



CHANGE ORDER

PROJECT: HBMWD 12 kV Switchgear Relocation

Change Order No.: 3

Date: 2/8/2021

Page No.: 1 of 1

DESCRIPTION OF CHANGE:

The 2MW backup generator warrants a new 3300 Generator Controller with associated conduit, wiring, and control strategy revisions that are required to enable the upgrade and efficient integration of a future proposed Battery Energy Storage System (BESS), to be provided by Tesla. The requirement for these changes was communicated by the controller manufacturer (Cummins) after construction had started and highlighted that the existing controller was not upgradable and reprogrammable to meet the needs of the BESS. Also, full integration into the District's SCADA system requires additional reprogramming and the existing SCADA panel is over 20 years old and does not have the capability to integrate the battery system and additional functionality desired for District operations. Therefore, the full integration of the 2MW backup generator warrants the controller upgrade as well as additional SCADA hardware, software, and programming upgrades. Also, there have been a few minor changes warranted by the actual site conditions encountered during construction that are included in this change order. Furthermore, as a result of project changes, Bid Item 18 is no longer needed and therefore is presented as a deduct in this change order as further described below.

The Base Bid Schedule included Line Item 18 (Relocate Generator Controller, Converter, and Add Remote Interface Panel). Instead of relocating and reusing the existing generator control equipment, HBMWD has decided to upgrade and install new generator control equipment and therefore, the work that had been planned under Item 18 is no longer required and is deducted from the change order cost. The generator mounted 3201 generator controller will be upgraded to a 3300 generator controller. The existing Onan Command Center Generator controller will no longer be needed, as it is being replaced with the new 3300 generator controller unit. The existing "Humgen" converter panel is no longer needed, and a new "Humgen 2" converter panel will be installed in the integrated power assembly building (IPA). The remote interface panel will remain but will be installed in the new converter panel in the IPA instead of being installed in the switchgear lineup compartment. Planning for proposed changes to the generator controller equipment required development of a new grid interconnection control strategy and additional support and coordination effort from the contractor's team. As recommended in the new control strategy document, the SEL-700G breaker protection relays for the utility main breaker and generator main breaker will be upgraded to SEL-700GT+ relays to simplify programming and integration of the new generator controller and future proposed BESS. The fiber optic line and existing conduit installed between the IPA building and the Essex facility SCADA interconnection switch will be upgraded to enhance communication speed and comply with associated bending radius constraints. Also, 12" vault extensions will be provided for three handholes (HH-4, HH-5, and HH-7) located along the bottom of the hillside and behind the Essex maintenance building to support a minimum depth of conduit cover and embedment into the slope and provide for easier access for maintenance. The cost associated with the above changes are included in the Potential Change Order quote (PCO #6.1) provided by the contractor, as follows:

- 1. Fiber Optic Line between IPA and Essex Facility..... \$2,728.44
- 2. Generator Controller Upgrade & Humgen 2 panel.....\$267,255.08
- 3. Replace SEL-700G Relays with SEL-700GT+ relays.....\$28,750.00
- 4. Add vault extensions to HH-4, HH-5, HH-7..... \$10,324.09

Sub Total Adder= \$309,057.61

5% O&P= \$15,452.88

Full Credit for Bid Schedule Item 18 = (\$43,287.00)

Total Adder= \$281,223.49

Additional minor changes covered in this change order that are warranted by actual site conditions encountered during construction include: increasing the integrated power assembly (IPA) retaining wall height, re-routing existing conduits on existing fence, using a severe-duty paint system for the IPA to minimize corrosion, dropping the IPA slab and surrounding concrete apron by 12 inches on the west side, and material substitutions for PVC 90s. The cost associated with the above changes are included in the Potential Change Order quotes (PCO #1, PCO #3, PCO #4, PCO #5) provided by the contractor, as follows:

1. Severe Duty Paint System to IPA (PCO #1).....\$5, 913.47
2. Conduit PVC 90s material substitution (PCO #3).....(\$2,796.00)
3. FDW#1 Added concrete retaining wall height (PCO #4)..... \$2,163.00
4. Relocating existing conduits along fence (PCO #5).....\$5,237.09

Total Adder= \$10,517.56

Overall Change Order #3 cost including generator controller related work and miscellaneous changes described above:

\$281,223.49 + \$10,517.56 = \$291,741.05

Significant effort by the District, GHD, and contractor's team has been spent expanding the new equipment and control strategy and approach for upgrading the generator controller and providing the District's desired functionality with the future BESS and other District facilities. The control strategy changes and redesign work has taken time to develop and will take time to implement including approval from PG&E, manufacturing of the switchgear and IPA units, and installation and startup. Due to these time requirements, 175 days are being added to the contract to change the completion date from July 30, 2021 to January 21, 2022. The Contractor is required to provide an updated detailed project schedule to account for the overall project work including the work under this Change Order and Liquidated Damages shall be assessed beyond the approved contract completion date.

CONTRACTOR: Sequoia Construction Specialties

Adjustment of contract sum	
Original Contract Sum	\$2,448,063
Prior Adjustments	\$23,265
Contract Sum Prior to this Change	\$2,471,328
Adjustment for this Change	\$291,742
Revised Contract Sum	\$2,763,070

Adjustment of contract completion dates	
Original Contract Completion Date	Nov. 26, 2020
Prior Adjustments in Calendar Days	246
Adjustment in Calendar Days for this Change Order	175
Revised Contract Completion Date	Jan. 21, 2022

NOTE: CONTRACTOR WAIVES ANY CLAIM FOR FURTHER ADJUSTMENTS FOR THE CONTRACT SUM RELATED TO THE ABOVE-DESCRIBED CHANGE IN THE WORK.

