



April 1, 2020

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First St., N.E.
Washington, D.C. 20426

Re: National Grid LNG LLC, Docket No. CP16-121-000
Fields Point Liquefaction Project
Monthly Status Report for March 2020

Dear Secretary Bose:

On October 17, 2018, the Commission issued the Order Issuing Certificate (“Certificate Order”) granting a certificate of public convenience and necessity to National Grid LNG LLC (“National Grid”) in the above captioned docket for the Fields Point Liquefaction Project (the “Project”). *National Grid LNG LLC*, 165 FERC ¶ 61,031 (2018). National Grid filed its acceptance of the certificate of public convenience and necessity on October 29, 2018 and the Implementation Plan was filed on November 1, 2018.

As required by Environmental Condition 8 of the Certificate Order, National Grid is submitting the Monthly Status Report for the March 2020 reporting period. Also attached to the March 2020 status report is the Fields Point Liquefaction Project Environmental Controls Contingency Plan for the inspection and maintenance of erosion controls if a shutdown of the construction project and related activities are required due to the COVID-19 pandemic.

If you have any questions about this submission, please contact me at 781-392-6640.

Respectfully submitted,

/s/ Patrick A. Chaney

Patrick A. Chaney
Lead Project Manager – New England LNG
Capital Delivery, Gas – Complex Project
Management
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cc: Service List

MONTHLY STATUS REPORT FOR MARCH 2020

On October 17, 2018, the Commission issued the Order Issuing Certificate (“Certificate Order”) issuing a certificate of public convenience and necessity to National Grid LNG LLC (“NGLNG”) in Docket No. CP16-121-000 for the Fields Point Liquefaction Project (the “Project”). *National Grid LNG LLC*, 165 FERC ¶ 61,031 (2018). Pursuant to Environmental Condition No. 8 of the Certificate Order, NGLNG provides its monthly status report for the month of March 2020.

Update on Federal Authorizations

As previously reported in the report for December 2018, all required Federal authorizations have been received.

Project Schedule – Construction Status and Work Planned

Work Accomplished in March 2020:

- Training in the Environmental Inspector (“EI”) duties occurred five times this month
- Air monitoring in accordance with the Rhode Island Department of Environmental Short-Term Remedial Action Plan is ongoing and continued during this month.
- Commenced direct bury conduit installation under compressor building
- Continued duct bank and UG utility grade beam installation
- Commenced micro piling in area “B”
- Commenced Area “D” pipe rack footing concrete

Work Planned for April 2020:

- Complete Micro piling in Areas “B”, “E”, “G” and “I”
- Complete direct bury conduit in Area C
- Place booster compressor foundation

Problems Encountered and/or Instances of Non-Compliance and Corrective Actions

The problems encountered, contractor nonconformance/ deficiency logs, and each instance of noncompliance observed by the EI during this reporting period are shown below along with the corrective and remedial actions taken and the effectiveness of the implemented actions.

Problems and Noncompliance				
Date	Problem/Noncompliance	Remedial Action Taken	Date of Corrective Action	Effectiveness of Corrective Action
02/26/2020	Clean Silt Sack in basin #3.	Silt sacks cleaned	03/02/2020	Effective, restored drainage of storm water.
02/26/2020	Secondary containment of generator needs to be adjusted.	Adjustments made to secondary containment.	03/04/2020	Effective, secondary containment restored.

02/26/2020	Sheen observed in secondary containment.	Sheen removed from containment.	03/04/2020	Effective, secondary containment restored.
03/04/2020	Oil filled equipment needs to be placed into secondary containment.	Equipment placed into secondary containment.	03/09/2020	Effective, equipment within secondary containment.
03/04/2020	Sheen observed in secondary containment.	Sheen removed from containment.	03/05/2020	Effective, secondary containment restored.
03/11/2020	Secondary containment of generator needs to be adjusted.	Adjustments made to secondary containment.	03/11/2020	Effective, secondary containment restored.
03/11/2020	Add crushed to stone to aprons to avoid tracking	Stone added to apron.	03/12/2020	Effective, restored tracking pad.
03/11/2020	Oil filled equipment needs to be placed into secondary containment.	Equipment placed into secondary containment.	03/13/2020	Effective, equipment within secondary containment.
3/13/2020	Sheen observed in secondary containment.	Sheen removed from containment.	03/14/2020	Effective, secondary containment restored.
03/18/2020	Crushed stone tracking pad at exit of work zone required maintenance.	Pads roughened.	03/27/2020	Effective, restored tracking pad.
03/24/2020	Sheen observed in secondary containment.	Sheen removed from containment.	03/27/2020	Effective, secondary containment restored.
03/30/2020	Clean Silt sack for catch basin 15.	Sediment removed from Silt sack.	None reported as of date of this report.	Will be tracked in April Status Report.
03/30/2020	Sheen observed in secondary containment.	Sheen removed from containment.	None reported as of date of this report.	Will be tracked in April Status Report

Releases				
Date	Material and Quantity Released	Cause	Description	Corrective Action Taken
03/12/2020	0.125 gallons hydraulic oil	Failed pressure gauge	Hydraulic oil spilled on to drill rig.	Hydraulic oil wiped off drill rig.

Landowner/Resident Complaints

None during this period.

Correspondence Received from Other Agencies Concerning Noncompliance

No correspondence was received concerning instances of noncompliance from other federal, state, or local permitting agencies.

