thrust bearings for increased reliability of hydro power plants..... Hydrovision, 2013

Discharge ring for propeller units – Rehabilitation know-how application ..... Hydrovision, 2013

The vibration behavior of annular plates with viscoelastic damping .....Applied Acoustics, 1995

An analytical approach for the frequency response of a multilayer disc

..... Presented at *Congrès de l'Association Canadienne d'Acoustique*, Ottawa, October 1994

## ADDITIONAL SKILLS

Languages : French, English, Spanish notions

Softwares : Ansys, MathCad, AutoCad, SciLab, MS Office Suite, etc.

For more information, please contact me or consult my LinkedIn profile at

<http://ca.linkedin.com/in/benoit1cournoyer>



## PROFESSIONAL EXPERIENCE

- ❖ **ON-SITE INSTALLATION EXPERT** **MARCH 2019 TO DATE**  
**Installation of turbine-generator units**  
*LDV CONSULTANTS INC.*
  - Technical support during installation
  - Special tooling design
  - Planning and cost estimation of installation work
  - Development and drafting of installation procedures
  - Technical support for on-site machining operations
  - Alignment of vertical and horizontal machines
  
- ❖ **HEAD OF PLANNING & TECHNICAL SUPPORT – ON-SITE INSTALLATION** **2016-MARCH 2019**  
**Installation of new units and refurbishment of existing units**  
*VOITH Hydro*
  - Manager of a group of engineers and technicians
  - Development of group installation policies
  - Preparation of procedures and special tools
  - Estimation of installation costs
  - Technical support during installation work
  
- ❖ **EXPERT / SUPPORT – ON-SITE INSTALLATION** **2006-2016**  
**Installation of new units and refurbishment of existing units**  
*ALSTOM Renewable Energy / GE Renewable Energy*
  - Manager of a group of engineers and technicians
  - Establishment of installation schedules and budgets
  - Preparation of procedures and special tools
  - Product design review with the engineering department
  - Technical support during installation work
  - On-site machining
  
- ❖ **COORDINATOR – ON-SITE INSTALLATION** **2002-2006**  
**Installation of new units and refurbishment of existing units**  
*ALSTOM Renewable Energy*
  - Planning and management of installation projects
  - Design of special tools
  - Development and improvement of installation procedures
  - Product design review with the engineering department
  - Estimation of installation costs

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- |   |                         |
|---|-------------------------|
| <p>❖ <b>PRODUCTION SUPERINTENDENT – GENERATOR LAMINATION WORKSHOP</b><br/><b>Stamping of rotor rim laminations – Stamping and varnishing of stator laminations</b><br/><i>ALSTOM Renewable Energy</i></p> <ul style="list-style-type: none"><li>◆ Management of the production of rim laminations and stator core laminations</li><li>◆ Assembly of stator sections by VPI process</li></ul>              | <p><b>1998-2002</b></p> |
| <p>❖ <b>PRODUCTION MANAGER – TURBO GENERATOR WORKSHOP</b><br/><b>Assembly and testing of 25 MW to 75 MW turbo generator</b><br/><i>ALSTOM Renewable Energy</i></p> <ul style="list-style-type: none"><li>◆ Manager of the turbo generator assembly and testing workshop</li><li>◆ Technical support and design of special tools</li></ul>   | <p><b>1996-1998</b></p> |
| <p>❖ <b>PRODUCTION ENGINEER – WINDING WORKSHOP</b><br/><b>Manufacturing of Roebel bars and stator winding coils</b><br/><i>ALSTOM Renewable Energy</i></p> <ul style="list-style-type: none"><li>◆ Technical support for the production of bars and coils</li><li>◆ Process improvement</li><li>◆ Design of special tools</li></ul>   | <p><b>1995-1996</b></p> |
| <p>❖ <b>FIELD ENGINEER – LA GRANDE-1 POWER STATION</b><br/><b>Installation of four 120 MW propeller turbine units</b><br/><i>ALSTOM Renewable Energy</i></p> <ul style="list-style-type: none"><li>◆ Planning of installation activities</li><li>◆ Management of quality control and quality assurance files</li><li>◆ Technical support for the installation</li><li>◆ Design of special tools</li></ul> | <p><b>1992-1995</b></p> |
| <p>❖ <b>DEPUTY COORDINATOR – ON-SITE INSTALLATION</b><br/><i>ALSTOM Renewable Energy</i></p> <ul style="list-style-type: none"><li>◆ Management of site tools</li><li>◆ Implementation of ISO-9001 in quality assurance procedures on construction sites</li></ul>  | <p><b>1989-1992</b></p> |

### PROFESSIONAL SKILLS

- |                                       |                               |
|---------------------------------------|-------------------------------|
| ◆ Sense of responsibility             | ◆ Teamwork                    |
| ◆ Strong analytical and creative mind | ◆ Able to adapt and integrate |

### COMPUTER KNOWLEDGE

- |                               |                          |
|-------------------------------|--------------------------|
| ◆ AutoCAD, MathCAD, RdM6, ... | ◆ Microsoft Office Suite |
|-------------------------------|--------------------------|

### DIPLOMAS

- 1987 **Bachelor of Construction Engineering**  
École de technologie supérieure, Montreal, Canada

## ***SECTION 5***

### ***ABILITY TO PERFORM***

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## 5. ABILITY TO PERFORM

### PAST PROJECT COOPERATIONS WITH OWNERS AND THIRD PARTIES

AH has a substantial history of working collaboratively with many of our customers and third parties to assure the successful outcome of the overhaul/upgrade projects. The following projects are examples of this experience that exhibit cooperation with owner teams, vendors and third parties, challenges overcome, and projects that included multiple units over multiple years.

**Jordan Dam – Alabama Power – Wetumpka, Alabama (3 units)** - AH has supplied new runners, stainless steel bottom rings and wicket gates and completed unit rehabilitation with field machining for three of the four units at Jordan Dam.

The last 2 units were completed in 2017 and involved a broad range of scope which included the base scope mentioned above but also added was the supply of new governors with high pressure servomotors, supply of new stainless air admission piping on one unit and replacement on the second unit.

The most collaborative effort was needed on the new governor systems for these units. There were several meetings between APC, AH, American Governor (governor controls supplier) and Rexroth (governor skid supplier). This included a joint FAT testing with teams from APC and AH present. Many stakeholders were involved including plant operators, plant management, controls and electrical specialist and the relative project managers from all parties. The joint FAT proved very valuable as the input from parties resulted in several key changes prior to shipment to site and installation. The end result was a new governor system installed and up and running with very little effort at commissioning. This collaborative effort proved that proper planning and working together through the project helped to eliminate assumptions, mitigate risks and meet expectations the first time around.

As mentioned above the schedule was very tight. Constant schedule reviews between APC and AH as well as weekly project meetings with APC and AH site crews, engineers and project managers helped us manage the assembly of two units during the same time period and eventually commissioning of U1 while U2 assembly was wrapping up. Without working close together with the customer these units would have never met the schedule requirements needed by APC.

**Keokuk Project- Ameren Missouri – Keokuk, Iowa** - This project included 15, 203 inch 12 MW Francis runners, unit upgrades, new runners, complete turbine refurbishment, field work including field machining, two unit simultaneous outage, contract evolution from 2000 to present.

The increased collaboration on the Keokuk project started with a joint lesson learned meeting on the previously completed project at the Keokuk powerhouse. This planning effort included technical, safety, project management, production, purchasing, sales, and scheduling resources from both companies. This allowed for both parties to incorporate these lessons into the next project and identified process improvements to be addressed before the next project got released. Starting with the unit 6 and 14 project AH and Ameren strategically developed goals for releasing long lead production and design work to avoid schedule risk during the outage. Both parties were also transparent with production resource loading to identify the ideal timing of scheduling outages. We also developed a scheduling program to integrate our production and construction schedules into an overall project schedule which was used as a tool to drive work being performed by third parties which was critical to meeting our commissioning dates. Ameren and AH structured the construction portion of the project to share the financial risks and

rewards, this led to a change control process which documented positive and negative impacts to the project and AH was transparent on all actual costs to execute the work.

The Keokuk U6 and U14 project was successfully commissioned in 2016 and we are currently in the early stages of the U5 and U15 project with outages scheduled to begin in early 2019. We have completed another session of lessons learned meetings and have identified several changes which will improve the efficiency and safety of construction during the next outage.

**Keys Pumping Plant – U. S. Bureau of Reclamation – Grand Coulee, Washington** - This project included two, 167 inch, 50 MW pumps, complete unit refurbishment, all field work, motor rewind/restack (Andritz as our subcontractor), fixed price contract. (AH has supplied a total of six pump impellers for the Keys Pumping Plant)

The U.S. Bureau of Reclamation, AH and Andritz Hydro are on the Keys Pump Units 5 and 6 Impeller Replacement and Stator Rewind project. AH has collaborated with Andritz Hydro to provide the best solution for the customer. AH is supplying the new upgraded impellers, modifying the hydraulic profile of the diffusor vanes, rehabilitating the pump components, and performing the disassembly and reassembly field work. While Andritz Hydro is supplying the new stator windings and core as well as installing the new core. This project involves continued communications and issue resolution between all parties as this project will span approximately three years to manufacture the long lead components and overhaul both pumps and motors. AH is also collaborating with other Wartsila partners to provide mechanical seals and re-babbitt the motor and pump bearings.

**Bear Swamp Pumped Storage Plant – Brookfield Renewable Power – Rowe, Massachusetts** -

AH continues the collaborative relationship with Brookfield Renewable on the Bear Swamp pump-turbine upgrade project. The Bear Swamp project is a much larger project, in which AH is directly responsible for all the field disassembly and reassembly work, model testing and production of new pump-turbine impellers, new wicket gates, modified stay vanes, rehabilitation of all other turbine equipment, and new generator rotors. The model testing was completed by our partner Kolektor Turboinstitut (KTI) in Slovenia, and the new generator rotors are being completed by our partner Electromechanical Engineering Associates (EME).

Since the beginning of the Bear Swamp project, AH and Brookfield have used a very collaborative process. AH has set up weekly project teleconference calls with Brookfield, KTI, and EME. AHC and EME have visited the Bear Swamp facility together on multiple occasions to gather information and meet with Brookfield project management and plant operations personnel. Brookfield (along with their engineering consultants) have participated in multiple visits to KTI with AH during the model testing. The same has been true for AH and Brookfield visiting EME together jointly multiple times throughout the design phase, to ensure common understanding of the design philosophy and to collaboratively work through any concerns that arise. There are never any secrets in this process.

Additionally, AH and Brookfield have been jointly working through transportation logistics related to the specific difficulties of delivering large equipment to the remote Bear Swamp site (especially during the challenging winter weather in Maine). This has included a series of teleconference calls, as well as site visits jointly arranged between AH, Brookfield, and the transportation provider.



## SCHEDULING MANAGEMENT

When a project moves from Proposal phase to Project phase, the project is moved from a wide body planning and scheduling regime to a more detailed, task level schedule by our Scheduling Department. This includes confirmed project milestones (including submittal dates, delivery dates, and specific milestones with sub-suppliers and sub-contractors as appropriate). Other deliverables such as design reviews, manufacturing reviews, field service plan reviews, invoicing, and other key project events are loaded into the Primavera P6 and are monitored throughout the life of the project. The baseline project is then compared to the customer requirements and, if any variances are present, the measures necessary to mitigate these variances are taken. If the variances cannot be mitigated, the customer is notified of the variance and a change request would be required.

An overview of the process of Project and Production control and capacity is outlined in Figure 1 below.

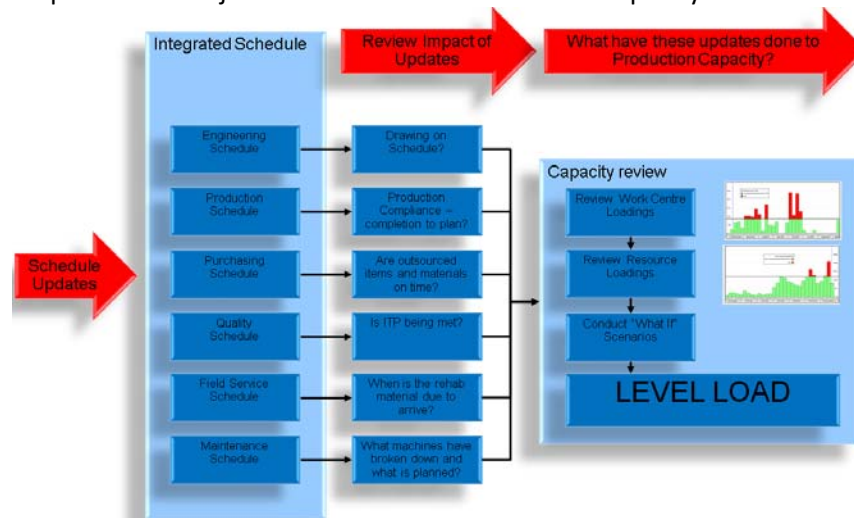


Figure 1 - Project and Production Control Development

All the shown work is planned for each task of each project. Primavera P6 then assembles all projects and looks at the entire amount of work by each resource or work center (Figure 2). The entire project load is reviewed, and the loading of each resource/work center determined. For overloaded work centers, the necessary activities are again reviewed and opportunities to shift work to under loaded centers are investigated. Because shop conditions are constantly changing, this analysis is performed a minimum of once per week.

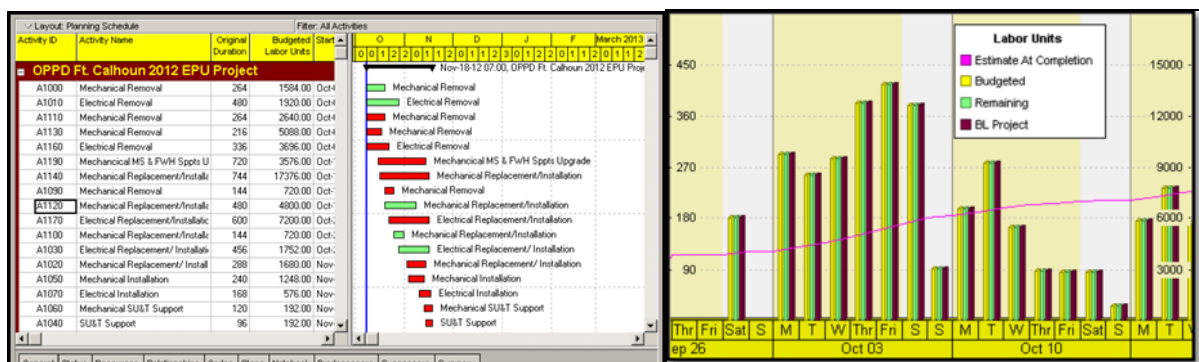


Figure 2 – Task Planning within P6

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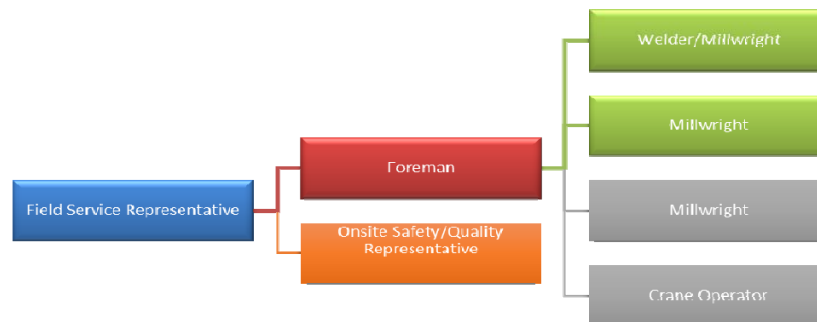
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By using this methodology in the planning and scheduling of project work, there is constant awareness of resource base, ability to accept new work, and the impact of any changes on existing work, thus assuring the ability to deliver on project commitments.

A more detailed schedule is then developed that the Project Manager reviews and maintains on a weekly basis.

## Field Service Schedule Management

AH field service also uses Primavera P6 software to plan, project, and manage field service activities throughout the project lifecycle. The general project field service scope includes the use of AH supplied craft non-union labor under the direction of an AH Field Service Representative. The onsite crew planned for the field work is shown below:



## ABB Schedule Management

The schedules prior and throughout the project will be set and refined as appropriate. They will be coordinated with the American Hydro turbine schedule. The final schedule will be reviewed in detail after the contract is awarded at the project kickoff meeting with Tacoma Power and ABB EPIS Hydro and American Hydro's project team. Schedules will be coordinated and mutually agreed upon prior to commencing any service work. A sample project can be provided upon request.

## CORPORATE HEALTH & SAFETY PROGRAM

Safety is one of American Hydro's main values. Our culture and policies require us to have hazard-free workplaces, both for our own employees and for our contractors. We do this by applying high standards of occupational health and safety. We are at 2,379 days without a lost time accident.

To emphasize the importance of safety, American Hydro has set a target of achieving zero lost time injuries. This means that all hazardous situations should teach us something. It also means that we all need to be involved if the target is to be reached. Injuries don't just happen by chance or coincidence, and all accidents are avoidable.

AH is committed to excellent EHS performance. Keeping each other safe is the most important thing we do as managers, colleagues and customer and supplier partners. Our operations present potential risks to our people and to the environment. To address these, we ensure that we have an organization equipped to recognize and deal effectively with risk through the capability of our people, clear policies and practices and an effective management system to deliver results and continuous improvement.

The American Hydro EHS Management System sets out how we manage EHS risk and deliver excellent performance. Since it was launched, the EHS Management System has contributed to improved performance in lost-time incidents, but our commitment to zero accident workplaces means none of us can afford to be complacent.

## **Quality, Environment, Health and Safety Policy:**

We shape the hydro energy market with advanced technologies and focus on lifecycle performance to enhance our customers' business and benefit the environment being:

- Reliable and safe
- Efficient and environmentally sound
- Compliant with the applicable legal requirements and regulations

We continue to improve our performance and reduce adverse environmental impact to satisfy our customers and other stakeholders.

We create and maintain safe and healthy workplaces for our employees and partners in all our business operations.

We give our employees the authority to stop work if conditions are unsafe or quality is compromised. Our skilled organization acts as a responsible global citizen.

## **Health and Safety Responsibilities:**

American Hydro shall provide employees a safe and healthful work environment. American Hydro is responsible for ensuring safe work performance of employees and subcontractors. These standards also apply to offsite activities, equipment, and facilities that primarily support the contract work. American Hydro has included provisions for coordination with the safety and health requirements of these standards in the terms and conditions of all contracts, subcontracts, and supply contracts.

## **Management System Registration:**

- Environmental Management System Registered to ISO 14001:2015
- Occupational Health and Safety Management System Registered to ISO 45001:2018

## **Site Safety**

The American Hydro Field Service Environment, Health and Safety Program has been designed to provide a healthy and injury free workplace for AH employees, subcontractors, customers, and the public. The policies and procedure defined in the Field Service EHS Handbook, combined with an active, safety minded field service personnel demonstrate AH's dedicated commitment to safety in all aspects of Field Service.

During the project, the AH Field Service Representative will be the main point of contact between the customer and AH. AH has also planned to staff an onsite Safety and Health Representative. The Site Safety Representative will coordinate drug testing, safety training activities, daily safety briefings and critical job safety assessments.

## **ABB Safety**

ABB EPIS Hydro Site safety and environmental procedures are in line with the ABB EHS strategy. While our EHS reference notebook is considered proprietary and cannot be distributed, it can be made available for review upon request. Our safety plan is always tailored to the project and built in coordination or revised with our contractors and partners.

## ***SECTION 6***

### ***EXCELLENCE IN DESIGN***

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## 6. EXCELLENCE IN DESIGN

Since the inception of AH in 1986, Continuous Improvement has been the foundation of our company. With regards to technical leadership, the key pillars of our program are as follows:

- Engineering Research and Development
- Manufacturing Research and Development
- Sustainability and Mentorship

AH has always been a leader in turbine design technology. A few of the noteworthy recent investments and accomplishments in technical excellence are discussed below.

### Engineering Research and Development:

- No hydro-turbine supplier can be considered state-of-the-art without a **High-Performance Computer** (HPC). The HPC is used to perform ever more complex numerical flow (CFD) simulations that are essential for maximizing turbine output, efficiency and smooth operating range. Since 2011, AH's in-house HPC has been upgraded 4 times to maintain our competitive advantage. To our knowledge, it is the most powerful HPC in the industry.
- In order to effectively use our growing HPC capability, the **software** that is used for runner design and analysis is in a continuous state of upgrade and development. The two core software programs used by hydraulic engineers are:
  - American Hydro Runner Design System (AHRDS)
  - American Hydro Runner Analysis System (AHRAS)

AH has a full-time hydraulic software engineer on staff whose purpose is to streamline our software to keep pace with our computer simulation requirements and to implement changes to continuously improve our designs. Our in-house software is supplemented by the full ANSYS suite of products to include ANSYS CFD (Fluent and CFX) as well as ANSYS mechanical analysis software.

### Manufacturing Research and Development:

- Research and collaboration with EWI (Edison Welding Institute) to develop semi-autonomous welding of runners
- Integration of three robotic centers into AH's manufacturing operations in the last four years
- Development and implementation of trimming complex 3D Shapes with a robotic high definition plasma center
- Future planning and definitions for three additional robotic centers to be installed in the next two years
- Development of our runner blade hot forming process that is providing higher degree of part placement for consistent shape and profile
- Installing state of the art 5 axis machining centers with tool and head changer that are capable of milling and vertical turning
- Installation of 4 axis HBM that provides higher degree of accuracy, eliminating requirements for templates and increases efficiencies through higher feed rates and spindle speeds
- Development and innovations for use of induction heating to facilitate welding procedures and operations that provide increased safety, production efficiencies and uniform heating
- Collaboration with welding wire manufacturers to develop product features that provide improved welding characteristics and performance.

### Sustainability and Mentorship:

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- Engineering department employs six co-op students per year to continuously develop engineering talent
- AH acted as industry advisors/mentors for graduate students at PSU for advanced research projects
- AH founded welder training school at AH to develop new fabricator in-house talent for welding skills and qualifications
- Outreach to tech prep secondary education institutions to provide Co-op career training in our manufacturing operations

## General Mechanical Evaluations

AH will produce the turbine components and quality assurance drawings according to our substantial experience in Francis turbine design and manufacture.

A complete and structurally sound runner design is assured through analysis and correct specification of:

- Materials
- Welding techniques and procedures including weld sizes
- Bucket thickness
- Shaft and seal mating tolerances
- Conformance to existing water passages

Finite element analysis of the runner will assure ample safety margins on stress levels even under full runaway speed.

All engineering for this project will be done at the AH headquarters using in-house developed and verified design/analysis software and complete NX CAD-CAM system. In addition, commercially available software including Fluent (CFD) and ANSYS (FEA) will be utilized.

ABB continuously works to achieve the highest level of excellence in design, quality and safety, to obtain project cost reduction, schedule improvement, flawless outage execution with zero incident. To do so, our products and methods are continuously improved, with the following as examples:

- Our ABB Hydro coil insulation systems (GEGARD 600™ or GEGARD400™) not only satisfy the most stringent north American requirements (for example voltage endurance and thermal cycling tests, partial discharge), but are constantly improved to adapt to customer-specific requirements. For example, our insulation press has been recently improved to comply with the void-free requirements request by a major US customer.
- Our patented pneumatic core restack tooling kit accelerates the stacking operations by days while providing a tighter stator core on vertical-shaft hydro units.
- With automated engineering tools in the project phase, our process uses standardized drawings, automated parts definition driving cycle, automatized work instructions and quality assurance records, for lean, fast, and uniform Engineering and site execution of our projects.
- We keep safety at the core of our designs. For example, heavy parts are designed with handling supports and lifting plans to eliminate the risk of accident.

We also prove our excellence in design in our daily work for our customers answering specific needs and solving issues. Three examples are illustrated below:

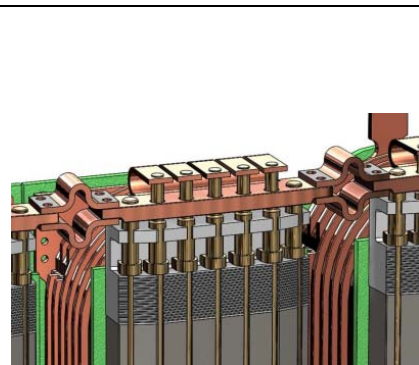
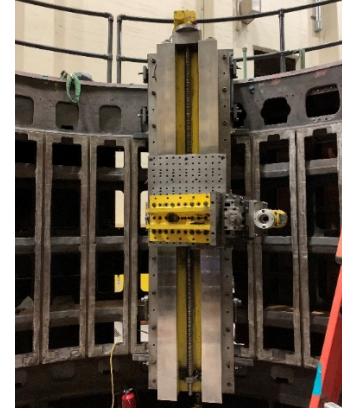


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## **PG&E Pit 1 Unit #1, Generator restack, rewind and pole refurbishment, USA, CA**

As described in a previous section, after disassembling the existing stator core and winding in preparation for a restack and rewind, damages were found in the keyway of the lamination dovetails. Additionally, laser measurements made on the existing frame showed significant circularity and verticality issues. ABB quickly worked with a subcontractor to machine new keyways on site (see picture) on the existing frame. A shimming plan was also developed to correct the circularity and verticality issues. Within 2 weeks, the subcontract was on site and work was quickly completed to allow the stacking of the unit. This solution provided with a quick and efficient solution to the customer, with minimal disruption to the schedule.

