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11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

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11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau, Québec K1A 0S5

Title - Sujet CCGS Griffon Summer Refit	
Solicitation No. - N° de l'invitation F2599-180006/C	Amendment No. - N° modif. 004
Client Reference No. - N° de référence du client F2599-180006	Date 2018-05-25
GETS Reference No. - N° de référence de SEAG PW-\$\$MD-034-26786	
File No. - N° de dossier 034md.F2599-180006	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-06-05	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B.	
Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Green, Dave	Buyer Id - Id de l'acheteur 034md
Telephone No. - N° de téléphone (819) 420-2900 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Solicitation Amendment # 4

This amendment is hereby raised to affect the following:

1. To make administrative revisions to the Solicitation
 2. To respond to vendor inquiries
 3. To upload additional drawings associated with the Solicitation
 4. To extend the bid closing date
-

1. To Make Administrative Revisions to the Solicitation

At Annex A - 7.3.2.7 Inspection of Generators and Generator Components after removal from Vessel

Delete: In its entirety: 7.3.2.7 to 7.3.2.7.5

Insert:

7.3.2.7 Inspection of Generators and Generator Components after removal from Vessel

- 7.3.2.7.1 The Contractor must notify the TA and IA of the date of the initial inspection of the generator components after removal from the vessel.
- 7.3.2.7.2 The Contractor must provide the TA and the IA with a detailed schedule for the overhaul and reconditioning of the generator armatures and generator components.
- 7.3.2.7.3 The Contractor must perform the following electrical tests to assess the condition of each of the 4 armatures prior to cleaning:
- Bar to bar test using a ductor to measure resistance. Each measured bar to bar value must be recorded and charted for comparison.
 - EL-CID (Electromagnetic Core Imperfection Detection) test to determine faults in the armature core laminations, surge test to determine faults in the armature windings.
- 7.3.2.7.4 The Contractor must provide a quote for the following electrical test for each of the 4 armatures. Should the EL-CID testing indicate faults in the armature core(s), the TA may exercise this option on a case by case basis.
- Core-loss test the armature core and continuously check for hotspots with an infrared camera. Any temperature variation greater than 10°C after energization of core at rated flux density for 30 minutes shall be marked, inspected, and identified to the TA and the IA.
- 7.3.2.7.5 The Contractor must perform a thorough inspection of the generator armatures and generator components to determine if there are any further defects not originally detected during the on-ship inspection and to diagnose the cause and effect of these defects (if any) so as to prevent a recurrence. The Contractor must provide the TA and the IA with a condition report for each propulsion generator including photographs and recommendations. The condition reports must include but not be limited to the following for each part of the generators:
- The data and results of the electrical tests performed in sections 7.3.2.7.3 and 7.3.2.7.4;
 - General cleanliness, insulation, mechanical and electrical checks;
 - Cracked or broken welds or castings (spiders) from rotor to armature;
 - Missing hardware, wear or rub marks, including fretting on shaft;

- Discoloration, charring, overheating, spurring of the commutator;
 - Carbon, corrosion, moisture, or oil inside or on the armature winding.
- 7.3.2.7.6 The Contractor must make the condition report available at the earliest possible time, particularly if there are issues that could have a potential impact on the completion schedule of the generator overhauls.
- 7.3.2.7.7 The Contractor must examine # 4 armature closely for shaft /spider weld cracks using NDT, as this shaft was not replaced in 1999. If cracks are found the Contractor must notify the TA immediately to determine if repairs can be made or if a new shaft/spider assembly must be installed.

At Annex A – 7.3.3.2 Electrical Testing of Armatures

Delete: In its entirety

Insert:

7.3.3.2 Electrical Testing of Armatures

- 7.3.3.2.1 Finished armatures must be given the following electrical tests, all test results to be recorded in the final test document.
- 7.3.3.2.2 Ductor - bar to bar test.
- 7.3.3.2.3 Measure winding insulation resistance to ground at 1000 volts DC, record insulation resistance every minute for 10 minutes, and calculate the polarization index. Minimum insulation resistance to be 500 megohms or better.
- 7.3.3.2.4 High potential AC test, 2275 volts AC for 1 minute, record leakage current. This test is 65% of the Westinghouse High-Potential test value for the machine when new. All high potential voltage tests must be witnessed by the TA/IA.
- 7.3.3.2.5 Repeat winding insulation resistance to ground test (megger) after high potential test.

At Annex A – 7.3.3.3 Commutator, before installation to 7.3.3.6 Information on the Generator Armatures for Quotation Purposes

Delete: In its entirety

Insert:

7.3.3.3 Optional Armature Work

- 7.3.3.3.1 The Contractor must provide a price in its bid for the refurbishment of all armature components that are affected by deterioration from heat, wear and time. All components/wiring etc. of the generator must be removed down to bare metal and replaced or renewed as follows. Silicone based compounds must not be used in rewinding of the generator. This is optional work and must include the above mentioned work as well as the following:
- a) Core-loss test the armature core and continuously check for hotspots with an infrared camera, any temperature variation greater than 10°C. After energization of core at rated flux density for 30 minutes must be marked, inspected and repaired after coils are removed.
 - b) Mark the position of the commutator with respect to the armature slots, and cut the coils close to the risers and remove the commutator.
 - c) Strip the armature winding without damaging core iron, acquire and confirm winding data required for rewind. If a cold strip of the armature winding is

possible; by heating the individual coils with a welder to soften the insulation this is the preferred method of removing the coils. If this is not possible, the exposed ends of the shaft extension must be wrapped securely with a fire resistant insulation and the rotor put in a charring oven to char the insulation for easy removal of the coils. The oven temperature must exceed 650°F., and must have a water suppression system to prevent any flare ups.

d) After the coils are removed, the slots cleaned and any lamination hotspot repairs made, perform a second core-loss test and recheck for hotspots with an infrared camera, maximum temperature variation not to exceed 10°C. after energization of core at rated flux density for 30 minutes.