Special Inspector's Report

Construction Activities Observed during the reporting period:

- Completed installation of micropiles in Areas D and H.
- Began installation of micropiles in Areas B and I.
- Continued installation of micropiles in Areas E and G.
- Completed initial proof testing program for production micropiles with 9 piles tested.
- Began construction of Duct Bank Foundations #4 and #10, along with grade beams UG FDN #1 and #10.
- Completed construction of Duct Bank Foundation #3.
- Completed construction of East-West Pipe Rack Foundations 5, 6, and 7.
- Completed construction of a support/force block (Tie-Point 008B FDN) for a waterline riser in the southwest portion of the site.
- Completed construction of the Compressor Building Sump Pit's lower portion.
- Realigned the LNG delivery roadway to support micropile installation.
- Graded to the subgrade for, and placed, the bedding sand for the proposed electrical conduit beneath the Compressor Building pile cap.
- Began installing the electrical conduit beneath the Compressor Building pile cap

Discrepancies reported to Contractors:

- The lone discrepancy reported to the contractor for the month of March is listed below in "Uncorrected discrepancies reported to Engineer of Record."

Uncorrected discrepancies reported to Engineer of Record:

- Kiewit inadvertently damaged the recently constructed Duct Bank 05 during the demolition of an adjacent concrete slab. Kiewit issued NCR-0044 to address the incident.

See Attached Register

All work requiring special inspection was, to the best of my knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions.

Yes

No

See discrepancies list above

Special Inspector:

Charles Boisvert

Date:

March 31, 2020

ATTACHMENT

NON-CONFORMANCE REGISTERS



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

	OSSQ	Engineering	Procurement	Construction	Quality	Vendor	Material Management	Project Management	Total Issued
Percentage of Total	19%	19%	19%	17%	10%	10%	2%	5%	100%
Count by Discipline	8	8	8	7	4	4	1	2	42
NCR Ref:	Audit Ref:	Issue Date	NCR Description		Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause 1	Discipline
SR010-RPT-012	N/A	8/14/2019	Section 7.2 Procurement Strategy of the prime Contract requires a Supplier shipment to be inspected by the Contractor to ensure compliance with Project Specifications. The first shipment for the UG piping did not receive a final release shipment		Open pending additional information			OSSQ	Procurement
SR010-RPT-013 R1	N/A	8/20/2019	Prime Contract Attachment 7 requires APCI to comply with NFPA 59A. A data review of the quality documents noted the actual NDE performed was not in compliance with the NFPA 59A requirements. A review of documentation for the Cross over Bridge piping did not reflect this requirement. Revision 1 added the contract requirements noted in Section 3.10 - SOW		Open pending additional information			Vendor	Vendor
SR010-RPT-015 R1	N/A	8/20/2019	Prime Contract Attachment 7 requires APCI to comply with NFPA 59A. A data review of the quality documents noted the actual NDE performed was not in compliance with the NFPA 59A requirements. A review of documentation for the Cold Box piping did not reflect this requirement. Revision 1 added the contract requirements noted in Section 3.10 - SOW		Evaluate the correct NDE requirements as required by NFPA-59A-2001 and contract. Perform the necessary additional NDE as required to meet compliance for the Cold Box fabrication.			Vendor	Vendor
SR010-RPT-016	N/A	8/27/2019	UOP/GCAW equipment data books were reviewed by National Grid and found to be non-compliant with contract requirements		Kiewit shall review the data books for the equipment as mentioned above and perform the necessary tasks so the data books comply with contractual requirements.			Vendor	Procurement
SR010-RPT-017	N/A	8/27/2019	UOP/Fabsco equipment data books were reviewed by National Grid and found to be non-compliant with contract requirements		Kiewit shall review the data books for the equipment as mentioned above and perform the necessary tasks so the data books comply with contractual requirements.			Vendor	Procurement
SR010-RPT-021	Civil 102519-002	11/1/2019	During the course of the Civil Audit #102519-002 performed at site; Checklist Item 4.0 (c) Has proof rolling been approved by the Geotechnical Engineer in coordination with the Field Representative? The audit team stated that the Geotechnical Engineer was not notified in accordance with Section 4.9 of the Earthwork Specification – 102761-B-CIV-SPC-0001. The audit team was unable to provide documentation supporting the requirement was met.		Open pending additional information			Contractor	Construction
SR010-RPT-024		12/21/2019	Section 3.10 of the Prime Contract NUMBER 4400005216 requires Kiewit to submit all welding procedures for piping, vessels and equipment performed off-site to Owner (National Grid) prior to start of construction. Kiewit is required to review the welding procedures for project compliance prior to submittal for National Grid review. The welding procedures for IFS's subcontractor, Transend were not submitted to Owner for approval after review by Kiewit.		Open pending additional information			Contractor	OSSQ
SR010-RPT-025		1/16/2020	The Contract states in, Section 2.23 Inspection and Testing, that Kiewit is to provide the owner in writing no less than (10) Business days, written notice of scheduled dates for the conduct of, and opportunity to witness, the off-site testing. Kiewit allowed IFS/Transend to conduct a hydrotest of the Feed Gas Filter without providing National Grid proper notification of the test		Open pending additional information			OSSQ	OSSQ

