



May 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 April 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 April 2020 reporting period

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  
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cc: Service List

## MONTHLY STATUS REPORT FOR APRIL 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 April 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 April 2020:

- Training in the Environmental Inspector (“EI”) duties occurred seven 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.
- Completed Micropiling in all areas other than “G” metering skid.
- Continued underground utility support grade beams.
- Continued duct bank works around Power Distribution Center.
- Continued firewater installation.
- Poured booster compressor foundation.
- Continued grounding installation.

Work Planned for May 2020:

- Complete micropiling in area “G” metering skid.
- Demobilize micropiling equipment.
- Continue foundations in compressor building and piperack.
- Start foundations in coldbox area.
- Continue firewater and ductbank utility foundations and installation.
- Erect 200t lattice boom crawler crane.  
Receive PDC modules.

### **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.

<b>Problems and Noncompliance</b>				
Date	Problem/Noncompliance	Remedial Action Taken	Date of Corrective Action	Effectiveness of Corrective Action
03/30/2020	Clean Silt sack for catch basin 15.	Sediment removed from Silt sack.	04/02/2020	Effective, restored drainage of storm water.

03/30/2020	Sheen observed in secondary containment.	Sheen removed from containment.	04/07/2020	Effective, secondary containment restored.
04/03/2020	Uncover catch basin 15	Road plate removed from catch basin.	04/04/2020	Effective, restored drainage of storm water.
04/03/2020	Sheen observed in secondary containment.	Sheen removed from containment.	04/07/2020	Effective, secondary containment restored.
04/08/2020	Clean Silt sack for catch basin 15.	Sediment removed from Silt sack.	04/11/2020	Effective, restored drainage of storm water.
04/08/2020	Roughen tracking pad.	Pad roughened.	04/10/2020	Effective, restored tracking pad.
04/22/2020	Place generator in secondary containment.	Equipment placed into secondary containment.	04/23/2020	Effective, secondary containment restored.
04/22/2020	Sheen observed in secondary containment.	Sheen removed from containment.	04/23/2020	Effective, secondary containment restored.
04/22/2020	Adjust filtrex soxx at perimeter.	Adjustment made to filtrex soxx.	04/24/2020	Effective, sedimentation control restored.
04/27/2020	Sheen observed in secondary containment.	Sheen removed from containment.	04/30/2020	Effective, secondary containment restored.

<b>Problems and Noncompliance</b>
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<b>Releases</b>				
Date	Material and Quantity Released	Cause	Description	Corrective Action Taken
None during this period.				

**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 all micropiles except for Area G, where pile installation is ongoing (less than 10 micropiles remain to be installed).
- Began construction of East-West Pipe Rack Foundations 2, 3, and 4.
- Began construction of Duct Bank Foundation #2 and grade beams UG FDN #4 and #5.
- Completed construction of Duct Bank Foundation #4, along with grade beam UG FDN #10 and the northern portion of grade beam UG FDN #1.
- Completed construction of the Compressor Building's Feed Gas Booster Compressor Foundation.
- Completed construction of Duct Banks 06 and 08.
- Installed the firewater line between an existing water line and Tie-Point 008B.
- Installed the firewater line between the north, main firewater line and the western Compressor Building connection.
- Continued installing the electrical conduit and associated bedding beneath the proposed Compressor Building pile cap.
- Continued placing mass fill material in the general area of the Compressor Building.
- Completed repairs to Duct Bank 05 per NCR-0044.

Discrepancies reported to Contractors:

- Due to the occurrence of an electrical storm towards the end of the day, Kiewit was unable to place grout for the fully drilled micropiles 5670-B-MP-12 and 5953-L-MP-04 on the same day drilling had been completed. This was not in compliance with Item 3.5.2 of project document, "Technical Specification for Cased Micropiles." Kiewit contacted their engineers who directed the contractor to proceed with the resolution from RFI-000098-5870-M-MP-07 – Same Day Grout Requirement, which had been submitted on 12/18/2019 to address a similar issue.

Uncorrected discrepancies reported to Engineer of Record:

- There were no uncorrected discrepancies for the month of April, 2020.