e) Inspect each slot visually to see that edges of iron are rounded and free from dirt high laminations, torn iron and burrs. Run a slot gauge down each slot to check for high laminations. Inspect vent fingers and end fingers for tightness and straightness.

f) Supply a new commutator or refill the existing commutator using new silver bearing copper, and new mica for Vee rings and new mica between commutator bars. Finished commutator to be seasoned, turned, undercut and beveled. Final runout not to exceed 0.003" with generator assembled on vessel.

g) Manufacture one set of class F or higher armature coils suitable for VPI impregnation. 2 spare coils are to be supplied and processed through VPI tank and oven cured, along with armature for dissection and inspection after processing.

h) Manufacture one set of rear equalizer connections.

i) Insert slot liners in all armature slots. Slot liners are to extend a minimum of 3/8" past the laminations at each end of the core.

j) Install armature coils, the maximum allowable clearance between the coil and the slot is 0.015". If clearance is excessive between the coil and the slot, increase the thickness of the slot liner to reduce the coil clearance to 0.015"

k) Connect equalizers, all connections to be cleaned and free of dirt varnish or oxides prior to TIG welding, use a sil-phos brazing rod (minimum 15% silver), no soldering allowed.

l) Band armature iron; front and rear coil extensions and riser connections. Place temporary bands on the coil extensions prior to banding armature iron. Ensure the core bands apply positive pressure to coils in slot, and no gaps exist between bands and coils after curing.

m) Glass polyester tape, used for banding must be properly stored and inspected to ensure expiry date has not been exceeded. Banding tape to be properly thawed prior to use.

n) Armature to be processed through a VPI system containing class F or higher resin. Armature is to be oven cured. 2 complete VPI and oven cure cycles are to be provided for each armature.

o) VPI process. Pull a vacuum down to an absolute pressure of less than 5 torr, maintain dry vacuum for 1 hour. Fill tank with resin while maintaining a vacuum of 5 torr. Break vacuum and pressurize with dry compressed air until 90 psi is reached. Hold this pressure for 1 hour per layer of tape plus one full hour. Repeat this process for the other generator components that require a VPI treatment

p) Rotor to be properly dried out and preheated before the start of the VPI process. Rotor temperature to be a minimum of 40°C., before the start of the VPI process. Record vacuum, pressure and cycle time for each VPI cycle.

q) Oven bake for 4 hours after iron temperature has reached 155°C. to cure

resin.

Note: Generator # 3 suffered a bearing failure and non-drive end shaft journal was machined undersize, shaft seal areas were also damaged. The recommended repair is to weld the journal and damaged seal areas, chroming is not

recommended. The journal area and damaged seal areas must first be under cut in the lathe. The shaft area to be repaired, must be preheat to 400°F to 450°F, and using a CWB certified welder, weld using an E7018 low hydrogen rod 3/32" diameter, placing weld passes on opposite sides of the shaft to prevent localized heating. Clean, and peen each weld pass to remove all welding slag, with the next weld pass having a 50% overlap over the previous weld. Maintain the preheat while welding. After welding is complete cover with an insulating blanket to prevent rapid cooling of the shaft. Stress relieve the portion of the shaft that was welded by slowly heating the shaft to 1175°F +/- 25 °F and holding the temperature for 4 hours using Cooper Heat ceramic blankets or equivalent and slowly cooling the shaft. Finish machine the shaft to Westinghouse drawing 169D571. Protect the armature core from excessive heat.

7.3.3.4 Electrical Testing of Armatures

7.3.3.4.1 Finished armatures must be given the following electrical tests, all test results to be recorded in the final test document.

7.3.3.5 Commutator, before installation

7.3.3.5.1 Test between adjacent commutator bars at 300 volts AC momentary (3 seconds).

7.3.3.5.2 Ground test commutator at 6000 volts AC momentary (3 seconds).

7.3.3.6 Test armature windings as follows:

7.3.3.6.1 Test between conductors of finished coil at 1000 volts DC momentary (3 seconds) before winding.

7.3.3.6.2 After winding coils, but before banding at 5500 volts AC momentary.

7.3.3.6.3 After banding VPI treatment and curing of armature at 4000 volts AC momentary.

7.3.3.6.4 Ductor - bar to bar test.

7.3.3.6.5 Measure winding insulation resistance to ground at 1000 volts DC, record insulation resistance every minute for 10 minutes, and calculate the polarization index. Minimum insulation resistance to be 500 megohms or better.

7.3.3.6.6 Final high potential test at 3500 volts AC for 1 minute, record leakage current.

7.3.3.6.7 Repeat winding insulation resistance to ground test (megger) after high potential test.

7.3.3.6.8 All high potential voltage tests must be witnessed by the TA/IA.

7.3.3.7 Information on the Generator Armatures for Quotation Purposes

7.3.3.7.1 Commutator contains 372 commutator bars, with a commutator diameter of 32.5". Commutator bar length is 12.24" including risers. Commutator bars are to be Vee bound, with a front and rear Vee ring to secure the commutator bars. Commutator bars to contain silver bearing copper. New mica insulation is to be used between the commutator bars and for the Vee ring insulation. Commutators are to be properly pressed and seasoned to prevent bar movement during operation.

- 7.3.3.7.2 Armature consists of 93 slots, 32.0" diameter with a gross core length 16.5", overall coil length 25.12". Original bare wire size was 0.085" x 0.30", 4 conductors wide by 3 conductors deep. Coils lie in slots 1 and 16, with 2 coils per slot. Slot size is 0.480" wide by 2.030" deep. Coil insulation to be class F or better, composed of mica tape insulation. Manufacture one set of armature coils suitable for VPI resin impregnation. Resin to have a minimum of a Class F rating. Supply 2 spare coils, which are to be also impregnated and cured and later inspected to ensure proper impregnation of resin through all the coil insulation. Sample coils are to be sandwiched between steel plates to simulate the slot section while being processed.
- 7.3.3.7.3 New rear equalizers are to be supplied and installed. Equalizers consist of 3 pieces of 0.020" by 0.50" with a total length of approximately 29.45" long, before shaping. 49 Armature coils contain equalizers.
- 7.3.3.7.4 Armature coils are held in the slot with glass bands (no slot wedges). There are 6 glass bands on the armature core to hold coils in place, 2.0" wide. Refer to drawing 549A475 for placement of glass bands. In addition there are front and rear armature coil bands to secure the coils. Armature coils are to be properly supported and packed to prevent glass bands from crushing coils. There is also a glass band over the risers to armature coil connections.

