AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0129	See Block 16C		

6. ISSUED BY CODE 892432

Idaho Operations Office
Idaho Operations
U.S. Department of Energy
Idaho Operations
Idaho Falls ID 89415

7. ADMINISTERED BY *(If other than Item 6)* CODE 00701

Idaho Operations
U.S. Department of Energy
Idaho Operations
1955 Fremont Avenue
MS 1221
Idaho Falls ID 83415

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

FLUOR IDAHO, LLC
Attn: AMANDA JORDAN
1070 RIVERWALK DRIVE, SUITE 201
IDAHO FALLS ID 83402

CODE 968795604 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-EM0004083

10B. DATED *(SEE ITEM 13)* 02/04/2016

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 _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication 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 letter or electronic communication, provided each letter or electronic communication 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 ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	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 data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Section I.100 Changes - Cost Reimbursement (AUG 1987) - Alternate II and III (APR 1984)
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

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

DUNS Number: 968795604
The purpose of this modification is to incorporate scope specific to CLIN-1. Please refer to the continuation pages incorporated as part of this modification. The Contractor is directed to continue operations in accordance with contract Section B.2.
Payment:
OR for Idaho
U.S. Department of Energy
Oak Ridge Financial Service Center
P.O. Box 6017
Oak Ridge TN 37831
FOB: Destination
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Thomas M. Williams Director, Prime Contracts	Jennifer K. Cate

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)	6/20/19	*(Signature of Contracting Officer)*	6.20.19

Previous edition unusable

STANDARD FORM 30 (REV. 11/2016)
Prescribed by GSA FAR (48 CFR) 53.243

NAME OF OFFEROR OR CONTRACTOR
FLUOR IDAHO, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Period of Performance: 06/01/2016 to 05/31/2021 Change Item 00001 to read as follows(amount shown is the total amount):				
00001	Target ICP-Core DOE Mission Work Line item value is: $1,654,792,658.00 Incrementally Funded Amount: $1,397,781,665.85 This modification increases the Total Contract Value (including options) by $262,626 from $1,775,692,927 to $1,775,955,553. See continuation pages for further details.				1,654,792,658.00

This modification is being made under the authority of the contract clause Section I.100, Changes – Cost Reimbursement (AUG 1987) - Alternate II and III (APR 1984). This bilateral contract modification definitizes the equitable adjustment to increase the contract estimated direct cost under CLIN-1 for new work scope associated with the new wireless communication system for the Idaho Nuclear Technology and Engineering Center (INTEC) Emergency Communication System (ECS) as well as extending the completion date for the ECS upgrades. Due to this change, the indirect cost under CLIN-1 is also adjusted to reflect the changes made to the POH table attached.

The following changes are hereby made to the contract:

1. SECTION B.2 CONTRACT COST AND FEE SCHEDULE is revised as follows:

CLIN-1: Target ICP Core DOE Mission Work Scope (Base) is revised to incorporate the change stated above.

The Direct Target Cost is increased by $197,047 from $854,747,310 to $854,944,357.

The Indirect Target Cost is increased by $35,468 from $282,331,538 to $282,367,006.

The Total Target Cost is increased by $232,515 from $1,137,078,848 to $1,137,311,363.

The Cost Incentive (Target) is increased by $11,510 from $23,946,673 to $23,958,183.

The Cost Incentive (Maximum) is increased by $30,111 from $62,648,368 to $62,678,479. The overall CLIN-1 Max Fee, including milestones and performance fee, in increased by $30,111 from $134,768,496 to $134,798,607.

Summary:

The Total Contract Value, including options, is increased by $262,626 from $1,775,692,927 to $1,775,955,553.

The attached B.2(c) Fee Model has been updated to reflect the adjustment to CLIN-1.