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause 1	Discipline
SR010-RPT-026		2/5/2020	Regen Gas Heater LDE-1021A tube bundle was removed for cleaning and Eddy Current testing to evaluate the condition of tubes from improper preservation. The testing was performed by IRIS NDT and the test results are attached. Two tubes were found with minor pit like indications showing a measured wall loss. In addition during the inspection several tubes were found to have been bent which caused contact between adjacent tubes causing a non relevant indication with one tube was only partially scanned due to the bent condition.	Open pending additional information			Vendor	OSSQ
SR010-RPT-027		2/5/2020	Regen Gas Heater LDE-1021B tube bundle was removed for cleaning and Eddy Current testing to evaluate the condition of tubes from improper preservation. The testing was performed by IRIS NDT and the test results are attached. Two tubes were found with indications. OPne tube was bent within the first foot and could not be inspected and one tube had non-relevant indication due to tube to tube contact. See attached report	Open pending additional information			Vendor	OSSQ
SR010-RPT-028		2/27/2020	Kiewit procedure 102761-B-QLT-PRO-0011 <i>Corrective & Preventative Actions</i> states the purpose of said procedure is to establish a continuous improvement process for generating documentation and implementing Corrective and Preventive Actions in accordance with Kiewit's Quality Management System. Section 19.3 of the Kiewit QMS rev 3 states that Corrective or Preventative Action requests can be initiated by the clients or by our employees. National Grid has determined that the number and causes of Non-Compliance Reports (NCR) generated for this project has warranted Corrective Action Reports (CAR's) and has requested on several occasions such reports be generated (see attachment). To date Kiewit has not generated CAR's.	Open pending additional information			Quality	Quality
SR010-RPT-029			Kiewit document 102761-B-QLT-PRO-0009 Project Quality Audit procedure states this procedure is to verify the overall effectiveness of the quality program along with proper implementation. It will also ensure work is conducted in accordance with customer's quality expectations including contract, code, jurisdiction requirements and Cherne Project Quality Management system. This procedure applies to all Cherne's project locations as well as shop and manufacturing facilities. Section 20.0 of the Quality Management System revision 3 defines the requirements of both internal and external audits which are required to be performed. As of this date, National Grid has not received any audit notifications or audit reports as required Kiewit QMS revision 3. National Grid has conducted several audits on Kiewit as of this date.	Open pending additional information			Quality	Quality
SR010-RPT-030		2027-2020	The Contract, Section 3.10 Welding Requirements, requires all procedures for welding of piping, vessels and equipment performed off-site to be submitted to the Owner for review and approval prior to construction. This requirement is also noted in the Contract between Kiewit and Patterson Horth in Sub-contract SC-7200002536 Compressor Building. Nucor, sub-vendor to Patterson Horth has refused to submit the required welding procedures claiming such procedures as company proprietary information.	Open pending additional information			Procurement	OSSQ
SR010-RPT-032		2/27/2020	Kiewit placed backfill on Duct Bank area 7 using (12") lifts. Earthwork Specification 102761-B-CIV-SPC-0001 REV 01 states in Section 4.15 Compaction Requirements that for Trench's the Backfill shall be placed in 6" Lifts.	Open pending additional information			Contractor	Construction

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause 1	Discipline
SR010-RPT-033		3/2/2020	Kiewit Plain and Reinforced Concrete procedure 102761-B-STR-SPC-0024 rev 1 Section 4.6.2.3 states Form removal shall be in accordance with ACI 301/ACI 301M and the following, which further states certain forms could be removed in (48) hours. ACI 301 Section 2.1.2.1.c requires a submittal of a method for determining concrete strength for formwork removal is in accordance with 2.3.4.2 when a method other than field-cured cylinders is proposed. ACI 347 section 3.7.3.1 states the engineer/architect should specify a minimum strength of the concrete to be attained before removal of forms or shores. Section 3.7.2.3 states because the minimum stripping time is a function of concrete strength, the preferred method of determining stripping time is using tests of job-cured cylinders or concrete in place. An alternative method has not been submitted for approval and forms have been removed before a compressive strength test has been completed and accepted.	Open pending additional information			Engineering	Construction
SR010-RPT-034		3/2/2020	Kiewit QMS rev 3 section 18.3 States "When a nonconforming situation or procedure is detected, the issues is documented and actions are taken to correct or resolve the issue in a timely manner. National Grid has (4) NCR's generated during 2019 without agreed dispositions; (14) NCR's generated during 2019 that are open without closure.	Open pending additional information			Quality	Quality
SR010-RPT-035		3/3/2020	National Grid performed an audit on legacy film for the 3886 LD-1000/C Adsorber at the GCAW facility and rejected the Number 4 weld on Nozzle "B" due to chemical stains rendering the film non-compliant with code requirements.	Open pending additional information			OSSQ	OSSQ
SR010-RPT-036		3/3/2020	Section 2.6 Employees and Key Personnel of the Prime Contract requires Key Personnel to be devoted to the Liquefaction Project for all of the time which is necessary to perform the Work and Contractor shall not remove or replace any of the Key Personnel without the prior written approval of Owner, which approval shall not be unreasonably withheld. Kiewit has on multiple occasions removed and replaced Key Personnel on the Project with new personnel without proper notification and/or approval.	Provide owner with current Organizational Chart that provides names to the positions as noted in Appendix "I", and submit resumes on all Key Personnel that have changed within the last (90) days.			Project Management	Project Management
SR010-RPT-037		3/10/2020	The Engineering, Procurement and Construction Contract Number 4400005216 provides requirements for the Contractor to submit documents for Client review and approval. These requirements are addressed in the Scope of Work Section 2.25 and further in Appendix "U". The attached Kiewit TRN # 02088 shows (10) Piping Material Specifications that were revised without providing documents to client for review and/or approval. The attached review history shows an example where Piping Specification 102761-B-MEC-SPC-0083 was issued a Studio Session for revision "A & B" but sessions for revisions "00, 01, 02, & 03" were not issued.	Kiewit will provide a comprehensive list of all design documents that are required to be submitted to owner for review and approval over the last (120) days that were not properly processed through a Studio Session for owner review. Owner may require, at Owner's discretion, for these documents be submitted for review and approval.			Engineering	Engineering
SR010-RPT-038		3/24/2020	Section 2.25 Design and Engineering Work paragraph (f) of the contract states <u>As Built Drawings and Specifications During construction, Contractor shall keep a relined, marked, up-to-date set of As-Built Drawings and specifications on the Work Site as required under Appendix "U"</u> . Kiewit has not maintained a "set" of as-built drawings as required by the statement above for piling and other civil activities..	Kiewit will produce a set of "E" size drawings for all past and future construction activities where as-built conditions have been generated. These drawings will be made available to all National Grid personnel anytime construction activities are taking place on site. The drawings set will be updated immediately upon changes or issuance of the IFC construction drawings that effect or change the original approved design or Scope of Work.			Engineering	Engineering
SR010-RPT-039		3/24/2020	Section 3.3 Engineering Design listed under the Scope of Work states : " <u>Development of up-to-date equipment lists, Drawings, specification0s, and requisition schedules. Frequency to be agreed with Owner as appropriate</u> ". National Grid has made repeated requests for Kiewit to provide an updated Drawing Index on a weekly basis and this has not happened.	Kiewit shall produce an updated drawing index in an acceptable format for all IFC/IFD/IFI drawings and submit such list to National Grid Engineering by COB on each Friday during design and construction of the LNG Facility..			Engineering	Engineering
SR010-RPT-040		3/24/2020	The contract requires Kiewit to develop within (45) days after Full Notice to Proceed (FNTP) a Project Procedure Manual and as the prime purpose of the PPM is to ensure consistent project processes and procedures. National Grid has requested that Kiewit develop a Site Specific Document Control procedure for over (8) months and as of this date the referenced procedure 102761-B-DMT-PRO-001 FPLP Document Control Procedure has not fully addressed the Owner's comments as contractually required.	Kiewit shall immediately produce and implement the Client's comments in the referenced Document Control Procedure and submit as IFC to the project.			Project Management	Project Management

