

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES 1 12
2. AMENDMENT/MODIFICATION NO. <b>0003</b>	3. EFFECTIVE DATE <b>See Block 16C</b>	4. REQUISITION/PURCHASE REQ. NO. <b>4200530485</b>	5. PROJECT NO. (If applicable) <b>PCN 97866.1</b>	
6. ISSUED BY <b>John F. Kennedy Space Center, NASA Procurement Office, OP-ES Kennedy Space Center, FL 32899</b>	CODE <b>OP-ES</b>	7. ADMINISTERED BY (If other than Item 6) <b>Same as block 6</b>		

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)	9A. AMENDMENT OF SOLICITATION. <b>X</b> <b>NNK15530485R</b>
	10A. MODIFICATION OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.  
 Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor   is required to sign this document and return      copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

**The purpose of Amendment 0003 is to:**

- A. Provide Government answers to potential bidder's questions, see attached.**
- B. Incorporate changes to the solicitation as a result of responses to bidder questions, see attached.**
- C. All other terms and conditions remain unchanged.**

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) <b>Randall A. Gumke</b>	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY 	16C. DATE SIGNED 11/14/2014
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

**NNK15530485R – Safety and Reliability Upgrade KSC Institutional Power Systems, Phase 1 of 4, PCN: 98966.1**

**A. ANSWERS TO BIDDERS QUESTIONS:**

**1. REFERENCE:** Section H – Special Contract Requirements, Paragraph H6

**QUESTION:** Are we to use the wage determination provided in the amendment or are we to contact the DOL for a determination for a “special enclave”. Please clarify which rates we are to use for bidding this project.

**RESPONSE:** Contractor shall utilize the current wage determinate rates provided under Amendment 1. These rates cover the Kennedy Space Center’s special enclave as stated in Article H.6. The contractor should contact DOL if clarification is required to determine which labor classification you should utilize for a specific type of work.

**2. REFERENCE:** Section I – Contract Clauses; paragraph I.4, page 47 Alternate II (OCT 2001)

**QUESTION:** The alternate states that a subcontracting plan shall be included in the proposals, however, the last two sentences on page 48 states: “The subcontracting plan shall be negotiated within the time specified by the contracting officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.” Please explain what needs to be “negotiated”, and in what time frame, prior to proposal submittal and award since this project is intended to be awarded without holding discussions with offerors. (Per paragraph L.9(a), pg. 85 of solicitation)

**RESPONSE:** This acquisition is a low price technically acceptable procurement. Per Article L.10 (NON-PRICE FACTORS), paragraph d (SMALL BUSINESS UTILIZATION), subparagraph 1, all offerors, except small businesses, are required to submit a Small Business Subcontracting Plan, including the associated subcontracting percentage goals and subcontracting dollars, with their proposal.

The Subcontracting Plan, as submitted, will be evaluated during the Low Price Technically Acceptable evaluation process per Article M.1 (BASIS FOR CONTRACTAWARD) paragraph b (EVALUATION OF NON-PRICE FACTORS) subparagraph (4) (FACTOR 4 - SMALL BUSINESS UTILIZATION).

As stated in Article M.1 (BASIS FOR CONTRACTAWARD), paragraph a (EVALUATION FACTORS AND SELECTION OF THE SUCCESSFUL OFFEROR) “In accordance with the Instructions to Offerors – Competitive Acquisition provision of this solicitation (FAR 52.215-1), the Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a).) Therefore, the offeror’s initial proposal should contain the offeror’s best

terms. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary.”

**3. REFERENCE:** Solicitation NNK15530485R

**QUESTION:** Liquidated Damages noted in the Solicitation, are there to be damages to be added by amendment?

**RESPONSE:** The only liquidated damages clause in the solicitation is FAR 52.219-16, Liquidated Damages – Subcontracting Plan. FAR Clause 52.211-12, Liquidated Damages – Construction is not applicable to this acquisition.

**4. REFERENCE:** Drawing 79K39767

**QUESTION:** Will the outages for replacement of transformer arresters be for just each individual transformer, or for a group of transformers in one specific area?