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B.2(c) Table				
CLIN 00001- TARGET ICP-CORE DOE MISSION WORK (BASE)				
	Target Cost	Max Fee	Target Fee	Total Price
Direct Target Cost w/ ID Spt (No Options Included)	854,944,357	134,798,607		1,272,109,970
Indirect Target Cost w/o ID Spt (Total Pool, PWS C.8)	282,367,006			
	1,137,311,363			
Target Fee			56,296,912	
Subtotal Milestone-Shedule & Performance Fee (B.3(d))		72,120,128		
Subtotal Incremental Cost Incentive Fee		62,678,479		
Cost Incentive Breakout				
Cost Incentive (Max)		62,678,479		12.95%
Cost Incentive (Target)			23,958,183	4.95%
CLIN 00002 - TARGET ICP CORE NNPP PPF WORK SCOPE				
	Target Cost	Max Fee	Target Fee	Total Price
Navy (Pieces, Parts and Fines - 102 Cans)	42,367,181	5,382,479	2,503,195	47,749,660
Milestone-Shedule & Performance		3,970,091	1,963,325	
Cost Incentive (Max)		1,412,388	539,870	
CLIN 00003 - NON-TARGET ICP CORE WORK SCOPE				
	Estimated Cost	Fee		Total Price
Total Non-Target Work Scope (See Contracting Officer for Breakout)	35,164,864	1,932,898		37,097,762
CLIN 00004- CONTRACT TRANSITION PERIOD				
Transition	6,811,889	0		6,811,889
CLIN 00005 - DEFINED BENEFIT PENSION PLAN COSTS				
Pension	125,000,000	0		125,000,000
CLIN 00006 INTEGRATED WASTE TREATMENT UNIT (IWTU) OPERATIONS AND TURNOVER				
	Estimated Cost	Max Fee	Fee Gal	Total Price
IWTU Ops (C.6.1)	44,307,931	5,538,491	$ 6.53	$ 49,846,422
	Estimated Cost	Fee		
IWTU Phase 1 - Process Assessment (C.6.1.1) (Fixed Fee)	19,331,848	956,926		$ 20,288,774
IWTU Phase 2 - Technical Issue Resolution (C.6.1.2) (Milestone Fee)	90,364,264	5,523,919		$ 95,888,183
Total (Excluding C.6.1 IWTU Ops)	**$ 109,696,112**	**$ 6,480,845**		**$ 116,176,957**
Total Contract Cost (Excluding Options)				
	Contract Cost	Max Fee	Target Fee	Total Price
	1,500,659,340	154,133,320	58,800,108	1,654,792,660
Total Contract Cost (Includes Options)				
Priced Options	Target Cost	Max Fee	Target Fee	Total Price
00001a - GrndWtr Monitoring Wells / CFA Landfill	773,962	100,228	38,311	874,190
00001b - GrdWtr Monitoring Wells/TAN Rem	676,966	87,667	33,510	764,633
00001c - Legacy Excess Radioactive/Haz Materials	24,747,535	3,204,806	1,225,003	27,952,341
00001d - RCRA Closure of AMWTP Facilities	30,476,158	3,946,662	1,508,570	34,422,820
00001e - Additional Temporary Storage	6,548,465	848,026	324,149	7,396,491
00001f - RH TRU Lot 11 Option Work (Definitized by Modification 048)	-	-	-	-
00001g - RH TRU Lot 12 Option Work	12,341,796	1,598,263	610,919	13,940,059
00001h - RH TRU Lot 11 GFY 2020 Option Work	19,099,074	2,473,330	945,404	21,572,404
00001i - RH TRU Lot 11 GFY 2021 Option Work	12,607,309	1,632,647	624,062	14,239,956
Total Options	107,271,265	13,891,629	5,309,928	121,162,894
Total Contract Cost (Includes Options) and Max Fee	1,607,930,605	168,024,949	64,110,035	1,775,955,553
Contract Performance Ceiling (B.6)				
Contract Performance Ceiling	1,361,836,383			
NOTE: Fixed Fee values from CLIN-3 and CLIN-6 are included in the max fee value for the total contract cost and total contract cost including options.				

No other changes to B.2(c).

2. **SECTION B.6(a)(2) CONTRACT PERFORMANCE CEILING** is increased by $262,626 from $1,361,573,757 to $1,361,836,383.

3. **SECTION C.3.2.02** ***Upgrade of the Emergency Communication System (ECS)*** is revised from:

   C.3.2.02 Upgrade of the Emergency Communication System (ECS)

   The Contractor shall upgrade the Emergency Communication System (ECS) Random Access Digital Audio (RADA) Announcement System. The ECS RADA shall be completed no later than March 31, 2019 (See Exhibit C-5).

