

PANAMA CANAL AUTHORITY		VARIATION	PAGE 1 OF 3
1. REQUEST FOR PROPOSAL No.:	2. CONTRACT No.:	3. DATE:	4. VARIATION No.:
RFP-76161	CMC-221427	January 11, 2011	012

5. ISSUED BY:

PANAMA CANAL AUTHORITY  
Employer's Representative  
Locks Project Management Division  
Building 740, Corozal  
Panama, Republic of Panama

6. NAME AND ADDRESS OF CONTRACTOR (INCLUDE PHYSICAL & POSTAL ADDRESS)	7. CONTRACTOR'S TELEPHONE NUMBER:
Grupo Unidos por el Canal, S.A. Building 732, Corozal West Panama, Republic of Panama	507-316-9900
	8. CONTRACTOR'S FACSIMILE NUMBER:
	507-317-6736

9. VARIATION:

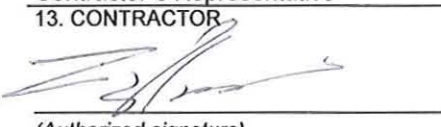
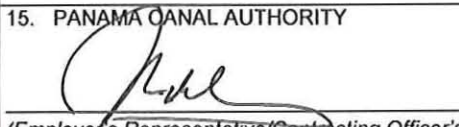
- The contract referred to in item No. 2 is hereby varied as set forth in item 10, entitled "DESCRIPTION OF VARIATION".  
 YES.  NO. The contractor shall send a copy, duly signed, of this Variation to the Employer's Representative/Contracting Officer.

	9 A. THIS VARIATION IS EXECUTED ON THE BASIS OF: (Specify the legal authority). <u>THE VARIATION DESCRIBED IN ITEM 10 IS HEREBY INCORPORATED AND MADE A PART OF THE CONTRACT.</u>
	9 B. THE CONTRACT REFERRED TO IN ITEM NO. 2, IS VARIED TO INCORPORATE ADMINISTRATIVE CHANGES (such as the paying office, account numbers, etc.).
X	9 C. THIS BILATERAL AGREEMENT IS SIGNED AND INCORPORATED INTO THE CONTRACT REFERRED TO IN ITEM NO. 2 OF THIS FORM, ON THE BASIS OF: (Specify the legal authority) Volume III, Conditions of Contract, Sub-Clause 1.16 [Entire Agreement], 4 <sup>th</sup> Paragraph
	9 D. OTHER. (Specify manner and the legal authority).
	9 E. ACCOUNT NUMBER (If required):

10. DESCRIPTION OF THE VARIATION (List in accordance with the order of the Contract. If additional space is required, use blank sheets).

**See attached**

Except for the variation(s) herein specified, all other terms and conditions of the Contract remain unchanged.

11. NAME AND TITLE OF THE PERSON AUTHORIZED TO SIGN (Type or print)	12. NAME AND TITLE OF THE EMPLOYER'S REPRESENTATIVE/CONTRACTING OFFICER (Type or print)
Antonio Maria Zaffaroni Contractor's Representative	Jorge de la Guardia, Employer's Representative
13. CONTRACTOR	14. DATE:
 (Authorized signature)	18/1/2011
	15. PANAMA CANAL AUTHORITY
	 (Employer's Representative/Contracting Officer's signature)
	16. DATE:
	12/I/2011

Variation No. 012 is issued to incorporate the following changes:

1. **Volume II, Part 1, Section 01 81 29 [Electrical and Lighting System]-** Delete Paragraph 1.04 P.4 [Accessories], and replace it with the following:

*"4. Accessories: Fuel capacity shall be as required in Section 26 32 13.13 (Diesel-Engine Driven Generator Sets) and Section 01 86 13 (Plant – Mechanical Systems and Equipment)."* (RFI 0236)