**RESPONSE:** Outages will be for each individual transformer; reference Note 29 on Drawing 79K39767, Sheet E-001. Where possible, the Government will attempt to secure outages for multiple pieces of equipment with surge arresters at the same time, but cannot guarantee they will be approved due to operational requirements for the facilities involved.

**5. REFERENCE:** : Drawings 79K39768, Sheet E-116

**QUESTION:** Sheet E-116 shows the existing Manhole-P2. On the one-line diagram on sheet E-618 shows cable going from LBS-908 to manholes-P1 and P3. There is no drawing that shows where these manholes are in relation to Manhole-P2. Please Clarify.

**RESPONSE:** Reference E-409 including Specific Notes B and D which indicate distances from Manhole P2. Manholes P1 and P3 are in-line with Manhole P2 and are on the same side (South side) of Saturn Causeway.

**6. REFERENCE:** Drawing Set 79K39767

**QUESTION:** With regard to the live front transformer surge arrestors that are to be removed as a single set during a single outage, provide data and price and then removed during subsequent outages. For bidding purposes. Is the intent to combine as many removal/installations as possible for an area in one outage or to equally apply the outages to every separate group of surge arrestors?

**RESPONSE:** Equally apply the outages to every separate group of surge arrestors. Also, reference Note 29 on Drawing 79K39767, Sheet E-001. Where possible, the Government will attempt to secure outages for multiple pieces of equipment with surge arresters at the same time, but cannot guarantee they will be approved due to operational requirements for the facilities involved.

**7. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-001 Note 24, Possible Asbestos

**QUESTION:** Since we don't know if it exists can this be consider a change condition?  
(We will not have to put cost to something that might not exist)

**RESPONSE:** Any required asbestos abatement will be a contract change condition.

**8. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-508 Note E

**QUESTION:** Can NASA provide a manufacturer and part number for the basis of design?

**RESPONSE:** Cooper 700-22.

**9. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-510, Notes A, B, D, G, H, and AC

**QUESTION:** Can NASA provide a manufacturer and part number for the basis of design?

**RESPONSE:** No manufacturer/part number basis of design is available for the components. See new Addendum Item 4c and response to question No. 24 for switch amperage ratings.

**10. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-510, Note J Corona Bells

**QUESTION:** Are we to install corona bells inside the busbar connectors and busbar terminals for the busbar that is using the busbar connector?

**RESPONSE:** No. Corona bells are to be installed at the ends of rigid bus bar segments where the bus bar does not terminate in a bus bar coupling, bus bar tap, or equipment connector.

**11. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-510, Note AJ

**QUESTION:** We have not located this note in the details is it required?

**RESPONSE:** See Sheets E-513 (Bay 9) and E-519 (Bay 17) of Drawing 79K39768.

**12. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-510, Note AN

**QUESTION:** If we have to modify the busbar for the new configurations can we use busbar couplings?

**RESPONSE:** Yes.

**13. REFERENCE:** Drawing 79K39768 (Task 2) Sheet E-624, Note D "The enclosure Industrial Control Panel shall be"

**QUESTION:** What shall the ICP be?

**RESPONSE:** Last sentence is a typographical error and is not applicable. Reference new Addendum Item 2h.

- 14. REFERENCE:** Specification 79K39769, Section 26 05 70.00 98, Para 2.1 Relay Management System

**QUESTION:** Can NASA provide the ten separate locations and the amount of each SEL devices at each location?

**RESPONSE:** Reference new Addendum Item 4b.

**QUESTION:** Are any of these listed 206 devices the same as shown on any drawing?

**RESPONSE:** If CLIN-0003 / Option 2 is awarded, the E-700 and E-800 series sheets of Drawing 79K39767 indicate SEL-751A units and SEL-2032 units included in the counts of Addendum Item 4b for the Orsino and C5/C5A Substations.