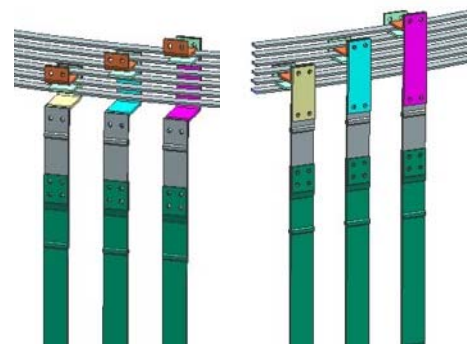


## **DWR Dos Amigos, Rotor pole refurbishment & redesign, USA, CA**

For years, the Dos Amigos powerplant struggled with damper winding failures creating significant reliability issues with multiple units. ABB assisted the customer with a complete rotor pole redesign (see picture) focusing on a more robust damper bar, damper segment, and connections. Working with our internal design tools, our analysis quickly identified a thermal expansion issue as the root cause. Additional thermal and mechanical analyses helped with providing a new design. Modified rotor poles were manufactured. The actual temperature rise of the new damper bars was measured on site to prove that the new design corrected the issue. A similar design is currently implemented on all affected units of the plant.

## **Georgia Power, Lake Sinclair, U1, generator rewind, USA, GA**

Phase and Neutral reversal are often performed by our customer to “extend” the life of their stator winding. This is usually performed with some alterations on the winding’s circuit rings and phase and neutral leads, requiring manufacturing of leads and an outage. In this project, Georgia Power requested a special winding design to perform a winding reversal with minimal outage and without the need for special winding leads. ABB innovated with a special design of the circuit ring tabs enabling a quick reversal by swapping the terminal links on the circuit rings, without the need for additional parts. The design was also implemented in the second unit.



## ***SECTION 7***

### ***UTILIZATION OF MWBE-CERTIFIED BUSINESSES***

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## 7. UTILIZATION OF MWBE-CERTIFIED BUSINESSES

AH and ABB are not considered certified Minority & Women's Business Enterprises (MWBE) but both companies have a history to include diverse businesses in the execution of projects. These include certified small businesses, small disadvantaged businesses, women-owned small businesses, HUBzone, veteran-owned and service-disabled veteran owned small businesses. Some of these vendors are currently assisting on our active projects. Without a technical RFP we can only include product/service scope of work for typical Turbine and Generator Hydroelectric rehabilitation projects. American Hydro and ABB will work to provide clear documentation of all business subcontracting. Below are the subcontracting vendors that could be used to perform possible work scope In the Cushman Contract:

FIRM	Product/Service	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB*
Mechanical Rubber	RUBBER COMP SPRINGS		X				
Chesapeake Machine	Machining	X					
Slothower Machining	Critical connection hardware	X					
System 22	Critical connection hardware	X					
Bay Cast Inc.	Castings	X					
Fisher Cast	Castings	X					
Atlas Bronze	Bronze Castings	X					
McInnes Rings	Rolled Ring Forgings	X					
PreMach	Machining	X					
KDA Machining	Machining			X			
Corrosion Products and Equipment	Seals, Gate Stem Packing, Servo Rehab Assembly	X					
Billet	Machining	X					
Chicago Alum	Casting and pattern	X					
All True Designs LLC	Greaseless Bushings	X					
Enscicon	Site Labor Mill Wrights					X	
ONESOURCE Supply Solutions LLC	Supply chain Solutions		X				
All American Logistics	Transportation of stator coils and tooling			X			
I &G Power systems	Wedging materials for stator slot			X			
SR Diversified LLC	Welding blasting stripping			X			
Action Tech	Crew winders			X			
Pacific Plant Maintenance	Crew winders			X			
IGS	Laminated Shims	X					
Wahoo Transportation	Transportation			X			
Spuncast	SST Upper Thrust Collars- Around Stems – Sleeves	X					

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Plastics Fabricators	Bushing and glide discs	X					
IRS Environmental of Washington Inc.	Core and winding Stripping with or w/o asbestos			X			

## The following methods are used to develop the subcontracting goals:

American Hydro's Program Administrator works with the various functional departments to determine the goods or services that can be obtained through subcontracting. Once such a determination is made, members of American Hydro's procurement team and the Program Administrator develop small business subcontracting goals.

Once goals are established, the Program Administrator utilizes the experience of the American Hydro purchasing team, market research tools, and reviews the company's experience regarding the availability of small businesses to meet specific requirements in services being provided under the contract. The capabilities and past performance of the small businesses are considered in determining whether to consider the inclusion of these small businesses in the goals. Reasonable goals are established based on determination of the type and value of the needed subcontractors and the availability of the qualified firms. Qualified small, small disadvantaged, women-owned small, HUBZone small, veteran-owned small and service-disabled veteran-owned businesses are used to establish program goals, whenever possible.

Proposal Phase process - American Hydro's Program Administrator and tendering department will make a good faith effort to acquire articles, equipment, supplies, services, or materials, or obtain the performance of construction work from the small business concerns that the offeror used in preparing the bid or proposal, in the same or greater scope, amount, and quality used in preparing and submitting the task order bid proposal related to the contract. This will be completed by identifying the work scope in the task order and approaching either new SB at the solicitation job walks, SB seminars, workshops and industry days or identifying previously qualified SB used for past similar work scope for certain supplies or field service to perform a portion of the contract. A qualification request for new SB as potential subcontractors will be completed per our procurement process. American Hydro will then use the small business concern's competitive pricing or cost information or technical expertise in preparing the bid or proposal, where there is written evidence of an intent or understanding that the small business concern will be awarded a subcontract for the related work if the offeror is awarded the specific task order in the contract.

Project Phase Process- Once the project is awarded, the project will be turned over to an American Hydro project Manager. The SB goals and SB pricing quotes will be discussed in a turnover meeting and the Project manager will work with the SB Program Administrator to award competitive SB subcontractor for specific supplies or field Service related to the task order. The project management group will continuously look for qualified SB during the task order execution and for any change orders. The Project manager and Program Administrator will assure timely payment is made to all SB Subcontractors for work scope performed.

American Hydro will conduct internal workshops, seminar and training programs to educate its employees about the company's subcontracting goals and monitor the activities of its staff to evaluate compliance with this subcontracting plan. Key subcontractors required to, in turn, subcontract services and products, will receive coaching from American Hydro to assist in seeking out small disadvantaged business concerns.

## SIGNATURE PAGE

### **CITY OF TACOMA – DEPARTMENT OF PUBLIC UTILITIES – TACOMA POWER**

All submittals must be in ink or typewritten and must be executed by a duly authorized officer or representative of the bidding/proposing entity. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

Submittals will be received and time stamped only at the City of Tacoma Procurement & Payables Division, located in the Tacoma Public Utilities Administration Building North, 4<sup>th</sup> Floor, at 3628 South 35<sup>th</sup> Street, Tacoma, WA 98409. **See the Request for Qualifications page near the beginning of the specification for additional details.**

#### **REQUEST FOR QUALIFICATIONS SPECIFICATION NO. PG20-0325F Cushman 2 Unit 31, 32 Rebuild Project**

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

#### **Non-Collusion Declaration**

*The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).*

#### **American Hydro Corporation**

Bidder/Proposer's Registered Name

135 Stonewood Road, P. O. Box 3628

Address

York, PA 17402

City, State, Zip

gerry.russell@ahydro.com

E-Mail Address

23-2426636

E.I.No. / Federal Social Security Number Used on Quarterly  
Federal Tax Return, U.S. Treasury Dept. Form 941



Digitally signed by Gerard J. Russell  
DN: cn=Gerard J. Russell, o=American  
Hydro Corporation,  
email=gerry.russell@ahydro.com, c=US  
Date: 2021.02.18 13:29:08 -0500

02/29/21

Signature of Person Authorized to Enter  
into Contracts for Bidder/Proposer

Date

Gerard J. Russell, President

Printed Name and Title

717-755-5300

(Area Code) Telephone Number / Fax Number

601-357-167

State Business License Number

in WA, also known as UBI (Unified Business Identifier) Number

AMERIHCO75C2

State Contractor's License Number

(See Ch. 18.27, R.C.W.)

Addendum acknowledgement #1 X #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_

***THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.***

**Attachment C**  
**Index of Confidential and Proprietary Information**  
**Cushman 2 Unit 31, 32 Rebuild Project**

Per Section 6.16 of the Request for Qualifications, in the index below, please provide the affected pages or sections and locations of all material identified Confidential or Proprietary.

Item Number	Page Number	Section	Description
all	1-67	all	Entire document is Confidential and Proprietary.



City of Tacoma, WA

**TACOMA POWER / GENERATION  
REQUEST FOR QUALIFICATIONS  
CUSHMAN 2 POWERHOUSE UNIT 31, 32 REBUILD PROJECT  
SPECIFICATION NO. PG20-0325F**

# Cushman 2 Powerhouse

## Unit 31, 32 Rebuild Project



### Request for Qualifications (RFQ)

#### Design-Build Services

**PG20-0325F**

RFQ Release Date:

**January 14, 2021**

Statement of Qualifications (SOQ) Submittal Deadline:

**February 23, 2021 at 11:00 AM (PDT)**

**PROJECT LOCATION:** Cushman 2 Powerhouse, Mason County, WA

**PROJECT DESCRIPTION:** The City of Tacoma seeks Statements of Qualifications (SOQs) from qualified firms to provide Design-Build (DB) Services for the Cushman 2 Unit 31, 32 Rebuild Design-Build Project (Project). The Project will consist of design, manufacturing, procurement, and construction services for the replacement, repair, and refurbishment of components of two (2) vertical hydroelectric turbine-generator units. The Allis-Chalmers units were originally installed in the 1930's and are rated 30 MVA each.

**DB CONTRACT ESTIMATE:** \$20,000,000 – \$22,000,000

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**City of Tacoma  
Tacoma Power / Generation**

**REQUEST FOR QUALIFICATIONS PG20-0325F  
Cushman 2 Unit 31, 32 Rebuild**

**Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, February 23, 2021**

**Submittal Delivery:** Sealed submittals will be received as follows:

**By Email:**

[bids@cityoftacoma.org](mailto:bids@cityoftacoma.org)

Maximum file size: 35 MB. Multiple emails may be sent for each submittal

**Bid Opening:** Held virtually each Tuesday at 11AM. Attend [via this link](#) or call 1 (253) 215 8782. Submittals in response to a RFQ will be recorded as received. As soon as possible on the day of submittal deadline, preliminary results will be posted to [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

**Solicitation Documents:** An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

- [Register for the Bid Holders List](#) to receive notices of addenda, questions and answers and related updates.
- Click here to see a [list of vendors registered for this solicitation](#).

**Pre-Proposal Meeting:** A pre-proposal meeting will be held virtually January 21, 2021 at 11:00 a.m. PST. Attend [via this link](#). Firms requiring telephone access to this meeting can direct inquiries to Doreen Klaaskate, Senior Buyer at [dklaaskate@cityoftacoma.org](mailto:dklaaskate@cityoftacoma.org). The City requests that firms have a maximum of two representatives for this meeting.

**Project Scope:** The City of Tacoma seeks Statements of Qualifications (SOQs) from qualified firms to provide Design-Build (DB) Services for the Cushman 2 Unit 31, 32 Rebuild Design-Build Project (Project). The Project will consist of engineering design and analysis, materials procurement, manufacturing, and construction services for the replacement, repair, and refurbishment of components of two (2) vertical hydroelectric turbine-generator machines to extend the reliable service life for 40 years.

**Estimate:** \$20,000,000 - \$22,000,000

**Paid Leave and Minimum Wage:** Effective February 1, 2016, the City of Tacoma requires all employers to provide paid leave and minimum wages, as set forth in Title 18 of the Tacoma Municipal Code. For more information visit [www.cityoftacoma.org/employmentstandards](http://www.cityoftacoma.org/employmentstandards).

**Americans with Disabilities Act (ADA Information):** The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing Gail Himes at [ghimes@cityoftacoma.org](mailto:ghimes@cityoftacoma.org), or by calling her collect at 253-591-5785.

**Federal Title VI Information:**

"The City of Tacoma" in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

**Additional Information:** Requests for information regarding the specifications may be obtained by contacting Doreen Klaaskate, Senior Buyer by email to [dklaaskate@cityoftacoma.org](mailto:dklaaskate@cityoftacoma.org)

**Protest Policy:** City of Tacoma [protest policy](#), located at [www.tacomapurchasing.org](http://www.tacomapurchasing.org), specifies procedures for protests submitted prior to and after submittal deadline.



Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.



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### Attachment

Attachment A	Contractor Qualification Form (State Responsibility Form Reciprocal Bidder Information)
Attachment A-1	Supplemental Bidder Responsibility Form
Attachment A-2	Certification of Compliance with Wage Payment Statutes
Attachment B	City’s Signature Page – Receipt of Addenda
Attachment C	Index of Confidential and Proprietary Information
Attachment D	Draft Contract
Attachment E	Draft General Terms and Conditions
Attachment F	Draft Insurance Requirements

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## 1.0 INTRODUCTION

The City of Tacoma (City), is using a two-step process to select a Design-Builder for the rehabilitation of two hydroelectric turbine-generator units (Unit 31, 32) at the City's Cushman 2 Powerhouse utilizing the Design-Build (DB) project delivery method authorized under RCW 39.10. The City was granted project approval from the State of Washington Capital Projects Advisory Review Board, Project Review Committee on December 3, 2020 to use the Design-Build delivery method.

This Request for Qualifications (RFQ) initiates the first step of the procurement, wherein the City will evaluate submitted Statements of Qualifications (SOQs) from experienced Proposers (which may include joint ventures) and select up to three (3) of the highest ranked Proposers (Finalists) to participate in the second step of the procurement. The second step consists of a Request for Proposals (RFP) process to submit competitive sealed Proposals for design and construction of the Project, as more specifically described in the RFP documents. The City intends to award the Design-Build Contract for the Project to the Finalist offering the Proposal that is ranked highest.

The City will pay an honorarium of \$40,000 to all non-successful Finalists who fully participate in the RFP process, including but not limited to submitting a responsive Proposal.

City personnel, in addition to technical consultants and a design-build advisor, have formed a team to provide technical oversight and design-build support for the Project. The City desires to partner with the Design-Builder to execute the Project, as described in the RFQ, and as will be described further in the RFP, and the final Design-Build Contract.

For clarity throughout the RFQ, the following terms and definitions apply.

**City** – The terms City, City of Tacoma, Owner, and Tacoma Power are synonymous and interchangeable in respect to this RFQ.

**Contract or Design-Build Contract or DB Contract** – The design-build contract the City anticipates executing through this procurement process, as provided under RCW 39.10.330.

**Design-Build Team** – The prime contractor, designer, and major and specialty subs and suppliers including, but not limited to, those parties performing the following: design, supply and/or manufacturing of major components, rotor pole refurbishment, machining, installation, disassembly and reassembly, alignment, and commissioning and testing.

**Design-Builder** – The firm or joint venture awarded the Design-Build Contract.

**Finalists** – The short-listed Proposers after SOQ evaluation.

**Major and Specialty Work** – includes design, supply and/ or manufacturing of major components, rotor pole refurbishment, machining, installation, disassembly and reassembly, alignment, and commissioning and testing.

**Proposers** – The firms or joint ventures responding to the RFQ; proposed Design-Builder.

## 2.0 PROJECT DESCRIPTION

### 2.1 Reasons for Using Design-Build Delivery

Hydroelectric turbine-generator rehabilitation is highly specialized work that requires simultaneous design, material sourcing, and manufacturing, which then must be coordinated and integrated with shipment, installation, and commissioning to meet outage schedules and reduce outage durations; this process lends itself to the use of a design-build project delivery method. The City will also use the design-build project delivery method to maximize innovation and efficiencies between the designer and the builder for this technical and complex integration of processes.

## 2.2 Project Background and Scope

The Cushman 2 Powerhouse located near Hoodspport, WA was constructed in the 1930's and today includes three vertical Francis hydroelectric turbine-generators. The powerhouse originally had two units, Units 31 and 32. The turbine-generators were supplied by Allis-Chalmers and include a vertical shaft and Francis-type turbine with a single turbine guide bearing. The generator components include a vertical shaft with a combined guide and thrust bearing mounted above the rotor and a guide bearing mounted below the rotor.

The Project will consist of design, procurement, manufacture and construction services to rehabilitate Unit 31 and 32 which have reached the end of their useful life. The third unit (Unit 33) is not included in the scope of work for this Design-Build project. The generators are rated 30 MVA at 0.9 power factor with a rated terminal voltage of 12.6kV. The turbines have a synchronous speed of 300 rpm, outlet diameter of 88.75 inches, design net head of 455 feet. The plant is not equipped with draft tube gates so the water elevation within the telescopic draft tube at high tide submerges the runner band 2" or Tacoma City elevation 10.72'. Unit centerline is EL 12.55'. The bottom ring is one piece coupling the scroll case and telescopic draft tube. The bottom ring is considered non-removable and may be considered for redesign and replacement.

The anticipated scope of work for the project includes:

- Unit disassembly
- Refurbish the runner
- Perform condition assessment of major turbine and generator components
- Perform fatigue and FEA on critical components
- Replace the wicket gates
- Add wicket gate leaf end seals in headcover and bottom ring facing plates
- Replace wicket gate stem seals
- Install greaseless bushings for wicket gates, the operating ring and the linkages
- Refurbish servomotors
- Restore runner inner and outer crown seal water to turbine
- Add runner band seal water to turbine
- Add blowdown air to support synchronous condense mode of operation
- Cleanup and coat the water passages
- Refurbish the turbine pressure relief valve
- Refurbish existing headcover air inlet valve. Analysis of expanding air inlet system.
- Rewind the stator
- Replace the stator core (continuously stacked)
- Refurbish the rotor poles
- Refurbish the stator frame
- Provide screening and dehumidification on generator cooling inlet air
- Convert generator to totally enclosed water cooled
- Add instrumentation to generator and turbine
- Reassemble and commission the unit

*Engineering and design* is expected to include, but is not limited to: finite element analysis of highly stressed components to predict remaining life of those components that are to be re-used; wicket gates; wicket gate end seals; greaseless bushings; stator frame modifications or new stator frame; stator core; stator windings; generator cooling modifications; and rotor pole refurbishment. Analysis will

also include resonant frequency analysis for stator core and frame. *Refurbishment* of the turbine-generator components is expected to include, but is not limited to: media blasting; non-destructive examination; engineering analyses; general repairs and refurbishments; modifications; repair of cavitation, erosion, and wearing/galling; machining; and painting, bearings and lubrication system, as well as supply and installation of replacements for worn components such as bushings, seals, wearing rings, etc.

*Site services* are expected to include, but are not limited to: signature testing on the unit before and after the rebuild; unit disassembly; unit inspections; field machining of components; hazardous materials abatement; media blasting and recoating of turbine and generator parts, as necessary; unit reassembly; machine alignment per industry standards; unit check out, start-up, and commissioning; and performance testing.

*Documentation* shall be provided and include, but not be limited to, O&M manual for generator and turbine. Provide general assembly drawings, subassembly drawings, detail drawings. Drawings shall show all necessary dimensions and fabrication details, including the type and grade of materials, details of welded and bolted joint connections, tolerances on fits and clearances, surface finish, painting, nondestructive examinations, and all field joints.

## 2.3 Project Goals

The City has established the following Project Goals:

1. **Maximize the Project Budget and Efficiency of Operations.** The Design-Builder will efficiently design and construct the Project to:
  - a. Optimize capital investment by working collaboratively with the City to determine the best value scope and solutions.
  - b. Re-certify existing re-used components to meet or exceed specified project service life and other requirements.
  - c. Maximize efficiency by extending the timing between future outages and rewinds and reducing the need for both routine maintenance and infrequent major maintenance.
  - d. Extend unit service life to additional 40 years.
2. **Excellent Design-Build Performance.** The Design-Builder will use a management approach to achieve the following objectives:
  - a. Appropriate decision-making authority for on-site personnel and an expedited analysis/decision process so that decisions by the Design-Build Team are made in a timely fashion so as not to impact the project schedule or delay the unit outage.
  - b. Excellent and intentional communication and collaboration with the City.
  - c. Transparent operations and decision making to reduce surprises to the City and reduce material changes to the project.
  - d. Reduced schedule delays and outages in the context of this project.
  - e. Provide timely resolution to issues, including specifically any issues discovered during the rehabilitation.
  - f. Reliable supply chain and a proven materials procurement plan.

- g. No recordable safety incidents.
  - h. Manage the identification, location, and remediation of hazardous materials located at the jobsite.
3. **Quality.** The Design-Builder will employ a robust and effective Quality Management Plan and demonstrate superior technical expertise of personnel performing the work to achieve the following objectives:
- a. Exceed technical and quality requirements for the Project.
  - b. Development and implementation of a clear and thorough Quality Management Plan that actively and transparently discovers, tracks, and successfully resolves quality issues before they impact schedule and cost.

#### 2.4 Project Funding

The overall project was approved as part of the 2021/22 budget by the Tacoma Public Utility Board with funds available in Tacoma Power's capital program. The estimated spend for the 2023/24 biennium will be included in the City's 2023/24 budget.

#### 2.5 Project Schedule

The following is the anticipated project schedule. The City intends to complete the Design-Builder selection process and execute a contract with the selected Design-Builder in a timely and efficient manner. The dates listed are preliminary and may be adjusted by the City during the procurement or project execution phases.

Key Milestones	Target Date(s)
<b>Step 1 – RFQ Phase</b>	
RFQ Released for Advertisement	January 14, 2021
RFQ Virtual Review Meeting	January 21, 2021
Deadline for Submitting Questions	February 5, 2021
Last Day for City response to questions and to Issue Addenda	February 12, 2021
Statement of Qualifications Deadline	February 23, 2021 at 11:00 AM PDT
Notification of Finalists	March 2021
<b>Step 2 – RFP Phase</b>	
RFP Issued	April 2021
RFP Virtual Review Meeting	April 2021
Mandatory Site Visit	April 2021
Proprietary Meeting #1	May 2021
Proprietary Meeting #2	May 2021
Deadline for Submitting Questions	June 2021

Key Milestones	Target Date(s)
Last Day for City response to questions and to Issue Addenda	June 2021
Proposal Deadline	June 2021 at 11:00 AM PT
Proposal Evaluation	July 2021
Interviews	July 2021
Announcement of Highest-Ranked Finalist	July 2021
Design-Build Contract Negotiations	August – September 2021
Design-Build Contract Execution	November 2021
<b>Project Execution</b>	
Engineering and Design	December 2021 – Ongoing
Manufacturing	February 2022 – Ongoing
Unit 32 Outage – Construction, Commissioning and Operational Testing	April – October 2023
Unit 31 Outage – Construction, Commissioning and Operational Testing	April – October 2024
Project Closeout	November – December 2024

### 3.0 REQUEST FOR QUALIFICATIONS

#### 3.1 Eligibility

Proposers who have a qualified Design-Build Team and are interested in being considered for selection as the Design-Builder may submit a SOQ in accordance with the requirements set forth in this RFQ. Attention is directed to Attachments A, A-1 and A-2 for eligibility and minimum qualifications.

#### 3.2 Statement of Qualification (SOQ) General Requirements

SOQs must address each topic below in a clear, comprehensive, and concise manner and in the format and order described below. SOQs should be prepared to provide straightforward and concise information that will enable the City's Selection Advisory Committee (SAC) to efficiently evaluate them.