At Annex A – 7.3.7.4.5

Delete: In its entirety

Insert:

- 7.3.7.4.5 There are 6 heaters, Chromolox Finstrip Element Cat # SEF-190 rated 115volts and 1000 watts each.

At Annex A – 16.2.2 Drawings

Insert:

664-120-7	Fore End Framing	664-120-7.dwg
664-120-8	Aft End Framing	664-120-8.dwg

At Annex A - 16.2 References

Insert:

16.2.4 Tank Details

Description	Location	Particulars	Coating
Fore Peak	Frames 113-FE	Capacity: 60 tonnes Surface Area: 330 m2 Frame Spacing: 16"	VapCor Marine Coat 195W
After Peak	Frames EA-6	Capacity: 60 tonnes Surface Area: 175 m2 Frame Spacing: 16"	VapCor Marine Coat 195W
Upper Flume	Frames 67-71	Capacity: 91 tonnes Surface Area: 290 m2 Frame Spacing: 24"	VapCor Marine Coat 195W
Lower Flume	Frames 67-71	Capacity: 88 tonnes Surface Area: 280 m2 Frame Spacing: 24"	VapCor Marine Coat 195W
Pipe Tunnel	Frames 60-90		Interprime 198 Red Primer
After Void Space	Frames 6-16	Surface Area: 175 m2 Frame Spacing: 16"	
#1 D.B. Port	Frames 71-95, Port	Capacity: 38 tonnes Surface Area: 200 m2 Frame Spacing: 610 mm (24")	Portland cement wash
#1 D.B. Starboard	Frames 71-95, Starboard	Capacity: 38 tonnes Surface Area: 200 m2 Frame Spacing: 610 mm (24")	Portland cement wash
#3 D.B. Port	Frames 37-46, Port	Capacity: 23 tonnes Surface Area: 190 m2 Frame Spacing: 610 mm (24")	Portland cement wash
#3 D.B. Starboard	Frames 37-46, Starboard	Capacity: 23 tonnes Surface Area: 190 m2 Frame Spacing: 610 mm (24")	Portland cement wash
#4 D.B. Port	Frames 24-36, Port	Capacity: 17 tonnes Surface Area: 110 m2 Frame Spacing: 610 mm (24")	Portland cement wash
#4 D.B. Starboard	Frames 24-36, Starboard	Capacity: 17 tonnes Surface Area: 110 m2 Frame Spacing: 610 mm (24")	Portland cement wash
Fuel oil Deep Tank (Port)	Frames 95-113	Capacity: 62.6 LT	
Fuel oil Deep Tank (Stbd)	Frames 95-113	Capacity: 58.3 LT	
Fuel Oil Settling Tank Port	Frames 62-67	Capacity: 41.53 L. Tons	
Fuel Oil Settling Tank Center	Frames 62-67	Capacity: 43.09 L. Tons	

Fuel Oil Settling Tank Stbd	Frames 62-67	Capacity: 41.53 L. Tons	
Fuel Oil Day Tank	Frames 53-54	Capacity: 3.51 L. Tons	
#2 Double Bottom Tank Port	Frames 48-62	Capacity: 31.58 L. Tons	
#2 Double Bottom Tank Stbd	Frames 48-62	Capacity: 31.58 L. Tons	
Emergency Generator Fuel Tank	Nav Bridge Deck Frames 34 to 35	Capacity 900 gallons.	
Port Chain Locker	Frames 113-119	Capacity: 16 tonnes Surface Area: 650 ft ² (60 m ²) Frame Spacing: 406.4mm (16")	Lower foot and bottom: Rust-Oleum 3600 System MultiPurpose Epoxy - black Sides and top: 2 coats rust-inhibiting primer and 2 coats anti-corrosion alkyd paint - grey.
Starboard Chain Locker	Frames 113-119	Capacity: 16 tonnes Surface Area: 650 ft ² (60 m ²) Frame Spacing: 406.4mm (16")	Same as Port Chain Locker

At Annex A – 16.2.4 to 16.2.6
Amend Spec. Item numbers to reflect insertion above.

At Annex A – 16.3.5.1

Delete: In its entirety

Insert:

16.3.5.1 The Contractor must remove and reinstall, to as found condition, all bulkhead, ceiling, deck panel coverings, furnishings, fixtures, planking, insulation etc. that are required to gain access for surveying and thickness measuring (see Appendix "A"). Areas that are too badly corroded, fouled, or otherwise unfit for survey and measurement are to be mechanically cleaned to bare metal and primed to facilitate the survey and measurement work. The Contractor will repair any damage caused during removal and installations. Areas where coatings have been removed will be repaired by the application of 2 coats of approved primer as per coating manufacturer's recommendations.

At Annex A - 16.3.5 Support

Insert:

16.3.5.6 For bidding purposes the Contractor must provide a price for the following:

- CARGO HOLD INSULATION – must be HIBAR Spray-Applied Fire Resistant Material (SPFRM) or equivalent, on 1" chicken wire for support, applied according to manufacturer's directions. The Contractor must quote on a per square meter area cost, applied to a thickness of 2", for 20 unique areas, for a total of 20 m2. The exact area will adjusted by a 1379. Material certificates and approvals must be provided to the TA and the IA.
- THERMAL INSULATION – The Contractor to quote on replacing on a per square meter cost, for a total of 20 m2 of thermal insulation. Foil faced fibrous mineral wool type with a density of 48 kg/m3, impaled on existing welded studs. Contractor must quote on supplying and installing dished speed clips, no less than 1-1/2" square, at a quantity suitable for 20 m2 with studs staggered at 12". Material certificates and approvals must be provided to the TA and the IA.
- A-60 AND A-15 FIRE INSULATION ON ALUMINUM DECKHEADS - The Contractor must quote a per square meter cost for 20m2 area of deckhead fire insulation. To be installed as per drawing 732120 Fire Insulation Plan (CMG05250mi1.dwg). Rocksill or equivalent, 40mm + 25 mm (2 layers) with 40mm around stiffeners. Exact area will adjusted up or down by 1379 based on per square meter cost. Fire insulation materials to be approved by a classification society recognized by TCMS. Material certificates and approvals to be provided to the TA and the IA.