- 15. REFERENCE:** Drawing 79K39770 (Task 3), Sheet E-010, New Cable Schedule Cable 2 and 3 type GSC

**QUESTION:** What is Ground Service Cable?

**RESPONSE:** Ground Service Cable is the neutral or grounded service conductor.

- 16. REFERENCE:** Drawing 79K39770 (Task 3), Sheet E-652

**QUESTION:** Does the EPP Generator Building Vault extend out to each generator? If it exists can we use this to get conduit and wire to the generators? Or will the conduit have to be run overhead?

**RESPONSE:** The vault is located beneath the EPP switchgear and does not extend to underneath the generators. Conduits containing the power conductors from each generator are routed under slab from the vault to each generator. Power conductor revisions for (2) existing generators will reuse these conduits. Control and instrumentation circuits will be run in new conduit overhead.

- 17. REFERENCE:** Specification 79K39769, Section 26 11 14.00 98, Paragraph 2.8 Surge Arrestors Type 1, 2, 3, 4, and 5

**QUESTION:** Can NASA provide a manufacturer and part number for the basis of design?

**RESPONSE:** Except for dead-front transformer arresters (Type 4) No manufacturer/part number basis of design is available for the components. At KSC, Type 4 arresters are typically Cooper elbow arresters suitable for plugging into 200A transformer inserts.

**18. REFERENCE:** Solicitation NNK15530485R, General

**QUESTION:** The bid date is for Monday 11/24/14 at 3:00 PM. Can NASA make the bid date Tuesday 11/25/14?

**RESPONSE:** No

**19. REFERENCE:** Drawing 81K06752, Sheet E-5 & Drawing 79K39770, Sheet E-602, Notes J & K

**QUESTION:** The load bank one line diagrams do not match on these two drawings? Which one line diagram do we need to use for this project in regards to the new load banks required? What bid items are the load banks suppose to be included?

**RESPONSE:** Sheet E-5 of Drawing 81K06752 is the current configuration. The new load bank final one-line after modification is Drawing 79K39770, Sheet E-602. Load bank one-line demolition is indicated on Drawing 79K37768, Sheet E-603. All load bank work is part of CLIN-0001 / Base Bid.

**20. REFERENCE:** SF1442 Solicitation, Bid Item Breakdown

**QUESTION:** On CLIN 004a, Description Option 3a for the surge arrestors is this bid item suppose to be for just material cost, sales tax and markup? If so, what bid item/s do we put the labor?

**RESPONSE:** CLIN-0004a is for live front distribution and intermediate class surge arrester devices only, including cost plus tax for work associated with CLIN-004 / Option 3. CLIN-004 / Option 3 is where the labor price and all other materials not included in CLIN-0004a is quoted.

**21. REFERENCE:** Drawing 79K39768, Sheet E-510

**QUESTION:** This project requires hot dipped, pre-fabricated lattice type structures that have been known to cause warping. Standard industry procedures are to first hot dip galvanize the members and then bolt them together. Please advise if bolting these structures together will be allowed instead of welding them?

**RESPONSE:** Contractor shall bid bolted and welded connections as indicated on the drawings.

**22. REFERENCE:** Drawing 79K39768, E-510, Note A

**QUESTION:** Are new 15kV post insulators of 15kV standard strength required? Do we supply new bus support clamps?

**RESPONSE:** Standard strength is specified in Specification 79K39769, Section 26 11 14.00 98, Sub-section 2.7. New bus support hardware is required with each insulator to attach bus bars to the post insulators as indicated on the drawings.

**23. REFERENCE:** Drawing 79K39768, Sheet E-510, Note AJ

**QUESTION:** On the new #350 copper jumpers what conductor type is required SDB, MHDB or HDB?

**RESPONSE:** Hard drawn is specified in Specification 79K39769, Section 26 11 14.00 98, Sub-section 2.4.2.

**24. REFERENCE:** Drawing 79K39768, Sheet E-510, Note H

**QUESTION:** Can you provide the amp rating of all new disconnects required?

**RESPONSE:** Fused switch ratings are specified in Specification 79K39769, Section 26 11 14.00 98, Sub-section 2.9.1.2. All unfused switches shall be 1200 Amp except for (7) sets which shall be 2000 A as follows (reference Sheet E-611 of Drawing 79K39768): TS8-1 in Bay 6, ST2 in Bay 9, ST2 in Bay 13, ST3 in Bay 17, ST4 in Bay 21, and Switches "1" and "2" to VCB BT1 in Bay 13. Also see new Addendum Item 4c.