   To:

   C.3.2.02 Upgrade of the Emergency Communication System (ECS)

   The Contractor shall upgrade the Emergency Communication System (ECS) Random Access Digital Audio (RADA) Announcement System. The ECS upgrades shall be completed no later than December 19, 2019 (see Exhibit C-5).

   No other changes to Section C.3.2.

4. **SECTION C, Exhibit C-5 List of INTEC Infrastructure Upgrades Projects, INTEC Emergency Communication System,** is revised to include the wireless communication system scope as detailed in the attached Exhibit C-5, incorporated with this modification 129.

5. **CONTRACTOR'S STATEMENT OF RELEASE:** In consideration of the modification agreed to herein as a complete equitable adjustment for the directed change identified in this modification, and in accordance with contract Section I.100 52.243-2 Changes—Cost Reimbursement Alt II and III, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the proposal for adjustment. The total price of the equitable adjustment under CLIN-1 is $262,626.

No other changes to the contract terms and conditions.

Summary Through Mod - 129

	Direct Cost Change	Total Direct Cost	POH Change	Total POH
Intitial CLINS 1,2,3,4,6		**$ 975,624,953**		**$ 290,675,615**
CLIN00001	$ 94,278,907	$ 1,069,903,860	$ (8,308,609)	$ 282,367,006
CLIN00002	$ (18,791,157)	$ 1,051,112,703		
CLIN00003	$ 22,638,363	$ 1,073,751,066		
CLIN00004	$ 1,056,927	$ 1,074,807,993		
CLIN00006	$ 109,565,044	$ 1,184,373,037		
Less Options	$ (91,080,703)	$ 1,093,292,334		
TOTAL	**$ 117,667,381**	**$ 1,093,292,334**	**$ (8,308,609)**	**$ 282,367,006**

CLIN00001

Mod	Work scope description	Direct Cost Change	Total Direct Cost	POH Change	Total POH
	Initial CLIN 00001 + Priced Options	$ 851,746,153	Initial	$ 290,675,615
010	Calcine Disposition Project	$ 442,956	$ 852,189,109	$ -	$ 290,675,615
014	Inf Upgrade Project	$ 2,991,701	$ 855,180,810	$ -	$ 290,675,615
020	ICDF,CCP&MFA	$ 8,842,414	$ 864,023,224	$ -	$ 290,675,615
022	MFC D&D	$ 480,355	$ 864,503,579	$ -	$ 290,675,615
023	Material Diff	$ (10,541,000)	$ 853,962,579	$ -	$ 290,675,615
025	Direct/Ind true up	$ (3,824,905)	$ 850,137,674	$ 3,824,905	$ 294,500,520
027	Calcine Disposition Project	$ 4,722,370	$ 854,860,044	$ -	$ 294,500,520
028	Tank Farm Cap	$ 1,799,652	$ 856,659,696	$ -	$ 294,500,520
032	Navy Replan Adj	$ 5,765,761	$ 862,425,457	$ -	$ 294,500,520
040	TAN well	$ 655,618	$ 863,081,075	$ -	$ 294,500,520
046	G&A Adj, Guard	$ 314,400	$ 863,395,475	$ 224,000	$ 294,724,520
050	RH TRU	$ 21,559,824	$ 884,955,299	$ -	$ 294,724,520
056	NNPP Adustment	$ 13,875,628	$ 898,830,927	$ -	$ 294,724,520
059	Mandatory Srv	$ -	$ 898,830,927	$ (34,859,143)	$ 259,865,377
078	Radios	$ 786,088	$ 899,617,015	$ -	$ 259,865,377
080	LWFC	$ (71,392,824)	$ 828,224,191	$ -	$ 259,865,377
081	SNF Replan	$ 1,610,172	$ 829,834,363	$ -	$ 259,865,377
088	Nitric Acid	$ 1,202,447	$ 831,036,810	$ -	$ 259,865,377
089	Batch Plant	$ 55,000	$ 831,091,810	$ -	$ 259,865,377
092	UST	$ 312,539	$ 831,404,349	$ -	$ 259,865,377
104	EBR II D&D	$ (4,779,913)	$ 826,624,436	$ -	$ 259,865,377
108	AMWTP Roofs 676 & 678	$ 810,298	$ 827,434,734	$ -	$ 259,865,377
109	INL Proprietary Alarm System	$ -	$ 827,434,734	$ 42,643	$ 259,908,020
110	CPP-2707 Security REA	$ 173,050	$ 827,607,784	$ 110,056	$ 260,018,076
111	MTR Canister	$ (693,220)	$ 826,914,564	$ -	$ 260,018,076
112	EBR II D&D adjustment	$ 1,000,000	$ 827,914,564	$ 431,500	$ 260,449,576
115	AMWTP Future Mission, FSV Biennial Exercise (actual costs)	$ 77,987	$ 827,992,551	$ -	$ 260,449,576
116	Emergency Management (shift to indirect)	$ (22,302)	$ 827,970,249	$ 22,302	$ 260,471,878
118	10 CFR 851	$ -	$ 827,970,249	$ 715,000	$ 261,186,878
121	CPP-749 Gas Sampling	$ 93,000	$ 828,063,249	$ -	$ 261,186,878
122	Utility Tunnel Repairs, Demob from EBRII D&D	$ 2,231,872	$ 830,295,121	$ -	$ 261,186,878
124	CH TRU Waste Settlement	$ 115,300,000	$ 945,595,121	$ 18,915,899	$ 280,102,777
125	IT Support for STI at WCB, FSV Travel Actuals	$ 93,496	$ 945,688,617	$ 16,829	$ 280,119,606
126	Continue CCP Staffing; Discontinue Fab and Testing of Shielded Container for Lot 9B	$ 139,396	$ 945,828,013	$ (838,051)	$ 279,281,555
128	IWTU Indirects - DMR Aging Coupons, Hazen/Lab Support, Canister Decon Conceptual Design, Product Sampling, Remove/Clean Uncoated Elements on PGF.	$ -	$ 945,828,013	$ 3,049,983	$ 282,331,538
129	INTEC ECS wireless communication	$ 197,047	$ 946,025,060	$ 35,468	$ 282,367,006
CLIN 00001 Change from Initial Contract		$ 94,278,907	$ 946,025,060	$ (8,308,609)	$ 282,367,006

