

General Manager
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Ketchikan, AK 99901

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5b(2)

TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Karl R. Amylon, General Manager

DATE: February 26, 2020

RE: **Exempting the Procurement of Bailey Generator No. 4 (BAG4) Turbo Upgrade for the Electric Division from the Competitive Bidding/Written Quotation Requirements of the Ketchikan Municipal Code – ABB Inc.**

In adopting the 2020 Ketchikan Public Utilities Annual Operating and Capital Budget, the City Council appropriated \$150,000 to the Electric Division for the Bailey Generator No. 4 (BAG4) Turbo Upgrade Project. The motion detailed below was prepared at the request of Electric Division Operations Manager Mark Adams, who asked that it be placed before the City Council for consideration at its meeting of March 5, 2020. If adopted, the motion provides for exempting the procurement of the Bailey Generator No. 4 (BAG4) Turbo Upgrade from the competitive bidding/written quotation requirements of the Ketchikan Municipal Code and authorizing the acquisition of such upgrade services at a cost of \$78,632.66 from ABB Inc. The Operations Manager is also requesting a \$5,000 contingency, bringing the total project cost to \$83,632.66.

Subparagraph 6 of Section 3.12.050(a) of the Ketchikan Municipal Code provides for exempting the purchase of such equipment upgrade services from competitive bidding/quotation when:

"Supplies, materials, equipment or contractual services which should be purchased from a specific source in order to prevent incompatibility with previously purchased supplies, materials, equipment or contractual services. For the purpose of this paragraph, the term incompatibility is defined as:

- (A) The inability to interconnect, combine, interchange, or join; or
- (B) That which causes substantial duplication in maintenance, expertise or training or in the stocking of parts, materials, supplies or replacement. Any purchase which is to be excluded from competitive bidding by authority of this subparagraph which exceeds \$10,000, must first be approved by the council."

The rationale for the exemption is detailed in Mr. Adams' transmittal memorandum and requires no elaboration on the part of my office. I concur with the Operations Manager's recommendation.

Mr. Adams and the Electric Division Manager will be attending the City Council meeting of March 5, 2020, in order to address any questions and/or concerns that Councilmembers may have.

A motion has been prepared for City Council consideration.

RECOMMENDATION

Pursuant to subparagraph 6 of Section 3.12.050(a) of the Ketchikan Municipal Code, it is recommended the City Council adopt the motion exempting the procurement of the Bailey Generator No. 4 (BAG4) Turbo Upgrade from the competitive bidding/written quotation requirements of the Ketchikan Municipal Code; authorizing the General Manager to enter into an agreement for the purchase of such upgrade services with ABB Inc. in an amount not to exceed \$78,632.66; establishing a \$5,000 contingency, bringing the total project cost to \$83,632.66; and approving funding from the Electric Division's 2020 Bailey Generator No. 4 (BAG4) Turbo Upgrade capital account.

Recommended Motion: Pursuant to subparagraph 6 of Section 3.12.050(a) of the Ketchikan Municipal Code, I move the City Council exempt the procurement of the Bailey Generator No. 4 (BAG4) Turbo Upgrade from the competitive bidding/written quotation requirements of the Ketchikan Municipal Code; authorize the General Manager to enter into an agreement for the purchase of such upgrade services with ABB Inc. in an amount not to exceed \$78,632.66; establish a \$5,000 contingency, bringing the total project cost to \$83,632.66; and approve funding from the Electric Division's 2020 Bailey Generator No. 4 (BAG4) Turbo Upgrade capital account.