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause 1	Discipline
SR010-RPT-041		3/24/2020	Kiewit performed a closure of the Dry Well next to the Old Propane House without properly notifying National Grid Construction, Environmental and GZA. Procedural steps were provided to Kiewit Construction Manager by National Grid Construction Manager on Friday March 20th, 2020 which outlined the steps and notification requirements for the proposed activity. Kiewit performed the work on Monday March 23rd without notifying the proper personnel as provided by National Grid.	Kiewit to perform a root cause analysis that shall accompany this NCR. The root cause shall be submitted to National Grid for review and approval and a subsequent discussion shall follow. Additionally a Corrective Action shall be generated as this is a recurring event where steps and notification requirements are not followed.			Project Management	Construction



Non-Conformance Log



Fields Point Liquefaction

National Grid

104012

NCR No.	Description	Recommended Corrective Action	19-Mar-20 STATUS	Type (Internal / Supplier / Client)	Action By	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	Date Disposition Submitted	Rejected	Elevated	Date Disposition Approved	Date Closed	Planned Action
0001	Concrete Driven Pile DP-13 hit an obstruction and shifted during operation and causing pile to be approximately 2.4744" out of tolerance per specification at 6"			Kiewit		Use-As-Is EOR approval for out of tolerance per specification	No action to be taken	5/28/2019	6/26/2019	N/A	N/A	6/26/2019	6/26/2019	
0002	Damage to upper concrete driven pile DP-10 during pile driving activities, damage is just above the Emeca splice plate, resulting in exposed rebar and a 2" crack protruding up the south east side of the column, extending from the break.			Kiewit		Rework or Scrap EOR to determine action to be taken per specification 102761-B-STR-SPC-0006 section 4.5.4.1.12	EOR to notify Quality of resolution	6/6/2019	8/13/2019	N/A	N/A	8/13/2019	8/13/2019	
0003	During installation of DP 113 the toe of the pile started to walk to the west. Crew attempted to correct the out of plumbness during driving but could not correct enough to get back in tolerance. As the pile sits now it is 1.3/8" in 4' equating to 2.86% or .86% out of tolerance.			Kiewit		Rework Rejected piles shall be corrected as directed by the engineer of record.		6/11/2019	6/26/2019	N/A	N/A	6/26/2019	6/26/2019	
0004	Regeneration Gas Separator LDD-1011 was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1200 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Would like to be present at the commencement of painting		Kiewit		Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/16/2019	6/14/2019	N/A	N/A	6/14/2019		NCR will remain open until equipment is re-painted
0005	Adsober L-1000A was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1200 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Would like to be present at the commencement of painting		Kiewit		Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/16/2019	6/14/2019	N/A	N/A	6/14/2019		NCR will remain open until equipment is re-painted
0006	Adsober L-1000B was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1200 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Would like to be present at the commencement of painting		Kiewit		Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/16/2019	6/14/2019	N/A	N/A	6/14/2019		NCR will remain open until equipment is re-painted
0007	Adsober L-1000C was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1200 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Would like to be present at the commencement of painting		Kiewit		Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/16/2019	6/14/2019	N/A	N/A	6/14/2019		NCR will remain open until equipment is re-painted
0008	Particle Filter LDS - 1010 A, was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1000 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Rejected / Does not agree with the disposition Re-coating will be performed to allow NDE to be reworked. Re-coating shall be performed as per 102761-B-MEC-SPC-0069 AND 0070		Kiewit	OSSQ	Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/22/2019	1/29/2020			1/29/2020		NCR will remain open until equipment is re-painted
0009	Particle Filter LDS - 1010 B, was found to have an incorrect coating applied in accordance w/ 102761-B-STR-SPC-0003. The original coating was specified as Sherwin-Williams Heat-Flex, Hi-Temp 1000 degree Fahrenheit system. The coatings found to be applied are Sherwin-Williams Macropoxy 646 (Interm.) and Acrolon 218 HS (Finish) 200 degree Fahrenheit system.	Rejected / Does not agree with the disposition Re-coating will be performed to allow NDE to be reworked. Re-coating shall be performed as per 102761-B-MEC-SPC-0069 AND 0070		Kiewit	OSSQ	Rework Blast incorrect coating and recoat with approved coating system per specification 102761-B-MEC-SPC-0070	Being knowledgeable of specification and verify current drawings before proceeding with any installation and applications of materials.	5/22/2019	1/29/2020			1/29/2020		NCR will remain open until equipment is re-painted
0010	Failure to meet pressure testing requirements as outlined in specification NFPA 59A 2001 Edition			Kiewit		Rework Testing plan shall be developed to provide re-testing at Barnhart Hake facility including pressure testing procedure to require 1.25 X MAWP, equipment mobilization manpower and safety plan and PPE to be used. See attached letter and instructions.	To be provided by APCI	6/18/2019	6/18/2019			6/18/2019		NCR will remain open until re-testing is completed and documentation has been received and reviewed.
0011	Companders K-The equipment maintenance and preservation for the Companders 1CS-V200 as required by Air Products and Chemicals, INC. was not followed and properly documented. Request have been previously made to produce verifiable documentation that would support proper maintenance and preservation activities during the period of January of 2018 through the date of this NCR. Specific requirements in accordance with FPLP-APCI Compander Storage Procedure and CryoMachinery Preservation Checklist Installation through start-up CMD-0177d Ref. CMD-0177a & CMD-0177b have not been followed and subsequently documented.210 & K-220			Kiewit	OSSQ	Rework Consultation with equipment manufacturer and owner to determine inspection steps that would identify any potential equipment damage. 1. New preservation procedure is to be submitted for both off-site and on-site storage encompassing requirements through commissioning. 2. Quarterly preservation inspections of all identified equipment must be performed and report submitted to Kiewit and National Grid.	Follow Written procedures	6/19/2019	2/7/2020			2/12/2020		NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.