CLIN00002

Mod	Work scope description	Direct Cost Change	Total Direct Cost
		Initial	$ 61,158,338
46	G&A Adj	$ (138,146)	$ 61,020,192
56	NNPP Adustment	$ (13,857,777)	$ 47,162,415
126	Remove RH TRU Shipping, Decrease scope for Certification	$ (4,795,234)	$ 42,367,181
CLIN 00002 Change from Initial Contract		$ (18,791,157)	$ 42,367,181

CLIN00003

Mod	Work scope description	Estimated Cost Change	Total Estimated Cost
		Initial	$ 12,526,501
022	NE CPP 603 Crane	$ 1,175,070	$ 13,701,571
027	Fuel Inversion	$ 678,707	$ 14,380,278
032	Navy Replan	$ 4,992,567	$ 19,372,845
033	Closeout	$ 350,001	$ 19,722,846
036	NE CPP 603 Crane	$ 5,449,933	$ 25,172,779
046	G&A Adj	$ (5,868)	$ 25,166,911
051	Nvy Adj, Castor V/21 & USGS	$ (203,767)	$ 24,963,144
053	NE CPP 603 Crane	$ (81,325)	$ 24,881,819
056	DOE Support	$ 29,412	$ 24,911,231
086	Calcine	$ 3,241,141	$ 28,152,372
111	MTR Canister	$ 1,087,100	$ 29,239,472
112	Calcine Retrieval Scope Removal	$ (122,305)	$ 29,117,167
115	FY 2019 Calcine, SPRU data collection and estimate	$ 6,047,697	$ 35,164,864
CLIN 00003 Change from Initial Contract		$ 22,638,363	$ 35,164,864

CLIN00004

Mod	Work scope description	Estimated Cost Change	Total Estimated Cost
		Initial	$ 5,754,962