**25. REFERENCE:** Drawing 79K39768, Sheet E-510, Note E

**QUESTION:** Can you provide the information on the new lights required?

**RESPONSE:** Reference fixture information on Drawing 79K39768, Sheet E-507.

**26. REFERENCE:** Drawing 79K39768, Sheet E-510

**QUESTION:** Is exothermic bonding acceptable for the substation grounding?

**RESPONSE:** Yes, unless specifically indicated otherwise on the drawings or in the specifications or where equipment is provided with other connection methods (such as a NEMA hole pattern cable pad).

**27. REFERENCE:** Drawing 79K39768, Sheet E-510, Note G

**QUESTION:** Please confirm that 8 new PT's are required for Bays 6, 12, 18, & 26?

**RESPONSE:** (8) PT's, (4) sets connected open delta, are required for the (4) bays 6, 12, 18, and 26 indicated in this question.

**28. REFERENCE:** Drawing 79K39768, Sheet E-510, Note H

**QUESTION:** Please provide the type of fuse, size and fuse unit required?

**RESPONSE:** Reference Specification 79K39769, Section 26 11 14.00 98, Sub-Section 2.9.1.2 and Drawing 79K39768, Sheet E510, Specific Note AC for fuse requirements.

**29. REFERENCE:** Drawing 79K39768, Sheet E-510

**QUESTION:** Please confirm that all new connectors to be supplied for both tubing and wire are bolted AC? Can you confirm new quantity in 4 Bays 24, 25, 27, & 29?

**RESPONSE:** Connectors for tubing are bolted, connector for equipment are as required by the manufacturer. Bid quantity of (1) for Specific (Flag) Note AC for each Bay 23, 24, 25, 27, and 29. Also see new Addendum Items 2i, 2j, 2k, and 2l.

**30. REFERENCE:** Drawing 79K39768, Sheet E-515, Section Bay 12, Far Right A

**QUESTION:** This does not look like an insulator, please confirm?

**RESPONSE:** These are surge arresters, not insulators between the fused switch and PT-4. Flag note indicating should be B instead of A. Reference new Addendum Item 2m.

**31. REFERENCE:** Drawing 79K39767, Sheet E-441, Substation 831

**QUESTION:** What size is the transformer?

**RESPONSE:** Work on Drawing 79K39767 (TASK 1), Sheet E-441 is not in scope.

**32. REFERENCE:** Solicitation Bid Item, Task 4

**QUESTION:** Task 4 EPP Modification work will require NASA emergency power functions to be disabled for many months. Will temporary power generators with auto-start control system be required as part of the required scope during the TASK 4 EPP modification work?

**RESPONSE:** Contractor does not have to provide a temporary generator. In accordance with TASK 2 documents, (2) of the (5) existing EPP generators are providing temporary emergency service to KSC loads via temporary switchgear including auto-start control and switching systems. Temporary switchgear is specified in Specification 79K79769, Section 26 23 00.00 98.

**QUESTION:** If so, please specify required capacity and control requirements of temporary emergency power system to be supplied by Contractor?

**RESPONSE:** The Contractor is to connect (2) of (5) existing EPP generators per TASK 2 Construction documents including applicable contract addendum items.

**QUESTION:** Will the Contractor be responsible for providing any fuel required for this project related to existing generator functions or possibly temporary?

**RESPONSE:** No. Fuel will be provided by the Government.

**33. REFERENCE:** Solicitation page 33, FAR 52.215-21

**QUESTION:** It states to submit the cost portion of the proposal in MS Excel format by email. My question is does this have to be in by the bid date and time, and does this just come to you?

**RESPONSE:** FAR 52.215-21 is specifically for modifications addressed once the contract is awarded. This does not apply to the proposal submitted in response to this solicitation.