0012	The equipment maintenance and preservation for the K-131 Nitrogen Recycle Compressors as required by Air Products and Chemicals, INC. was not followed and properly documented. Request have been previously made to produce verifiable documentation that would support proper maintenance and preservation activities during the period of January of 2018 through the date of this NCR.			Kiewit	OSSQ	Rework Consultation with equipment manufacturer and owner to determine inspection steps that would identify any potential equipment damage. 1. New preservation procedure is to be submitted for both off-site and on-site storage encompassing requirements through commissioning. 2. Atlas Copco needs to provide Technician to site to evaluate compressor condition and compliance to proper preservation procedures. 3. Quarterly preservation inspections of all identified equipment must be performed and report submitted to Kiewit and National Grid.	Follow Written procedures	6/19/2019	2/7/2020			2/12/2020		NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.
0013	The equipment maintenance and preservation for Air Cooled Heat Exchangers E-2131, E-2141, E-2151, & E-2135 required by Air Products and Chemicals INC. was not followed and properly documented. Request have been previously made to produce verifiable documentation that would support proper maintenance and preservation activities during the period of January of 2018 through the date of this NCR	Nitrogen Lube Oil Cooler 1CS-E137 Compander Lube Oil 1CS-E10		Kiewit	OSSQ	Rework Consultation with equipment manufacturer and owner to determine inspection steps that would identify any potential equipment damage. 1. New preservation procedure is to be submitted for both off-site and on-site storage encompassing requirements through commissioning. 2. Quarterly preservation inspections of all identified equipment must be performed and report submitted to Kiewit and National Grid.	Follow Written procedures	6/19/2019	2/7/2020			2/12/2020		NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.
0014	As Kiewit was cutting off piles to elevation the first, two or three feet, voids in top of concrete piles were discovered on two separate piles with numbers mentioned in the Reference Documentation above.			Kiewit		Repair Repair to Standard - Recommend using Sikadur 42, Grout-pak PT, per manufactures recommendations to fill voids.	Kiewit's Concrete Engineer is communicating to Oldcastle (Supplier) to remedy the cause and ensure voids don't occur again. Oldcastle will be doing a training with their staff.	8/27/2019	9/10/2019	N/A	N/A	9/10/2019	9/11/2019	
0015	Pile initially inspected and there were no cracks. We started driving the top piece and noticed the crack. The crack went down about 20" and the corner of the pile chipped off 20" down. Once pile chipped we continued driving to grade.			Kiewit		Scrap Drive another pile within 28" (center to center) in any direction of the pile that cracked.	Unknown. We believe it was a flaw with the concrete that was not visible to the naked eye.	6/27/2019	7/8/2019	N/A	N/A	7/8/2019	7/8/2019	
0016	14" Pre-Cast Pile were cut off short by 2 inches to 3 inches out of Tolerance. Specification Cut-off tolerance shall be within 1 inch of the required elevation shown in the contract documents.			Kiewit		Use-As-Is Propose when performing the back filling and installing the Tensar wall that we do one 12 inch lift, one 9 inch lift and one 6 inch lift this would bring us back to design elevation.	To prevent from recurrence Control Point (3rd party surveyor) are shooting in bench marks then by using a laser level laying out the cut lines.	7/10/2019	7/15/2019	N/A	N/A	7/15/2019	9/11/2019	
0017	Air Content was observed as being 3.3% per the required 4.5%-7.5%. Resulting in failure per the mix design.	Draft complete confirming Use-As-Is. EOR approval targeted for 20-Mar-20.		Kiewit	Engineering	Use-As-Is Request EOR evaluation and / or approval. Speak with concrete supplier about air content concerns.	If air test fails initially, take new sample and re-perform air content test. If test fails for second time, truck will be rejected.	9/30/2019	3/20/2020					KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.
0018	Air Content was observed as being 4.0% per the required 4.5%-7.5%. Resulting in failure per the mix design.	Draft complete confirming Use-As-Is. EOR approval targeted for 20-Mar-20.		Kiewit	Engineering	Use-As-Is Request EOR evaluation and / or approval. Speak with concrete supplier about air content concerns.	If air test fails initially, take new sample and re-perform air content test. If test fails for second time, truck will be rejected.	9/30/2019	3/20/2020					KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.
0019	On September 17th 2019 a quality document and NDE review was performed at GCAW shop in Humble, TX. Attendees included, Robert Poche, Alex Devine, Robert Johnson, Gene Johnson, and Al Noriega. It was discovered during this review that the volumetric examination records and radiographic film were found to be non-compliant to the mandatory essential variables as per ASME Sec. VIII and ASME Sec. V requirements including but not limited to, film quality, film density, IQI placement and identification, etc. Reader sheets / Reports were found to not meet minimum requirements as per ASME Sec. V	Need Robert Johnson to follow up with Vendor and AI		Kiewit	OSSQ	Rework to Acceptable Standard Volumetric examination to be performed in conformance with code and contractual requirements 1. NDE must be re-performed in compliance to the contract specification. 2. NDE procedures and operator qualifications must be submitted for review. 3. This rework will take place after blasting and before recoating of vessels. Kiewit and National Grid will be in attendance for first operation.	Proper NDE review must be performed by supplier to assure conformance of sub-vendor to code and contractual requirements. OSSQ oversight of proper film and documentation reviews performed during in-process inspections.	9/30/2019	11/15/2019	NGWP 11/21/2019				Need OSSQ to work with Vendor and Authorized Inspector to provided documentation as required by codes of construction. If there are welds in question are not subject to these requirements (triflo Shots) then that needs to be part of the explanation.
0020	Fill materials were brought on-site from the PJ Keating quarry, it was discovered after dumping the load the 1 1/2" dense grade material was unapproved and would not meet the standards for FPLP.			Kiewit		Scrap Kiewit to take another test sample from the stock pile at PJ Keating as well as witness an in-process sieve analysis in conjunction with National Grid's Special Inspector. If material is deemed unsuitable for use the stock piles shall be separated to prevent another delivery of unsuitable fill.	Action to prevent recurrence: Kiewit has communicated to the vendor that any new materials not previously tested and approved from PJ Keating's stock pile to the project, shall be tested and approved before use. Kiewit will be conducting random visits at PJ Keating's Quarry.	10/9/2019	11/23/2019			1/13/2020	1/13/2020	
0021	Craft proceeded cutting 16" concrete driven piles 5871-D-DP-25 & 5871-D-DP-26 without confirming pile cutoff elevations accordingly, resulting in two piles approximately 18" below actual elevation.			Kiewit		Use-As-Is All pile cutoffs halted until survey marks pile cutoff elevations in front of pile cutting crew and per RFI-000075, attached.	Action to prevent recurrence: Have survey crew mark each individual pile then tie with green flagging around piling signifying pile cutoff elevations were marked before commencing cutting of pile.	10/15/2019	11/23/2019			1/10/2020	1/10/2020	