2. **Volume II, Part 1, Section 35 73 00 [Borinquen Dams 2E, 1W and 2W]-** Delete Paragraph 1.03 A.1.a, and replace it with the following:

*"a. The nominal PAC invert elevation shall be at 9.14 m PLD north of Station 5+880 and 6.42 m PLD south of Station 6+180 (with 2 percent maximum slope between these stations). The crest elevations of the dams shall not be less than 32.00 m PLD. The dam crest elevation shall be confirmed by analyses for wave run-up combined with the locks design flood level [Refer to Section 01 10 00 (General Project Requirements), Subparagraph 1.02 L.]. The dam crest widths shall be based on the results of seismic-stability and ship-grounding analyses; but shall not be less than 30.00 m. Furthermore, the crest widths shall be subject to approval by the Employer."* (RFI 0243)

3. **Volume II, Part 2, Section 26 24 19 [Motor Control Centers]-** Delete Paragraph 1.04 C.1.f, and replace it with the following:

*"f. Dielectric Voltage Withstand: As per ANSI C37.50, ANSI C37.51 and U.L. 845."* (RFV 037)

4. **Volume II, Part 2, Section 26 32 13.13 [Diesel-Engine Driven Generator Sets]-** Delete Paragraph 1.01 B. [Scope], and replace it with the following:

*"B. Scope: This Section contains the technical specifications for furnishing a complete design for future installation by the Employer of the generator set group at each locks complex. The generator will be installed in a separate building and will feed the electrical distribution system through switchgear located in an electrical room at the upper chamber. All signals necessary for synchronization of the generator to the incoming feeders shall be available at the generator connecting point. The generator power transfer will be done with programming to be retrofitted by the Employer in the incoming switchgear, in accordance to the transfer scheme to be supplied by the Contractor as indicated in Section 26 13 00 (Medium Voltage Switchgear), and with the provisions provided by the Contractor in the switchgear for later retrofitting by the Employer of such transfer scheme. The generator room will be designed and constructed by the Employer."* (RFV 029)



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## Design and Construction of the Third Set of Locks

5. **Volume II, Part 2, Section 27 31 23 [IP-Based Telephone Systems]** – Delete Paragraph 1.03 D.4.a [Indoor Phones] and replace it with the following:

**“a. Indoor Phones:**

*Unless otherwise specified, the Contractor shall furnish no less than the following quantities and types of indoor telephone sets:*

<b>Area</b>	<b>Sub-area</b>	<b>Analog Phones</b>	<b>IP/SIP Phones</b>
Administrative and office spaces (in general)		-	1 for every 10 m <sup>2</sup>
Control buildings (main and backup)		-	1 for every 10 m <sup>2</sup>
Elevators	Passenger	1 per car	-
	Special purpose	1 per car	-
Emergency response sites		1 per site	-
Fire fighting equipment buildings	Fire equipment rooms	1 for every 50 m <sup>2</sup>	-
	Telecommunications rooms	1 per room	-
Maintenance shops		1 for every 100 m <sup>2</sup>	-
Machinery buildings	Emergency generator rooms	1 per room	-
	HPU rooms	1 for every two HPUs	-
	Switchgear rooms	2 per room	-
	Other electrical equipment rooms	1 per room	-
	Other rooms	1 per room	-
All other areas		In accordance with BICSI TDMM recommended work and coverage area sizes	

(RFI-0245)

6. **Volume II, Part 3, Section 01 35 23 [Health & Safety Requirements]** – Revise Paragraph 1.17 B to delete in the Table, under the “Actions” column, the three references to “ACP Form 2505” and replace them with the following: “*Corrective Action Request, contained in Appendix 1 of document: G00/UPCMGP0019-UB. The document “Corrective Action Request”, contained in Appendix 1 of document: G00/UPCMGP0019-UB”, now forms part of the Locks Contract.*” (RFV-035)

The changes included in this Variation No. 012 have no cost or time implications to the Third Set of Locks Contract (CMC-221427).