The SOQ shall be formatted as follows:

1. Table of Contents. Refer to Section 3.5 for required sections and order.
2. Use tabs, or electronic bookmarks to separate the required SOQ sections.
3. The City has strict page limits for certain sections of the SOQ as shown in Section 3.5. Any pages that exceed the page limit will not be considered for purposes of evaluation. While the City does not intend to reject SOQs for exceeding page limits, it will not consider any information on pages that exceed the page limitation for an individual section.
4. All SOQs shall be in an 8 ½" by 11" format with the exceptions noted. Proposers may use 11" by 17" format for plans, figures, drawings, schedules, exhibits, tables, or other illustrative and graphical information used in responding to the RFQ requirements. All 11" by 17" pages will be counted as one page. Pages in 11" by 17" format may not be used for narrative responses.



5. All information shall be in English.
6. All narrative text shall be single-spaced in a regular style font at a minimum of 11 points. The type style and size of headings and figures are not prescribed.
7. No text, tables, figures, photos, or other substantive content shall be printed within 1.0 inch of any page edge.
8. SOQs should only include information required by this RFQ.
9. SOQs shall be digital in PDF format. The complete SOQ shall be contained in a single, unlocked, searchable PDF file with bookmarks.
10. SOQs shall be submitted per the instructions on the information page located at the front of the RFQ. Proposers have full responsibility for ensuring that their SOQs are received by the City by the SOQ deadline.

### **3.3 RFQ Submittal (SOQ) Evaluation Process**

SOQs will be evaluated by a Selection Advisory Committee (SAC). The SAC will be comprised of individuals familiar with the Project and knowledgeable in the scope of work, including representatives from the City and the City's technical consultants.

The SAC will first review SOQs for initial decisions on SOQ responsiveness and on Proposer responsibility. Attachment A – Contractor Qualification Form, Attachment A-1 – Supplemental Bidder Responsibility Form, Attachment A-2 – Certification of Compliance with Wage Payment Statutes, signed documents, completion of required forms, and other initial elements of responsiveness and responsibility will be reviewed during initial screening. Those SOQs and Proposers found responsive and responsible will continue to be evaluated and scored.

The City reserves the right to determine, in its sole discretion, which projects submitted by the Proposer meet the definition of "Projects of Similar Scope and Complexity" and to award more points to Proposers who have performed work on projects that incorporate more of the characteristics set forth in this definition and that are more recent. The City also reserves the right to award more points to projects in which the Proposer's Key Personnel had substantial responsibility for their respective scopes of work.

The SAC will evaluate and score the SOQs using the evaluation criteria and weighting presented in this RFQ. SOQs will be scored and then ranked in relation to all other SOQs submitted. Scores will be subjective and may range from zero points to the maximum points available, depending on the appropriateness and completeness of the response to the stated criteria.

The SAC will identify significant and minor strengths and weaknesses from the SOQs. The term "strength" is that part of the SOQ which ultimately represents a benefit to the Project and is expected to increase the Proposer's ability to meet or exceed the Project Goals; a minor strength has a slight positive influence and a significant strength has a considerable positive influence on the Proposer's ability to exceed the Project Goals. The term "weakness" is that part of the SOQ which detracts from the Proposer's ability to meet the Project Goals and may result in inefficient or ineffective performance; a minor weakness has a slight negative influence and a significant weakness has a considerable negative influence on the Proposer's ability to exceed the Project Goals.

The City may contact references furnished by Proposers at any stage in the selection process and may contact other sources that may not have been named by the Proposer but can assist the City in evaluating Proposers.

The City may perform a review of any Proposer's financial status and capacity to perform the work. All Proposers shall comply with requests for information that are deemed necessary by the City to perform a reasonable review of the firm's financial status. The City reserves the right to reject any Proposer if the City's analysis of the Proposer's financial status and capacity indicates, in the City's sole judgment, that the Proposer will not be able to successfully perform the work.

The City intends to select up to the three (3) highest ranked teams to form the short list to which the City intends to issue a RFP. The City will notify all Proposers submitting SOQs of the highest ranked Proposers who will be invited to submit Proposals in response to the Final RFP issued by the City. Scoring from the RFQ will not carry forward or be used in the determination of the selection of the Design-Builder during the RFP phase.

### **3.4 Projects of Similar Scope and Complexity**

The term "Projects of Similar Scope and Complexity" as used in this RFQ refers to projects the Proposer has successfully completed in North America within the last ten (10) years which have many, or all, of the characteristics listed below where the Proposer had prime responsibility. This term will be used when evaluating SOQs.

1. Projects that involved the refurbishment of generators (with minimum scope of new stator core with improved core clamping, new stator windings, and rotor pole reinsulation) rated between 10 and 50 MVA and of a similar speed range to Cushman Unit 31 and 32. Experience with Allis-Chalmers generators, particularly those of similar vintage as Cushman Unit 31 and 32.
2. Projects that involved the refurbishment of Francis turbines that generate between 10 and 50 MW. Experience with Allis-Chalmers turbines, particularly those of similar vintage as Cushman Unit 31 and 32.
3. Projects that included engineering , manufacturing and installation of new turbine-generator components, including at a minimum stator core laminations and windings, wicket gates, wicket gate end seals, and greaseless wicket gate bushings.
4. Projects that included synchronous condensing capabilities in an existing unit.
5. Projects that included conversion from an open ventilated generator to a totally enclosed water-cooled unit.
6. Projects that involved FEA and fatigue analysis of critical turbine-generator components.
7. Projects that required strong coordination and integration of the design and construction professionals and collaboration with the owner.
8. Projects where the contractor/vendor improved the functionality and life cycle performance of the generators.
9. Projects that involved complete construction services, including, unit disassembly, site machining of embedded and other components, rigging/handling/transportation of large and heavy components, unit reassembly, and machine alignment.

10. Projects that involved turbine-generator testing, such as signature testing, turbine index testing, generator performance and other testing, etc.
11. Projects that involved hazardous materials remediation.

### 3.5 RFQ Submittal (SOQ) Evaluation Criteria

The SOQs submitted by the Proposers should contain information demonstrating how the proposed team meets the evaluation criteria below. The SOQ must include a Table of Contents (not included in the maximum page count of the SOQ) and be organized by sections corresponding to the criteria, in the order shown below.

SOQ Section No.	Section Title and Required Information	Maximum Pages	Points Available
1	Contractor Qualification Form; Supplemental Bidder Responsibility Form; Certification of Compliance with Wage Payment Statutes Form	-	Pass/Fail*
2	Letter of Interest	2	Pass/Fail*
3	Design-Build Team Qualifications and Past Performance References	10**	35
4	Key Personnel Experience and Qualifications	5***	35
5	Ability to Perform	5	15
6	Excellence in Design	3	10
7	Utilization of MWBE-Certified Businesses	2	5
8	Forms <ul style="list-style-type: none"> <li>City's Signature Page*</li> <li>Index (confidential and proprietary information)</li> </ul>	- -	Pass/Fail* NA
	<b>TOTAL POINTS</b>		<b>100</b>

*\*Failure to submit information will result in disqualification of the SOQ*

*\*\*Page count does not include Identification of Projects Table*

*\*\*\*Page count does not include resumes for Key Personnel. Each individual resume shall not exceed two pages.*

### 3.6 Contractor Qualification

Submit a completed Contractor Qualification Form (Attachment A), Supplemental Bidder Responsibility Form (Attachment A-1), and Certification of Compliance with Wage Payment Statutes (Attachment A-2). Based on information provided, the City will review and determine, at its sole discretion, whether the Proposer's SOQ will be further reviewed and considered for this work.

If the Proposer is a joint venture or team of firms, a Contractor Qualification Form and related materials shall be submitted for each member of the joint venture or proposed team. A letter of agreement to partner on the project between firms shall be provided. The City reserves the right to

deem as “non-responsive” and reject any Proposer’s SOQ which does not provide this information or, in its sole discretion, “fails” this portion of the SOQ selection criteria.

### **3.7 Letter of Interest**

At a minimum include the name of the entity submitting as the Proposer and the primary point of contact with address, email, telephone number, and the signature of an authorized representative.

The Letter of Interest should introduce your firm (or joint venture or proposed team), provide supplementary information about your firm and proposed Design-Build Team that is not provided elsewhere in the SOQ, and explain what makes your team unique and the best fit for the Project. The Letter of Interest should also include the address of the office that will oversee and manage the Project, including design, manufacturing and construction.

The City is looking to partner with a Design-Build Team with demonstrated qualifications and experience from Projects of Similar Scope and Complexity.

### **3.8 Design-Build Team Qualifications and Past Performance References**

Please provide a narrative which includes the following information regarding the Proposer’s experience and technical capabilities. For all Major and Specialty Work the Proposer intends to subcontract to a Design-Build Team member, include the subcontractor’s and/or supplier’s experience and technical capabilities. The Proposer’s experience and capabilities should be drawn from and reference three (3) to five (5) Projects of Similar Scope and Complexity that the Proposer has completed.

1. Overall hydro turbine-generator analysis capabilities, including the number, size, and location of turbine-generators assessed and analyzed in the last 10 years. Demonstrate analysis capabilities directly relevant to the Cushman 2 Unit 31, 32 Rebuild anticipated scope of work (e.g., resonant frequency modeling, analyses to evaluate and improve generator ventilation, generator uprate analyses, wicket gate and headcover FEA).
2. Overall hydro turbine-generator design capabilities, including the number and location of new or refurbished turbine-generators designed and installed in the last 10 years. Demonstrate design and installation capabilities directly relevant to the Cushman 2 Unit 31, 32 Rebuild (e.g. stator winding designs in the 12.6 kV voltage class or higher, design of replacement stator cores with improved core clamping for existing machines, field pole rehabilitation or replacement, and refurbishment engineering of turbines of similar vintage).
3. Manufacturing capabilities to handle hydro turbines and generators of similar weight and dimensions to Cushman 2 Unit 31, 32 (e.g. rotor-and-shaft weight of 121 tons, stator assembly weight of 67.5 tons, stator bore inside diameter of 139.5 inches, generator shaft length of 247.25 inches, and runner outside diameter 95.7 inches).
4. Overall on-site construction and commissioning capabilities. Experience with unit disassembly and reassembly and unit alignment. Experience with site field machining, fabrication, and modification of turbines and generators of similar weight and dimensions to Cushman 2 Unit 31, 32. Experience with generator performance testing and turbine index and vibration testing. Demonstrate on-site construction capabilities directly relevant to the Cushman 2 Unit 31, 32 Rebuild (e.g. stacking and winding the

stator; inspection, non-destructive examination, and repair of turbine and generator components).

5. Demonstrate experience working in a collaborative team to develop the best value-engineered solutions to technical issues and to deliver projects on schedule and within budget. Projects may be the same or in addition to those listed in the Identification of Projects Table.

In addition to the information provided in the narrative above, provide the information requested below for the referenced three (3) to five (5) Projects of Similar Scope and Complexity.

The information below must be submitted in an Identification of Projects Table. The Identification of Projects Table may be submitted on 11" x 17" paper and shall be no more than three pages in length. The Proposer is responsible for ensuring that contact information contained in the table is correct. The inability to contact a reference may have a detrimental impact on the evaluation of qualifications. The City reserves the right to contact any person listed in the Identification of Projects Table or any other person with knowledge regarding any project in which any Key Personnel or Design-Build Team member participated.

1. Project name, name of owner, and location;
2. A description of the project;
3. Contract type (e.g., design-build, design-bid-build, general contractor / construction manager (GCCM), guaranteed maximum price (GMP), other);
4. Indicate if the project meets all the elements of the definition of "Projects of Similar Scope and Complexity";
5. Contract duration from date of notice-to-proceed to the date of physical completion;
6. Original Substantial Completion Date, Actual Substantial Completion Date, and explanation for difference, if any;
7. Awarded contract price and final contract price, including all change orders, with an explanation of the difference, if any, between the award contract price and final contract price;
8. The identity and role played by each of the Design-Build Team members (companies) and each of the Key Personnel (individuals) on each project and if they stayed in the role for the duration of the project;
9. Name, position, and contact information for the owner's representative who is most familiar with the Proposer's work on the project.
10. Identify any key personnel proposed for this project who have worked on these example projects to demonstrate experience.

### **3.9 Key Personnel Experience and Qualifications**

Provide a narrative describing the experience and qualifications of your Key Personnel for the roles identified below. Identified Key Personnel must have the minimum required years of experience shown on the below table. The City expects a single person for each specific key role; the same person may not be assigned to multiple Key Personnel roles unless the individual has sufficient hands-on experience performing an additional role. Roles for Key Personnel should include, but are not limited to, the following:

- Project Manager
- Project Engineer/System Integrator (if applicable)
- Lead Turbine Engineer
- Lead Generator Engineer
- (Onsite) Construction Manager/Superintendent
- Rewind/Restack Supervisor
- Turbine Supervisor
- Site Safety Manager

<b>Key Personnel Title</b>	<b>Minimum Required Years of Experience</b>
Project Manager	5
Project Engineer/System Integrator (if applicable)	10
Lead Turbine Engineer	10
Lead Generator Engineer	10
(Onsite) Construction Manager/Superintendent	10
Rewind/Restack Supervisor	10
Turbine Supervisor	10
Site Safety Manager	5

Proposers are encouraged to highlight situations where Key Personnel have worked together on previous Projects of Similar Scope and Complexity.

For all Key Personnel roles, identify an equivalent back up individual should the Key Personnel identified becomes unavailable during the Project duration.

Please provide resumes (no more than two pages each) for Key Personnel and their identified backup that include the following information.

1. Name, current firm, geographic location, current title, and years employed by current firm;
2. If employed less than five (5) years at current firm, please list previous firm, previous title and years employed by previous firm;
3. Total years of professional experience;
4. Total years of professional experience in designated role for this project;
5. Education, certifications, professional registration and licenses held;
6. Proficiency in English and other languages;
7. Proposed role on the Project;
8. Proposed percent time involvement during the various project phases – design,

manufacturing and procurement, field construction, and startup and commissioning. Identify and discuss the impact of current assignments and other potential projects on the availability of the Key Personnel for this Project.

9. Provide at least one (1) previous project (include project and owner name, description, current status, dates of involvement) that demonstrates experience that will assist in achieving or exceeding the Project Goals in the role on this Project;
10. Provide three (3) professional references, including name, title, phone number, and email address. References may not be current City employees, and may be checked only for the highest-scoring Proposer teams. Please ensure all reference information provided is current and correct. References may be contacted by the City and used as part of the evaluation process, including references not provided by the Proposer.
11. Organizational Chart and Key Personnel Availability: Provide a Cushman project-specific organizational chart showing the overall organizational structure and hierarchy for all Project Team Members including Key Personnel. Provide a narrative of the proposed project team, including the firms and the individual team members (personnel), and how the organizational structure will result in an integrated and cohesive team for managing the project. Chart may be submitted on 11"x17" paper. Chart will count towards the page limit of this section.

### **3.10 Ability to Perform**

Describe Proposer's abilities in managing, performing, and completing design-build projects or construction Projects of Similar Scope and Complexity. Demonstrate through past performance the Proposers' ability to exceed the Project Goals and achieve Design Excellence.

Concisely discuss past successes in the following:

1. Facilitating cooperation with owner teams and third parties.
2. Past project where team members, reporting structures, and various disciplines work well regarding unforeseen conditions and/or a difficult owner. Describe how Proposer addressed the challenges and why it was successful.
3. Past project that included multiple units over multiple years.
4. How work is tracked during an outage to ensure that the overall schedule is maintained.
5. Being responsive to owner's requests (scope and quality) and exceeding Project Goals.
6. How Proposer's firm effectively manages project schedule and budget.
7. Being self-sufficient on site (e.g., supplying appropriate tooling, equipment, and personnel to complete work without assistance from the owner).
8. Discuss how Proposer's corporate culture encourages safety.

### **3.11 Excellence in Design**

Provide at least two project examples where your team (or each member of your team) has achieved a high level of design quality leading to a reduction in project costs, duration, or improved project safety while maximizing value and without compromising quality or project requirements. Examples may include, but are not limited to, increased capacity or efficiency, unique design features such as resonant frequency analysis on the stator core and frame or construction methods,

operational considerations, increased duration between maintenance outages, or entire overall projects. Examples may also include how safety was incorporated into design, fabrication, and site work. Projects described here may be in addition to those requested above.

### **3.12 MWBE Experience**

Describe your team's programs, approaches, and specific steps used to include diverse businesses including, but not limited to, certified Minority & Women's Business Enterprises (MWBE) in previous Projects of Similar Scope and Complexity. Using specific past project examples, highlight strategies that were successful in increasing diverse-business participation.

For past Projects of Similar Scope and Complexity provide examples of scope of work that was awarded to MWBE.

Identify scope items from this RFQ which you would solicit interest from MWBE companies should you be shortlisted.

The City may require inclusion of MWBE companies as part of the final award.

## **4.0 REQUEST FOR PROPOSALS**

Finalists from the RFQ stage will be notified in writing and issued an RFP. Only the Finalists may submit a Proposal in response to the RFP.

The RFP will consist of the documents listed below that will provide a more detailed description of the scope of work and to provide a more complete context within which Finalists can appreciate the nature of the work and the relevant experience and expertise being sought from the Finalists.

### Volume 1

- Instructions to Finalists
- Proposal Submittal and Forms
- Draft Contract Forms
- Draft Design-Build Contract

### Volume 2

- General Terms and Conditions
- General Requirements
- Technical Specifications
- Information Available to Finalists
- Reference Drawings

### **4.1 Scope of RFP**

Finalists will be required to put together a Technical Proposal comprised of a preliminary design package, a detailed project schedule, a project management plan, and other project-related information based on the General Requirements and Technical Specifications of the RFP. The City estimates a 20%-30% design effort, including preliminary drawings, design calculations, component analysis, and conceptual design. In addition to the Technical Proposal, Finalists will submit a Price Proposal.



#### **4.2 Proposal Submittal**

Finalists will submit Technical and Price Proposals on the date set forth in the RFP. The Technical and Price Proposals shall be submitted as separate packages.

#### **4.3 Site Visit and One-on-One (Proprietary) Meetings**

The City plans to conduct one site visit and two confidential One-on-One Meetings with each Finalist which will be described in further detail in the RFP. The format of the One-on-One Meetings will be designed to allow the Finalists to ask questions regarding the Project and the City's Project Goals, for Finalists to explain the general concepts in their Technical Proposal, and for the City to observe the Finalists' ability to collaborate with their own team members and with the City. The City will provide candid feedback and direction to confirm that the proposed concepts are consistent with the Project Goals and the technical specifications. The City expects that the Finalist's Key Personnel will be participating in these meetings.

All information from the Finalists provided in the One-on-One Meetings will remain confidential during the procurement process; however, see Sections 6.15 and 6.16 of this RFQ with respect to the potential public disclosure of information provided during the procurement pursuant to Washington's public records act.

#### **4.4 Interview**

The City will hold an interview with each Finalist after the submission of the Technical and Price Proposals. During the interview, Finalists will be provided an opportunity to present their Proposals. The SAC may ask questions of the Finalists in advance of the interview to be addressed in writing or to be addressed as part of the presentation. The SAC may ask questions of the Finalists during the interview.

Presentations will be evaluated on how the technical solutions and management approach will meet or exceed the City's Project Goals. Finalists will be evaluated on their ability to address the concerns from the SAC, effectively communicate and collaborate, and provide achievable and collaborative solutions to meet or exceed the City's Project Goals.

Interview requests with specific information, including a list of the team members and Key Personnel expected to attend, will be emailed to each Finalist. At a minimum, the Project Manager, Lead Engineers and Construction Manager/Superintendent shall attend the interview. The interview will be evaluated and scored.

#### **4.5 Proposal Evaluation**

The City's SAC will evaluate the Proposals based solely on the factors, weighting, and scoring identified in the RFP and in any addenda. The Finalist with the highest score shall be selected as the Highest Ranked Finalist.

Responsible Finalists submitting responsive Technical and Price Proposals will be evaluated and scored using the criteria in the table below and following the process described below and in Section 3.3 of this RFQ.

<b>Evaluation Criteria</b>	<b>Max Points</b>
<b>Technical Proposal</b>	<b>70</b>
Design	30
Management Plan	20
Schedule	20
<b>Price Proposal</b>	<b>30</b>
<b>Equity in Contracting (EIC)</b>	<b>5</b>
<b>Interview</b>	<b>20</b>
<b>Total</b>	<b>125</b>

The Price Proposal will not be scored until after the scoring of the Technical Proposal. Each Price Proposal will be opened, and the Finalist with the lowest Price Proposal (LPP) will receive the maximum points allocated for the Price Proposal criteria. The remaining Finalists will receive a proportionate share of the points based on their Price Proposal (PP) and the following equation  $(LPP \div PP) \times \text{Max Points}$  rounded down to the next lowest whole number.

#### **4.6 Selection and Notification**

The City will notify all Finalists submitting proposals of the Highest Ranked Finalist and will also make a selection summary of the final proposals available to all Proposers within two (2) Business Days of such notification.

#### **4.7 Honorarium**

Finalists submitting responsive proposals which are not awarded a Design-Build contract will be paid an honorarium of \$40,000. The City reserves the right to issue less than the full honorarium amount in the event that, in its sole discretion, it determines that less than 100% of the requirements of the RFP were satisfactorily completed.

### **5.0 NEGOTIATION, AWARD, AND EXECUTION**

#### **5.1 Notice of Award Recommendation Letter**

The Highest Ranked Finalist will receive a Notice of Award Recommendation letter from the City, announcing the City's intent to initiate negotiations with the selected Finalist.

#### **5.2 Negotiation**

The City will initiate negotiations with the Highest Ranked Finalist to finalize the Technical Requirements and the General Terms and Conditions. If the City is unable to reach mutual agreement with the Highest Ranked Finalist, negotiations with that Finalist may be suspended or terminated, and the City may proceed to negotiate with the next highest scored Finalist. The City will continue in accordance with this procedure until mutual agreement is reached, or the selection process is terminated.

Upon successful negotiation, the City will send a Contract Award Letter that will include a request

for documents that are to be submitted within ten (10) Business Days of receipt and prior to execution of the contract, including:

1. Unless the Finalist has already submitted a Taxpayer Identification Number and Certification Request Form (W-9) to the City, the Finalist must submit this form prior to Contract Execution
2. Certificate of Insurance and all required insurance documents including endorsements
3. Evidence of required licenses for Finalist and identified Subcontractors
4. Payment and Performance Bond
5. Retainage Bond, if applicable
6. Original, signed Contract Cover (or Agreement Form)

### **5.3 Insurance Requirements**

The Finalist receiving a Contract Award Letter must promptly provide proof of insurance required for this Project. The Design-Build Contract will not be executed until all required proof of insurance has been received and approved by the City.

## **6.0 GENERAL CONDITIONS**

### **6.1 Addenda**

All RFQ documents will be posted on <http://www.TacomaPurchasing.org>. It is the Proposer's responsibility to ensure it has received a complete set of documents from the website.

Proposer's may submit written questions to the Purchasing representative at any time until the deadline stated in the RFQ. No further questions will be accepted after this date and time. The City will publish the questions and any answers on <http://www.tacomapurchasing.org>. The City reserves the discretion to group similar questions to provide a single answer or not to respond when the requested information is confidential.

The City reserves the right to revise the RFQ at any time before the submittal deadline. Such revisions, if any, will be announced by written addendum to the RFQ.

The City will issue addenda for any changes to the RFQ, which will become part of the RFQ. If an addendum is issued, all other provisions in the RFQ that are not modified remain unchanged. Addenda will be issued on <http://www.tacomapurchasing.org>.

It is the obligation and responsibility of the Proposer to learn of any addenda, responses, or notices issued by the City. Note that some third-party services may independently post City of Tacoma solicitations or other procurement documents on their websites. Proposer relying on such services do so at their own risk.

Proposers shall acknowledge receipt of addenda on the City's Signature Page (Attachment B).

### **6.2 Validity of SOQs**

Proposers agree that the information included in the SOQs, including Key Personnel, will remain valid and accurate for a minimum of ninety (90) days from submission. Finalists will be required to extend their validation through final selection and the Finalist awarded a Design-Build Contract will be required to extend through contract execution.

### **6.3 Cost of Preparing Statement of Qualifications**

The Proposer is solely responsible for all costs incurred in the preparation and presentation of a SOQ in response to this RFQ.

The City is not liable for any costs incurred by the Proposer in preparation of materials or a proposal submitted in response to this RFQ, for attending any interviews, or any other activities related to responding to this RFQ.

### **6.4 No Objections**

If the Proposer does not object to any of the provisions of this RFQ prior to the SOQ deadline, the Proposer waives all rights to protest the provisions of this RFQ. By submitting an SOQ in response to this RFQ, Proposer agrees that the process, criteria, and requirements described in this RFQ are fair and proper, and that the Proposer has no objection to any provisions of the RFQ.