NCR No.	Description	Recommended Corrective Action	19-Mar-20 STATUS	Type (Internal / Supplier / Client)	Action By	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	Date Disposition Submitted	Rejected	Elevated	Date Disposition Approved	Date Closed	Planned Action
0022	Upon cutting off of the 16" driven concrete piles it was found that the tension connector tubes were not in the correct location within the pile per Dwg. 102761-B-00-0000-STR-SF-6021 Rev.3 Gen. Notes 8. has a tolerance of +1/8"			Kiewit		Use-As-Is Engineering to provide recommendation and path forward.	The lack of support templates being used during fabrication. Kiewit has advised the fabricator of the findings and advised them of the need for additional support. Kiewit will also be performing a shop visit to ensure the fabricator has addressed the issue.	10/16/2019	1/8/2020			1/16/2020		This NCR should be ready to close. Tommy H./Jason R. to gather revised engineering documents to facilitate closure of NCR and present to NG week of 3/16/2020.
0023	During review of Duct Bank 5, Sections 1, 2, & 3 - the underground utility warning tape installed is, 3" wide and approximately 100' total placed. Per specification 102761-B-CIV-SPC-0001; states in section 3.10, "Tape shall be six (6) inches wide."			Kiewit	Engineering	Use-As-Is Discontinue using the currently installed 3" wide utility warning tape and use the required 6" wide tape specified in the 102761-B-CIV-SPC-0001	Ensure all specifications are reviewed and cross referenced as necessary by all involved. Make sure any questions are answered before material is installed.	10/22/2019	1/22/2020			1/23/2020	1/23/2020	
0024	Material delivered on-site from P.J. Keating was a new material (not existing) which was tested and failed to meet the requirements per specification 102761-B-CIV-SPC-0001 section 3.1			Kiewit		Reject/Scrap Non-conforming material was rejected and returned, Kiewit and National Grids Quality Manager conducted an off-site visit at P.J. Keating to further assess the stockpile of the material.	Deliveries will continue to be monitored and P.J. Keating is to clearly segregate Kiewit's approved stockpile from any other new materials.	10/24/2019	1/14/2020			1/14/2020	1/14/2020	
0025	Atisa Copco Air Cooled Heat Exchanger was pressure tested to 1.3 instead of the 1.5 required	1. Re-testing will be performed at AXH to 1.5 X MAWP. Kiewit and National Grid will be in attendance for testing.		Kiewit		Rework to Acceptable Standard Retest Heat Exchanger to correct Pressure	Verify the supplier follows test requirements	11/1/2019	1/10/2020			1/14/2020	1/14/2020	
0026	The Gas Heater was preserved under a N2 purge with positive pressure of 12-15 psig at the end of fabrication. The purge was physically monitored weekly. However there was no log or record kept of the monitoring. NCR assigned to Taylor Forge	1. New preservation procedure shall be submitted and approved. Inspections will be conducted weekly and documented. Inspection documentation will be submitted monthly. 2. 100% Internal VT will be performed at time of re-work, borescope will be required where applicable. 3. ITP shall be submitted by UOP/Taylor Forge including VT hold point and final inspection of vessels before shipment.	Tommy to check on status. NG has never responded.	Kiewit	OSSQ	The supplier will maintain a record of inspection starting September 2019. The heater will be internally inspected for condition and documented. The inspection will be insured via the hold point from the ITP.		11/1/2019	11/23/2019					Tommy H. to check with NG on their acceptance of proposed disposition. No response has ever come from NG on this.
0027	During concrete testing prior to pouring Duct Bank 5 - Section 4, Fenagh Inspector was asked to take the temperature of the concrete and said, he did not have a thermometer with his testing equipment. Temperature is required per Fenagh's procedure and ACI 301. Infrared Gun was used to verify temperature externally at 58 deg. F, which is not acceptable per ACI 301/ASTM C1064.	Ask EOR to review and accept concrete as-is.	Draft complete confirming Use-As-Is. EOR approval targeted for 20-Mar-20.	Kiewit	Engineering	Use-As-Is Fenagh testing agency was unprepared, no checks to verify equipment was on-site, and concrete trucks were not rejected when all testing was not completed.	Action to prevent recurrence: Kiewit to inspect Fenagh's testing equipment prior to each test to verify all equipment is on-site before testing is performed, regroup the team and discuss stop work authority. Fenagh to review their procedures internally with all technicians.	11/5/2019	3/1/2020			3/27/2020	3/27/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.
0028	During the cutting operation of concrete piles, survey (A-Plus) reported pile 5953-L-DP-09 was cut-off approximately 6ft below elevation. Proposed Cut-off=18.75 Actual=13.17. Piles in that run of grade-beam had been being cut-off at approx. 13ft as the location was below grade, cuts made on the other adjacent piles were preliminary cuts and not final cuts.	Abandon driven pile 5953-L-DP-09 and replace with Micropile(s) per direction of EOR.		Kiewit		Reject/Scrap Pile cut short had been marked by survey, verified cut-off location approximately 8ft in the air. Slurry from adjacent pile cutting may have obscured the pile cut off mark.	Using pile driver at molocut finalizing alignment prior to proceeding with cut. Survey will be verifying height same day as cut. No more 'preliminary' cuts, remaining cuts are at final height.	11/9/2019	11/23/2019			1/21/2020	3/9/2020	