RECOMMENDED BY:

Nathan Stevens

Engineer – Nathan Stevens

DATE: 2/8/2021

APPROVED BY:

Owner – John Friedenbach, General Manager

DATE: _____

ACCEPTED BY:

Contractor – Brian Pritchard, President

DATE: _____

Potential Change Order/Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061
310 Redmond Rd
Eureka, CA. 95503
Phone: (707)442-3596 Fax: (707)442-0304

Proposal Number:	6.1
Date:	2/4/2021
Requested by:	

Issued To:

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
Generator controller upgrades	\$ -
Colburn Electric	\$ 309,057.61
	\$ -
	\$ -
	<i>Sub Total</i> \$ 309,057.61
	5% O&P \$ 15,452.88
	Credit to delete item
	18 from bid schedule \$ (43,287.00)
	Total Price \$ 281,223.49

Additional contract days required: 175 days

Attachments: Colburn Proposal

Signed: Brian Pritchard

Proposal
ROBERT COLBURN ELECTRIC, INC.

California Contractor License No. 750471
PO Box 3667 , Eureka, CA 95502
Phone: (707) 445-8474 Fax: (707) 445-8475
www.colburn-electric.com

To: **Sequoia Construction** Date: **2/4/2021**
Attn: **Brian** Job Location: **HBMWD 12kv Switchgear Relocation**
Email COR: **3**

We hereby propose to furnish all materials, equipment, and labor necessary to perform the following work:

Budget Quote for Change Order 3 revised per Jordan King's request dated January 8, 2021, and using Daqota Systems for the control integration and per the attached breakdowns.

Item #	Description	Amount
1	Fiber Optic Line between IPA and Essex Facility	2,728.44
2	Generator Controller Upgrade (Humgen 2 Panel included in price)	267,255.08
3	Replace two Sel 700G Relays with two SEL700GT + Relays	28,750.00
4	Change in Number, Size, Extensions for Vaults/Handholes	10,324.09
Total Adder		\$ 309,057.61

Includes: Sales Tax.

You, the Customer (buyer) or tenant have the right to require the contractor to furnish you with a performance bond. You, the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction. Cancellation by the buyer after the right to rescind has passed, shall be deemed a material breach of this agreement and entitles the contractor to damages. Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, PO Box 26000, Sacramento, California 95826, or call the CSLB at 1-800-321-CLSB (2752) or visit the CSLB Internet Web site at www.cslb.ca.gov.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance.

Acceptance of Proposal-- The above prices, specifications and conditions are satisfactory to do the work as specified. Payment to be made as outlined above.

Authorized Signature Bob Colburn
Robert Colburn Electric, Inc.

Our workers are fully covered by Workmen's Compensation Insurance.

This proposal may be withdrawn by us if not accepted within 30 days.

ACCEPTED BY: _____

Signature _____

Date of Acceptance _____

Potential Change Order/Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061
310 Redmond Rd
Eureka, CA. 95503
Phone: (707)442-3596 Fax: (707)442-0304

Proposal Number:	1
Date:	6/4/2020
Requested by:	

Issued To:

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
Add Severe Duty Paint System to IPA	\$ -
Colburn Electric Proposal	\$ 5,375.88
	\$ -
	\$ -
	<i>Sub Total</i> \$ 5,375.88
	5% O&P \$ 537.59
	Total Price \$ 5,913.47

Additional working days required: TBD

Attachments:

Colburn proposal

Signed: Brian Pritchard

Potential Change Order / Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061
310 Redmond Rd
Eureka, CA. 95503
Phone: (707)442-3596 Fax: (707)442-0304

Proposal Number:	3
Date:	6/24/2020
Requested by:	

Issued To:

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
Conduit material substitution	\$ -
Colburn Electric Proposal	\$ (2,796.00)
	\$ -
	\$ -
	<i>Sub Total</i> \$ (2,796.00)
	\$ -
	Total Price \$ (2,796.00)

Additional working days required: TBD

Attachments:

Colburn proposal

Signed: Brian Pritchard

Potential Change Order / Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061
310 Redmond Rd
Eureka, CA. 95503
Phone: (707)442-3596 Fax: (707)442-0304

Proposal Number:	4
Date:	7/6/2020
Requested by:	

Issued To:

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
FDW #1 Added concrete retaining wall height and footing width	\$ -
Materials	\$ 1,260.00
Labor	\$ 800.00
	\$ -
	<i>Sub Total</i> \$ 2,060.00
	5% O&P \$ 103.00
	Total Price \$ 2,163.00

Additional working days required: TBD

Attachments:

Signed: Brian Pritchard

Potential Change Order / Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061
310 Redmond Rd
Eureka, CA. 95503
Phone: (707)442-3596 Fax: (707)442-0304

Proposal Number:	5
Date:	7/6/2020
Requested by:	

Issued To:

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
FWD #2 Relocate water and air line from fence to underground, power meter	\$ -
Materials, 1 1/2" Sch 80 pvc water line, 1" HDPE air line, sand	\$ 1,683.00
Labor	\$ 2,200.00
Colburn	\$ 1,104.70
	<i>Sub Total</i> \$ 4,987.70
	5% O&P \$ 249.39
	Total Price \$ 5,237.09

Additional working days required: TBD

Attachments:

Signed: Brian Pritchard