### **6.5 Proposer Responsibility in Responding**

It is the Proposer's responsibility to provide a full and complete written response, which does not require interpretation or clarification by the City. The Proposer is to provide all requested materials, forms, and information. During evaluation and scoring (prior to interviews, if any), the City will rely upon the submitted materials and will not accept materials from the Proposer after the SOQ deadline; however, this does not limit the right of the City to consider additional information independently available to the City (such as references that are not provided by the Proposer but are known to the City, or past experience by the City in assessing the Proposer), or to seek clarifications from the Proposer as needed by the City.

For a Proposer proposing as a Joint Venture, each member of the Joint Venture shall separately provide their own individual information where this RFQ requests specific evidence of a Proposer's qualifications.

Proposers are advised that the City's ability to evaluate SOQs is dependent in part on the Proposer's submitting SOQs that are well-ordered, detailed, comprehensive, and readable. Proposers are responsible for errors and omissions in their SOQs. No such error or omission shall diminish the Proposer's obligations to the City.

Prior to the SOQ deadline, a Proposer may make changes to its SOQ. No change shall be allowed after the deadline. If any changes are made to the SOQ after submitting to the City and prior to the deadline, the Proposer shall contact the Purchasing representative in writing to request the return of SOQ. The Proposer will be required to resubmit the SOQ package.

### **6.6 Withdrawal**

At any time, by written request, a Proposer may withdraw their SOQ.

### **6.7 Cancellation and Rejection of Statement of Qualifications**

The City reserves the right to reject non-responsive SOQs, and may reject all SOQs for any reason at its sole discretion. The City may choose not to award and/or execute a Design-Build Contract even after declaration of the Highest Ranked Finalist. Proposers acknowledge that a Notice of Award Recommendation confers no right of contract. A decision by the City to cancel the RFQ, RFP, and/or

not enter into a contract will not be the basis of any claims or causes of action for costs or damages by any Proposers.

#### **6.8 Ex Parte Communications**

Proposers are advised to refrain from initiating and/or engaging in communications specific to this procurement with third party agencies, City consultants, and other non-designated employees of the City and its departments who may or may not have knowledge of the Project. These agencies and/or employees are not authorized to represent the interests of the City in this procurement. Proposers are advised not to rely on any information obtained other than what is provided by the designated City representative through the City of Tacoma's purchasing website. The City reserves the right to take actions deemed appropriate to the City, up to and including the disqualification of the Proposer, for engaging in unauthorized communications deemed detrimental to this procurement.

#### **6.9 Ethics**

The Proposer must be aware, familiar and comply with the City's Code of Ethics contained in Chapter 1.46 of the Tacoma Municipal Code and educate Proposer workers accordingly.

#### **6.10 Gifts and Gratuities**

A Proposer shall not directly or indirectly offer anything of value (such as retainers, loans, entertainment, favors, gifts, tickets, trips, favors, bonuses, donations, special discounts, work, or meals) to any City employee, consultant, volunteer or official.

#### **6.11 Involvement of Current and Former City Employees**

A Proposer (including officer, director, trustee, partner or employee) must not have a business interest or a close family or domestic relationship with any City official, officer or employee who was, is, or will be involved in selection, negotiation, drafting, signing, administration or evaluating Proposer performance. If a Proposer has any current or past (within the most recent 24 months) involvement with City employees, officials or volunteers that are working or assisting on this procurement or on the Design-Build Contract, Proposer must notify the Purchasing representative. The City shall make sole determination as to compliance.

#### **6.12 Organizational Conflicts of Interests**

Organizational Conflict of Interest means that because of other activities or relationships with other persons or entities, a person or entity:

1. Is unable or potentially unable to render impartial assistance or advice to the City; or
2. Is or might be otherwise impaired in its objectivity in performing the contract work; or
3. Has an unfair competitive advantage.

The integrated nature of the Design-Build project delivery method creates the potential for Organizational Conflicts of Interest. Disclosure, evaluation, neutralization, and management of these conflicts and of the appearance of conflicts, is in the interests of the public, the City, and the consulting and construction communities.

The City will take steps to ensure that individuals involved in the preparation of the procurement documents (e.g., RFQ, RFP), evaluation of SOQs and Proposals, and selection of Design-Builder are not influenced by Organizational Conflicts of Interest, and that no Proposer is given an unfair competitive advantage over another.

Proposers are required to disclose all relevant facts concerning any past, present, or currently planned interests, activities, or relationships which may present an Organizational Conflict of Interest. Proposers shall state how their interests, activities, or relationships, or those of the chief executives, directors, Key Personnel, or any proposed consultant, subconsultant at any tier, contractor, or subcontractor at any tier may result, or could be viewed as, an organizational conflict.

If an Organizational Conflict of Interest is determined to exist, the City may, at its sole discretion, offer the Proposer the opportunity to avoid or neutralize the Organizational Conflict of Interest; disqualify the Proposer from further participation in the procurement; cancel this procurement; or, if Award has already occurred, declare the Proposal non-responsive and Award the Design-Build Contract to the next highest scored Finalist, or cancel the Design-Build Contract. If the Proposer was aware of an Organizational Conflict of Interest prior to Award of a Design-Build Contract and did not disclose the conflict to the City, the City may terminate the Design-Build Contract for default.

### 6.13 Licensing and Registration

All Proposers must be registered pursuant to RCW 18.27 (Contractor's Registration Statute).

Proposers must register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, 253-591-5252, [https://www.cityoftacoma.org/government/city\\_departments/finance/tax\\_and\\_license/](https://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/).

Any resultant contract may require the additional licensing listed below. The Highest Ranked Finalist must meet all licensing requirements that apply to its type of business immediately after receiving Notice of Award Recommendation **(unless required earlier in the procurement process per this RFQ)** or the City may find the Finalist not responsible.

Before the Design-Build Contract is Executed, the Design-Builder must have a State of Washington business license (a State "Unified Business Identifier" known as a UBI#). If the State of Washington has exempted Design-Builder's business from State licensing (for example, some foreign companies are exempt and in some cases, the State waives licensing because the company does not have a physical presence in the State), then submit proof of that exemption to the City. All costs for any licenses, permits and associated tax payments due to the State because of licensing shall be borne by the Proposer and not charged separately to the City. Instructions and applications are at: <http://bls.dor.wa.gov>, and the State of Washington Department of Revenue is available at 1-800-647-7706.

In addition to the Minimum Qualifications required at the time the SOQ is submitted, no later than the Execution of the Design-Build Contract, Proposer must have an Employment Security Department Account number for Unemployment Insurance and be current on payments; and a Labor & Industries Account for Industrial Insurance (Worker's Compensation), and be current on amounts due or submit proof of being self-insured; and have a Department of Revenue tax account set up and be current on payments.

### 6.14 Team Continuity and Changes to Organizational Structure

Part of the evaluation of SOQs will be based on the qualifications of the proposed Key Personnel. A

Proposer/Finalist may not, without the written consent of the City, substitute, or change any of the Key Personnel for the duration of the selection process and for the duration of the Design-Build Contract. Requests shall not be unreasonably withheld. All proposed Key Personnel are to be committed throughout the selection process and be available for the post-Proposal Interview. If a Proposer substitutes any Key Personnel prior to Award, the City reserves the right to revise its scoring of that team.

Requests for removal, replacements, and additions shall be submitted in writing. To qualify for approval, the written request shall document that the proposed removal, replacement, or addition will be equal to or better qualified than the Key Personnel provided in the SOQ. The City will use the criteria specified in the RFQ to evaluate all requests.

#### **6.15 Requesting Disclosure of Public Records**

This procurement is subject to RCW 39.10.470(3), which provides that all documents related to a procurement under RCW 39.10.330 are exempt from disclosure until the notification of the highest scoring Finalist is made in accordance with RCW 39.10.330(6) or the selection required under RCW 39.10.330(3).

#### **6.16 Public Disclosure Proprietary and Confidential Material Must be Marked**

Proposer submittals, all documents and records related to the submittal, and all other documents and records provided to the City by Proposer are deemed public records subject to disclosure under the Washington State Public Records Act, Chapter 42.56 RCW (Public Records Act). Thus, City may be required, upon request, to disclose the Contract and documents or records related to it unless an exemption under the Public Records Act or other laws applies. In the event City receives a request for such disclosure, determines in its legal judgment that no applicable exemption to disclosure applies, and Proposer has complied with the requirements to mark records considered confidential or proprietary as such requirements are stated below, City agrees to provide Proposer 10 days written notice of impending release. Should legal action thereafter be initiated by Proposer to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Proposer, including any damages, attorneys' fees or costs awarded by reason of having opposed disclosure. City shall not be liable for any release where notice was provided and Design-Builder took no action to oppose the release of information.

If Proposer provides City with records or information that Proposer considers confidential or proprietary, Proposer must mark all applicable pages or sections of said record(s) as "Confidential" or "Proprietary." Further, in the case of records or information submitted in response to this Request for Qualifications or a subsequent Request for Proposals, an index must be provided indicating the affected pages or sections and locations of all such material identified Confidential or Proprietary. Information not included in the required index will not be reviewed for confidentiality or as proprietary before release. If Proposer fails to so mark or index Submittals and related records, then the City, upon request, may release said record(s) without the need to satisfy the requirements to mark confidential or proprietary content above; and Proposer expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s). Proposer may not simply mark everything with a document header or footer, page stamp, or a generic statement that a document is non-disclosable, exempt, confidential, proprietary, or protected.

Submission of materials in response to City's RFQ and RFP shall constitute assent by Proposer to the foregoing procedure and Proposer shall have no claim against the City on account of actions taken

pursuant to such procedure.

Proposers must be familiar with the Washington State Public Records Act and the limits of record disclosure exemptions. For more information, visit the Washington State Legislature's website at <http://www1.leg.wa.gov/LawsAndAgencyRules>).

#### **6.17 The City's Rights**

Throughout the procurement process, the City reserves the right, at its sole discretion, to:

1. Appoint evaluation committees to review SOQs and Proposals;
2. Investigate the qualifications of any Proposer;
3. Seek or obtain data related to the SOQs or Proposals from any source and consider such data in the evaluation of the SOQ;
4. Require confirmation of information furnished by a Proposer;
5. Hold meetings and conduct discussions and correspondence with the Proposers to seek an improved understanding and evaluation of the SOQs or Proposals;
6. Require additional information from a Proposer concerning its SOQ or Proposal;
7. Require additional evidence of qualifications to perform the work;
8. Modify the procurement process as permitted by law;
9. Waive minor deficiencies and irregularities in a SOQ or Proposal;
10. Reject any or all SOQs or Proposals;
11. Issue a new RFQ or RFP;
12. Conduct negotiations with the Highest Ranked Finalist prior to award of the Contract;
13. Cancel a Contract signed by the selected Design-Builder but not yet executed by the City; and
14. Not issue a Notice to Proceed after execution of the Contract.

#### **6.18 Debriefing**

Unsuccessful Proposers may ask the Purchasing representative for a debriefing, once the protest deadline has concluded and the Design-Build Contract has been signed. Debriefings may include a review of the debriefed Proposer's points for each evaluation criteria, overall ranking, the strengths and weaknesses of its SOQ and Proposal, and presentation in the interview, and answers to questions regarding the selection process.

#### **6.19 Protests**

The City has rules to govern the rights and obligations of Proposers that desire to submit a protest to this process. Please see the City website at <http://www.tacomapurchasing.org> for these rules. Proposers have the obligation to be aware of and understand these rules, and to seek clarification as necessary from the City.

#### **END OF RFQ**



**Attachments**

Attachment A	Contractor Qualification Form (State Responsibility Form Reciprocal Bidder Information)
Attachment A-1	Supplemental Bidder Responsibility Form
Attachment A-2	Certification of Compliance with Wage Payment Statutes
Attachment B	City's Signature Page – Receipt of Addenda
Attachment C	Index of Confidential and Proprietary Information
Attachment D	Draft Contract
Attachment E	Draft General Terms and Conditions
Attachment F	Draft Insurance Requirements

**Attachment A**  
**Contractor Qualification Form**

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Specification No. \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

## State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor  
(Must be in effect at the time of bid submittal):

Number: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Current Washington Unified Business Identifier  
(UBI) Number:

Number: \_\_\_\_\_

Do you have industrial insurance (workers' compensation) coverage for your employees working in Washington?

☐ Yes      ☐ No  
☐ Not Applicable

Washington Employment Security Department Number

Number: \_\_\_\_\_

☐ Not Applicable

Washington Department of Revenue state excise tax  
Registration number:

Number: \_\_\_\_\_

☐ Not Applicable

Have you been disqualified from bidding any public works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes      ☐ No  
If yes, provide an explanation of your disqualification on a separate page.

Do you have a physical office located in the state of Washington?

☐ Yes      ☐ No

If incorporated, in what state were you incorporated?

State: \_\_\_\_\_ ☐ Not Incorporated

If not incorporated, in what state was your business entity formed?

State: \_\_\_\_\_

Have you completed the training required by RCW 39.04.350, or are you on the list of exempt businesses maintained by the Department of Labor and Industries?

☐ Yes      ☐ No

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**Attachment A-1**  
**Supplemental Bidder Responsibility Form**

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**PROJECT: CUSHMAN 2 UNIT 31, 32 REBUILD PROJECT**

**SPECIFICATION NO. PG20-0325F**

**Responsibility Certification Form**

This form shall be completed in its entirety, **submitted with the SOQ response**, and shall be used to demonstrate the Proposer's, or Proposer's Design-Build Team's, experience for the minimum qualifications of the Project. Failure to submit this form is grounds for SOQ rejection.

Qualification of Proposer: Proposer, or Proposer's Proposed Design-Build Team, shall have experience delivering Projects of Similar Scope and Complexity in North America within the last ten (10) years.

**Projects of Similar Scope and Complexity shall be rehabilitation projects for 60Hz, suspended type, vertical, salient pole hydroelectric turbine-generators driven by Francis runners with minimum ratings of 12.6kV and 10MW.**

**Proposer's Company Name:** \_\_\_\_\_



SUPPLEMENTAL BIDDER RESPONSIBILITY FORM

<b>Minimum Experience Criteria</b>		
For each of the experience criteria identified below, please check the appropriate box to indicate that the Proposer, or Proposer's Design-Build Team, has the described experience on Projects of Similar Scope and Complexity.	<b>Yes</b>	<b>No</b>
Refurbished an existing generator that included design, manufacture, installation of a new stator core with improved core clamping, new stator windings, and frame refurbishment.	<input type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis with the intent of reusing and replacing existing turbine components including scroll case, draft tube, runner, shaft, seals, wicket gates, wear rings, wicket gates, shift ring, bushings, levers, etc. Analysis capabilities include component FEA, fatigue and hand calculations.	<input type="checkbox"/>	<input type="checkbox"/>
Performed detailed analysis of existing generator components including frame, upper and lower brackets, shafts (main and stub), rotor hub, rotor spider and rotor rim and rotor pole to rim connections	<input type="checkbox"/>	<input type="checkbox"/>
Refurbished or supervised the refurbishment of the poles for a salient pole hydro generator	<input type="checkbox"/>	<input type="checkbox"/>
Performed or coordinated the successful disassembly, in-situ and shop machining, welding, reassembly, alignment, balancing and commissioning	<input type="checkbox"/>	<input type="checkbox"/>
Performed refurbishment and commissioned a mushroom type, turbine pressure relief valve	<input type="checkbox"/>	<input type="checkbox"/>

<b>Financial Criteria</b>		
For each of the financial criteria identified below, please check the appropriate box to indicate that the Proposer meets the criteria.	<b>Yes</b>	<b>No</b>
Proposer has \$20 million dollar bonding capacity.	<input type="checkbox"/>	<input type="checkbox"/>

By completing and signing this form, the Proposer is certifying the responses marked on the form are true and accurate. The Proposer's failure to disclose the required information or the submittal of false or misleading information will result in the rejection of the Proposer's SOQ.

The information provided herein is true and complete.	
Signature of Authorized Representative	Date
Print Name and Title	

**Attachment A-2**  
**Certification of Compliance with Wage Payment Statutes**

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City of Tacoma

## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (**January 14, 2021**), that the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
Signature of Authorized Official\*

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
City

\_\_\_\_\_  
State

**Check One:**

Individual ☐

Partnership ☐

Joint Venture ☐

Corporation ☐

State of Incorporation, or if not a corporation, the state where business entity was formed:

\_\_\_\_\_

If a co-partnership, give firm name under which business is transacted:

\_\_\_\_\_

*\* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

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**Attachment B**  
**City's Signature Page – Receipt of Addenda**

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## SIGNATURE PAGE

### **CITY OF TACOMA – DEPARTMENT OF PUBLIC UTILITIES – TACOMA POWER**

All submittals must be in ink or typewritten and must be executed by a duly authorized officer or representative of the bidding/proposing entity. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

Submittals will be received and time stamped only at the City of Tacoma Procurement & Payables Division, located in the Tacoma Public Utilities Administration Building North, 4<sup>th</sup> Floor, at 3628 South 35<sup>th</sup> Street, Tacoma, WA 98409. **See the Request for Qualifications page near the beginning of the specification for additional details.**

#### **REQUEST FOR QUALIFICATIONS SPECIFICATION NO. PG20-0325F Cushman 2 Unit 31, 32 Rebuild Project**

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

#### **Non-Collusion Declaration**

*The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).*

\_\_\_\_\_  
Bidder/Proposer's Registered Name

\_\_\_\_\_  
Signature of Person Authorized to Enter      Date  
into Contracts for Bidder/Proposer

\_\_\_\_\_  
Address

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
(Area Code) Telephone Number / Fax Number

\_\_\_\_\_  
E-Mail Address

\_\_\_\_\_  
State Business License Number  
in WA, also known as UBI (Unified Business Identifier) Number

\_\_\_\_\_  
E.I.No. / Federal Social Security Number Used on Quarterly  
Federal Tax Return, U.S. Treasury Dept. Form 941

\_\_\_\_\_  
State Contractor's License Number  
(See Ch. 18.27, R.C.W.)

Addendum acknowledgement #1\_\_\_\_\_ #2\_\_\_\_\_ #3\_\_\_\_\_ #4\_\_\_\_\_ #5\_\_\_\_\_

***THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.***



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**Attachment C**  
**Index of Confidential and Proprietary Information**

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**Attachment C**  
**Index of Confidential and Proprietary Information**  
**Cushman 2 Unit 31, 32 Rebuild Project**

Per Section 6.16 of the Request for Qualifications, in the index below, please provide the affected pages or sections and locations of all material identified Confidential or Proprietary.

Item Number	Page Number	Section	Description

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**Attachment D**  
**Draft Contract**

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# CONTRACT

Resolution No.  
Contract No.

This Contract is made and entered into effective as of \_\_\_\_\_, ("Effective Date") by and between the City of Tacoma, a Municipal Corporation of the State of Washington ("City"), and \_\_\_\_\_ ("Design-Builder").

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

- I. The City is authorized under the Revised Code of Washington ("RCW") Chapter 39.10, the Alternative Public Works Contracting Procedures Act (the "Act"), as amended, to undertake the Cushman 2 Unit 31, 32 Rebuild Project ("Project") through the alternative public works contracting design-build procedures, including public solicitation of proposals for design-build services.
- II. The City has determined that it is in the City's best interest to contract with a single entity to design, manufacture and construct the Project in accordance with, and as described in this Contract.
- III. The City began the design-build procurement for the Project by issuing a Request for Qualifications ("RFQ") on \_\_\_\_\_.
- IV. Following an evaluation of the statements of qualifications submitted in response to the RFQ, based on the criteria set forth in the RFQ, the City short-listed three (3) firms deemed to be the most qualified to submit Proposals.
- V. On \_\_\_\_\_, the City began the second phase of the competitive process by issuing a Request for Proposals to design, manufacture, construct, and acceptance and performance test the Project (the "RFP") to the three (3) shortlisted Proposers.
- VI. Proposals submitted in response to the RFP were received on \_\_\_\_\_ from three (3) shortlisted firms.
- VII. The Proposals were evaluated by the City in accordance with the evaluation criteria and scoring method set forth in the RFQ and RFP.
- VIII. Based on the evaluations of the Proposals, the City determined that the Proposal submitted by Design-Builder was the Highest Scored Proposal received in response to the City's RFP.
- IX. The Project will be owned, financed, operated and maintained by the City.
- X. Design-Builder shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as "Contract Documents":

---

  1. Specification No. \_\_\_\_\_ Cushman 2 Unit 31, 32 Rebuild.
  2. Design-Builder's submittal submitted in response to Specification No. \_\_\_\_\_ Cushman 2 Unit 31, 32 Rebuild
  3. *Other*

---
- XI. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained in the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:
  1. Contract
  2. Specification
  3. Design-Builder's submittal
- XII. The Contract terminates on \_\_\_\_\_.



- XIII. The total price to be paid by City for Contracts full and complete performance hereunder may not exceed:  
\$\_\_\_\_\_, plus any applicable taxes.
- XIV. The Design-Builder shall begin the Design-Build Work on the Notice to Proceed Date in the Notice to Proceed issued to Design-Builder by the City. Following Notice to Proceed, the Design-Builder shall perform the Design-Build Work regularly and without interruption (unless the City directs otherwise in writing) with such forces as necessary to complete the Design-Build Work in a manner acceptable to the City and on the schedule as follows:

**Unit 31:**      **Scheduled Performance Test Completion** \_\_\_\_\_  
**Scheduled Commercial Operation Date** \_\_\_\_\_

**Unit 32:**      **Scheduled Performance Test Completion** \_\_\_\_\_  
**Scheduled Commercial Operation Date** \_\_\_\_\_

The time of beginning, rate of progress, and time of completion are essential and material provisions of the Contract.

- XV. If the Design-Build Work is delayed or does not meet certain Performance Guarantees and/or certain project milestones, the Design-Builder agrees to Liquidated Damages as set forth in the Contract Documents.
- XVI. The City shall pay the Design-Builder to complete the Design-Build Work as set forth herein and in accordance with the Contract Documents. The Design-Builder shall inform all Subcontractors who work on the Project of this Contract and of the manner and method of payment.
- XVII. In accordance with RCW Chapter 39.12 and the Contract, the Design-Builder shall pay, or cause to be paid to persons employed on or in connection with this Work, not less than the prevailing rate of wage for the labor performed.
- XVIII. Design-Builder agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Design-Builder shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.
- XIX. The Design-Builder on behalf of his or her heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the covenants to which the Design-Builder is obligated under the terms of the Contract.
- XX. The City's preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. DESIGN-BUILDER may be required to have the capability of accepting the City's ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used. The City, in its sole discretion, will determine the method of payment for this Contract.
- XXI. Failure by City to identify a deficiency in the insurance documentation provided by Design-Builder or failure of City to demand verification of coverage or compliance by Design-Builder with the City's stated insurance requirements shall not be construed as a waiver of Design-Builder's obligation to maintain such insurance.
- XXII. Design-Builder acknowledges, and by signing this Contract agrees, that the Indemnification provisions set forth in the controlling Contract Documents, including the Industrial Insurance immunity waiver (if applicable), are totally and fully part of this Contract and, within the context of the competitive bidding laws, have been mutually negotiated by the Parties hereto.