10	IWTU Transition	$	1,056,927	$	6,811,889
CLIN 00004 Change from Initial Contract		$	1,056,927	$	6,811,889

CLIN00006				
Mod	**Work scope description**	**Estimated Cost Change**		**Total Estimated Cost**
	Initial		$	44,438,999
012	Phase I	$	19,331,848	$ 63,770,847
037	Phase II	$	66,553,245	$ 130,324,092
046*	G&A Adj	$	(131,068)	$ 130,193,024
103	DMR Redesign	$	5,659,068	$ 135,852,092
103	CRR Repair	$	1,207,602	$ 137,059,694
128	DMR Aging Coupons, Hazen/Lab Support, Canister Decon Conceptual Design, Product Sampling, Remove/Clean Uncoated Elements on PGF.	$	16,944,349	$ 154,004,043
CLIN 00006 Change from Initial Contract		$	109,565,044	$ 154,004,043

Exhibit C-5 List of INTEC Infrastructure Upgrades Projects

INTEC Utility Control System

The current INTEC programmable logic controller (PLC) -based Utility Control System shall be replaced with a secure Ethernet-based control system. The system shall consist of the newest generation of General Electric (GE) PLCs and shall include all necessary computer hardware and software, gigabit switches, power supplies, trip units, and other components. The scope includes specifying, designing, procuring, installing and testing the new utility control system.

The following table shows the configuration of the current system hardware on the left, and a previously proposed upgrade on the right. This is provided for information only.

Item	Quantity	Catalog #	Description	Replace	Quantity	Catalog #	Description
1	17	IC697PWR711	PWR SUPPLY 120/240 VAC 100W	Yes	17	IC698PSA100	RX7i Power Supply 100Watt 85-264VAC
2	5	IC697PGM711	PROGRAMMABLE COPROCESSOR MDL	No			
3	2	IC697MEM773	MEMORY 256KB CMOS EXPAN(386)	Yes	0	Memory included with new RX7I Processor	
4	3	IC697CPX935	935 CPX 1 MB MEM FLOAT	Yes	3	IC698CPE010	RX7i 300mhz CPU with Ethernet 10/100
5	2	IC697CPU782	782 CPU EXPAN MEM FLOAT (386)	Yes	2	IC698CPE010	RX7i 300mhz CPU with Ethernet 10/100
6	2	IC697CPM925	925 CPM 1 MB MEM FLOAT	Yes	2	IC698CPE010	RX7i 300mhz CPU with Ethernet 10/100
7	8	IC697CPM915	915 CPU 1 MB MEM FLOAT 486DX	Yes	8	IC698CPE010	RX7i 300mhz CPU with Ethernet 10/100
8	2	IC697CPM914	914 CPU 512 KB MEM FLOAT 486DX	Yes	2	IC698CPE010	RX7i 300mhz CPU with Ethernet 10/100
9	63	IC697BEM731	90-70 GENIUS BUS CONTROLLER	Yes/No	63	Depends on the firware version the Bus Controller	120/240VAC, 125VDC Multipurpose Power Supply is suitable for use in load -sharing and redundancy application. It must be installed in a PACsystems RX3i (IC695catalog number) Universal Backplane. It can be used as the only power supply in the backplan
10	2	IC693PWR322	PWR SUPPLY24/48VDC STD	Yes	2	IC695PSA140	
11	3	IC693PCM301	PROGRAMMABLE COPROCESSOR 192K	Yes	3	Function of Programmable Coprocessor must be review for replacement.	
12	2	IC693MDL740	OUTPUT 12/24VDC 0.5A 16PT/SLOT	No			
13	3	IC693MDL646	INPUT 24VDC 16PT POS/NEG FAST	No			
14	2	IC693CPU352	SERIES 90-30 CPU, MODEL 352	Yes	2	IC695CPU310	300Mhz CPU with 10Meg of memory 2 SERIAL PORTS (occupies two slots on system base)
15	2	IC693CMM321	ETHERNET INTERFACE	Yes	2	IC695ETM001	Ethernet module 10/100 Mbits 2 RJ45 connections one IP address occupies one slot on system base
16	155	IC660BPM100	PWR TRAC 115-230VAC/125VDC	No			
17	137	IC660BBS103	I/O BLK W/O F/S AD/DC 8 CKT ISOL	No			
18	7	IC660BBS101	I/O BLK W/O F/S AD/DC 8 CKT ISOL	No			
19	5	IC660BBS100	I/O BLK 115VAC/125VDC 8CKT	No			
20	20	IC660BBD110	INPUT BLK 115VAC 16CKT	No			
21	10	IC660BBD025	I/O BLK 5/12/24VDC 32CKT SNK	No			
22	4	IC660BBD022	I/O BLK 24VDC 16CKT SRC	No			
23	23	IC660BBD020	I/O BLK 24/48VDC 16CKT SRC	No			
24	11	IC660BBA100	ANALOG 115VAC 4I/2O	No			
25	32	3RD PTY VME	PHOENIX OPTICAL COMM MODULE	No			
26	11	3RD PTY VME	DATUM BC637GPS MODULE	No			
27	??	IC697CHS791	9070 Rack	Yes		IC698CHS117	RX7i 17Slot Rack Front Mount
	??	IC693CHS391	9030 CPU Rack	Yes		IC695CHS012	RX3i 12 slot universal base
				Yes	1	IC660HHM501	Genius Hand Held Monitor
					1	IC647MPP101	Logic Developer PLC Professional with Programming Cable without Proficy GlobalCare Complete with USB Hardware key