0029	After grouting operations were completed on micropiles 5850-C-MP-08 & 5850-C-MP-28 centerbars being placed ended up leaning to an out-of-tolerance location horizontally within the casing.		Engineering will continue review of the NCR following completion of the proof testing. Disposition targeted for 27-Mar-20.	Kiewit	Engineering	Use-As-Is After grouting, the centerbar generally extends from the ground surface to the soils at the pile tip. However, since approximately 25 to 30 feet of casing has been pulled, the casing does not extend to the bottom of the hole, but is held in place by skin friction in what is generally considered to be the unbonded zone. To prevent the casing from dropping back down the hole until the grout is set and can support it, a temporary pile cap is connected from the centerbar to the casing to hold the casing in place until initial set of the grout has occurred. For the piles identified, either due to accidental and undetected shifting the top of the centerbar during the connection of the temporary cap or after the cap has placed and the pile is no longer being monitored (due to loads imposed by the casing), the location of the center bar shifted.	Fabricate wooden templates to ensure center bar is centrally located within tolerance of micropile casing / In addition, we have developed a method of wiring the rod in the center using the holes in temporary casing that holds the casing. Either method is anticipated to eliminate this problem. We will also measure the annular distance between the bar and the casing.	12/2/2019	3/20/2020					KOE currently reviewing issue and will provide proposed disposition no later than 3/26/2020.
0030	During driving of concrete piles an obstruction was encountered and forced two piles (5900-D-DP-01 & 5900-D-DP-06) out of tolerance and one (5900-D-DP-01) of the two piles out of plumb.			Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	2/18/2020			2/27/2020	3/9/2020	
0031	During driving of concrete piles obstructions were encountered and forced seventeen (17) piles (5871-D-DP-04, 5871-D-DP-09, 5871-D-DP-14, 5871-D-DP-18, 5871-D-DP-21, 5871-D-DP-24, 5871-D-DP-26, 5871-D-DP-27, 5871-D-DP-28, 5871-D-DP-32, 5871-D-DP-34, 5871-D-DP-35, 5871-D-DP-36, 5871-D-DP-41, 5871-D-DP-43, 5871-D-DP-44, 5871-D-DP-45) out of tolerance and two (2) (5871-D-DP-03 & 5871-D-DP-08) piles out of plumb.		Revised IFC drawing complete and Kiewit Engineering disposition referencing updated drawings to be provided to Kiewit Quality on 19-Mar-20.	Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	3/23/2020			3/27/2020	3/27/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.
0032	During driving of concrete piles obstructions were encountered and forced seven (7) piles (5620-F-DP-05, 5620-F-DP-12, 5620-F-DP-21, 5620-F-DP-24, 5620-F-DP-27, 5620-F-DP-28, & 5620-F-DP-31) out of tolerance.		Revised IFC drawing complete and Kiewit Engineering disposition referencing updated drawings provided to Kiewit Quality on 18-Mar-20.	Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	3/19/2020					KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time. Submitted to NG 3/19/2020
0033	During driving of concrete piles six (6) piles (5620-F-DP-17, 5620-F-DP-24, 5620-F-DP-25, 5620-F-DP-26, 5620-F-DP-28, & 5620-F-DP-29) did not meet the blow count (driving criteria) per 25ft embedment.			Kiewit		Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	1/21/2020			1/21/2020	1/21/2020	
0034	During driving of concrete piles obstructions were encountered and forced one (1) pile (5640-F-DP-03) out of tolerance.		Revised IFC drawing complete and Kiewit Engineering disposition referencing updated drawings provided to Kiewit Quality on 18-Mar-20.	Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	3/19/2020			3/27/2020	3/27/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time. Submitted to NG 3/19/2020
0035	During driving of concrete piles obstructions were encountered and forced five (5) piles (5560-G-DP-01, 5560-G-DP-03, 5560-G-DP-04B, 5560-G-DP-05B, & 5560-G-DP-09) out of tolerance.		Revised IFC drawing complete and Kiewit Engineering disposition referencing updated drawings provided to Kiewit Quality on 18-Mar-20.	Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	3/19/2020					KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time. Submitted to NG 3/19/2020
0036	During driving of concrete piles obstructions were encountered and forced one (1) pile (5880-L-DP-09) out of tolerance.		Revised IFC drawing complete and Kiewit Engineering disposition referencing updated drawings to be provided to Kiewit Quality on 19-Mar-20.	Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	3/20/2020			3/23/2020		KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.
0037	During driving of concrete piles obstructions were encountered and forced two (2) piles (5952-L-DP-03 & 5952-L-DP-09) out of tolerance.			Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	2/18/2020			2/27/2020	3/10/2020	
0038	During driving of concrete piles obstructions were encountered and forced two (2) piles (5953-L-DP-19 & 5953-L-DP-21) out of tolerance.			Kiewit	Engineering	Disposition and Action to be taken per engineering's recommendation and path forward.	Piles hit an obstruction.	1/8/2020	2/18/2020			2/27/2020		This NCR should be ready to close. Tommy H./Jason R. to gather revised engineering documents to facilitate closure of NCR and present to NG week of 3/16/2020.