- XXIII. Design-Builder and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.
- XXIV. It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.
- XXV. If the Design-Builder violates any material covenant or provision of this Contract the City may exercise its options as afforded under this Contract, including but not limited to: withhold payment due; order that the Design-Build Work be stopped; terminate the Contract, or; debar the Design-Builder.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:

DESIGN-BUILDER:

By:

By:

**(City of Tacoma use only - blank lines are intentional)**

---

Director of Finance: \_\_\_\_\_

City Attorney (approved as to form): \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

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Approved By: \_\_\_\_\_

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**Attachment E**  
**Draft General Terms and Conditions**

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# GENERAL TERMS AND CONDITIONS

## SECTION I DEFINITIONS

### 1.01 DEFINITIONS

- A. **“Applicable Law”** means (1) any federal, State or local law, code or regulation, including the City’s rules and regulations; (2) any formally adopted and generally applicable rule, requirement, determination, standard, policy, implementation schedule, or other order of any Governmental Body having appropriate jurisdiction; (3) any established interpretation of law or regulation utilized by an appropriate regulatory Governmental Body if such interpretation is documented by such regulatory body and generally applicable; (4) any Governmental Approval; and (5) any consent order or decree, settlement agreement or similar agreement between the City and any Governmental Body, in each case having the force of law and applicable from time to time, over the Project, the Design-Build Work or any other transaction contemplated hereby.
- B. **“Certificate for Reuse”** means a written certification (supported by attached analyses and calculations of stresses, remaining fatigue life, and estimated future time in service for crack initiation/propagation using criteria provided in these Documents) that the component in question is projected to have a remaining service life that exceeds the service life specified herein by at least 50 percent.
- C. **“Changed Condition”** means any act, event or condition that (1) is beyond the reasonable control of the affected party, (2) could not reasonably have been assumed, anticipated or provided for in the Design-Builder’s Proposal, and (3) materially expands the scope, interferes with, delays, or increases the cost of performing the Design-Build Work under the Contract, to the extent that such act, event or condition is not the result of the willful or negligent act, error or omission, failure to exercise reasonable diligence, or breach of this Contract on the part of the party claiming the occurrence of a Changed Condition.
- D. **“City” or “City of Tacoma”** means City of Tacoma, inclusive of Tacoma Public Utilities, Light Division dba Tacoma Power.
- E. **“Commercial Operation”** means that all Design-Builder required testing has been completed and the Unit is available for electrical and mechanical operations without restrictions such as limits on capacity, start/stops, etc., for 24hr/day continuous operation. No punch list item remains to be completed which in any way adversely impacts the availability for full, safe, unrestricted operation and/or which reasonably requires a Unit outage to complete. Commercial Operation follows Unit Acceptance.
- F. **“Contract”** means the City of Tacoma’s Contract Documents as listed in Section 2.01.A.
- G. **“Days”** means calendar days.
- H. **“Design-Builder”** The firm or joint venture awarded the Design-Build Contract.
- I. **“Design-Build Team”** The prime contractor, designer, and major and specialty subs and suppliers including, but not limited to, those parties performing the following: design, supply and/or manufacturing of major components, rotor pole refurbishment, machining, installation, disassembly and reassembly, alignment, and commissioning and testing.
- J. **“Design-Build Work” or “Work”** means everything required to be furnished and done for and relating to the design and construction required by the Contract both during the term of the Contract and relating to the Warranty Obligations set forth in the Contract Documents. Design-Build Work includes the employment and furnishing of all labor, materials, equipment, supplies, tools, scaffolding, transportation, insurance, temporary facilities and other things and services of every kind whatsoever necessary for the full performance and completion of the Design-Builder’s design, engineering, procurement, manufacturing, construction, quality assurance and quality control, acceptance and performance testing, and related obligations with respect to the design and construction required by the Contract, including all completed structures, assemblies, fabrications, acquisitions and installations, all testing, and all of the Design-Builder’s administrative, accounting, recordkeeping, notification and similar responsibilities of every kind whatsoever under this Contract pertaining to such obligations. A reference to Design-Build Work shall mean any part and all of the Design-Build Work unless the context otherwise requires and shall include all Design-Build Work authorized by change order or other Contract amendment or modification.
- K. **“Event(s) of Default”** means those events permitting termination of the Contract and which are set forth in Sections 2.13 and 2.14.
- L. **“Force Majeure Event”** means an event which (1) is not the result of a party’s action or failure to act, and (2) is not foreseeable, (3) is otherwise beyond a party’s reasonable control, and (4) prevents a party from performing its obligations under the Contract. Examples of possible Force Majeure Events include but are not limited to an act of nature, act of civil or military authority, fire, flood, windstorm, earthquake, terrorism, or war.
- M. **“General Requirements”** means the general requirements for the Design-Build Work set forth in the

## General Requirements.

- N. **“Good Engineering and Construction Practice”** means those methods, techniques, standards and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as good design, engineering, equipping, installation, construction and commissioning practices for the design, construction and improvement of capital assets in the electrical utility industry as followed in the northwestern region of the United States.
- O. **“Governmental Approval”** means all orders of approval, permits, licenses, authorizations, consents, certifications, exemptions, rulings, entitlements and approvals issued by a Governmental Body of whatever kind and however described which are required under Applicable Law to be obtained or maintained by any person with respect to the Design-Build Work.
- P. **“Governmental Body”** means any federal, state, regional or local legislative, executive, judicial or other governmental board, agency, authority, commission, administration, court or other body, or any official thereof having jurisdiction other than the City.
- Q. **“Hazardous Substances”** means any waste, substance, object or material designated as, or containing any component designated as, hazardous, toxic or harmful under Applicable Law including, without limitation, “hazardous substances” as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and “hazardous waste” as defined under the Resource Conservation and Recovery Act (RCRA).
- R. **“Project”** means the Design-Build Work required by the Contract.
- S. **“Performance Guarantees”** means the performance requirements set forth in the General and Technical Requirements.
- T. **“Performance Test”** means the tests set forth in the General and Technical Requirements to determine whether the unit met the Performance Guarantees.
- U. **“Project Site”** or **“Site”** means the project site as more fully set forth in the General and Technical Requirements.
- V. **“Punch List”** shall be a list of incomplete aspects of the Design-Build Work which need to be completed as a condition of Project Completion. It shall also include resolution of aforementioned items.
- W. **“Regulated Site Condition”** means, and is limited to, the presence of Regulated Substances in environmental media anywhere in, on or under the Project Site, whether or not disclosed to the Design-Builder.
- X. **“Regulated Substance”** means (1) any oil, petroleum or petroleum product and (2) any pollutant, contaminant, hazardous substance, hazardous material, toxic substance, toxic pollutant, solid waste, municipal waste, industrial waste or hazardous waste that is defined as such by and is subject to regulation under any Applicable Law. Regulated Substances include Hazardous Substances.
- Y. **“Subcontractor”** means every other person or entity (other than employees of the Design-Builder) employed or engaged by the Design-Builder or any person directly or indirectly in privity with the Design-Builder (including but not limited to all subcontractors and every sub-subcontractor of whatever tier) for any portion of the Design-Build Work, whether for the furnishing of design, services, labor, materials, equipment, supplies, services, or otherwise.
- Z. **“Technical Requirements”** means the technical requirements for the Design-Build Work set forth in the Technical Requirements.
- AA. **“Unit Acceptance”** is the milestone which occurs when the Trial Operation Period is successfully completed, all work is completed, and the Unit is available for Commercial Operation. No Punch List item(s) remain to be completed that in any way adversely impacts the availability for full, safe, unrestricted operation of the Unit. As-built drawings have been submitted.

## SECTION II CONTRACT REQUIREMENTS

### 2.01 DESIGN-BUILDER'S RESPONSIBILITY

#### A. Contract Documents

The Respondent to whom the Contract is awarded, hereinafter called the Design-Builder, shall enter into a Contract with the City within 10 days after receipt from the City of a properly prepared Contract subsequent to the successful completion of negotiations. The Contract Documents will consist of, at a minimum, the Contract, the General Terms and Conditions, the General and Technical Requirements, the Design-Builder's Proposal, and Change Orders.

**B. Surety Bonds**

The Design-Builder to whom the Contract is awarded shall provide a payment bond and performance bond, including power of attorney, for 100 percent of the amount of his/her bid (including sales taxes), to insure complete performance of the Contract including any guarantee. In addition, a warranty/maintenance bond for 25% of the amount of his/her bid shall also be provided. The bonds must utilize City forms and be executed by a surety company licensed to do business in the State of Washington.

**C. Independent Contractor**

Design-Builder is an independent contractor; no personnel furnished by the Design-Builder shall be deemed under any circumstances to be the agent or servant of the City. Design-Builder shall be fully responsible for all acts or omissions of Subcontractors and its and their suppliers, and of persons employed by them, and shall be specifically responsible for sufficient and competent supervision and inspection to assure compliance in every respect with the Contract. There shall be no contractual relationship between any Subcontractors or supplier and the City arising out of or by virtue of this agreement. No provision of the Contract is intended or is to be construed to be for the benefit of any third party.

**D. Assistance**

The obligations of a party to cooperate with, to assist or to provide assistance to the other party hereunder shall be construed as an obligation to use the party's personnel resources to the extent reasonably available in the context of performance of their normal duties, and not to incur material additional overtime or third party expense unless requested and reimbursed by the assisted party.

**E. Good Engineering and Construction Practice**

The Design-Builder shall utilize Good Engineering and Construction Practice in carrying out the Design-Build Work and to supplement and in no event displace or lessen the stringency of, the requirements under this Contract. In the event that, over the course of the performance of this Contract, Good Engineering and Construction Practice evolves in a manner which in the aggregate materially and adversely affects the cost of compliance therewith by the Design-Builder, the Design-Builder shall be relieved of its obligation to comply with such evolved construction practice (but not Good Engineering and Construction Practice as of the Contract Date) unless the City agrees to adjust the Awarded Contract Price, as appropriate, to account for such additional costs. Except to the extent that the Design-Builder is relieved of its obligation to comply with such evolved Good Engineering and Construction Practice, as provided above, in no event shall any evolution of Good Engineering and Construction Practice, or any City election to pay or not pay any such additional costs, relieve the Design-Builder of its obligations under the Contract.

**F. Key Personnel**

The Design-Builder has identified, and the City has approved, the Key Personnel who are assigned to the Project as part of their Proposal. Prior to award of Contract, the Design-Builder shall submit a table, which sets forth the key Project staff, their Project assignments, and the expected amounts of their available time that will be spent on the Project for design, manufacturing, construction, and/or testing.

Percentage of time estimates shall be based on 100% of the hours available over the entire phase, assuming 40 hours per week (for non-construction personnel only), minus time for vacations, sick leave, training, professional societies, and conferences as a basis.

**G. City Rights With Respect to Key Personnel**

The Design-Builder acknowledges that the identity of the Key Personnel proposed by the Design-Builder and its Subcontractors in its responses to the RFQ and RFP was a material factor in the selection of the Design-Builder. The Design-Builder shall utilize the Key Personnel to perform the tasks at the level of effort identified in the Design-Builder submitted table. If any Key Personnel must be changed during the Project, the Design-Builder shall provide the City with thirty (30) days written Notice of the proposed change with such additional information as the City may reasonably require. For the duration of the Project, Design-Builder may not, without written consent of the City, substitute or change any of Key Personnel.

**H. Character of Design-Builder's Employees**

The Design-Builder shall employ only competent, skillful, faithful and orderly persons fluent in spoken and written English to do the work, and whenever the City staff administering the Contract shall notify the Design-Builder in writing that any person on the work is, in City staff's opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory, the Design-Builder shall forthwith discharge such persons from the work and shall not again employ him or her on this Contract.



## **2.02 INSPECTION**

### **A. Observation and Design Review Program**

During the progress of the Design-Build Work through Project completion, the Design-Builder shall at all times during normal working hours afford the City every reasonable opportunity for observation and shall comply with any Design-Build Work review procedures set forth in the Contract. The Design-Builder shall use its best efforts to provide City employees with safe access to the Design-Build Work. During any such observation, all representatives of the City shall comply with the Design-Builder's site-specific health and safety plan applicable to areas visited and shall in no material way interfere with the Design-Builder's performance of any Design-Build Work.

### **B. Design-Builder Tests**

The Design-Builder shall conduct all tests or inspections of the Design-Build Work as required by the Contract or per Good Engineering and Construction Practice. The Design-Builder shall give the City reasonable advance notice (unless otherwise noted in the Contract, at least twenty-one (21) days) of tests or inspections prior to the conduct thereof. Unless the City provides express written direction to the contrary, Design-Builder shall not conduct any test or inspection required pursuant to the Contract unless the City is present to observe the test or inspection. If required by the Contract, the Design-Builder shall engage an engineer licensed in the State at its sole cost and expense to conduct or witness any such test or inspection. All analyses of test samples shall be conducted by persons appearing on lists of laboratories authorized to perform such tests by the State or federal agency having jurisdiction and shall be subject to the approval of the City, which approval shall not be unreasonably withheld.

### **C. City Tests, Observations and Inspections**

The City, its employees, agents, representatives and contractors (which may be selected in the City's sole discretion), and all Governmental Bodies having lawful jurisdiction, may at any reasonable time and with reasonable notice conduct such on-site or off-site observations and inspections, and such civil, structural, mechanical, electrical or other tests as the City deems necessary or desirable to ascertain whether the Design-Build Work complies with this Contract. Off-site locations include, but are not limited to, any Design-Builder or Subcontractor fabrication sites. The costs of such test, observation or inspection shall be borne by the City unless such test, observation or inspection reveals a material failure of the Design-Build Work to comply with this Contract or Applicable Law, in which event the Design-Builder shall bear all reasonable costs and expenses of such observation, inspection or test. In the event that any requested test, observation or inspection causes a material delay in the progress schedule, the progress schedule shall be adjusted to reflect the actual period of time needed for completion as directly caused by the requested testing, but only if such testing, observation or inspection does not reveal any material failure or non-compliance as set forth herein.

### **D. Certificates and Reports**

The Design-Builder shall secure and deliver to the City promptly, at the Design-Builder's sole cost and expense, all required certificates of inspection, test reports, work logs, certified payroll and approvals with respect to the Design-Build Work as and when required by the Contract. The Design-Builder shall provide to the City, immediately after the receipt thereof, copies of any notice of default, breach or non-compliance received by the Design-Builder from or in connection with any Governmental Body, Subcontract, or Payment and Performance Bond.

### **E. Notice of Covering Design-Build Work**

The Design-Builder shall give the City notice in the monthly progress report of its upcoming schedule with respect to the covering and completion of any Design-Build Work, and shall update such notice, if necessary, within a reasonable time period (at least fourteen (14) days) before such covering and completion. The City shall give the Design-Builder reasonable notice (a minimum of 48 hours) of any intended inspection or testing of such Design-Build Work in progress prior to its covering or completion, which notice shall be sufficient to afford the City a reasonable opportunity to conduct a full inspection of such Design-Build Work. At the City's written request, the Design-Builder shall take apart or uncover for inspection or testing any previously-covered or completed Design-Build Work; provided, however, that the City's right to make such requests shall be limited to circumstances where there is a reasonable basis for concern by the City as to whether the disputed Design-Build Work complies with the requirements of this Contract. The cost of uncovering, taking apart, or replacing such Design-Build Work along with the costs related to any delay in performing Design-Build Work caused by such actions, shall be borne as follows:

- (1) by the Design-Builder, if such Design-Build Work was covered prior to any observation or test required by the Contract or if such Design-Build Work was covered prior to any observation or test for which the City was not provided reasonable advance notice hereunder, and, therefore, did not observe the test; and
- (2) in all other cases, as follows:

- a. by the Design-Builder, if such observation or test reveals that the Design-Build Work does not comply with this Contract; or
- b. by the City, if such observation or test reveals that the Design-Build Work complies with this Contract.

In the event such Design-Build Work does comply with this Contract, the delay caused by such observation or test shall be treated as having been caused by a Changed Condition and any costs incurred with respect to such observation or test shall be borne by the City (through and only through a written modification to the Contract).

## **2.03 REPORTS, RIGHT TO AUDIT**

### **A. Reports**

Design-Builder shall, at such times and in such form as the City may reasonably require, furnish the City with periodic status reports pertaining to the services undertaken or goods provided pursuant to the Contract.

### **B. Right to Audit**

Upon City's request, Design-Builder shall make available to City all accounts, records and documents related to the scope of work for City's inspection, auditing, or evaluation during normal business hours as reasonably needed by City to assess performance, compliance and/or quality assurance under the Contract or in satisfaction of City's public disclosure obligations as applicable.

## **2.04 INDEMNIFICATION**

### **A. Indemnification**

Design-Builder acknowledges that pursuant to the terms of this agreement, Design-Builder is solely and totally responsible for the safety of all persons and property in the performance of this Contract. To the greatest extent allowed by law, Design-Builder assumes the risk of all damages, loss, cost, penalties and expense and agrees to indemnify, defend and hold harmless the City, from and against any and all liability which may accrue to or be sustained by the City on account of any claim, suit or legal action made or brought against the City for the death of or injury to persons (including Design-Builder's or subcontractor's employees) or damage to property involving Design-Builder, or subcontractor(s) and their employees or agents, arising out of and in connection with or incident to the performance of the Contract including if the City is found to have a nondelegable duty to see that work is performed with requisite care, except for injuries or damages caused by the sole negligence of the City. In the case of concurrent negligence, Design-Builder shall only be liable to the extent of the negligence of Design-Builder and the parties for which it is responsible.

In this regard, Design-Builder recognizes that Design-Builder is waiving immunity under industrial Insurance Law, Title 51 RCW. This indemnification extends to the officials, officers and employees of the City and also includes attorney's fees and the cost of establishing the right to indemnification hereunder in favor of the City. In addition, within the context of competitive bidding laws, it is agreed that this indemnification has been mutually negotiated. Provided however, this provision is intended to be applicable to the parties to this agreement and it shall not be interpreted to allow a Design-Builder's employee to have a claim or cause of action against Design-Builder.

## **2.05 ASSIGNMENT AND SUBCONTRACTING OF CONTRACT**

### **A. Assignment**

The Contract shall not be assigned except with the consent of the City.

Requests for assignment of this Contract must be in writing with the written consent of the surety, and the request must show the proposed person or organization to which the contract is assigned is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his/her experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of assignment. City's acceptance of any assignment shall be documented in writing using the City's Assignment of Agreement template.

### **B. Subcontracting**

The Contract shall not be subcontracted except with the written consent of the City.

Requests for subcontracting of this Contract must be in writing with the written consent of the Surety, and the request must show the proposed person or organization to which the Contract is subcontract is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his experience, financial ability and

give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of subcontracting.

The written consent approving the subcontracting of the Contract shall not be construed to relieve the Design-Builder of his/her responsibility for the fulfillment of the Contract. The Subcontractor shall be considered to be the agent of the Design-Builder and the Design-Builder agrees to be responsible for all the materials, work and indebtedness incurred by the agent.

Subcontractor shall not subcontract any portion of a subcontract for work with the City without the written consent of the City.

## **2.06 EXTENSION**

The Contract may be mutually extended in writing by the parties, subject to the same prices, terms and conditions.

## **2.07 DELAY**

### **A. Extension of Time**

With the written approval of the City, the Design-Builder may be granted additional time for completion of the work required under this Contract, if, in the City's opinion the additional time requested arises from unavoidable delay.

### **B. Unavoidable Delay**

Unavoidable delays in the prosecution of the work shall include only delays from causes beyond the control of the Design-Builder and which he/she could not have avoided by the exercise of due care, prudence, foresight and diligence. Delay caused by persons other than the Design-Builder, Subcontractors or their employees will be considered unavoidable delays insofar as they necessarily interfere with the Design-Builder's completion of the work, and such delays are not part of this Contract.

Unavoidable delay will not include delays caused by ordinary weather conditions, surveys, measurements, inspections and submitting plans to the Engineer of the particular Division involved in administering this Contract.

## **2.08 FORCE MAJEURE; CHANGED CONDITIONS**

### **A. Relief from Obligations**

Except as expressly provided under the terms of this Contract, neither party to this Contract shall be liable to the other for any loss, damage, delay, default or failure to perform any obligation to the extent it results from a Force Majeure Event; however if a Force Majeure Event would otherwise operate to relieve Design-Builder from an obligation under the Contract, the City may elect to treat the Force Majeure Event as a Changed Condition. The occurrence of a Force Majeure Event shall not excuse or delay the performance of a party's obligation to pay monies previously accrued and owing under this Contract, or to perform any obligation hereunder not affected by the occurrence of the Force Majeure Event.

### **B. Changed Condition - Notice and Mitigation**

If Design-Builder encounters or experiences any Changed Condition for which the Design-Builder does or should reasonably anticipate may result in a request for an adjustment to the Contract time or price, the City shall be entitled to prompt notice and information in order to allow the City to anticipate and mitigate any costs. The party that asserts the occurrence of a Changed Condition shall notify the other party in writing within 72 hours of the date and time the party experiencing such Changed Condition first knew of the occurrence, followed within 15 days by a written description of: (1) the Changed Condition and the cause (to the extent known); and (2) the date the Changed Condition began, its estimated duration, the estimated time during which the performance of such party's obligations hereunder shall be delayed, or otherwise affected, and the impact, if any, on the Acceptance Date. As soon as practicable after the occurrence of an Changed Condition, but within 30 days of the occurrence, the affected party shall also provide the other party with a description of: (i) the amount, if any, by which the Awarded Contract Price is proposed to be adjusted as a result of such Changed Condition; (ii) any areas where costs might be reduced and the approximate amount of such cost reductions; and (iii) its estimated impact on the other obligations of such party under this Contract. The affected party shall also provide prompt written notice of the cessation of such Changed Condition. Whenever such act, event or condition shall occur, the party claiming to be adversely affected thereby shall, as promptly as reasonably practicable, use its best efforts to eliminate the cause therefor, reduce costs and resume performance under this Contract, except that with respect to the discovery of possible Regulated Substances the parties shall follow the process described in Section 2.38. While the Changed Condition continues, the affected party shall give notice to the other party, before the first day of each succeeding month, updating the information previously submitted. The party claiming to be adversely

affected by a Changed Conditions shall bear the burden of proof and shall furnish promptly any additional documents or other information relating to the Changed Condition reasonably requested by the other party.

**C. Conditions to Performance, Schedule and Awarded Contract Price Relief**

If and to the extent that any Changed Condition materially expands the scope of the Design-Builder's obligations hereunder, materially interferes with, materially delays or materially increases the cost of the Design-Builder's performing its obligations hereunder, the Design-Builder shall be entitled to relief from the performance of its obligations hereunder, an extension of schedule or an increase in the Awarded Contract Price, or any combination thereof, which properly reflects the interference with performance, the time lost or the amount of the increased cost, in each case as a result thereof, but only to the minimum extent reasonably forced on the Design-Builder by the event, and the Design-Builder shall perform all other Design-Build Work without delay in time or increase in cost. The proceeds of any Required Insurance available to meet any such increased cost, and the payment by the Design-Builder of any deductible, shall be applied to such purpose prior to any determination of cost increase payable by the City under this Section. Any cost reduction achieved through the mitigating measures undertaken by the Design-Builder pursuant to subsection (B) of this Section upon the occurrence of a Changed Condition shall be reflected in a reduction of the amount by which the Awarded Contract Price would have otherwise been increased or shall serve to reduce the Awarded Contract Price to reflect such mitigation measures, as applicable. In the event that the Design-Builder believes it is entitled to any relief on account of an Changed Condition, it shall furnish the City written notice of the specific relief requested and detailing the event giving rise to the claim within 30 days after the giving of notice delivered pursuant to subsection (B) of this Section, or if the specific relief cannot reasonably be ascertained and such event detailed within such 30-day period, then within such longer period within which it is reasonably possible to detail the event and ascertain such relief. Within 30 days after receipt of such a timely submission from the Design-Builder the City shall issue a written determination as to the extent, if any, it concurs with the Design-Builder claim for performance, price or schedule relief, and the reasons therefor. The Design-Builder acknowledges that its failure to give timely notice pertaining to a Changed Condition as required under this Section may adversely affect the City. To the extent the City asserts that any such adverse effect has occurred and that the relief to the Design-Builder or the additional cost to be borne by the City under this subsection should be reduced to account for such adverse effect, the Design-Builder shall have the affirmative burden of refuting the City's assertion. Absent such refutation, the reduction in relief to the Design-Builder and the reduction in additional cost to the City asserted by the City in such circumstances shall be effective. The agreement of the parties as to the specific relief to be given the Design-Builder hereunder on account of a Changed Condition shall be evidenced by a Change Order.

**D. Exclusions**

It is specifically understood that, without limitation, none of the following acts, events or circumstances shall constitute a Changed Condition for purposes of any adjustment to the Contract:

- (1) any act, event or circumstance that would not have occurred but for the affected party's failure to comply with its obligations hereunder;
- (2) changes in interest rates, inflation rates, wage rates, insurance premiums, commodity prices, currency values, exchange rates or other general economic conditions, except as addressed in the Contract;
- (3) changes in the financial condition of the City, the Design-Builder or their affiliates or Subcontractors affecting the ability to perform their respective obligations;
- (4) the consequences of error, neglect or omissions by the Design-Builder, any Subcontractor, any of their Affiliates or any other person in the performance of the Design-Build Work;
- (5) union or labor work rules, requirements or demands (other than City changes to its union or labor work rules, requirements or demands) which have the effect of increasing the number of employees employed at the Project or otherwise increasing the cost to the Design-Builder of performing the Design-Build Work;
- (6) weather conditions normal for the area surrounding the Project Site;
- (7) any and all surface, subsurface and other conditions affecting the Project Site, which may increase costs of performing or cause delay in the performance of the Design-Build Work, except those constituting Regulated Site Conditions or unfavorable Changed Conditions;
- (8) mechanical failure of equipment;
- (9) power outages caused by the Design-Builder or its Subcontractors;
- (10) failure of the Design-Builder to secure any patent or other intellectual property right which is or may be necessary for the performance of the Design-Build Work;
- (11) a Change in Law pertaining to Taxes (except an increase or decrease in the rate of the local Tax currently imposed on building materials used in the construction of the Project); or

(12) local labor disputes or strikes involving employees of the Design-Builder, its Affiliates, or Subcontractors which affect the performance of the Design-Build Work.