At Annex A - 16.3.6

Insert:

16.3.6 Access and Cleaning Requirements for Fuel Tanks

16.3.6.1 The Contractor must open all access covers to the fuel tanks listed. Depending on the amount of fuel remaining onboard at the time, the Contractor must work in

conjunction with the ship's crew to shift fuel from various fuel tanks to allow all the work in this section to be completed.

- 16.3.6.2 The Contractor must remove any remaining fuel from the tanks and must provide a marine chemist or other qualified person's gas free certificate stating the tanks are safe for entry and work. The Contractor must quote on removing a total of 20 cubic meters of fuel from the tanks. The Contractor must be responsible to arrange for the disposal of this fuel.
- 16.3.6.3 All fuel removed from the vessel and all waste generated from the tank cleaning must be tracked in accordance with all Federal, Provincial and Municipal regulations in effect. The Contractor must provide disposal documentation for all generated waste to the TA.
- 16.3.6.4 The Contractor must supply all materials and labor necessary to clean all internal surfaces of the tank such that the internal structures of the tanks can be inspected and thickness measurements completed by the attending Classification Society surveyor.
- 16.3.6.5 The Contractor must prepare the surface of the tanks for UT thickness readings as directed by the Classification Society Surveyor.
- 16.3.6.6 The Contractor must have the internals of the tanks inspected by the attending Classification Society surveyor. The Contractor must also notify the IA such that they may also be afforded the ability to view the internals of the fuel tanks.
- 16.3.6.7 The Contractor must close all tank covers and must install new fiber-re-enforced nitrile gaskets for all tank covers.

16.3.7 Fuel Tanks Tests and Trials

- 16.3.7.1 All tanks that have been opened for inspection must be hydrostatic pressure tested to a 2.5-meter (8-foot) head of water.
- 16.3.7.2 The Contractor must blank all suction and discharge lines, vents and sounding pipes during the test. The Contractor is responsible for supplying, fitting and subsequent removal of blanks.
- 16.3.7.3 The Contractor must empty and wipe down dry the tanks afterwards and ensure no water remains in the tanks. Pressure tests must be witnessed by IA.

16.3.8 Ballast Tanks and Flume Tanks

- 16.3.8.1 The Contractor must coordinate with the IA to de-ballast the tanks.
- 16.3.8.2 The Contractor must open up, ventilate, strip any remaining ballast water, and certify the tanks for entry and clean all ballast tanks and flume tanks.
- 16.3.8.3 The Contractor must scrape any visible rust and scale off the insides of the tanks where the tank coating has failed. The Contractor must quote on mechanically descaling 25% of the tank interior surfaces.
- 16.3.8.4 The Contractor must pressure wash all ballast tanks with a minimum of 8000 psi pressure washer to remove all rust, scale and any other foreign deposits from the tanks. All water and debris must be removed from the tank and disposed of ashore

- 16.3.8.5 The Contractor must prepare the surface of the ballast tanks for UT thickness readings as directed by the Classification Society Surveyor.
- 16.3.8.6 The surface preparation of the tanks and the application of the coating system must be carried out under the supervision of an authorized field service representative of the manufacturer of VapCor Marine Coat. Marine Coat is distributed by CorrSafe in Canada.
- 16.3.8.7 The VapCor representative, in conjunction with the IA will identify the areas in the tanks where spot coating is required.
- 16.3.8.8 The Contractor must supply and apply spot coating of VapCor Marine Coat 195W to the identified areas of the Fore Peak, Aft Peak, Upper and Lower Flume tanks.
- 16.3.8.9 The Contractor must supply a price quote on spot coating 50% of all surfaces and the amount of Marine Coat 195W to be 2 drums (205 liter drums).
- 16.3.8.10 The tanks must be closed with new Contractor supplied 6mm neoprene fiber re-enforced gaskets to be fitted at all manhole openings.

16.3.9 Pipe Tunnel and Aft Void Space

- 16.3.9.1 The Contractor must open up, ventilate, strip any fluids, and certify the pipe tunnel and aft void space for entry and clean all spaces, removing any loose debris ashore. The Contractor must mechanically clean any visibly corroded areas of the void spaces, removing all rust and scale build up. All dirt and scale must be removed and taken ashore.
- 16.3.9.2 The Contractor must prepare the surface of the pipe tunnel and void space for UT thickness readings as directed by the Classification Society Surveyor.
- 16.3.9.3 Upon completion of cleaning the Contractor must submit the tanks to the attending Classification Society surveyor.
- 16.3.9.4 The Contractor must supply and apply 2 coats of International Interprime 198 red primer to any bare steel area in the Pipe Tunnel.
- 16.3.9.5 The Contractor must supply a price quote for 30% area of the pipe tunnel to be coated with primer.
- 16.3.9.6 The pipe tunnel and void spaces must be closed with new 6.35 mm neoprene fiber re-enforced gaskets to be fitted at all manhole openings.

16.3.10 Ballast and Void Tanks Inspection, Test and Trials

- 16.3.10.1 The Contractor must hydrostatically pressure test the Fore Peak, Aft Peak, Upper and Lower Flume tanks to a static head of 2.5 meters of water above the tank top. The tank will be held a minimum of 1 hour at this test pressure. These tests must be witnessed by the IA.
- 16.3.10.2 The Contractor must pressure test the Pipe Tunnel and Aft Void Space with air to a maximum pressure equal to 2.5 meters head of water from the tank top for 1 hour. This test must be witnessed by the IA.