Equipment Sub-total

INTEC Emergency Communication System

The INTEC Emergency Communication System (ECS) shall be replaced with a new wireless communication system. The ECS includes alarms and voice paging using speakers, visual indications using strobes, and interfaces with the fire alarm system. This scope includes installing a wireless base station(s) with 4 hour battery backup and a computer with system management software; and installing a wireless remote in each building listed below, including 4 hour battery backup, fire alarm interfaces, antennas, speakers, and strobes.

The scope includes:
-Designing a new wireless system in accordance with current code requirements.
-Project and construction management.
-Installation of new wireless communication equipment, new speakers, strobes, and conduit.
-Installation of conduit/wire between wireless field units and new speakers/strobes in buildings.
-Connection of new speakers/strobes to new wireless units using existing conduits/wires.
-Installation of speakers which meet the DOE O 470.6, Technical Security Program requirements in CPP-1686, CPP-1663 and CPP-666 secured discussion areas.
-Installation of ECS connection and notification panel service in CPP-1674 so that BEA personnel residing in the BEA controlled spaces within INTEC (CPP- 1674, CPP-651, CPP-653, CPP-609 and CPP-1634) receive notification of INTEC events (Voice or Fire Alarm) or BEA initiated actions for INTEC personnel.
-Installation of power wiring to new field units from electrical distribution panels.
-Programming of communication equipment.
-S.O. Testing
-Factory oversight and commissioning of new equipment.

The following INTEC Buildings/Structures are included:

603	1617	1666
604	1618	CPP-1688
605	1631	CPP-1689
649	~~1642~~	CPP-1696
606	~~1643~~	CPP-2719
626	1647	
644	1650	
652	1663	
655	1671	
659	1673	
662	1683	
663	1684	
666	1686	
~~684~~	1774 (outdoor area)	
697	2710	
749 (outdoor area)	698	
1604	~~1634~~	
~~1605~~	~~1651~~	
1606	1662	

INTEC Power Distribution System Upgrades

The Contractor shall replace aging electrical distribution equipment at INTEC. The scope of work includes the following:

1) Perform arc-flash labeling, and purchase electrical power metering equipment.
2) Install AC-PRO breaker control units for Load Centers 1, 3, 4, PCC-FPG-681, PCC-FPE-669, PCC-PFG-680, and PCC-YDH-971.
3) Replace failing/obsolete/non-supported Substation Breaker relay control units with units that match Integrated Waste Treatment Unit (IWTU) relay control equipment for Substations 10, 15, 20, and 60, and Power Control Center (PCC) -85.
4) Develop PM work orders for approximately 947 pieces of electrical distribution equipment designated as Hazard Category 0 in approximately 175 INTEC facilities.
5) Procure test equipment for PM inside INTEC facilities including power quality meter and infrared cameras.
6) Implement changes to National Fire Protection Association (NFPA) 70, "National Electrical Code," and 70E, "Standard for Electrical Safety in the Workplace," requirements.
7) Replace approximately 30 sectionalizing switch input/output (I/O) batteries.
8) Procure spare circuit breakers for Substation 15 and PCC-85.
9) Replace Power Sectionalizing Switch PSS-FPG-120.
10) Increase the power capacity and double-end feed to Building CPP-663.