Electric Division
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Ketchikan, AK 99901

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TRANSMITTAL MEMORANDUM

TO: Karl Amylon, KPU General Manager
Lacey G. Simpson, Assistant KPU General Manager

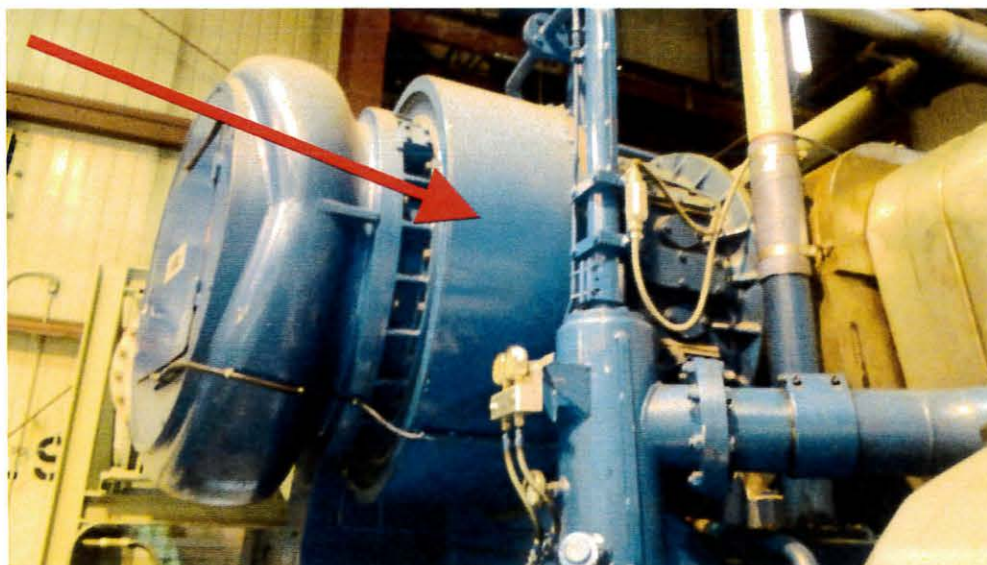
FROM: Mark Adams, Electric Operations Manager

DATE: February 21, 2020

SUBJECT: **Request Authorization for Sole Source Purchase Order to ABB Inc. for Bailey Generator No. 4 (BAG4) Turbo Upgrade**

In adopting the 2020 KPU annual budget, the City Council appropriated \$150,000 to the Electric Division for the Bailey Generator No. 4 (BAG4) Turbo Upgrade capital project (CIP #2). This project consists of replacing the air inlet casing on both of the unit's turbos due to a safety notification received from the turbo manufacturer ABB that effectively de-rated BAG4 to 85% capacity (10.8 MW to 9.2 MW). Operating BAG4 above 85% capacity without the casing upgrades presents a hazard to KPU employees in the rare event of a compressor wheel mechanical failure.

The Electric Division intends to have ABB undertake this work in late-April in order to have BAG4 returned to 100% capacity before SEAPA's annual line outages, tentatively scheduled for the late-May to early-June timeframe. ABB's work on BAG4 is estimated to take less than seven (7) days. As the turbos are proprietary ABB units, separate from Wartsila, there are no other manufacturers/vendors approved to do this work.



BAG4's Existing ABB Turbo Inlet Casing (Right Side)

Recommendation: It is recommended that the City Council authorize KPU to issue a sole-source purchase order to ABB Inc. in the not-to-exceed amount of \$78,632.66, plus a \$5,000 contingency, with funding from the Electric Division's Bailey Generator No. 4 (BAG4) Turbo Upgrade Capital Improvement Project account.

Attachments:

CIP #2 Bailey Generator No. 4 (BAG4) Turbo Upgrade
ABB Safety Notification
ABB Quote

cc: Andrew Donato, Electric Division Manager
Jeremy Bynum, PE, Electric Systems Engineering Manager



ABB Turbo Systems Ltd, P.O. Box, CH-5401 Baden

From	Axel Martin
Department	Technical Service
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E-Mail	axel.martin@ch.abb.com
Cc	
Reference No	
Our Sign	
Page	1/2
Date	August 27, 2019

IMPORTANT ADDITIONAL INFORMATION CONCERNING SAFETY PRECAUTIONS FOR ABB TURBOCHARGERS VTR..4P/D/E ...

**... with grey cast iron air inlet casings
... with single piece compressor wheels
... and delivered ex works (Baden/Switzerland) before 18 December 1998, serial number below HT431780**

Dear Customers,

This issue requires your special attention.