- 16.3.10.3 The Contractor must have the attending coating FSR prepare and present a complete report on the coating applied to all of the ballast tanks. Copies of the report must be passed to the IA. The report must detail the surface preparation, amount of product applied, final film thickness of applied product and the environmental conditions at the time of product application, including but not limited to the following: Air temperature, dew point, metal temperature and relative humidity, type and size of equipment used for the coating application.

16.3.11 Potable Water Tanks

- 16.3.11.1 Other than the #1 potable water tanks all work must be performed only after the Bilge Cleaning section of this specification has been performed. This is to prevent the contamination of the potable water tanks.
- 16.3.11.2 The Contractor must coordinate with the TA/IA to strip the water as far as possible from the potable water tanks. The Contractor must remove all remaining water from the tanks. As the potable water tanks are cement coated not all limber holes are free to permit easy drainage of all water from the tank spaces. Additionally, the suction valves draw 6-8" from the bottom of the tanks. The Contractor must quote on removing 8 tons of water from each of the six tanks through the manhole covers.
- 16.3.11.3 The Contractor must open up, ventilate, certify for entry and work and clean all identified potable water tanks.
- 16.3.11.4 The Contractor must prepare the surface of the potable water tanks for UT thickness readings as directed by the Classification Society Surveyor.
- 16.3.11.5 Tanks must be scraped and wire brushed clean of any loose coating to match the area requiring re-coating. All debris, mud and other loose material must be removed and taken ashore.
- 16.3.11.6 The Contractor must have the work witnessed by the TA/IA.
- 16.3.11.7 The Contractor must supply a price quote on re-coating 50% of the total interior surface of all potable water tanks with 2 coats of cement wash. The cement wash must consist of Portland cement and water.
- 16.3.11.8 The Contractor must supply a price quote for a unit price per square feet.

16.3.12 Potable Water Tank Inspections, Tests and Trials

- 16.3.12.1 The Contractor must close all tank access covers after final inspection by the attending Classification Society Surveyor and the TA/IA.
- 16.3.12.2 Tanks must not be closed within 24 hours of the application of any cement wash.
- 16.3.12.3 The Contractor must replace all tank access cover gaskets with new ¼ inch thick fiber-re-enforced neoprene gasket material.
- 16.3.12.4 The Contractor must hydrostatically test all tanks to a 2.5 meter head of water with the final test level being maintained for 1 hour. All hydrostatic tests must be witnessed by the attending Classification Society surveyor and the IA.
- 16.3.12.5 The Contractor must blank all suction and discharge lines, vents and sounding pipes during the test. The Contractor must be responsible for supplying, fitting and subsequent removal of blanks.

16.3.12.6 The Contractor must empty the tanks afterwards.

16.3.13 Potable Water Tank Disinfection and Commissioning

16.3.13.1 The Contractor must disinfect all potable water tanks after the successful completion of the hydrostatic pressure tests using the following procedure:

- All potable water tanks must be filled with hyper-chlorinated potable water for a period of 24 hours. The hyper-chlorinated water must have a free chlorine content of 50 mg/l. The Contractor must provide certification to the TA that the water used for the disinfection meets these requirements. If the Contractor wishes to use calcium hypochlorite to produce the hyper-chlorinated potable water, the water must be filtered to remove all calcium before it is introduced into the potable water tanks.
- Following the 24 hour disinfection period, the Contractor must drain and flush the potable water tanks until the following readings are attained for the potable water:
 1. Chlorine: between 0.2 and 0.5 mg/l;
 2. Fecal Coli form: 0 MPN/100 ml;
 3. Total Coli form: 0 MPN/100 ml;
 4. Total Dissolved Solids: less than 500 mg/L;
 5. pH: between 6.5 and 8.5 pH units;
 6. Iron: less than 0.3 mg/L;

16.3.13.2 These readings must be verified by an independent laboratory that is provincially licensed to perform these tests on potable water. Copies of all final test results must be presented to the TA.

16.3.13.3 The Contractor must dispose of all hyper-chlorinated water in accordance with the Provincial Regulations in effect at the time of the work. The Contractor must provide a proof of disposal certificate to the TA.

16.3.13.4 Should the Contractor choose another method of safe disposal of the hyper-chlorinated water, the Contractor must submit a written explanation of the procedure to the TA. The procedure must have approval by the provincial authority responsible for regulating wastewater management.

16.3.13.5 The Contractor is to fill all the potable water tanks to 100% - this is to allow the vessel to transit and resume operations.

16.3.14 Potable Water Tank Documentation

16.3.14.1 The Contractor must provide copies off all lab reports attesting to the quality of water contained in all potable water tanks after the work has been completed.

16.3.14.2 The Contractor must provide documentation attesting to the safe disposal of hyper chlorinated water.

16.3.14.3 The Contractor must provide signed documentation from TCMS surveyor that the potable water tanks have been successfully pressure tested.

16.3.14.4 All work must be included in the Test & Inspection Plan.

16.3.15 Port and Starboard Chain Lockers

16.3.15.1 The Contractor must unship the anchors and anchor chains and flake them on the dock. The bitter end must be disconnected.

- 16.3.15.2 The port anchor is Baldt type, 5092 lbs, with 8 shots.
- 16.3.15.3 The starboard anchor is Byer's type, with 8 shots.
- 16.3.15.4 The Contractor must coordinate with the IA when unshipping the anchor chains. Unshipping and shipping of the anchor chains must not interfere with Hawboldt's requirements to work on the anchor windlass drive motor.
- 16.3.15.5 The anchor chains must be flaked on the dock such that the ship's crew can range them, and exchange one shot end for end on each anchor chain.
- 16.3.15.6 The Contractor must open up, ventilate, and certify the chain lockers for entry. The port chain locker has an access hatch. The starboard chain locker is open to and accessible from the port chain locker.
- 16.3.15.7 The Contractor must lift and secure the false bottoms. Mud boxes and strainers must be cleaned and proven clear.
- 16.3.15.8 The Contractor must pressure wash both chain lockers with a minimum of 3000 psi pressure washer to remove all rust, scale and any other foreign deposits from the tanks.
- 16.3.15.9 The Contractor must scrape any visible rust and scale off the insides of the tanks including the false bottom plates where the tank coating has failed. The contractor must quote on mechanically descaling 30% of the locker interior surfaces.
- 16.3.15.10 All water, mud, debris, scale, paint, and other loose material must be removed from the chain locker and disposed of ashore.
- 16.3.15.11 The Contractor must prepare the surface of the chain lockers for UT thickness readings as directed by the Classification Society Surveyor.