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:

April 30, 2020

# **ATTACHMENT**

## **NON-CONFORMANCE REGISTERS**

NON-CONFORMANCE REGISTER - For the registration of NCR Reports



Project #: 9000130901

Project Name: Field Point Liquefaction Project Providence, RI

	OSSQ	Engineering	Procurement	Construction	Quality	Vendor	Material Management	Project Management	Total Issued
Percentage of Total	21%	19%	19%	16%	9%	9%	2%	5%	100%
Count by Discipline	9	8	8	7	4	4	1	2	43
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-001	N/A	5/1/2019	Contract section 3.20.6 states the Contractor shall be responsible to store, protect and maintain all equipment.		The equipment as noted above shall be fully inspected by the original equipment manufacturer to what ever extent necessary and then submit to Owner and recommended repairs that should be made	11/15/2019		Vendor	Procurement
SR010-RPT-001A r1	N/A	6/11/2019	Incorrect paint applied on vessels at GCAW was not properly addressed by Kiewit with a NCR per Section 18 of the QMS r3		UOP has agreed to blast the non-compliant vessels to achieve a SSPC-SP10 surface profile and repaint following the manufacturer's recommended procedure to apply a #14 system IZ/HS/HS paint system	7/31/2019		Vendor	Procurement
SR010-RPT-002	N/A	6/23/2019	Section 12.0 of the Kiewit QMS requires all documents that are replaced to be stamped as voided or superseded		Kiewit to follow the Documents Control Procedure 102761-B-DMT-PRO-0001 section 6.3.4 Stamping and Document Notations	11/15/2019		Engineering	Engineering
SR010-RPT-003	N/A	6/23/2019	National Grid requested Kiewit to provide (2) RT film packages for audit purposes related to the GCAW Adsorber PO. These documents were not provided after several requests spanning a (6) week period		National Grid to perform an audit on all RT film at the Vendor's facility	7/31/2019	9/27/2019	Procurement	Vendor
SR010-RPT-004	N/A	7/1/2019	Kiewit did not follow their QMS r3 or contract requirements when changing the location of the load cells for the Micro Pile testing		Kiewit to provide refresher RFI training to field personnel on the RFI process to ensure RFI's are submitted in a timely manner.	9/9/2019	9/9/2019	Contractor	Construction
SR010-RPT-005	N/A	7/3/2019	Piping specifications showed the incorrect NFPA-59A specification. The piping specification showed the 2019 version versus the 2001 version.		Kiewit issued a code revision RFI to NG referencing all piping specifications were revised to remove the NFPA 59A 2019 reference	8/27/2019	9/27/2019	Engineering	Engineering
SR010-RPT-006	N/A	7/30/2019	Kiewit's Procurement Plan requires non-conforming materials received to be placed in a Quarantine area and/or marked as do not use.		Place the referenced piping into the specified quarantine area and properly mark as do-not-use	10/21/2019	10/21/2019	Contractor	Material Management
SR010-RPT-007	N/A	8/1/2019	Kiewit did not notify National Grid for the off-site testing of the Feed Gas Booster Compressor in accordance with Section 2.23 of the Contract.		Procurement and OSSQ shall review the requirements for notification of off-site testing to ensure National Grid is properly notified in the required time frame.	11/15/2019		Procurement	Quality
SR010-RPT-008	N/A	8/2/2019	Incorrect hydro test pressure and hold time for firewater line. Test was not conducted in accordance with NFPA 24.		The firewater spools in question will be retested in the overall firewater system test to be performed on site at a later date. No further action required	9/27/2019	9/27/2019	Engineering	Engineering
SR010-RPT-009	N/A	8/5/2019	Kiewit is required to notify National Grid per the Master ITP on Hold and Witness points. NG was not notified for the First Shipment of Piping Fabrication		Revisit the requirements for Client notification of vendor testing with all personnel related to the requirement, document the training and provide NG with a responsibility matrix to ensure proper notification is achieved.	11/15/2019		OSSQ	Procurement
SR010-RPT-010	N/A	8/8/2019	Kiewit is required to provide the off-site vendors with the requirements of the contract between National Grid LNG LLC and Kiewit Power Constructors Co. Section 3.10 Welding Requirements was not conveyed to ABB for off-site construction.		Vendor ABB submitted weld procedures as required	8/8/2019	9/27/2019	Procurement	Procurement