**E. Acceptance of Relief Constitutes Release**

Either party's acceptance of any performance, price or schedule relief under this Section shall be construed as a release of the other party for any and all Loss-and-Expense resulting from, or otherwise attributable to, the event giving rise to the relief claimed.

**2.09 WARRANTY**

**A. Warranty for Construction, Labor or Services Contract**

Neither the final certificate of payment or any provision in the Contract Documents, nor partial or entire occupancy of the premises by the City, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Design-Builder of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Design-Builder shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear or could have been reasonably discovered within the warranty period. The City will give notice of observed defects with reasonable promptness.

If it has been discovered, before payment is required under the terms of the Contract, that there is a failure to comply with any of the terms and provisions of this Contract, the City has the right and may withhold payment.

In case of a failure of any part of the work, materials, labor and equipment furnished by the Contract or to fully meet all of the requirements of the Contract, the Design-Builder shall make such changes as may be necessary to fully meet all of the specifications and requirements of this Contract. Such changes shall be made at the Design-Builder's sole cost and expense without delay and with the least practicable inconvenience to the City. Rejected material and equipment shall be removed from the City's property by and at the expense of the Design-Builder.

**B. Warranty**

Unless a longer period is specified, the Design-Builder and/or manufacturer of the supplies, materials and/or equipment furnished and all Work pursuant to this Contract agrees to correct any defect or failure of the supplies, materials, equipment and/or Work which occurs within five (5) years from the date of Unit Acceptance. All of the costs (including shipping, dismantling and reinstallation) of repairs and/or corrections of substandard, defective or failed equipment, supplies material and/or Work is the responsibility of the Design-Builder and/or manufacturer.

When the Design-Builder is not the manufacturer of the item of equipment, Design-Builder agrees to be responsible for this warranty and Design-Builder is not relieved by a manufacturer's warranty.

**C. Warranty Period Extension**

The Contract warranty period shall be suspended from the time a significant defect is first documented by the City until the work or equipment is repaired or replaced by Design-Builder and accepted by the City. In addition, in the event less than ninety (90) days remain on the warranty period (after recalculating), the warranty period shall be extended to allow for at least ninety (90) days from the date the work or equipment is repaired or replaced and accepted by the City.

**2.10 DEDUCTIONS FOR UNCORRECTED WORK**

If the City deems it expedient to correct work not done in accordance with the terms of this Contract, an equitable deduction from the Contract price shall be made.

**2.11 CITY'S RIGHT TO TERMINATE CONTRACT**

**A. City Termination for Cause**

The City shall have the right during the term of the Contract to terminate the Contract for cause and to pursue all remedies available pursuant to this Section, without cost or liability to the City, if the Design-Builder should be adjudged as bankrupt, or makes a general assignment for the benefit of creditors, or a receiver should be appointed on account of his/her insolvency, or if he/she or any of his/her subcontractors should violate any of the provisions of the Contract, or if the work is not being properly and diligently performed, or in the case of and other Event of Default by the Design-Builder.

The City may serve written notice upon the Design-Builder and Surety executing the Payment and Performance Bond of City's intention to terminate the Contract; such notice will contain the reasons for termination of the Contract, and unless within 10 days after the serving of such notice, such violation shall cease and an arrangement satisfactory to the City for correction thereof shall be made, the Contract shall, upon the expiration of said 10 days, cease and terminate and all rights of the Design-

Builder hereunder shall be forfeited. In the event the Contract is terminated for cause, Design-Builder shall not be entitled to any lost profits resulting therefrom.

In the event of any such termination, the City shall immediately send (by regular mail or other method) written notice thereof to the Surety and the Design-Builder. Upon such termination the Surety shall have the right to take over and perform the Contract, provided however, the Surety must provide written notice to the City of its intent to complete the work within 15 calendar days of its receipt of the original written notice (from the City) of the intent to terminate. If the Surety fails to so confirm its intent to perform, or having done so fails to perform accordingly, the City may take over the Work and prosecute the same to completion by any method it may deem advisable, for the account of and at the expense of the Design-Builder, and the Design-Builder and the Surety shall be liable to the City for all reasonable excess cost occasioned to the City thereby. The City may without liability for doing so, take possession of and utilize in completing the work, such materials, equipment, plant and other property belonging to the Design-Builder as may be on the Site of the Work and necessary therefore.

**B. City Convenience Termination Option**

The City shall have the right at any time during the term of this Contract, exercisable in its sole discretion, for its convenience and without cause, to terminate this Contract upon 10 days written notice to the Design-Builder. Upon any such termination, the City, subject to the Design-Builder substantiating its costs, shall pay the Design-Builder all amounts due for the Design-Build Work actually performed to be paid as part of the Awarded Contract Price but not yet paid as of the date of termination.

**2.12 REMEDIES FOR BREACH**

The parties agree that, except as otherwise provided in the Contract with respect to termination rights, in the event that either party breaches this Contract, the other party may exercise any legal rights it may have under this Contract, under the Payment and Performance Bond and under Applicable Law to recover damages or to secure specific performance, and that such rights to recover damages and to secure specific performance shall ordinarily constitute adequate remedies for any such breach. Neither party shall have the right to terminate this Contract except upon the occurrence of an Event of Default or as otherwise provided herein; provided that upon any such termination, the terminating party shall have all of the rights and remedies provided for herein.

**2.13 EVENTS OF DEFAULT BY THE DESIGN-BUILDER OR DESIGN-BUILD TEAM**

**A. Events of Default Not Requiring Previous Notice or Cure Opportunity for Termination**

Each of the following shall constitute an Event of Default by the Design-Builder or a major subcontractor or team member of the Design-Builder upon which the City, by notice to the Design-Builder, may terminate this Contract without any requirement of having given notice previously or of providing any further cure opportunity:

- (1) Insolvency. The insolvency of the Design-Builder as determined under the Bankruptcy Code;
- (2) Voluntary Bankruptcy. The filing by the Design-Builder of a petition of voluntary bankruptcy under the Bankruptcy Code; the consenting of the Design-Builder to the filing of any bankruptcy or reorganization petition against the Design-Builder under the Bankruptcy Code; or the filing by the Design-Builder of a petition to reorganize the Design-Builder pursuant to the Bankruptcy Code; or
- (3) Involuntary Bankruptcy. The issuance of an order of a court of competent jurisdiction appointing a receiver, liquidator, custodian or trustee of the Design-Builder or of a major part of the Design-Builder's property, respectively, or the filing against the Design-Builder of a petition to reorganize the Design-Builder pursuant to the Bankruptcy Code, which order shall not have been discharged or which filing shall not have been dismissed within 90 days after such issuance or filing, respectively.

**B. Events of Default Requiring Previous Notice and Cure Opportunity for Termination**

It shall be an Event of Default by the Design-Builder upon which the City may terminate this Contract, by notice to the Design-Builder, if:

- (1) any representation or warranty of the Design-Builder hereunder was false or inaccurate in any material respect when made, and the legality of this Contract or the ability of the Design-Builder to carry out its obligations hereunder is thereby materially and adversely affected; or
- (2) The Design-Builder fails, refuses or otherwise defaults in its duty (a) to pay any amount required to be paid to the City under this Contract within sixty (60) days following the due date for such payment, or (b) to perform any other material obligation under this Contract (unless such default is excused by an Changed Conditions as and to the extent provided herein), except that no such default (other than those set forth in subsection (A) of this Section) shall constitute an Event of Default giving the City the right to terminate this Contract for cause under this subsection unless:

- a. The City has given prior written notice to the Design-Builder stating that a specified default has occurred which gives the City a right to terminate this Contract for cause under this Section, and describing the default in reasonable detail; and
- b. The Design-Builder has neither challenged in an appropriate forum the City's conclusion that such a default has occurred or constitutes a material breach of this Contract nor corrected or diligently taken steps to correct such default within a reasonable time but not more than 30 days from the date of the notice given pursuant to item (1) above (but if the Design-Builder shall have diligently taken steps to correct such default within a reasonable period of time, the same shall not constitute an Event of Default for so long as the Design-Builder is continuing to take such steps to correct such default).

## **2.14 EVENTS OF DEFAULT BY THE CITY**

### **A. Events of Default Permitting Termination**

Each of the following shall constitute an Event of Default by the City upon which the Design-Builder, by notice to the City, may terminate this Contract:

- (1) Failure to Pay or Perform. The failure, refusal or other default by the City in its duty to perform any material obligation under this Contract (unless such default is excused by a Changed Conditions as and to the extent provided herein); or
- (2) Bankruptcy. The authorized filing by the City of a petition seeking relief under the Bankruptcy Code, as applicable to political subdivisions which are insolvent or unable to meet their obligations as they mature; provided that the appointment of a financial control or oversight board by the State for the City shall not in and of itself constitute an Event of Default hereunder.

### **B. Notice and Cure Opportunity**

No such default described in subsection (A) of this Section shall constitute an Event of Default giving the Design-Builder the right to terminate this Contract for cause under this subsection unless:

- (1) The Design-Builder has given prior written notice to the City stating that a specified default has occurred which gives the Design-Builder a right to terminate this Contract for cause under this Section, and describing the default in reasonable detail; and
- (2) The City has neither challenged in an appropriate forum the Design-Builder's conclusion that such default has occurred or constitutes a material breach of this Contract nor corrected or diligently taken steps to correct such default within a reasonable period of time but not more than 30 days from the date of the notice given pursuant to item (1) above (but if the City shall have diligently taken steps to correct such default within a reasonable period of time, the same shall not constitute an Event of Default for as long as the City is continuing to take such steps to correct such default).

## **2.15 OBLIGATIONS OF THE DESIGN-BUILDER UPON TERMINATION**

### **A. Design-Builder Obligations**

Upon a termination of the Design-Builder's right to perform this Contract or upon expiration of this Contract, the Design-Builder shall, as applicable:

- (1) stop the Design-Build Work on the date and to the extent specified by the City;
- (2) promptly deliver to the City all design documents and "as-built" construction record drawings prepared by the Design-Builder in carrying out the Design-Build Work which have been paid for but have not previously been delivered to the City;
- (3) promptly take all action as necessary to protect and preserve all materials, equipment, tools, and other property;
- (4) promptly remove from the Project all equipment, implements, machinery, tools, temporary facilities of any kind and other property owned or leased by the Design-Builder (including, but not limited to sheds, trailers, and workshops), and repair any damage caused by such removal;
- (5) clean the Project and the Project Site and leave them in a neat and orderly condition;
- (6) promptly remove all employees of the Design-Builder and any Subcontractors and vacate the Project Site;
- (7) promptly deliver to the City a list of all supplies, materials, equipment, property and special order items previously delivered or fabricated by the Design-Builder or any Subcontractor but not yet incorporated in the Project;
- (8) provide the City with any spare parts and additional materials required by the Contract Documents;
- (9) deliver to the City the Operation and Maintenance Manual used at the Project in the performance of the Design-Build Work, including all revisions and updates thereto;
- (10) deliver to the City a copy of all books and records in its possession relating to the performance of the Design-Build Work;

- (11) advise the City promptly of any special circumstances which might limit or prohibit cancellation of any Subcontract;
- (12) promptly deliver to the City copies of all Subcontracts, together with a statement of:
  - a. the items ordered and not yet delivered pursuant to each agreement;
  - b. the expected delivery date of all such items;
  - c. the total cost of each agreement and the terms of payment; and
  - d. the estimated cost of canceling each agreement;
- (13) assign to the City any Subcontract that the City elects in writing, at its sole election and without obligation, to have assigned to it. The City shall assume, and the Design-Builder shall be relieved of its obligations under, any Subcontract so assigned;
- (14) unless the City directs otherwise, terminate all Subcontracts related to this Project;
- (15) provide the City with a list of all Project equipment subject to patents, licenses, franchises, trademarks or copyrights and the associated royalties and license fees associated therewith which the City will be responsible for paying on or after the Termination Date;
- (16) as directed by the City, transfer to the City by appropriate instruments of title, and deliver to the Project (or such other place as the City may specify), all special order items pursuant to this Contract for which the City has made or is obligated to make payments;
- (17) notify the City promptly in writing of any Legal Proceedings against the Design-Builder by any Subcontractor or other third parties relating to the termination of the Design-Build Work (or any Subcontracts);
- (18) give written notice of termination, effective as of date of termination of this Contract, promptly under each policy of Required Insurance (with a copy of each such notice to the City), but permit the City to continue such policies thereafter at its own expense, if possible; and
- (19) take such other actions and execute such other documents as may be necessary to effectuate and confirm the foregoing matters, or as may be otherwise necessary or desirable to minimize the City's costs and take no action which shall increase any amount payable by the City under this Contract.

**B. Design-Builder Payment of Certain Costs**

If termination is pursuant to cause, the Design-Builder shall be obligated to pay the costs and expenses of undertaking its obligations under subsection A. of this Section. If the Design-Builder fails to comply with any obligation under this Section, the City may perform such obligation and the Design-Builder shall pay on demand all reasonable costs thereof subject to Cost Substantiation.

**C. City Payment of Certain Costs**

If termination is due to a City Event of Default or termination for the City's convenience, the City shall pay to the Design-Builder within 60 days of the date of the Design-Builder's invoice supported by Cost Substantiation all reasonable cost and expenses incurred by the Design-Builder in satisfying its obligations under the Contract.

**D. Delivery of Design-Build Work to the City**

Concurrently with payment by the City to the Design-Builder of the amount due upon any termination of this Contract under this Section, the Design-Builder shall deliver to the City all materials including Deliverables-in-progress produced for this Contract during the period to the Termination Date hereunder, which Deliverables and Deliverables-in-progress immediately shall become the property of the City. The City's use of any such Deliverables and Deliverables-in-progress for any purpose other than the continuation of the Design-Build Work shall be at its own risk and the Design-Builder shall have no liability therefor.

**2.16 SURVIVAL OF CERTAIN PROVISIONS UPON TERMINATION**

All representations and warranties of the parties hereto contained in this Contract, the Design-Builder's indemnity obligations in this Contract with respect to events that occurred prior to the Termination Date, , and all other provisions of this Contract that so provide shall survive the termination of this Contract. No termination of this Contract shall (1) limit or otherwise affect the respective rights and obligations of the parties hereto accrued prior to the date of such termination; or (2) preclude either party from impleading the other party in any Legal Proceeding originated by a third-party as to any matter occurring during the performance of this Contract.

**2.17 LIENS**

In the event that there are any liens on file against the City, the City shall be entitled to withhold final or progress payments to the extent deemed necessary by the City to properly protect the outstanding lien claimants until proper releases have been filed with the City Clerk.



## **2.18 LEGAL DISPUTES**

### **A. General**

Washington law shall govern the interpretation of the Contract. The state or federal courts located in Pierce County Washington shall be the sole venue of any mediation, arbitration, or litigation arising out of the Contract. The Design-Builder and the City each irrevocably consents to the jurisdiction of such courts in any such Legal Proceeding and waives any objection it may have to the laying of the jurisdiction of any such Legal Proceeding.

### **B. Attorney Fees**

If the Contract becomes the subject of litigation or arbitration, the substantially prevailing party may be entitled to reasonable attorney fees, as provided in RCW 39.04.240. Provided, however, the attorney fee hourly rate for the City's Deputy City Attorneys is agreed to be \$250 per hour or the same as the hourly rate for Design-Builder's legal counsel, whichever is greater.

### **C. Dispute Resolution Process**

All claims, disputes and other matters in question between the City and the Design-Builder arising out of, or relating to, this Contract, shall be resolved in accordance with the following procedures: (1) dispute, (2) claims, (3) mediation, and (4) judicial resolution.

### **D. Claims**

The City and the Design-Builder acknowledge the benefits of resolving, and attempting to resolve, all disputes by discussion between themselves, without proposing to any third parties, and agree therefore to negotiate in good faith to resolve all disputes before invoking any other method of dispute resolution as provided for in this Contract; provided, however, that the period of time for good faith negotiations shall not exceed 30 days, unless a longer period is mutually agreed.

### **E. Mediation**

- (1) If the City and the Design-Builder cannot resolve a dispute through the administrative claims process, either party may request mediation. The party requesting mediation shall do so within 30 days of receiving the other parties notice of denial.
- (2) The parties will select and agree upon a mediator. If they are unable to agree, the City and the Design-Builder shall seek the selection of the mediator by Pierce County Superior Court, Seattle WA. Mediation will occur within sixty (60) days of the filing of the Design-Builder's written notice to mediate unless both parties agree to a later date or unless the mediator's schedule requires a later date. Each part will participate in the mediation process in good faith and may be represented at the mediation by lawyers. The parties shall each bear their respective costs incurred in connection with this procedure, except that they shall share equally the fees and expenses of the mediator and the cost of the facility for the mediation. If mediation does not resolve the disputed matter, the Design-Builder may pursue judicial resolution as provide herein.

### **F. Judicial Resolution**

- (1) If mediation does not resolve the disputed matter, the Design-Builder may serve and file a lawsuit in Pierce County Superior Court in Tacoma, WA. Such lawsuit shall be filed within one hundred eighty (180) days of the Project Completion Date or within ninety (90) days of the mediation process under Section C, whichever is later. This requirement cannot be waived except by an explicit waiver signed by the City. The failure to file a lawsuit within the 180 day period shall result in the City's decision rendered in accordance with Section B being final and binding on the Design-Builder and all its Subcontractors.
- (2) Actions by the Design-Builder against the City or between the Design-Builder and its Subcontractor arising out of a common set of circumstances shall, upon demand by the City, be submitted in a single forum or the City may consolidate such claims or join any party necessary to the complete adjudication of the matter in the same forum.

## **2.19 CONTINUANCE OF WORK DURING DISPUTE**

At all times during the course of any dispute process, the Design-Builder shall continue with the Design-Build Work as per the Contract, in a diligent manner and without delay or conform to the City's decision or order and shall be governed by the applicable provisions of this Contract. Records of the Design-Build Work performed during such time shall be kept in sufficient detail to enable payment in accordance with the applicable provisions in this Contract, if necessary.

## **2.20 CONFLICT OF INTEREST**

No officer, employee, or agent of the City, nor any member of the immediate family of any such officer, employee or agent as defined by City ordinance, shall have any personal financial interest, direct or indirect,

in a Contract, either in fact or in appearance. Design-Builder shall comply with all federal, state, and City conflict of interest laws, statutes, and regulations. Design-Builder represents that Design-Builder presently has no interest and shall not acquire any interest, direct or indirect, in the program to which the Contract pertains that would conflict in any manner or degree with the performance of Design-Builder's services and obligations hereunder. Design-Builder further covenants that, in performance of a Contract, no person having any such interest shall be employed. Design-Builder also agrees that its violation of the City's Code of Ethics contained in Chapter 1.46 of the Tacoma Municipal Code shall constitute a breach of Contract subjecting the Contract to termination.

## **2.21 DESIGN-BUILDER'S DUTY TO EXAMINE**

Design-Builder agrees to be responsible for examining the site(s) and to have compared them with the Specifications and Contract Drawings, and to be satisfied as to the facilities and difficulties attending the execution of the proposed Contract (such as uncertainty of weather, floods, nature and condition of materials to be handled and all other conditions, obstacles and contingencies) before the delivery of his/her Proposal. No allowance will be subsequently made by the City on behalf of the Respondent by reason of any error or neglect on Respondent's part, for such uncertainties as aforesaid.

## **2.22 PERMITS**

Except when modified by the Special Provisions, the Design-Builder shall procure and pay for all permits and licenses necessary for the completion of this Contract including those permits required by the City. The City will obtain county or state road crossing permits if required. In the event a necessary permit is not obtained, the Design-Builder will not be permitted to work on items subject to said permit and any delays caused thereby will not be subject to extra compensation or extensions.

## **2.23 NOTIFICATION OF OTHER GOVERNMENTAL AGENCIES AND UTILITIES WHEN UNDERGROUND WORK IS INVOLVED**

The Design-Builder shall notify all other affected governmental agencies and utilities whenever underground work is done under the terms of this Contract. The Design-Builder is required to obtain permission of the appropriate public and private utilities and governmental agencies before performing underground work pursuant to the terms of this Contract. The Design-Builder is required to call "one call" at 1-800-424-5555 for all work involving excavation or digging more than 12 inches beneath ground or road surface.

The City may have indicated on the plans and specifications the existence of certain underground facilities that are known to the City division responsible for this Contract. It is the Design-Builder's responsibility to fully comply with the Underground Utility Locate Law, Chapter 19.122 RCW. If the site conditions are "changed or differing" as defined by RCW 19.122.040(I), the Design-Builder may pursue the party responsible for not properly marking or identifying the underground facility. The Design-Builder agrees not to file any claim or legal action against the City (division responsible for this Contract) for said "changed or differing" conditions unless said City division is solely responsible for the delay or damages that the Design-Builder may have incurred.

## **2.24 INSURANCE**

- A.** During the course and performance of a Contract, Design-Builder will provide proof and maintain the insurance coverage in the amounts and in the manner specified in the City Insurance Requirements as is applicable to the services, products, and deliverables provided under the Contract. The City Insurance Requirements document, if issued, is fully incorporated into the Contract by reference.
- B.** Failure by City to identify a deficiency in the insurance documentation provided by Design-Builder or failure of City to demand verification of coverage or compliance by Design-Builder with these insurance requirements shall not be construed as a waiver of Design-Builder's obligation to maintain such insurance.
- C.** The Design-Builder shall not commence work under this Contract until all required insurance has been obtained and such insurance has been approved by the City, nor shall the Design-Builder allow any subcontractor to commence work on his/her subcontract until all insurance required herein has been obtained by Subcontractor. It is the Design-Builder's responsibility to ascertain that all Subcontractors have the insurance as required by this Contract at all times such Subcontractors are performing the work. The insurance coverages required herein shall be maintained and effective at all times any work including warranty work is being performed by the Design-Builder or a Subcontractor.

## **2.25 SAFETY**

### **A. General**

The Design-Builder shall, at all times, exercise adequate precautions for the safety of all persons, including its employees and the employees of a Subcontractor, in the performance of this Contract and shall comply with all applicable provisions of federal, state, county and municipal safety laws and

regulations. It is the Design-Builder's responsibility to furnish safety equipment or to contractually require Subcontractors to furnish adequate safety equipment relevant to their responsibilities.

The Design-Builder shall obtain the necessary line clearance from the inspector before performing any work in, above, below or across energized Light Division circuits.

The City may advise the Design-Builder of any safety violations. It is the Design-Builder's responsibility to make the necessary corrections. Failure to correct safety violations is a breach of this Contract and, as such, shall be grounds for an order from the City to cease further work and remove from the Site until the condition is corrected. Time and wages lost due to such safety shutdowns shall not relieve the Design-Builder of any provisions of this Contract and shall be at the sole cost of the Design-Builder. The purpose of this authority to stop work is to enforce the contract and not to assume control except to the extent necessary to ensure compliance with the provisions of this contract.

Any of the above actions by employees of the City shall in no way relieve the Design-Builder of his/her responsibility to provide for the safety of all persons, including his/her employees.

#### **B. Work Hazard Analysis Report**

The Design-Builder will be required to complete a work hazard analysis report. This report shall outline how the Design-Builder proposes to satisfy all safety laws and regulations involved in performing the work. This report shall be completed and submitted to the City before the pre-construction conference. In addition, the report shall be updated at least monthly to account for changing work hazards and submitted to the City within 5 days of update. A copy of the most recent report shall be maintained at the work site (accessible to the supervisor).

### **2.26 PROTECTION OF WORKERS AND PROPERTY**

The Design-Builder shall erect and maintain good and sufficient guards, barricades and signals at all unsafe places at or near the work and shall, in all cases, maintain safe passageways at all road crossings, and crosswalks, and shall do all other things necessary to prevent accident or loss of any kind.

The Design-Builder shall protect from damage all utilities, improvements, and all other property that is likely to become displaced or damaged by the execution of the work under this Contract.

The Design-Builder is responsible for all roads and property damaged by his/her operations as shall be determined by the Engineer administering this Contract and for all costs associated with the repairs. The Design-Builder shall be responsible for repairing all damage to roads caused by his/her operations to the satisfaction of the particular governmental body having jurisdiction over the road. The Design-Builder shall also be responsible for repairing all damage to City-owned property to the City's satisfaction.

