



October 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 September 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 September 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
Management
Patrick.Chaney@nationalgrid.com

cc: Service List

MONTHLY STATUS REPORT FOR SEPTEMBER 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 September 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 September 2020:

- Training in the Environmental Inspector (“EI”) duties occurred six (6) times this month
- Air monitoring in accordance with the Rhode Island Department of Environmental Management Short-Term Response Action Plan is ongoing and continued during this month.
- Erection of Compressor Pre-Engineered Building
- Vent Stack and other vessels placed on metering skid foundation
- Pre-Treatment foundation poured
- Trench drain and paving on East/West rack installed
- Piping starting to be staged in East/West rack

Work Planned for October 2020:

- Erection of Compressor Pre-Engineered Building
- Continue various concrete pedestal pours
- Receive N2 Recycle and Booster Compressors
- Erection of North South rack steel
- Complete East/West rack steel
- Receive Crossover Box and Compander skid
- Receive/Set piping in East/West and North/South racks

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
09/02/2020	Sediment and debris accumulation at catch basin 3.	Sediment and debris removed.	09/03/2020	Effective, restored drainage of storm water.
09/09/2020	Clean silt sack in catch basin 3	Silt sack cleaned.	09/11/2020	Effective, restored drainage of storm water.
09/09/2020	Replace filtrex soxx near catch basin 3	Filtrex soxx replaced.	09/11/2020	Effective, restored effectiveness of erosion control.
09/16/2020	Silt sack in catch basin needs to be cleaned.	Silt sack cleaned.	09/21/2020	Effective, restored drainage of storm water.

Releases				
Date	Material and Quantity Released	Cause	Description	Corrective Action Taken
None				

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:

- Placed concrete for the Booster Compressor Aftercooler/Lube Oil Cooler Foundation (pedestals yet to be completed).
- Completed construction of the following foundations:
 - Intercooler/Aftercooler
 - Compressor Lube Oil Cooler
 - HVAC Heater
 - Feed Gas Metering
 - Feed Gas Pretreatment
 - N2 Storage Area
 - 1st Stage Intercooler
 - Cold Box
- Placed fill material throughout the site for foundation backfill.

- Placed mass fill along the western end of the site.
- Completed construction of the underground firewater lines.
- Reworked/realigned the west end of the MSE revetment wall.
- Completed the construction of the East-West Pipe Rack LNG Diversion Trench.
- Began construction of the East-West Pipe Rack Diversion Trench's concrete apron.
- Began construction of LNG Diversion Trench South.

Discrepancies reported to Contractors:

- The shear pocket for Column A1 at the northwest corner of the Compressor Building Foundation was found to be out of alignment. The contractor had chipped concrete away from the mis-located shear pocket to find a section of reinforcement steel (rebar) conflicting with space required for the associated column's shear lug. The SI informed Kiewit's lead engineer for the FPLP of the issue and that Kiewit construction was about to begin removing the section of rebar. Consequently, Kiewit construction had cut half-way through the section of rebar prior to the work being halted (or receiving written authorization for the work). Kiewit submitted RFI-236 addressing the issue, whose resolution did not involve cutting rebar. Kiewit addressed the issue with NCR-0082, which has been closed.

Uncorrected discrepancies reported to Engineer of Record:

- The concrete placed for the Intercooler/Aftercooler Foundation's pedestals was observed to have porous surface areas. This surface issue is believed to be the result of Kiewit placing concrete without properly coating the job-built forms with a release agent. Item 4.2.2. of contract document "Cast-in-Place Concrete Installation Procedure" states: Forms are to be thoroughly cleaned of all dirt, mortar and foreign matter and coated with a release agent before each use. Kiewit addressed the issue with NCR-0087, which remains open.
- Kiewit placed three sections (approximately 40 feet total) of reinforced slope layer for an MSE revetment wall approximately 12 inches back from the face of the underlying wire facing unit. Project document, STR-SF-5175.05 specifies a 1.5 to 1 slope for the revetment wall (27-inch set-back per 18-inch wire facing unit). The SI informed Kiewit's superintendent that deviating from the specifications required written authorization from the EOR. The superintendent initially indicated that Kiewit was proceeding at their own risk. Kiewit has since changed the status of the work as providing temporary construction access for the project, which could be incorporated into the final roadway design pending review by the EOR.