**34. REFERENCE:** Solicitation page 85 L.9 (c) 1-12, and page 113 d Evaluation Process (3)

**QUESTION:** The first referenced paragraph shows that all parts of the proposal price and technical should be in one volume, and the second reference states that there is a “technical (non-price) proposal. Does the technical (non-price) information need to be separated from the pricing proposal?

**RESPONSE:** Yes. Pricing proposal is the completed SF1442.

**B. INCORPORATE CHANGES INTO SOLICITATION**

(b) Addenda to Specification and Drawings:

2. Drawing 79K39768 (TASK 2)

h. Sheet E-624. Last sentence of specific note D is deleted as follows

From: "THE ENCLOSURE INDUSTRIAL CONTROL PANEL SHALL BE"

To: "[DELETED]"

i. Sheet E-522, Zone B4. Change quantity associated with Specific Note AC flag indication for Bay 23

From: "(2)"

To: "[deleted-quantity of 1]"

j. Sheet E-523, Zone B4. Change quantity associated with Specific Note AC flag indication for Bay 25

From: "(2)"

To: "[deleted-quantity of 1]"

k. Sheet E-524, Zone B4. Change quantity associated with Specific Note AC flag indication for Bay 27

From: "(2)"

To: "[deleted-quantity of 1]"

l. Sheet E-525, Zone C7. Change quantity associated with Specific Note AC flag indication for Bay 23

From: "(2)"

To: "[deleted-quantity of 1]"

m. Sheet E-515, Zone F4. Change Specific Flag Note indication.

From: "(3) A"

To: "(3) B"

4. Specification 79K39769 (Task 2)

b. Section 26 05 70.00 98, PROTECTIVE RELAY SYSTEM COMPONENTS AND APPRUTENANCES, Sub-section 2.1 – Paragraph a is revised as follows:

From: Existing two hundred and six (206) SEL devices:

1. Eighty-three (83) SEL-351A protective relays.
2. Three (3) SEL-387 protective relays.
3. Six (6) SEL-501 protective relays.
4. Five (5) SEL-587 protective relays.
5. Seventy-seven (77) SEL-751A protective relays.
6. Five (5) SEL-787 protective relays.
7. Fourteen (14) SEL-2032 protective relays.
8. Five (5) SEL-3530 protective relays.
9. Eight (8) SEL-351S protective relays.

To: Device locations are as follows:

1. M7-360 Space Station Processing Facility USS-118  
SEL-751A 14  
SEL-3530 1
2. K6-947 Utility Annex Switch Station 700  
SEL-351A 17  
SEL-2032 1
3. K7-188B Switch Station 900  
SEL-351A 17  
SEL-2032 2
4. Launch Pad 39A Switch Station 902  
SEL-351A 28  
SEL-2032 3
5. Launch Pad 39B Switch Station 1001  
SEL-351A 6  
SEL-2032 1
6. K6-1141 C5 Substation  
SEL-751A 20  
SEL-501 1  
SEL-587Z 1

SEL-787 1  
SEL-2032 2

7. K6-1141A C5A Substation

SEL-751A 22  
SEL-501 2  
SEL-587Z 1  
SEL-787 2  
SEL-2032 2

8. M6-996 Orsino Substation

SEL-751A 23  
SEL-387 A 3  
SEL-501 3  
SEL-587Z 1  
SEL-2032 2

9. New USS 119 under construction at M7-407 Industrial Area Chiller Plant

SEL-351A 12  
SEL-351S 4  
SEL-787 2  
SEL-3530 2

10. New USS 801 under construction at K6-848, VAB Tower A:

SEL-351A 4  
SEL-351S 4  
SEL-3530 2

- c. Section 26 11 14.00 98, MEDIUM-VOLTAGE DISTRIBUTION, Sub-section 2.9.1.1 –  
Change non-fused disconnect switch continuous current rating as follows:

From: Continuous Current: 600A or 1200A as indicated on the Drawings.

To: Continuous Current: 2000A for seven (7) sets of switches interconnecting the C5  
Substation “13.8 kV Unregulated (Main) Bus” sections together (ST1, ST2, ST3, ST4)  
and to Vacuum Circuit Breakers VCB-TS8/VCB-BT1; all other switches shall be 1200A.