ATTACHMENT

Environmental Controls Contingency Plan

Fields Point Liquefaction Project (the “Project”)

Contingency Plan to inspect and maintain erosion control devices during work stoppage event as a result of COVID-19 pandemic

This plan has been developed to identify measures that will be implemented if a shutdown of the construction project and other related activities is required due to the COVID-19 pandemic. This plan identifies tasks that will be implemented beyond the normal daily shutdown of site activities. If the project receives less than 48 hours' notice of the need to shut down, then National Grid (Owner) will make best efforts to accomplish the tasks listed below during the day prior to shut down. To the extent possible, outreach may be by phone and/or electronic communication by and between Owner, to Kiewit (Contractor) and the Environmental Inspector (EI) to address shut down. The plan steps below will be implemented by Owner and its contractors as long as it is possible for personnel to access the site to perform inspections and corrective actions during a shutdown.

1. EI shall perform an inspection of the site, two days prior to shut down and provide a report of corrective actions that need to be done prior to shut done to both Owner and Contractor.
2. Efforts during the two days prior to work shut down shall focus on securing the site for one month or longer.
3. Environmental Inspector shall perform an inspection of the site, one day prior to shut down and provide a report of corrective actions that need to be done prior to shut done to both Owner and Contractor.
4. Contractor shall implement work on corrective actions received from the EI during the day before the site shutdown.
5. EI shall continuously monitor corrective actions during this last day and provide bi-hourly feedback to Owner and Contractor on progress.
6. Final check at end of last day to be made by EI.
7. EI to inspect site erosion control devices on a weekly basis, and after each rainfall event of one quarter inch of rain or more in 24-hour period.
8. Contractor to correct action items within seven days of inspection by EI.
9. Owner personnel or subcontractors to perform correction actions if Contractor is unable to perform duties.
10. Owner Environmental department to act as EI if EI is unable to perform duties.

Document Content(s)

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