ABB Turbo Systems Ltd ("ABB") has a strong commitment to deliver you the most reliable and highest quality turbochargers available. A reassessment of the population of ABB turbochargers of the types VTR..4P/D/E with certain characteristics (i.e., grey cast iron air inlet casings, with single piece compressor wheels) revealed that if the defined values/limits stated in the operation manuals are not strictly observed, then irregular and/or potentially dangerous situations could occur. For example, the bursting of a compressor wheel.

Turbochargers equipped with these casings were delivered prior to 18 December 1998 and have serial numbers below HT431780. Our records indicate that you have one or more of these turbochargers in service. As such, given the potential for a dangerous condition, ABB is hereby notifying you of its recommended actions as follows.

Head office

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Phone: +41 58 585 77 77
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E-Mail: turbocharging@ch.abb.com
www.abb.com/turbocharging

Bank account

Credit Suisse
CH-5401 Baden / Switzerland
Account-No.: 111811-21,
Clearing-No.: 4835
IBAN: CH31 0483 5011 1811 2100 0

Date	August 27, 2019
Page	2/2
Subject	VTR..4P/D/E Compressor casings

Recommended Actions:

Remedy: We recommend to replace the grey cast iron air inlet casings with the nodular cast iron air inlet casings (ABB Part Number 76000).

Safety precaution: Until the casings have been replaced, keep the area near the turbochargers clear from personnel while the engine is operating at >85% of its rated output. For general safety instructions please refer to the Operation Manual.

If you have any questions regarding this subject, please contact your local ABB Service Station.

Safety and quality are top priorities at ABB. We apologize for the inconvenience this matter may cause and would like to thank you for your support.

Yours sincerely,



Axel Martin
Team Manager
Global Technical Service



Benno Rüegg
General Manager
Global Technical Service

Head office

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ABB Inc Seattle Turbo
18425 72ND Ave. S
KENT WA 98032
USA

20390140

Ship-To 270027253 CITY OF KETCHIKAN 334 FRONT ST KETCHIKAN AK 99901 USA		Bill-To 270027253 CITY OF KETCHIKAN 334 FRONT ST KETCHIKAN AK 99901 USA		Basic Information ABB Quotation Number 20390140 Last Revision Date 02/19/2020 Valid From 02/13/2020 Valid To 04/13/2020 ABB Quotation Date 02/13/2020 Payment Terms 30 Days net INCO Terms CIP SHIPPING POINT Delivery Terms Prepaid and Allowed Delivery Method Ground parcel - PO Number PENDING Industry Power Plant			
Sold-To 270027253 CITY OF KETCHIKAN 334 FRONT ST KETCHIKAN AK 99901 USA							
UNIT PRICES (USD\$)							
Item	Material Number	Description	Qty	A (< 7 DAYS)	B (> 7 DAYS)	C (> 1 MONTH)	D (> 4 MONTHS)
10	HZTL501095R0001	AIR INLET CASING	2 PCE	38,855.88	36,913.09	34,970.29	31,084.70
20	NB 315856P0416	HEX SOCKET HEAD CAP SCREW M12X50 8.8 SW	12 PCE	3.06	2.91	2.75	2.45
30	NB 335850P0109	LOCK WASHER 12 ST-FD/BK	12 PCE	0.09	0.09	0.08	0.07
40	NB 312333P0414	HEXAGON-HEAD SCREW M12X40 8.8 ZN	12 PCE	1.02	0.97	0.92	0.82
50	NB 336850P2056	LOCKING PLATE 1L 13/25X30 ST-ZN	12 PCE	2.04	1.94	1.84	1.63
60	USP_SPEC_AGREE	LABOR AIR INLET CASING EXCHANGE	2 EA	1,490.00	1,490.00	1,490.00	1,490.00
70	USP_SPEC_AGREE	TRAVEL EXPENSES	1 EA	1,120.00	1,120.00	1,120.00	1,120.00
80	USP TVL HRS	TRAVEL TIME	1 EA	2,235.00	2,235.00	2,235.00	2,235.00