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-011	N/A	8/8/2019	Section 3.21.23 Document Management and Control states the Contractor shall provide a fully functional, integrated, electronic data and document management system.	Kiewit has provided a system using SharePoint for that allows updates to review documents and coordinates with Document Control	1/15/2020	1/15/2020	Contractor	Engineering
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	4/13/2020		Vendor	Vendor
SR010-RPT-014	N/A	8/20/2019	Prime Contract Section 3.10 Scope of Work requires all procedures for welding of piping, vessels and equipment performed off-site shall be submitted to the Owner for review and approval prior to construction.	Kiewit will comply with the requirements of the Prime Contract	9/27/2019	11/15/2019	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.	4/13/2020		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.	Rejected 4-6-20		Vendor	Procurement
SR010-RPT-017	N/A	8/27/2019	UOP/Fabscow 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.	Rejected 4-6-20		Vendor	Procurement
SR010-RPT-018	N/A	8/28/2019	Kiewit Site Specific Procurement Plan requires all contracts with risk level of 4 or 5 to conduct kick-off meetings upon execution of the contract.	Kickoff meetings with all suppliers signed up pre-suspension rated as 4 or 5 on the Master ITP have had kickoff meetings pre-suspension and during project re-initiation. An additional Prefab Quality meeting will be held as indicated in MITP	9/27/2019	11/15/2019	Procurement	Procurement
SR010-RPT-019	N/A	9/23/2019	Kiewit Site Specific Procurement Plan requires development of a Master ITP Plan including Witness and Hold Points, FAT Test, quality audits and any additional recommended in-process shop inspection. These activities shall include dates.	Kiewit is to provide an updated and completed Master ITP that complies with the requirement as noted in the Project Specific Procurement Plan 102761-B-QLT-PLN-002	11/15/2019		Procurement	OSSQ
SR010-RPT-020	N/A	10/3/2019	A ground Water monitoring well (mw) was identified in Kiewit's work area for Field Point Liquefaction Project in an area that required placement of several feet of fill. National Grid SIR provided guidance to Kiewit on closure of the mw in accordance with RIDEM requirements, prior to placement of the fill material. Kiewit did not follow proper closure procedures and did not notify On-site environmental for required oversight of mw closure procedure.	Kiewit is to notify National Grid SIR with proposal to locate and properly close the ground water monitoring well in accordance with RIDEM requirements. The mw closure shall be witnessed and approved by the National Grid SIR representatives.	11/15/2019	11/15/2019	Contractor	Construction
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.	Proof rolling as described and shown meets the project requirements - M. Oakland Kiewit will be submits a Corrective Action with Preventive actions for procedural adherence - COB 4-3-2020	4/3/2020		Contractor	Construction
SR010-RPT-022	Civil 102519-002	11/1/2019	During the course of the Civil Audit #102519-002 performed at site; Checklist Item 3.0 (g) Does the Geogrid meet the requirements as required by Earthwork Specification section 3.12. Documentation showing approval for the Geogrid materials was not provided prior to construction and were subsequently approved by the Geotechnical Engineer on 10/24/2019 which is after the placement of the materials. The audit team was unable to provide documentation supporting approval prior to the start of construction.	Received supporting documentation	1/7/2020	1/7/2020	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-023		11/4/2019	On October 11, 2019 Kiewit and National Grid attended a shop inspection to witness hydro testing of the L9020-A/B N2 storage vessels located at Chart Ind. New Prague, MN. Upon arriving, the (2) vessels of interest were set up to conduct a cold-stretch test in accordance with ASME Section VIII Appendix 44. The subsequent Off-Site Vendor Surveillance report 191011 per OSSQ stated that Chart conducted a Cold Stretch Test in Lieu of a hydro and further referenced ASME Section VIII Div. 1 Appendix 44 as reference. A review of the 2017 version of Mandatory Appendix 44 states in 44-6.1 (f) "...the pressure test required by UG-99 or UG-100 shall be applied after all welding on the pressure retaining parts..." Kiewit has not provided National Grid written proof that a hydro test was performed and documented on the vessels in question.	Kiewit to provide National Grid proof that a hydro test was conducted as required by ASME VIII Div.1 or have Chart perform a hydro as required. National Grid will be notified as required to attend the testing of the vessels in question.	11/15/2019		Vendor	OSSQ
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	Close findings log		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	Close findings log		OSSQ	OSSQ
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	Pending Kiewit Decision		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. Open 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	Pending Kiewit Decision		Vendor	OSSQ
SR010-RPT-028		2/27/2020	Kiewit procedure 102761-B-QLT-PRO-0011 Corrective & Preventative Actions 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	Requires compliance with CAR Procedure		Quality	Quality
SR010-RPT-029		2/27/2020	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	4/10/2020		Quality	Quality
SR010-RPT-030		2/27/2020	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	4/22/2020		Procurement	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-031		2/27/2020	<i>Fields Point Project Management of Change</i> Implementation process, dated March 15 <sup>th</sup> , 2019 define the requirements for Major Changes in Section 3.3 and the requirements for Minor Changes in Section 3.4. Each respective section further provides the steps and processes on how changes are implemented utilizing forms, team reviews, studies and an additional requirement that the MOC is only to be implemented once approval had been received. Kiewit has modified and submitted in large quantity P&ID drawings and classified these drawings as IFC. These drawings depict processes that have been changed, which is in violation of the MOC Implementation Plan. The required MOC documentation and prior approval of the MOC is required as stated in the Implementation Plan.	All Kiewit Project Engineering Staff must attend training on the project MOC procedures which will be conducted by Ryan Terry of PSRG and that Kiewit will be responsible for the cost of the training through a back change.	4-20-20 Signed		Engineering	Engineering
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.	Kiewit will remove the non-compliant backfill and replace in 6" lifts for the area of Duct Bank 7 and follow the 102761-B-CIV-0001 Earthwork Specification going forward.	4/2/2020		Contractor	Construction
SR010-RPT-033			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.		procedure required		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	Pending further discussion		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	Pending NDE Completion		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.	TH will resubmit documents with NCR		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.	4/10/2020		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.	Rejected 4-6-20		Engineering	Engineering
SR010-RPT-039		3/24/2020	Section 3.3 Engineering Design listed under the Scope of Work states : " <i>Development of up-to-date equipment lists, Drawings, specifications, and requisition schedules. Frequency to be agreed with Owner as appropriate</i> ". 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..	4/6/2020		Engineering	Engineering