### **2.27 DESIGN-BUILDER'S COMPLIANCE WITH THE LAW**

#### **A. Hours of Labor**

The Design-Builder and Subcontractors shall be bound by the provisions of RCW Chapter 49.28 (as amended) relating to hours of labor. Except as set forth in the Special Provisions, eight (8) hours in any calendar day shall constitute a day's work on a job performed under this Contract.

In the event that the work is not performed in accordance with this provision and in accordance with the laws of the State of Washington, then this Contract may be terminated by the City for the reason that the same is not performed in accordance with the public policy of the State of Washington as defined in said statutes.

#### **B. Prevailing Wages**

The Design-Builder and any Subcontractors shall be bound by the provisions of Chapter 39.12 RCW, as amended, relating to prevailing wages and usual fringe benefits. No worker, laborer, or mechanic employed in the performance of any part of this Contract shall be paid less than the "prevailing rate of wage" as determined by the industrial Statistician of the Department of Labor and Industries. The schedule of the prevailing wage rates for the locality or localities where this Contract will be performed is by reference made a part of this Contract as though fully set forth herein. Current prevailing wage data will be furnished by the Industrial Statistician upon request. The Design-Builder shall immediately upon award of the Contract, contact the Department of Labor and Industries, ESAC Division, General Administration Building, Olympia, Washington 98504, to obtain full information, forms and procedures relating to these matters.

Before payment is made by or on behalf of the City, of any sum or sums due on account of a Public Works contract, it shall be the duty of the officer or person charged with the custody and disbursement of public funds to require the Design-Builder and each and every Subcontractor from the Design-Builder or a Subcontractor to submit to such officer a "Statement of Intent to Pay Prevailing Wages." Each statement of intent to pay prevailing wages must be approved by the industrial statistician of the Department of Labor and Industries before it is submitted to said officer. Unless otherwise authorized by

the Department of Labor and Industries each voucher claim submitted by a Design-Builder for payment on a project estimate shall state that the prevailing wages have been paid in accordance with the prefiled statement or statements of intent to pay prevailing wages on file with the public agency. Following the final acceptance of a Public Works project, it shall be the duty of the officer charged with the disbursement of public funds to require the Design-Builder and each and every Subcontractor from the Design-Builder or a Subcontractor to submit to such officer an "Affidavit of Wages Paid" before the funds retained according to the provisions of RCW 60.28.010 are released to the Design-Builder. Each affidavit of wages paid must be certified by the industrial statistician of the Department of Labor and Industries before it is submitted to said officer.

In the event any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the State of Washington, Department of Labor and Industries whose decision shall be final, conclusive and binding on all parties involved in the dispute.

## **2.28 TAXES**

- A.** Applicable federal, state, City, and local taxes shall be included in the Contract price. As used herein, the term "taxes" shall include any and all taxes, assessments, fees, charges, interest, penalties, and/or fines imposed by applicable laws and regulations in connection with the procurement of goods and/or services hereunder.
- (1) Federal Excise Tax. The City is exempt from federal excise tax. The City will furnish a Federal Excise Tax Exemption certificate, if required.
  - (2) State and Local Sales Tax. The City is subject to Washington state sales tax. It is Design-Builder's obligation to state the correct sales tax percentage and include the applicable Washington state, city and local sales tax as a separate line item(s) in the prices submitted.
  - (3) City of Tacoma Business and Occupation Tax. It is Design-Builder's obligation to include City of Tacoma Business and Occupation tax in the unit and/or lump sum prices submitted; it shall not be shown separately on the submittal. Per Sub-Title 6A of the City of Tacoma Municipal Code, transactions with the City may be subject to the City's Business and Occupation Tax.
- B.** Any or All Other Taxes. Any or all other taxes are the responsibility of Design-Builder unless otherwise required by law. Except for state sales tax, Design-Builder acknowledges that it is responsible for the payment of all taxes applicable to the Contract and Design-Builder agrees to comply with all applicable laws regarding the reporting of income, maintenance of records, and all other requirements and obligations imposed pursuant to applicable law.
- C.** If the City is assessed, made liable, or responsible in any manner for taxes contrary to the provisions of the Contract, Design-Builder agrees to hold the City harmless from such costs, including attorney's fees. In the event Design-Builder fails to pay any taxes, assessments, penalties, or fees imposed by any governmental body, including a court of law, other than those taxes the City is required to pay, then Design-Builder authorizes the City to deduct and withhold or pay over to the appropriate governmental body those unpaid amounts upon demand by the governmental body. It is agreed that this provision shall apply to taxes and fees imposed by City ordinance. Any such payments shall be deducted from Design-Builder's total compensation.

## **2.29 LICENSES/PERMITS**

- A.** Design-Builder must register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, 253-591-5252, [https://www.cityoftacoma.org/government/city\\_departments/finance/tax\\_and\\_license/](https://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/).
- B.** During the term of the Contract, Design-Builder, at its expense, shall obtain and keep in force any and all necessary licenses and permits including a Washington State business license and a business license as is required by Tacoma Municipal Code Subtitle 6C.20.

## **2.30 COMPENSATION**

- A.** The City shall compensate Design-Builder in accordance with the Contract. Said compensation shall be the total compensation for Design-Builder's performance hereunder including, but not limited to, all work, services, deliverables, materials, supplies, equipment, subcontractor's fees and all reimbursable travel and miscellaneous or incidental expenses to be incurred by Design-Builder. Unless stated otherwise the total stated compensation may not be changed without a written change order or other form of contract amendment.
- B.** Payment(s) made in accordance with the Contract shall fully compensate Design-Builder for all risk, loss, damages or expense of whatever nature, and acceptance of payment shall constitute a waiver of all claims

submitted by Supplier.

## **2.31 PROGRESS PAYMENT**

Progress payments will be made up to the amount of ninety-five percent (95%) of the actual work completed as shall be determined by the Engineer administering the Contract.

The Design-Builder may request that an escrow account be established as permitted by law, in which event the Design-Builder will earn interest on the retained funds.

When the time for construction, services and/or installation will exceed thirty (30) days, the Design-Builder may request, by invoice, to be paid a progress payment based on percentage of work completed. Progress payment invoices shall be accompanied by the following documentation for each progress payment item, at a minimum:

- Brief narrative description of the progress on the item during the invoice period;
- Labor hours on the item during the invoice period, broken down by management/administration, engineering, fabrication, and installation/construction, expressed as both hours expended during the invoice period and percentage of total hours for the item;
- Materials purchased or used on the item during the invoice period, expressed as units, cost at unit price(s), and percentage of total cost of the item;
- Incidental and other direct costs for the item, expressed as costs during the invoice period and percentage of total cost associated with the item
- Calculation of above values to determine overall percentage completion of the item during the reporting period; the calculation methodologies for each progress payment item shall be submitted for review and approval before invoicing any progress payment.

The Engineer will review and approve the progress payment request on a monthly basis.

## **2.32 FINAL PAYMENT**

The final payment of five percent (5%) of the Contract price shall be approved on final acceptance of the work under this Contract by the City. Also, before final payment is made, the Design-Builder shall be required to:

- A.** Provide a certificate from the Washington State Department of Revenue that all taxes due from the Design-Builder have been paid or are collectible in accordance with the provisions of Chapter 60.28 and Title 82 of the Revised Code of Washington;
- B.** Provide the General Release to the City on the form set forth in these Contract documents;
- C.** Provide a release of any outstanding liens that have been otherwise filed against any monies held or retained by the City of Tacoma;
- D.** File with the City Director of Finance, and with the Director of the Washington State Department of Labor and Industries, on the state form to be provided, an affidavit of wages paid;
- E.** File with the City Director of Finance, on the state form to be provided, a statement from the State of Washington, Department of Labor and Industries, certifying that the prevailing wage requirements have been satisfied;
- F.** File with the City Director of Finance, on the state form to be provided, a statement of release from the Public Works Contracts Division of the State of Washington, Department of Labor and Industries, verifying that all industrial insurance and medical aid premiums have been paid;
- G.** If there is a fee assessed to the City for any certificate, release or other form required by law, the Design-Builder agrees that the fee amount may be passed on to the Design-Builder and deducted from the monies paid to the Design-Builder.

## **2.33 CHANGES**

### **A. In Plans or Quantities**

The City, without invalidating this Contract, or any part of this Contract, may order extra work or make reasonable changes by altering, adding to or deducting from the materials, work and labor and the Contract sum will be adjusted accordingly. All such work and labor shall be executed under the conditions of the original Contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change. When work or bid items are deducted, reduced or eliminated, it is agreed that no payment will be made to Design-Builder for anticipated profit.

**B. Extra Work**

Any claim or order for extra materials, work and labor made necessary by alterations or additions to the plans or by other reasons for which no price is provided in this Contract, shall not be valid unless the Design-Builder and City have agreed upon a price prior to commencing extra work, and the agreement has been signed by the Design-Builder and approved by the City, and approved by the payment and performance bond surety.

**C. Extra Work - No Agreed Price**

If it is impracticable to fix an increase in price definitely in advance, the order may fix a maximum price which shall not under any circumstances, be exceeded, and subject to such limitation, such alteration, modification, or extra shall be paid for at the actual necessary cost as determined by the City, which cost (including an allowance for profit) shall be determined as the sum of the following items (1) to (7) inclusive:

- (1) Labor, computed at regular wage scale, including premium on compensation insurance and charge for social security taxes, and other taxes, pertaining to labor; no charge for premium pay shall be allowed unless authorized by the City;
- (2) The proportionate cost of premiums on comprehensive general liability and other insurance applicable to the extra work involved and required under this Contract;
- (3) Material, including sales taxes pertaining to materials;
- (4) Plant and equipment rental, to be agreed upon in writing before the work is begun; no charge for the cost of repairs to plant or equipment will be allowed;
- (5) Superintendence, general expense and profit computed at 20 percent of the total of paragraphs (1) to (4) inclusive;
- (6) The proportionate cost of premiums on bonds required by this Contract, computed by 1 1/2 percent of the total of paragraphs (1) to (5) inclusive;
- (7) The City reserves the right to furnish such materials as it may deem expedient, and no allowance will be made for profit thereon.

Whenever any extra work is in progress, for which the definite price has not been agreed on in advance, the Design-Builder shall each day, report to the City the amount and cost of the labor and material used, and any other expense incurred in such extra work on the preceding day, and no claim for compensation for such extra work will be allowed unless such report shall have been made.

The above-described methods of determining the payment for work and materials shall not apply to the performance of any work or the furnishing of any material, which, in the judgment of the City, may properly be classified under items for which prices are established in the Contract.

**D. Claims for Extra Work**

If the Design-Builder claims that any instructions by drawings or otherwise, involve extra cost under this Contract, he/she shall give the City written notice thereof within 30 days after receipt of such instruction, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedures governing the same shall be as provided for immediately above in this paragraph. The method in these paragraphs is the only method available to the Design-Builder for payment of claims for extra work performed under the terms of this Contract.

**2.34 CLEANING UP**

The Design-Builder shall at all times, at his/her own expense, keep the premises free from accumulation of waste materials or debris caused by any workers or the work, at the completion of the work the Design-Builder shall remove all his waste materials from and about the Site and all his/her equipment, sanitary facilities and surplus materials. In the case of dispute, the City may remove the debris and charge the cost to the Design-Builder as the City shall determine to be just. All material that is deposited or placed elsewhere than in places designated or approved by the City will not be paid for and the Design-Builder may be required to remove such material and deposit or place it where directed.

**2.35 LIST OF SUBCONTRACTORS**

Provide a list of subcontractors as required in this RFP.

**2.36 ACCESS TO AND SUITABILITY OF THE PROJECT SITE**

**A. Familiarity with the Project Site**

The Design-Builder acknowledges that the Design-Builder's agents and representatives have visited, inspected and are familiar with the Project Site, its physical condition relevant to the obligations of the Design-Builder under this Contract; that the Design-Builder is familiar with all local and other conditions which may be material to the Design-Builder's performance of its obligations under this Contract

(including, but not limited to transportation; seasons and climate; access; availability; disposal, handling and storage of materials and equipment; and availability and quality of labor and utilities); and that the Design-Builder reviewed all information regarding the Project Site provided or otherwise made available through this Contract or the RFP process, or otherwise obtained in the course of performing its obligations hereunder; and that based on the foregoing and the reasonably observable conditions at the Project Site Walkthrough, the Project Site constitutes an acceptable and suitable site for the construction of the Project in accordance herewith, and the Project can be constructed on the Project Site within the Awarded Contract Price in accordance with the progress schedule and Design-Builder's Price Proposal, subject to the provisions hereof relating to Regulated Site Conditions and other Changed Conditions.

**B. Access to Project Site**

The execution of this Contract and Notice to Proceed shall constitute the granting of access to the Design-Builder to the Project Site, conditioned upon compliance with Site security requirements and solely for the purpose of performing all Design-Build Work.

**2.37 PROJECT PHASES AND VALIDATION PERIODS**

Not Used.

**2.38 REGULATED SITE CONDITIONS**

**A. Design-Builder Obligations**

In performing the Design-Build Work, the Design-Builder shall exercise due care, in light of all relevant facts and circumstances, to avoid exacerbating any Regulated Site Condition or otherwise address and manage such Regulated Site Conditions in accordance with Good Engineering and Construction Practice after the location and existence of such Regulated Site Condition has been disclosed to the Design-Builder, or becomes actually known by the Design-Builder through physical observation (including any such observation made during any demolition). The Design-Builder shall also comply with all requirements concerning Regulated Site Conditions. The Design-Builder shall be liable for any loss and expense incurred by the City arising out of or resulting from: (1) the Design-Builder's, or its agents' or Subcontractors', failure to exercise due care with respect to such disclosed or known Regulated Site Condition; (2) the Design-Builder's, or its agents' or Subcontractors', failure to comply with any requirements in the Schedules concerning Regulated Site Conditions; and (3) any new release of Regulated Substances caused by the Design-Builder or its agents or Subcontractors, such as a spill. The Design-Builder shall not otherwise be responsible for any Regulated Site Condition, including any loss and expense relating to any Regulated Site Condition.

**B. Asbestos Discovery - Notification Obligations**

- (1) The City has provided notice of existing asbestos in the Project Site. In the event that the presence of any asbestos is discovered in the vicinity of the Work that existed prior to the Design-Builder's entry ("pre-existing asbestos"), the Design-Builder shall promptly suspend all work and notify the City. The Design-Builder shall be responsible for the removal, abatement, and disposal of any pre-existing asbestos in accordance with the Contract.
- (2) To the extent that the Design-Builder fails to promptly suspend all work and notify the City of the discovery of any pre-existing asbestos, or to the extent the Design-Builder, its Subcontractors or agents, negligently cause any pre-existing asbestos, the location of which the City has notified the Design-Builder, to become disturbed, the Design-Builder shall remain responsible for such asbestos related claims.

**C. City Obligations**

If at any time a Regulated Site Condition is determined to exist which (1) reasonably requires a Response Action or other action in order to comply with Applicable Law, (2) interferes with the performance of the Design-Build Work, or (3) increases the cost to the Design-Builder of performing the Design-Build Work, then the Design-Builder shall immediately provide written notice to the City of such Regulated Site Condition. The City shall promptly after written notice from any Governmental Body or the Design-Builder of the presence or existence thereof, commence and diligently prosecute Response Actions or other actions as may be necessary to dispose of, remediate or otherwise correct the Regulated Site Condition or otherwise make the Regulated Site Condition comply with Applicable Law.

**2.39 COMMENCEMENT OF DESIGN-BUILD WORK**

**A. Commencement**

The Design-Builder shall proceed, promptly following the Contract Date, to undertake, perform and complete the Design-Build Work in accordance with the Contract Documents. The Design-Builder shall not commence the manufacturing or construction portion of the Design-Build Work until the Design-

Builder has satisfied all pre-construction requirements set forth in or such requirements have been waived by the City.

**B. Sole Responsibility and Liability**

The Design-Builder shall have the sole and exclusive responsibility and liability for the design, construction and performance of the Project hereunder, notwithstanding any term, condition or provision pertaining to the Project set forth in the RFQ or RFP. The Design-Builder acknowledges that, in the proposal and negotiation process leading to the execution of this Contract, the Design-Builder had the unrestricted right and opportunity not to execute this Contract if the Design-Builder had determined that any such term, condition or provision would in any manner or to any degree impair the Design-Builder's ability to perform the Design-Build Work in compliance herewith.

**C. City Review and Comment on Design Documents**

The City shall have the right to review and comment on the Design-Builder's design documents in order to confirm the compliance and consistency of the design documents with the General and Technical Requirements. The Design-Builder shall give due consideration and provide written responses, in the time and manner provided in the Contract Documents, to any comments delivered by the City as to the Design-Builder's design documents. Neither compliance by the Design-Builder with the General and Technical Requirements, nor review and comment by the City of the design documents, nor any failure or delay by the City in commenting on any design documents shall in any way relieve the Design-Builder of full responsibility for the timely design, construction and performance of the Project in accordance with the Contract.

**D. Documents at the Project Site**

The Design-Builder shall maintain at the Project Site all design and construction documents, including a complete set of record drawings, in accordance with the Contract Documents. These documents shall be available to the City for reference, copying and use. Construction and other record drawings shall be updated at least bi-weekly with redline markups to reflect as-installed or constructed conditions.

**2.40 DESIGN-BUILDER DESIGN – GENERAL AND TECHNICAL REQUIREMENTS**

**A. Conformity of Design-Builder Design Documents with the General and Technical Requirements**

The Design-Builder shall prepare all design documents necessary or appropriate to carry out and complete the Project. All working and final design documents shall comply with the General and Technical Requirements and shall ensure that the Project is constructed to a standard of quality, integrity, durability and reliability which is equal to or better than the standard established by the Contract Documents.

**B. City Interest in the General and Technical Requirements**

The Design-Builder acknowledges the City's material interest in each provision of the General and Technical Requirements and no change to the General and Technical Requirements shall be made except with the consent of the City, which may be withheld or conditioned in its sole discretion. Any such changes shall be evidenced by a Change Order, as applicable.

**C. General and Technical Requirement Changes Made At Design-Builder Request**

The Design-Builder may request for City consideration changes to the General or Technical requirements that do not negate, dilute, or supersede any other General or Technical requirement and which also do not negatively impact the quality, integrity, reliability, and service life. The Design-Builder shall provide the City timely written notice of any such request such that the City has at least 30 days to review such request, and if approved, sufficient time develop and execute a Change Order so that the project schedule is not affected. The notice shall contain sufficient technical, cost, and schedule information for the City to determine that the General or Technical Requirements change: (1) does not diminish the capacity of the Project to comply with the Contract; (2) does not impair the quality, integrity, durability and reliability of the Project; (3) is reasonably necessary or is advantageous for the Design-Builder to fulfill its obligations under this Contract; and (4) is feasible. The City shall have the absolute right to accept, reject or modify any General or Technical Requirements change proposed by the Design-Builder. Any such General or Technical Requirement change accepted or modified by the City, and any related change in the terms and conditions of this Contract, shall be reflected in a Change Order.

**D. General and Technical Requirement Changes Made On Account Of Changed Condition**

Upon the Notice of Changed Conditions, the City shall promptly proceed, subject to the terms, conditions and procedures set forth in Section 2.33, to make or cause to be made all General and Technical Requirements changes reasonably necessary to address the Changed Condition(s). The Design-Builder shall consult with the City concerning possible means of addressing and mitigating the effect of any Changed Conditions, and both parties shall cooperate in order to minimize any delay,



lessen any additional cost and modify the Project so as to permit the Design-Builder to continue performing the Design-Build Work in light of such Changed Conditions. The design and construction costs resulting from any General or Technical Requirement resulting from a Changed Condition shall be borne by the City. Any General or Technical Requirement change made on account of Changed Conditions, and any related change in the terms and conditions of this Contract, shall be reflected in a Change Order.

**E. General and Technical Requirement Changes Required By Governmental Bodies**

The parties recognize that a Governmental Body may impose conditions in connection with a Governmental Approval, not known at the time of Technical and Price Proposal submittals, that requires a General or Technical Requirement(s) change. In the event of any such additional conditions are set by a Governmental Body, the City shall promptly proceed to accommodate any General or Technical Requirement changes reasonably necessary to comply with such additional conditions by Change Order.

**F. General and Technical Requirement Changes Made At City Direction**

The City shall have the right to make General and Technical Requirement changes at any time for any reason whatsoever, whether and however the exercise of such rights affects this Contract. The design and construction costs resulting from any such General or Technical Requirement change made at the City's direction under this Section shall be added to the Contract by Change Order. No General or Technical Requirement change shall be made at the direction of the City under this Section that impairs any right, impairs the ability to perform, imposes any additional obligation or liability, or increases the costs of the Design-Builder hereunder, unless the Design-Builder is specifically compensated or specifically provided relief for such impairment, obligation, cost or liability.

**2.41 COMMENCEMENT OF CONSTRUCTION**

**A. Pre-Construction Requirements**

The Design-Builder shall not commence construction of the Unit or any portion thereof until all of the following pre-construction requirements have been satisfied by the Design-Builder or waived by the City:

- (1) Plans and Reports for Design-Build Work. The Design-Builder shall have received approval from the City on all final versions of plans, drawings and reports required for the Design-Build Work in accordance with the requirements set forth in the Contract Documents.
- (2) Updated Construction Schedule. The Design-Builder shall have provided the City an updated Construction Schedule in accordance with the Contract Documents.
- (3) Materials on Site. The Design-Builder shall have delivered and inspected all materials required to be on Site in accordance with the requirements of the Contract Documents.
- (4) Pre-Construction Conference. The Design-Builder has held a pre-construction conference for the Unit with the City in accordance with the requirements of the Contract Documents.

**2.42 CONSTRUCTION PRACTICE**

The Design-Builder shall perform the Design-Build Work in accordance with the Contract and shall have exclusive responsibility for all construction means, methods, techniques, sequences, and procedures necessary or desirable for the correct, prompt, and orderly prosecution and completion of the Design-Build Work as required by this Contract. The responsibility to provide the construction means, methods, techniques, sequences and procedures referred to above shall include, but not be limited to, the obligation of the Design-Builder to provide the following construction requirements: construction trailers; required design certifications; required approvals; weather protection; clean-up and housekeeping of the Project Site; construction personnel; temporary parking; vehicle traffic; safety and first aid facilities and equipment; correction of or compensation for defective work or equipment; Subcontractors' insurance; additional storage areas; temporary fire protection; Subcontractor and vendor qualification; receipt and unloading of delivered materials and equipment; erection rigging; temporary supports; and construction coordination and supervision.

**2.43 ENGAGEMENT OF CITY**

The Design-Builder shall fully cooperate with the City's Contract Representative of this Contract and the performance of its duties for the City. In the performance of such services, the Design-Builder agrees that the City may, without limiting other possible services to the City: review and monitor construction progress, payments and procedures; determine the completion of specified portions of the Design-Build Work; review proposed changes to the General and Technical Requirements; review plans, drawings and specifications of the Project for compliance with the General and Technical Requirements; review the validity of any Design-Builder written notice that an Changed Conditions has occurred (including the discovery of Regulated Site Conditions); and provide certificates and perform such other duties as may be specifically conferred on the

City hereunder. It is understood that while the services intended to be provided by the City shall be of an observational and review nature, the City may, if appropriate, have the authority to interfere with, halt or delay, in any way it deems necessary, the construction of the Project or require or approve changes to the General and Technical Requirements or the Design-Builders design documents prepared in connection therewith.

## **2.44 PROGRESS SCHEDULE AND REPORTS**

### **A. General**

The Design-Builder shall submit to the City design submittals, monthly progress schedules and reports in accordance with the requirements of the Contract Documents. The Design-Builder agrees that the Design-Builder's submission of the monthly progress schedule and report (or any revised progress schedule and report) is for the City's information only, and the City's acceptance of the monthly progress schedule and report (or any revised progress schedule and report) shall not bind the City in any manner. Thus, the City's acceptance of the monthly progress schedule and report (or any revised monthly progress schedule and report) shall not imply City approval or consent to any of the matters set forth therein.

### **B. Design and Construction Schedule**

The Design-Builder shall perform the Design-Build Work according to the accepted progress schedule.

## **2.45 UNIT ACCEPTANCE**

### **A. Acceptance Process**

The Design-Builder shall prepare and submit to the City for its approval a detailed Inspection and Test Plan, which shall conform to the requirements of the Contract Documents in all respects.

### **B. Punch List**

The Design-Builder shall submit an up to date Punch List to the City when the Design-Builder believes that the Design-Build Work for the Unit has been substantially completed in compliance with this Contract.