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KENT WA 98032
USA

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Item	Material Number	Description	Qty	UNIT PRICES (USD\$)			
				A (< 7 DAYS)	B (> 7 DAYS)	C (> 1 MONTH)	D (> 4 MONTHS)
90	USP_SPEC_AGREE	PER DIEM	4 EA	60.00	60.00	60.00	60.00
100	FREIGHT-TURBO	IMPORT COST	1 EA	550.00	550.00	550.00	550.00
110	FREIGHT-TURBO	FREIGHT COST (KENT- CITY OF KETCHIKAN)	1 EA	1,500.00	1,500.00	1,500.00	1,500.00
Grand Total				86,411.28	82,522.10	78,632.66	70,854.04

Project Manager Saminda Abeysinghe

Phone

E-Mail SAMINDA.G.ABEYSINGHE@US.ABB.COM

Scope Of Work VTR454P32 X 2 AIC UPGRADE_HT405854/ HT405855

Dismantle Turbochargers for A.I.C Upgrade.

Clean and evaluate all necessary parts.

Assemble TC using spare parts provided.

Quotation is an estimate only, changes may apply

Quotation is for standard overhaul, does not include overtime time

Depending on advanced evaluation findings, additional work may be required.

Price quoted is NOT A FIXED PRICE offer.

Damaged parts will be disposed upon job completion. Advance notice must be sent in writing prior to disposal if part retention is desired for inspection.

Importation cost billed based on actual amount.

PRICES QUOTED ARE IN U.S. DOLLARS. THIS QUOTATION IS VALID FOR 30 DAYS. THE TERMS AND CONDITIONS FOR THIS QUOTE ARE INCLUDED. PARTS AVAILABILITY IS SUBJECT TO PRIOR SALE. CREDIT TERMS ARE TO BE ESTABLISHED UPON PLACEMENT OF ORDER.



ABB Inc Seattle Turbo
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Lead Time weeks after written order, subject to prior sales. Comments: Bearing and oil pump cores must be received by ABB within 60 days of shipment of reconditioned (CPEX) parts. Core Deposits will be credited in full upon receipt of reusable, original ABB cores in exchange for CPEX parts supplied.

Terms and Conditions: ABB Inc. General Terms & Conditions of Sale for Turbocharging exclusively govern this offer. Notwithstanding the foregoing, in the event of a master agreement or negotiated terms and conditions, then those shall exclusively govern this offer. ABB reserves the right to refuse an order resulting from this proposal without being subject to any penalties. Sales price may vary due to currency fluctuation. Price valid until current stock lasts.

Price and availability may subsequently change. Please do not hesitate to contact us if you need further information.

Above special prices are only for items and quantities shown. Substitutions and scope changes are automatically covered.

Comments:

Delivery Time Discount Terms

- A Delivery 0% Less than 7 business days
between a fully accepted order
and ex-works delivery
- B Delivery 5% More than 7 business days
between a fully accepted order
and ex-works delivery
- C Delivery 10% More than 30 business days
between a fully accepted order
and ex-works delivery
- D Delivery 20% More than 120 business days
between a fully accepted order
and ex-works delivery.

Note: The above Discount and Delivery Time applies to Spare Parts only. Please refer to Labor Estimate for additional time to complete repair.

Division: Electric			Project Priority: 2			Project Number:				
Project Title: Bailey Generator No. 4 (BAG4) Turbo Upgrade			Start Date: 01/20 End Date: 12/20			Estimated Project Cost:				
Description: Bailey Generator No. 4 (BAG4) is a Wärtsilä 10.8MW diesel generator equipped with two (2) ABB turbochargers type VTR. ABB Turbo Systems Ltd issued a safety notice (VTR..4P/D/E Compressor casings) on August 27, 2019, which has identified these turbochargers as having a casing design flaw that presents a dangerous condition for KPU personnel and equipment. The remedy for this condition is to replace the air inlet casings with nodular air inlet casings. As a safety precaution, BAG4's operating limit has been limited to eighty-five percent (85%) of rating; which reduces the generating capacity of BAG4 by 1.6MW.						Design 150,000 Land/Right-of-Way Construction Management Construction Equipment Other Project Total 150,000				
Source of Funds	Fund No.	Prior Years	Adopted 2020			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2021	2022	2023	2024	
Revenue Generating Fund				150,000	150,000					150,000
Total				150,000	150,000					150,000