16.3.16 Chain Locker Coatings

- 16.3.16.1 The bottom of the chain locker is epoxy coated as is the lower 1 foot of the sides. The contractor must repair any damaged coatings with contractor supplied Rust-Oleum 3600 System Multi-Purpose Epoxy – colour black. The Contractor must bid on 20 square feet of the chain locker bottom to be coated with epoxy. The Contractor must also provide unit price per square feet.
- 16.3.16.2 Any bare metal areas on the false bottoms and other surfaces of the chain locker are to be coated with two coats of rust inhibiting primer and two top coats of anti-corrosion alkyd paint – colour light grey.
- 16.3.16.3 The Contractor must install the false bottom gratings as originally installed. All work must be inspected by the IA prior to re-shipping of the anchor cables.
- 16.3.16.4 The Contractor must ship the anchor chains and flake them correctly in the chain lockers.

**At Annex A – 16.3.6 to 16.3.7
Amend Spec. Item numbers to reflect insertion above.**

At Annex A – Statement Of Work – Specifications – Item 17.3.3

Insert:

Note: The CCGS Griffon recently suffered a breakdown of the Ship Service Alternators #2 and #3. As a result, the CCG completed the work necessary to return the ship to service while obtaining the TCMS Div. 3 5 year credit for these two alternators. Section 17.3.3 now only applies to ship service alternator #1. The rest of section 17.0 of the SOW remains unaffected.

At Annex A – Statement Of Work – Specifications

Insert:

25.0 Bridge Window Glass Replacement

25.1 Identification

25.1.1 The purpose of this section of the SOW is to replace the glass of 27 bridge windows and one Clearview screen onboard the CCGS Griffon. This work will consist of removing the existing glass from their frames, cleaning the frames, reinstalling new glass in the existing frames and completing a hose test on the windows to demonstrate their water tightness.

25.1.2 The new glass for each of the 27 windows will be provided by the CCG. All other sealants, gaskets and hardware must be supplied by the Contractor, unless stated otherwise.

25.2 References

25.2.1 Documents

Drawing Number	Description	Electronic Number
	Existing Window Information	Bridge Window Info.pdf
CMG05-111-GA	General Arrangement	G05111ga1.pdg
664-1066-1 sht. 5 and 6	Ship Windows	664-1066-1_05.dwg 664-1066-1_06.dwg

25.2.2 Window Dimensions – Table 1

Item #	Window Number	Frame Number	Side	Location	Existing Glass	Fixed / Sliding	DWG Letter	Approx. Clear Glass Height	Approx. Clear Glass Width	New Window Glass	Installation Type	Corner Radius	Set to be Delivered	Set to be Delivered Assembled
This information is for guidance only.														
1	47	58	PORT	AFT. Inboard most window	1/2" ARMOUR PLATE	FIXED	A	33"	57" MIN	12mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
2	48	58	PORT	AFT	1/2" ARMOUR PLATE	Horizontal SLIDING	A	33"	57" MIN	12mm Clear Tempered glass	Bolted	4-5/16"	2 Glass **Seals not provided	No
3	49	58	PORT	AFT	1/2" ARMOUR PLATE	FIXED	B	33"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
4	50	58-60	PORT	PORT SIDE	3/4" LAMINATED	FIXED	C	33"	36" MIN	19mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
5	51	60-64	PORT	PORT SIDE UPPER adjacent to Telegraphs	3/4" LAMINATED	Horizontal SLIDING Fore to Aft to access Telegraphs	D	33"	66" MIN	19mm Clear Tempered glass	Bolted	4-5/16"	3 Glass **Seals not provided	No
6	53	HOUSE FRONT	PORT	FRONT	3/4" LAMINATED	FIXED Clearview Screen	F	33"	66" MIN	12mm/6mm CLEAR TEMPERED LAMINATED GLASS WITH VERTICAL CENTER MULLION DIVIDER WITH CVS HOLE ON ONE SIDE TO SUIT A SPEICH CLEARVIEW SCREEN EX385.H	Bolted	3-13/16"	1 Glass **Seal not provided 1 Speich EX385.H Clearview Screen (380 mm, 120VAC with heater) with drive and control	No

Item #	Window Number	Frame Number	Side	Location	Existing Glass	Fixed / Sliding	DWG Letter	Approx. Clear Glass Height	Approx. Clear Glass Width	New Window Glass	Installation Type	Corner Radius	Set to be Delivered	Set to be Delivered Assembled
7	54	HOUSE FRONT	PORT	FRONT	3/4" LAMINATED	FIXED	G	33"	66" MIN	19mm CLEAR TEMPERED GLASS WITH VERTICAL CENTER MULLION DIVIDER	Bolted	3-13/16"	1 Glass	No
8	56	HOUSE FRONT	STBD	FRONT	3/4" LAMINATED	FIXED	G	33"	66" MIN	19mm CLEAR TEMPERED GLASS WITH VERTICAL CENTER MULLION DIVIDER	Bolted	3-13/16"	1 Glass	No
9	59	60-64	STBD	STBD SIDE UPPER adjacent to Telegraphs	3/4" LAMINATED	Horizontal SLIDING Fore to Aft to access Telegraphs	D	33"	66" MIN	19mm Clear Tempered glass	Bolted	4-5/16"	3 Glass **Seals not provided	No
10	60	58-60	STBD	STBD SIDE	3/4" LAMINATED	FIXED	C	33"	36" MIN	19mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
11	61	58	STBD	AFT	1/2" ARMOUR PLATE	FIXED	B	33"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
12	62	58	STBD	AFT	1/2" ARMOUR PLATE	Horizontal SLIDING	A	33"	57" MIN	12 mm Clear Tempered glass	Bolted	4-5/16"	2 Glass **Seals not provided	No
13	63	58	STBD	AFT	1/2" ARMOUR PLATE	FIXED	A	33"	57" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
14	65	58	PORT	AFT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
15	66	58	PORT	AFT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No