The Punch List shall include a statement of repairs, corrections and adjustments to the Design-Build Work, and incomplete aspects of the Design-Build Work which need to be completed as a condition of Project Completion.

The Design-Builder and the City will agree in writing upon the Punch List (or, if they are unable to agree, the City will prepare and issue the Punch List to the Design-Builder within twenty-one (21) days of the Design-Builder having submitted its prepared Punch List to the City). Completion of the Punch List work shall be verified by a walk-through of the Project conducted by the City with the Design-Builder.

### **C. Performance Testing**

- (1) Conduct the Performance Test. When the Design-Builder has reassembled the unit, the Design-Builder shall conduct the Performance Test in accordance with the Contract Documents.
- (2) Commercial Operation. If the Unit cannot be placed in Commercial Operation by the Scheduled Commercial Operation Date, Liquidated Damages will apply pursuant to Section 2.47. If the Unit fails to meet the Performance Guarantees, the City may elect, in its discretion, to place the Unit in Commercial Operation while the Design-Builder continues to correct the conditions to meet the Performance Guarantees. If the Performance Test indicates that the Unit meets the Performance Guarantees and all other Unit Acceptance Date Conditions set forth below, the Unit will be accepted and the parties shall begin Project completion. If the Unit Acceptance Date Conditions are not met, the parties shall proceed as set forth below.
- (3) Performance Test Report. Within thirty (30) days following the last day of any Performance Test, the Design-Builder shall furnish the City with a written Performance Test report consistent with the requirements specified in the Contract Documents. If the Design-Builder fails to furnish the certified Performance Test report within such 30-day period, the Unit shall be deemed to have failed to meet the Performance Test requirements.
- (4) Costs of Performance Test. The cost of all Performance Test activities which the Design-Builder incurs, including any repetition of the Performance Test, shall be included in the Awarded Contract Price. If repeated Performance Tests are required due to the failure of the Design-Builder to meet Performance Test requirements or other Performance Guarantees, the Design-Builder shall reimburse the City for all costs of the City in conducting any such repeated Performance Tests.

#### **D. Unit Acceptance Date Conditions**

The following conditions shall constitute the "Unit Acceptance Date Conditions," each of which must be satisfied in all material respects by the Design-Builder in order for the Unit Acceptance Date to occur, and each of which must be and remain satisfied as of the Unit Acceptance Date:

**Achievement of Performance Guarantees.** The Design-Builder shall have completed the Performance Tests and such tests shall have demonstrated that the Unit has met the Performance Guarantees. Unit Acceptance shall not be deemed to have been achieved unless the Performance Test, conducted in the manner provided in the Contract Documents and the Performance Test Plan, demonstrates that the Performance Guarantees have been met. In the event the Unit does not successfully meet the Performance Guarantees, the Design-Builder, at Design-Builder's expense, shall take corrective action and re-test the Unit in accordance with the Contract Documents. The Design-Builder shall provide the City with at least two weeks' written notice of any repeat of the Performance Test. The City reserves the right to reschedule the Performance Test retest or rework due to failed Performance Tests.

**Design-Build Work Completed.** All Work on the Unit, including all items on the Punch List for the Unit has been completed.

**Final Operation and Maintenance Manual.** The Design-Builder has delivered to the City the final Operation and Maintenance Manual for the Unit.

**Trial Operation Period** is completed and accepted by the City.

**Warranty Bonds** are issued and submitted by the Design-Builder and accepted by the City.

**Unit Acceptance Certificate** is issued by the Design-Builder and accepted by the City.

#### **E. Concurrence Or Disagreement With Unit Acceptance Date Conditions**

- (1) **Unit Acceptance Date Concurrence.** The "Unit Acceptance Date" shall be the day upon which the Design-Builder certifies that all Unit Acceptance Date Conditions have occurred. The City shall determine, within 30 Days of its receipt of such report, whether it concurs with such certification. If the City states in writing that it concurs with the Design-Builder's certification, the Unit shall be deemed to have achieved Acceptance and the Unit Acceptance Date shall be established on the date of the Design-Builder's original certification. In cases where the City does not determine in writing the concurrence or disagreement with Unit Acceptance Date Conditions certified by the Design-Builder within thirty (30) Days of the receipt by the City of such report, the date of the Design-Builder's original certification of the Unit Acceptance Date shall be deemed to have been achieved and established.
- (2) **Unit Acceptance Date Disagreement.** If the City determines at any time during such 30-Day review period that it does not concur with the Design-Builder's certification of Unit Acceptance, the City shall immediately send written notice to the Design-Builder of the basis for its disagreement. In the event of any such non-concurrence by the City, the parties shall attempt to resolve the matter through discussion and negotiation for the remainder of the 30-Day review period. If the parties do not resolve the dispute within the 30 Days allowed for review, either party may elect to refer the dispute to Mediation pursuant to Section 2.18. If the parties are unable to resolve the dispute through Mediation, then either party may initiate judicial proceedings.

### **2.46 PROJECT COMPLETION**

#### **A. Requirements**

"Project Completion" shall be deemed to have occurred when all of the following conditions have been satisfied:

- (1) **Unit Acceptance Achieved.** The Design-Builder has achieved Unit Acceptance in accordance with this Section;
- (2) **Deliverables.** The Design-Builder shall have delivered to the City all Deliverables required under the Contract Documents;
- (3) **Final Record Drawings.** The Design-Builder shall have delivered to the City construction record drawings and all Operations and Maintenance manual as required in the Contract Documents;
- (4) **Spare Parts In Storage.** All spare parts and additional materials required by the applicable General and Technical Requirements have been delivered and are in storage at the Project Site or other area designated by the City;
- (5) **Punch List.** All items on the Punch List have been completed by the Design-Builder and then approved and verified by the City.
- (6) **Contract Documentation.** The Design-Builder shall have delivered all other documentation required by the Contract or by Applicable Law;

- (7) Payment of Claims. The Design-Builder has certified to the City that all of its claims against the City have been paid; and
- (8) Cleanup. Clean up and removal of construction materials, debris, and any temporary facilities has been completed.

Final acceptance by the City is contingent upon the Design-Builder achieving Project Completion.

## **2.47 LIQUIDATED DAMAGES**

### **A. General**

This Contract provides for the assessment of Liquidated Damages against the Design-Builder for delay, for failure of the Unit to meet requirements to be placed in Commercial Operation, or for delay or failure of the Unit to achieve Performance Guarantees. Each party agrees that the City's actual damages in each such circumstance would be difficult or impossible to ascertain (particularly with respect to the public harm that could occur as a result of such non-performance, breach or default of the Design-Builder), and that the Liquidated Damages provided for herein with respect to each such circumstance are a fair and reasonable determination of such damages and are intended to place the City in the same economic position as it would have been in had the circumstance not occurred. Liquidated Damages shall constitute the only damages that will be assessed against the Design-Builder for delay or failure to achieve Performance Guarantees, and are the exclusive remedy of the City; provided that such Liquidated Damages shall not preclude, limit or alter any other remedies available at law or equity for default or breach for which Liquidated Damages are not specifically provided for in this Contract. The parties acknowledge and agree that such additional remedies are intended to address harms and damages which are separate and distinct from those which the Liquidated Damages are meant to remedy. The City's assessment of Liquidated Damages shall not be construed as a penalty.

### **B. Liquidated Damages for Delay**

- (1) The parties have agreed on the following Liquidated Damages resulting from failure to achieve specific progress schedule milestones. The Design-Builder authorizes the City to deduct the Liquidated Damages pursuant to the schedule set forth below from any money due or become due the Design-Builder. Liquidated Damages will not be assessed for any Day for which an extension of time is granted. No deduction or payment of such damages for delay will release the Design-Builder, in any degree, from further obligations and liability to complete the Contract.
- (2) Liquidated Damages for Failure to Achieve Commercial Operation. In the event that the Design-Builder fails to achieve the Performance Guarantees and other applicable specified requirements by the Scheduled Commercial Operation Date, the City may, in its sole discretion, determine whether to place the Unit in Commercial Operation. If the Unit is not placed in Commercial Operation by the Scheduled Commercial Operation Date, Liquidated Damages will apply as set forth below for the Unit for each calendar day beyond the Scheduled Commercial Operation Date until the Design-Builder achieves Commercial Operation.

1 to 7 Days	\$TBD
Beyond 7 Days	\$TBD

### **C. Failure to Achieve Performance Guarantees**

- (1) In the event that the Design-Builder initially fails to achieve the Performance Guarantees, the Design-Builder shall be required to conduct the Performance Test at least one additional time. Prior to any retest, the Design-Builder shall provide, for the City's approval, a written plan laying out the remedial steps the Design-Builder plans to take to meet the Performance Guarantees.
- (2) If the City decides to place the Unit in Commercial Operation even though the Unit failed to achieve the Performance Guarantees, the Design-Builder shall provide to the City, a written plan (hereinafter "Remedial Plan") describing, in detail, the remedial steps the Design-Builder proposes to take to meet the Performance Guarantees, including but not limited to whether the Remedial Plan requires an outage and the planned duration of the outage. The City shall have the right to approve the Remedial Plan in whole or in part, provided the City shall not unreasonably withhold approval of the Remedial Plan. If the approved Remedial Plan requires a Unit outage, the City shall conduct an outage to allow the Design-Builder an opportunity to perform the Corrective Work; however, such Corrective Work may be limited if the disassembly of other Units restricts the ability to disassemble the Unit in question. In addition, the City shall determine, in its sole discretion, the date and duration of any outage, and the extent of disassembly of the Unit. In no circumstance will the City remove the rotor from the Unit for this outage. If such an outage is conducted, Liquidated Damages will apply in the amount of \$9,500 per day for each day of the outage.
- (3) If the City decides to place the Unit in Commercial Operation despite the failure to achieve the Performance Guarantees or other applicable requirements, and not allow an outage, the City will proceed as set forth in Section D below and shall not be entitled to the liquidated remedies for delay.

#### **D. Liquidated Damages for Continued Failure to Achieve Performance Guarantees**

- (1) Liquidated Damages shall be assessed in the amount of \$TBD for each kilowatt (or portion thereof) that the actual stator winding I2R losses at 95 degrees Celsius as determined by test, exceed the guaranteed I2R losses per Contract. Any reduction so made will be based on measurement of the winding resistance (average of all three phases) and winding RTDs temperature (average of all readings) as specified and calculated I2R losses at rated current.
- (2) Liquidated Damages shall be assessed in the amount of \$TBD for every kVA reduction (or portion thereof) from 33,000 KVA at 0.90 power factor required to limit the temperature rise of the stator winding and field winding to values specified in Bid. KVA at warranted temperature rise will be determined by test as specified.

#### **2.48 COST RECORDS AND REPORTING**

During the Term of this Contract, the Design-Builder shall prepare and maintain proper, accurate and complete books and records of the cost and description of the Design-Build Work that the Design-Builder has performed since the Contract Date, the cost of which would be the responsibility of the City if the City were to elect to terminate this Contract pursuant to this Section. All financial records of the Design-Builder and its Subcontractors shall be maintained in accordance with generally accepted accounting principles and auditing standards. The Design-Builder shall submit a reasonably detailed summary thereof acceptable to the City, together with a summary statement of monthly and aggregate reimbursable expenses incurred, to the City at any time after the Contract Date at its request. Specific requests by the Design-Builder for the payment of reimbursable expenses shall be supported by Cost Substantiation. In the event that the City terminates the Contract, the Design-Builder shall make available to the City a copy of all books and records of the Design-Build Work.

#### **2.49 NO WAIVERS**

No action of the City or Design-Builder pursuant to this Contract (including, but not limited to, any investigation or payment), and no failure to act, shall constitute a waiver by either party of the other party's compliance with any term or provision of this Contract. No course of dealing or delay by the City or Design-Builder in exercising any right, power or remedy under this Contract shall operate as a waiver thereof or otherwise prejudice such party's rights, powers and remedies. No single or partial exercise of (or failure to exercise) any right, power or remedy of the City or the Design-Builder under this Contract shall preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

#### **2.50 NOTICES**

Unless otherwise specified, except for routine operational communications, which may be delivered personally or transmitted by electronic mail, all notices required by the Contract shall be in writing and shall be deemed to have been duly given if delivered personally or mailed first-class mail, postage prepaid, to Design-Builder's registered agent and to the applicable City representative.

#### **2.51 NONDISCRIMINATION**

Design-Builder agrees to take all steps necessary to comply with all federal, state, and City laws and policies regarding non-discrimination and equal employment opportunities. Design-Builder shall not discriminate in any employment action because of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental, or physical handicap. In the event of non-compliance by Design-Builder with any of the non-discrimination provisions of the Contract, the City shall be deemed to have cause to terminate the Contract, in whole or in part.

#### **2.52 FEDERAL, STATE, AND MUNICIPAL LAWS AND REGULATIONS**

Design-Builder shall comply with all federal, state, municipal, and/or local laws and regulations in the performance of all terms and conditions of the Contract. Design-Builder shall be solely responsible for all violations of the law from any cause in connection with its performance of work under the Contract.

#### **2.53 FEDERAL, STATE AND MUNICIPAL REGULATIONS**

All federal, state, municipal and/or local regulations shall be satisfied in the performance of all portions of the Contract. The Design-Builder shall be solely responsible for all violations of the law from any cause in connection with work performed under this Contract.

## **2.54 PUBLIC DISCLOSURE: PROPRIETARY OR CONFIDENTIAL INFORMATION**

- A.** Design-Builder submittals, all documents and records comprising the Contract, and all other documents and records provided to the City by Design-Builder are deemed public records subject to disclosure under the Washington State Public Records Act, Chapter 42.56 RCW (Public Records Act). Thus, City may be required, upon request, to disclose the Contract and documents or records related to it unless an exemption under the Public Records Act or other laws applies. In the event City receives a request for such disclosure, determines in its legal judgment that no applicable exemption to disclosure applies, and Design-Builder has complied with the requirements to mark records considered confidential or proprietary as such requirements are stated below, City agrees to provide Design-Builder 10 days written notice of impending release. Should legal action thereafter be initiated by Design-Builder to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Design-Builder, including any damages, attorneys' fees or costs awarded by reason of having opposed disclosure. City shall not be liable for any release where notice was provided and Design-Builder took no action to oppose the release of information.
- B.** If Design-Builder provides City with records or information that Design-Builder considers confidential or proprietary, Design-Builder must mark all applicable pages or sections of said record(s) as "Confidential" or "Proprietary." Further, in the case of records or information submitted in response to a Request for Proposals, an index must be provided indicating the affected pages or sections and locations of all such material identified Confidential or Proprietary. Information not included in the required index will not be reviewed for confidentiality or as proprietary before release. If Design-Builder fails to so mark or index Submittals and related records, then the City, upon request, may release said record(s) without the need to satisfy the requirements of subsection A above; and Design-Builder expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s).
- C.** Submission of materials in response to City's Solicitation shall constitute assent by Design-Builder to the foregoing procedure and Design-Builder shall have no claim against the City on account of actions taken pursuant to such procedure.

## **2.55 WAIVER**

A waiver or failure by either party to enforce any provision of the contract shall not be construed as a continuing waiver of such provisions, nor shall the same constitute a waiver of any other provision of the Contract.

## **2.56 SEVERABILITY AND SURVIVAL**

If any term, condition or provision herein or incorporated by reference is declared void or unenforceable or limited in its application or effect, such event shall not affect any other provisions hereof and all other provisions shall remain fully enforceable. The provisions of the Contract, which by their sense and context are reasonably intended to survive the completion, expiration or cancellation of the Contract, shall survive termination of the Contract.

## **2.57 NO CITY LIABILITY**

Neither the City, its officials, staff, agents, employees, representatives, or consultants will be liable for any claims or damages resulting from any aspect of this procurement process.

## **2.58 SIGNATURES**

A signed copy of Submittals, Contract Documents, including but not limited to contract amendments, contract exhibits, task orders, statements of work and other such Contract related documents, delivered by email or other means of electronic transmission including by using a third party service, which service is provided primarily for the electronic execution of electronic records, shall be deemed to have the same legal effect as delivery of an original signed copy.

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**Attachment F**  
**Draft Insurance Requirements**



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# CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

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The Contractor (Contractor) shall maintain at least the minimum insurance set forth below. By requiring such minimum insurance, the City of Tacoma shall not be deemed or construed to have assessed the risk that may be applicable to Contractor under this Contract. Contractor shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

## 1. GENERAL REQUIREMENTS

The following General Requirements apply to Contractor and to Subcontractor(s) of every tier performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements applicable to Contractor and Contractor's Subcontractor(s):

- 1.1. City of Tacoma reserves the right to approve or reject the insurance provided based upon the insurer, terms and coverage, the Certificate of Insurance, and/or endorsements.
- 1.2. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by City of Tacoma.
- 1.3. Contractor shall keep this insurance in force during the entire term of the Contract and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.
- 1.4. Insurance policies required under this Contract that name "City of Tacoma" as Additional Insured shall:
  - 1.4.1. Be considered primary and non-contributory for all claims.
  - 1.4.2. Contain a "Separation of Insured provision and a "Waiver of Subrogation" clause in favor of City of Tacoma.
- 1.5. Section 1.4 above does not apply to contracts for purchasing supplies only.
- 1.6. Verification of coverage shall include:
  - 1.6.1. An ACORD certificate or equivalent.
  - 1.6.2. Copies of all endorsements naming the City of Tacoma as additional insured and showing the policy number.
  - 1.6.3. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.
- 1.7. Liability insurance policies, with the exception of Professional Liability and Workers' Compensation, shall name the City of Tacoma and its officers, elected officials, employees, agents, and authorized volunteers as additional insured.
  - 1.7.1. No specific person or department should be identified as the additional insured.
  - 1.7.2. All references on certificates of insurance and endorsements shall be listed as "City of Tacoma".
  - 1.7.3. The City of Tacoma shall be additional insured for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20



# CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

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37 04 13 or the equivalent for the full available limits of liability maintained by the Contractor irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract and irrespective of whether the Certificate of Insurance describes limits lower than those maintained by the Contractor.

- 1.8. Contractor shall provide a Certificate of Insurance for each policy of insurance meeting the requirements set forth herein when Contractor provides the signed Contract for the work to City of Tacoma. Contractor shall provide copies of any applicable Additional Insured, Waiver of Subrogation, and Primary and Non-contributory endorsements. Contract or Permit number and the City Department must be shown on the Certificate of Insurance.
- 1.9. Insurance limits shown below may be written with an excess policy that follows the form of an underlying primary liability policy or an excess policy providing the required limit.
- 1.10. Liability insurance policies shall be written on an "occurrence" form, except for Professional Liability/Errors and Omissions, Pollution Liability, and Cyber/Privacy and Security
- 1.11. If coverage is approved and purchased on a "Claims-Made" basis, Contractor warrants continuation of coverage, either through policy renewals or by the purchase of an extended reporting period endorsement as set forth below.
- 1.12. The insurance must be written by companies licensed or authorized in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best's Key Rating Guide [www.ambest.com](http://www.ambest.com).
- 1.13. Contractor shall provide City of Tacoma notice of any cancellation or non-renewal of this required insurance within Thirty (30) calendar days.
- 1.14. Contractor shall not allow any insurance to be cancelled or lapse during any term of this Contract, otherwise it shall constitute a material breach of the Contract, upon which City of Tacoma may, after giving Five (5) business day notice to Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith; with any sums so expended to be repaid to City of Tacoma by Contractor upon demand, or at the sole discretion of City of Tacoma, offset against funds due Contractor from City of Tacoma.
- 1.15. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars (\$25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.
- 1.16. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services has changed.



# CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

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- 1.17. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made by City of Tacoma to Contractor.
- 1.18. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).
- 1.19. Failure by City of Tacoma to identify a deficiency in the insurance documentation provided by Contractor or failure of City of Tacoma to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 1.20. If Contractor is a State of Washington or local government and is self-insured for any of the above insurance requirements, a certification of self-insurance shall be attached hereto and be incorporated by reference and shall constitute compliance with this Section.

## **2. CONTRACTOR**

As used herein, "Contractor" shall be the Supplier(s) entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise.

## **3. SUBCONTRACTORS**

It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage. Contractor shall provide evidence of such insurance upon City of Tacoma's request.

## **4. REQUIRED INSURANCE AND LIMITS**

The insurance policies shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve Contractor from liability in excess of such limits.

### **4.1 Commercial General Liability Insurance**

Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. The Commercial General Liability Insurance policy shall be written on an Insurance Services Office form CG 00 01 04 13 or its equivalent. Products and Completed Operations shall be maintained for a period of three years following Substantial Completion of the Work related to performing construction services.

This policy shall include product liability especially when a Contract solely is for purchasing supplies. The Commercial General Liability policy shall be endorsed to include:

- 4.1.1 A per project aggregate policy limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

### **4.2 Commercial (Business) Automobile Liability Insurance**

Contractor shall maintain Commercial Automobile Liability policy with limits not less than One Million Dollars (\$1,000,000) each accident for bodily injury and property damage and bodily injury and property damage coverage for owned (if any), non-owned, hired, or leased vehicles. Commercial Automobile Liability Insurance shall be written using ISO form CA 00 01 or



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

equivalent. Contractor must also maintain an MCS 90 endorsement or equivalent and a CA 99 48 endorsement or equivalent if "Pollutants" are to be transported.

### 4.3 Workers' Compensation

Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. The Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.

### 4.4 Employers' Liability Insurance

Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars (\$1,000,000) each employee, One Million Dollars (\$1,000,000) each accident, and One Million Dollars (\$1,000,000) policy limit.

### 4.5 Professional Liability Insurance or Errors and Omissions

Contractor and/or its subcontractor shall maintain Professional Liability or Errors and Omissions with limits of One Million Dollars (\$2,000,000) per claim and Two Million Dollars (\$4,000,000) in the aggregate covering acts, errors and omissions arising out of the professional services under this Contract.

If the policy limit includes the payment of claims or defense costs, from the policy limit, the per claim limit shall be Two Million Dollars (\$2,000,000).

If the scope of such design-related professional services includes work related to pollution conditions, the Professional Liability policy shall include Pollution Liability coverage.

If provided on a "claims-made" basis, such coverage shall be maintained by policy renewals or an extended reporting period endorsement for not less than three years following the end of the Contract.

### 4.6 Excess or Umbrella Liability Insurance

Contractor shall provide Excess or Umbrella Liability Insurance with limits not less than Fifteen Million Dollars (\$15,000,000) per occurrence and in the aggregate. This coverage shall apply, at a minimum, in excess of primary underlying Commercial General Liability, Employer's Liability, Pollution Liability, Marine General Liability, Protection and Indemnity, and Automobile Liability if required herein.

### 4.7 Pollution Liability Insurance

Contractor shall maintain a Pollution Liability or Environmental Liability Insurance providing coverage, including investigation and defense costs, for bodily injury and property damage, including loss of use of damaged property or of property that has been physically damaged or destroyed.

Such coverage shall provide both on-site and off-site cleanup costs and cover gradual and sudden pollution, and include in its scope of coverage the City of Tacoma damage claims for loss arising out of Contractor's work with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) aggregate.

This policy shall include Environmental Resource Damage coverage and Hazardous Substance Removal. If such coverage is provided on a "claims-made" basis, the following additional conditions must be met:

4.7.1 The policy must contain no retroactive date, or the retroactive date must precede the commencement date of this Contract.

4.7.2 The extended reporting period (tail) must be purchased to cover a minimum of Six (6) years beyond completion of work.

### 4.8 Commercial Property Insurance



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

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Contractor shall provide Commercial Property Insurance for loss or damage to any and all equipment owned by City of Tacoma while in the care, custody, or control of Contractor, Subcontractors, or their agents. The coverage shall be provided on an ISO **Special Form Causes of Loss** CP10 30 06 07 or equivalent and shall provide full replacement cost coverage. The deductible shall not exceed Two Thousand Five Hundred Dollars (\$2,500). Contractor shall be responsible for paying the deductible for the applicable coverage.

#### 4.9 Installation Floater Insurance

Contractor shall maintain during the term of the Contract, at its own expense, Installation Floater Insurance covering Contractor's labor, materials, and equipment to be used for completion of the work performed under this Contract against all risks of direct physical loss, excluding earthquake and flood, for an amount equal to the full amount of the Contract improvements.

#### 4.10 Inland Marine (Cargo) Insurance

Contractor shall maintain Cargo Insurance. Coverage shall protect the property from all risk of injury, and coverage shall be in an amount of the full replacement cost of the property, with no coinsurance exposure. Any applicable deductible shall not exceed Five Thousand Dollars (\$5,000).

#### 4.11 Other Insurance

Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.