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-040		3/24/2020	The contract requires Kiewit to develop within (45) days after Full Notice to Proceed (FNTF) 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
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.	4/1/2020		Project Management	Construction
SR010-RPT-042		4/16/2020	Kiewit OSSQ performed a Final Inspection and Document Review on 4-8-2020 at the Highland Tank facility (Report #200408 Highland Tank). There were multiple findings during this visit which included (1) U-1A form requires correction (2) Multiple X-ray reports were found to be non-compliant; missing IQIs, missing "F" markers, missing acceptance noted on report (3) PMI Testing showed low values on nickel composition (4) Missing NDE testing prior to hydro testing (5) Welder Performance Qualification records were found to have various errors. (5) Welding Procedures were found to have typographical errors on the PQR documents.	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 documentation review uncovers multiple findings subsequent to a recent OSSQ Inspection. All items as noted in Section "A" are required to be corrected as required to a compliant status with project and code requirements.			OSSQ	OSSQ



Non-Conformance Log



Fields Point Liquefaction National Grid 104012

Table with 15 columns: 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, Proposed Closure Date, Date Submitted for Closure, Date Closed, Planned Action. Rows include details for various NCRs such as concrete driven pile obstructions, coating issues, and equipment maintenance.



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	Proposed Closure Date	Date Submitted for Closure	Date Closed	Planned Action
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		<b>Use-As-Is</b> All pile cutoffs hauled 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	
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		<b>Use-As-Is</b> 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 stop visit to ensure the fabricator has addressed the issue.	10/16/2019	1/8/2020			1/16/2020	4/17/2020			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. Waiting to receive updated Drawings from Eng. 4/14/2020
0023	During review of Duct Bank 5, Sections 1, 2, & 3 - the underground utility warning tape installed is, 3" wide and approximately 100' long placed. Per specification 102761-B-CIV-SPC-0001, states in section 3.10, "Tape shall be six (6) inches wide."			Kiewit	Engineering	<b>Use-As-Is</b> 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		<b>Reject/Scrap</b> 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	Alisa 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		<b>Rework to Acceptable Standard</b> 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. <b>NCR assigned to Taylor Forge</b>	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	OSSO	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	1/10/2020			1/14/2020			1/14/2020	
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	<b>Use-As-Is</b> 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 out of approximately 8ft 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		<b>Reject/Scrap</b> 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 piledriver at mobil 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 off-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	<b>Use-As-Is</b> 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 putted, 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 rod 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 back down 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			4/10/2020				KOE currently reviewing issue and will provide proposed disposition no later than 3/28/2020.
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-05, 5871-D-DP-14, 5871-D-DP-16, 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 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	3/19/2020			4/17/2020	4/14/2020		3/16/2020	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 25R 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 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	3/19/2020 Resubmit 3/23/20			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 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	3/19/2020			4/17/2020	4/14/2020		3/16/2020	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