Item #	Window Number	Frame Number	Side	Location	Existing Glass	Fixed / Sliding	DWG Letter	Approx. Clear Glass Height	Approx. Clear Glass Width	New Window Glass	Installation Type	Corner Radius	Set to be Delivered	Set to be Delivered Assembled
16	67	58-60	PORT	PORT SIDE BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	36" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
17	68	60-62	PORT	PORT SIDE BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	33" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
18	69	60-62	STBD	STBD SIDE BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	33" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
19	70	58-60	STBD	STBD SIDE BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	36" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
20	71	58	STBD	AFT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
21	72	58	STBD	AFT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	27"	24" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
22	74	HOUSE FRONT	PORT	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	H	30"	30" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
23	75	HOUSE FRONT	PORT	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	H	30"	30" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
24	76	HOUSE FRONT	PORT	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	30"	31" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No

Item #	Window Number	Frame Number	Side	Location	Existing Glass	Fixed / Sliding	DWG Letter	Approx. Clear Glass Height	Approx. Clear Glass Width	New Window Glass	Installation Type	Corner Radius	Set to be Delivered	Set to be Delivered Assembled
25	79	HOUSE FRONT	STBD	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	A	30"	31" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
26	80	HOUSE FRONT	STBD	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	H	30"	30" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No
27	81	HOUSE FRONT	STBD	FRONT BOTTOM	DOUBLE GLAZED SEALED 1/2" ARMOUR PLATE	FIXED	H	30"	30" MIN	12 mm Clear Tempered glass	Bolted	3-13/16"	1 Glass	No

** Seals not provided. The Contractor must replace the existing seals with similar seals. These seals will have to be custom made for each window. The new seals must be designed for all weather conditions (Outside air temperatures -35°C to 35°C, 100% humidity, high wind, heavy rain and/or spray, exposure to high ultraviolet rays).

25.3 Technical

25.3.1 General

- 25.3.1.1 The Contractor must supply all materials, tools, equipment, scaffolding, crane services, sealants, gaskets and hardware required to carry out the work in this section of the SOW.
- 25.3.1.2 The windows will be provided to the Contractor in 3 wooden crates. The Contractor is responsible for manipulating the crates and safely getting the window panes to the bridge without damaging them. The wooden crates must be opened in the presence of the AI. Any window panes damaged by the Contractor must be replaced at the Contractor's expense. The approximate weights and dimensions of the wooden crates are:
1. 68" x 10" x 44", 645 lbs
 2. 52" x 23" x 43", 1035 lbs
 3. 43" x 19" x 46", 700 lbs
- 25.3.1.3 The Contractor must install the window panes as per manufacturer's recommendations. The installation of the windows must be done under the supervision of a representative from the window OEM, Beclawat Manufacturing Inc. For bidding purposes, bidders must quote using an FSR allowance of \$10,000. The \$10 000 allowance will be adjusted (increased/decreased) using a 1379 form upon receipt of the representative's final invoice, along with all supporting documentation attesting to actual costs.
- 25.3.1.4 The Contractor must take detailed photo records in the presence of the IA detailing all fixtures and fittings on the Bridge that will be affected by removal of the windows. A copy of the photo records must be submitted to the IA and the TA prior to commencing work.
- 25.3.1.5 The Contractor must cover and protect the entire Bridge carpet as per section 4.10 of the SOW prior to commencing the work.
- 25.3.1.6 The Contractor must install protective coverings over all Bridge consoles and other electronic equipment.
- 25.3.1.7 The Contractor must protect the interior of the Bridge and Bridge equipment at all times from the ingress of moisture, dirt, wind, rain, etc. Measures must be put in place such that the Bridge must not be rendered open to weather at any time.
- 25.3.1.8 Upon completion of the work, the Contractor must remove and dispose of all protective coverings from the consoles and flooring. The Contractor must return the Wheelhouse to its original state of cleanliness and functionality.

25.3.2 Removal of Existing Windows

- 25.3.2.1 The Contractor must remove and store for reinstallation of the following:
1. 13 window blinds complete with fixed and adjustable cleats;
 2. 12 aluminum air flow deflectors (above windows);
 3. All miscellaneous brackets, hooks, etc. in way of the work;
 4. 3 gyro repeaters complete with transits;
 5. 3 binocular boxes;
 6. 1 Telescope box;
 7. 3 ELAC Depth Sounder readouts;
 8. Young Wind Tracker;
 9. VHF-3 master radio unit;
 10. VHF-1 slave hand unit located on the port bridge wing.

- 25.3.2.2 The Contractor is responsible for identifying, removing and temporarily storing any other inference items in way of the work areas. Upon completion of the work, the Contractor must reinstall all of the above mentioned items and any other interference items in their original locations.
- 25.3.2.3 The Contractor must remove and discard all fasteners for the window retaining rings, mullions and sliding window handles. The Contractor must remove and retain for re-use the window retaining rings, mullions and sliding window handles; and remove the glass panes.
- 25.3.2.4 The Contractor must keep all existing window panes on-site until the end of the Contract.
- 25.3.2.5 The Contractor must remove and discard all existing gaskets and clean the inside of the window frame, retaining rings and mullions to bare metal. Any damage to the window frames, retaining rings or mullions must be repaired by the Contractor at the Contractor's expense.
- 25.3.2.6 The Contractor must remove and return the existing Clearview Screen to the IA.
- 25.3.2.7 There are two life ring release pull wires at each aft corner of the Bridge that control the release of the life rings outside of the bridge. The Contractor must secure the life rings during the work period to prevent accidental release of the life rings.
- 25.3.2.8 The CO2 Pull Stations, Wing and Center Bridge Consoles must be covered, must not be disturbed and protected from damage.
- 25.3.3 Wood trim and melamine work**
- 25.3.3.1 Where the melamine/wood trim on the Bridge which surrounds the windows requires removal for access to the mounting arrangements for each window, new melamine/wood trim must be installed once the new windows have been installed and tested.
- 25.3.3.2 All replacement plywood must be Marine Grade DFP meeting British Standard 1088 or equivalent.
- 25.3.3.3 All new Melamine must match Pebble D337-335-60, Color Pebble of Wilsonart Inc. The melamine must be flame retardant.
- 25.3.3.4 For ease of installation, all new melamine face panels must be made removable with stainless steel wood screws and matching stainless steel finishing cup washers. By Contractor request, alternative decorative fastening systems may be considered, but must be approved by the IA prior to installation. All horizontal melamine work surfaces must remain flush and free of fasteners.
- 25.3.4 Installation of new Windows and Window Components**
- 25.3.4.1 The Contractor must install all glass panes and window components in accordance with the manufacturer's recommendations. Upon completion of installation, the Contractor must complete a final inspection with TCMS and the IA, to the satisfaction of the TCMS inspector.
- 25.3.4.2 The Contractor must provide new window seals for the sliding windows, including seals for the sliding window handles, and the Clearview as per Table 1. All seals must be manufactured of material suitable for extended use in all weather conditions identified in table 1.
- 25.3.4.3 The Contractor must replace all the window panes as specified in Table 1 using new Sikaflex-296 caulking material or approved equivalent.
- 25.3.4.4 The Contractor must re-install all windows retaining rings using new stainless steel fasteners.
- 25.3.4.5 Where fitted, the Contractor must re-install all mullions and sliding window handles using new gaskets and new stainless steel fasteners.

- 25.3.4.6 The Contractor must position and install the mullions to allow unhindered sliding of the window pane within the window frame to the full extent as the original window.
- 25.3.4.7 The Contractor must install and connect the new Clearview Screen and all its components in window #53. The installation and connections must be in accordance with the manufacturer's specifications.
- 25.3.4.8 Upon resealing of all windows, the Contractor must perform a hose test on all windows and the Clearview Screen as detailed in section 25.4.2 below.
- 25.3.4.9 Upon successful testing of all new windows, the Contractor must dispose of all removed glass panes.

25.4 **Proof of Performance**

25.4.1 **Inspections**

- 25.4.1.1 All work must be completed to the satisfaction of the IA and the attending TCMS inspector.
- 25.4.1.2 Upon completion of the installation, the Contractor must afford the IA the opportunity to test all sliding windows for unhindered operation. Any window which does not travel its full course or requires excessive force to operate must be repaired to the satisfaction of the IA at the Contractor's expense.

25.4.2 **Testing**

- 25.4.2.1 Upon completion of installation the windows must be submitted to a hose test in the presence of the IA and TCMS. The Contractor must perform a hose test on all windows using a 12 mm diameter nozzle from 3 meters away with water pressure of 60 psi for 2 minutes on each window. Testing of the Clearview Screen must be done with the Clearview Screen in operation for 10 minutes prior to the test, during the test and 10 minutes after the application of water on the Clearview Screen has stopped. Any leaks must be repaired at the Contractor's expense.

25.5 **Deliverables**

25.5.1 **Documentation**

- 25.5.1.1 The Contractor must provide a copy of all photos taken prior to commencing work.
- 25.5.1.2 It is the Contractor's responsibility to obtain TCMS certification for the installation upon completion of the testing of new windows and components.
- 25.5.1.3 The Contractor must return the old Clearview to the IA.

2. To respond to vendor inquiries

Q58. Annex A - Item 7.3.3.5 and 7.3.3.6 at this section it is clear that Canada want optional price for armature work, is it unit price for one generator or we must include for all four generators?

A58. The Contractor must provide a unit price that can be applied to all 4 armatures if required.

Q59. Annex A item 7

Item 7.3.4 Generator brush gear

Item 7.3.5 Magnetic frames (Stators)

Item 7.3.6 Assembly for magnet frame coils and poles

Item 7.3.7 Electrical testing of magnet frame winding

Item 7.3.8 Generators auxiliaries

Must we include all these items jobs for all 4 generators in item 7 on annexe H?

A59. Yes, this is mandatory work that must be carried out on all generators.

Q60. Annex H section 7

When we look at the annex H

On English version title is " Total spec. 7- overhaul of propulsion generators(survey item)

On French version title is " Total pour la spec 7 remise en état des génératrices de propulsion

Please confirm what "survey item" means.

A60. "Survey item" means that this work must receive acceptance by TCMS as mentioned in paragraph 7.4.4.1.

Q61. Griffon spec provided, under SERVICES page 25 of 166 it states para 4.10 Temporary Deck Covering Amendment 001 states changes to this item Temporary Deck Covering

To date; the pricing data sheet Amendment 003 still does not show this item 4.10 to be priced.

Can CANADA please provide a correct pricing form to use?

A61. Yes, Revised Annex H to follow.

Solicitation No. - N° de l'invitation
F2599-180006/C
Client Ref. No. - N° de réf. du client
F2599-180006

Amd. No. - N° de la modif.
004
File No. - N° du dossier
034mdF2599-180006

Buyer ID - Id de l'acheteur
034md
CCC No./N° CCC - FMS No./N° VME

Q62. For the solicitation No.F2599-180006, item 7.3.8, is Canada supplying the new parts to execute the job on generator auxiliaries?

A62. Any Government Furnished Equipment/Supplies are listed at 7.48 of the Resulting Contract Clauses that form part of the solicitation package. Unless listed, bidders should assume all new parts and materials are to be supplied by the bidder and included in the proposed price unless otherwise stated.

3. To upload missing drawings associated with the Solicitation

See Technical Package 4

4. To extend the bid closing date

At Invitation to Tender - Cover Page – Solicitation Closes

Delete: May 31, 2018

Insert: June 5, 2018