Follow-Up to August's "Uncorrected discrepancies reported to Engineer of Record":

- There were a few issues observed with the N2 Comandor Foundation:
 - The north wall was observed to have an approximate 1-inch deep bow of about 12 feet in length.
 - There were approximately 6 hairline cracks (about 6-8 feet apart) in each of the north and south walls.
 - There was a small crack below the control joint (in the haunch portion of the concrete placement) on the north face, where the grade transitioned from the haunch to the main foundation section.

Kiewit continues the process of working through a Condition Report to address the issues.

- Kiewit was observed placing dense grade gravel against a firewater line riser and feed gas line riser without initial backfill material (sand, per RFI-109) as bedding for the vertical

pipe sections. Item 4.11 of the Earthwork Specification (CIV-SPC-0001) states to “bring initial backfill evenly up on both sides and along the full length of utility piping to avoid damage or displacement of utility system.” Kiewit resolved the issue by removing the dense grade gravel that surrounded the risers and replacing it with sand bedding material.

See Attached Register

All site civil 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:

September 30, 2020

ATTACHMENT

NON-CONFORMANCE REGISTERS

NON-CONFORMANCE REGISTER - For the registration of NCR Reports



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	30%	16%	14%	16%	13%	7%	0%	4%	100%
Count by Discipline	17	9	8	9	7	4	0	2	56
NCR Ref:	Audit Ref:	Issue Date	NCR Description		Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	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	6/22/2020	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	Open	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	6/3/2020	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 Project Specific Procurement Plan 102761-B-QLT-PLN-0002 requires any discrepancies or damaged materials will be tagged or labeled accordingly and isolated in the warehouse, laydown area or receiving QA/QC holding areas pending resolution. Underground piping was received at project site without documentation and the piping was not properly stored or marked as quarantined.		Place the referenced piping material into the specified quarantine area and properly mark as do-not-use	10/21/2019	10/21/2019	Quality	Quality
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	5/28/2020	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

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-009	N/A	8/5/2019	A Master Inspection Test Plan (MITP) was provided to allow National Grid to determine which vendor inspections/meetings that National Grid wanted written notification to attend. National Grid populated this document with the required Hold/Witness points which included a hold point for "Final Inspection Prior to Shipment (first shipment)" (see attached). This inspection was noted as a hold point by the Client and the Client was not notified of the inspection step.	Revisit the requirements for Client notification of vendor testing with all personnel related to this requirement, document the training and provide National Grid with a responsibility matrix to ensure proper notification is achieved on future inspections.	11/15/2019	5/29/2020	OSSQ	OSSQ
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
SR010-RPT-011	N/A	8/8/2019	Section 3.21.23 of the Contract states "the Contractor shall provide a fully functional, integrated, electronic data and document management system". TeamBinder which is the existing Document Control Management system has not proved to be a functional system. This system has shown to be unable to consistently provide access by the Owner to the technical documents for review which are related to this project both for pre-suspension and post suspensions documents. Large data dumps are transmitted without regard to previous review and comments by Owner. Documents have been removed from the obligatory (10) day period prior to period completion. Comments made by the Owner during the document review have not been incorporated into the subsequent document release. The Owner has been subjected to Beta testing of system changes which has proven to be ineffective and confusing to the overall document control procedure.	Provide the Owner with a functional system that is capable and will permanently correct the discrepancies as noted in section "A" above.	1/15/2020	1/15/2020	Engineering	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	See Addendum "A" attached to the NCR report	5/21/2020	5/28/2020	OSSQ	Procurement
SR010-RPT-013 R2	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	Kiewit will direct APCI to perform the NDE on the crossover box as defined by KIEWIT RFI-000119 resolution dated 2-20-20	4/13/2020	Open	Vendor	Vendor
SR010-RPT-014r1	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 R2	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	6/22/2020	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.	5/27/2020	Open	Vendor	Procurement
SR010-RPT-017	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.	5/28/2020	Open	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

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
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	6/4/2020	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 RI DEM 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	6/23/2020	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
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) <i>...the pressure test required by UG-99 or UG-100 shall be applied after all welding on the pressure retaining parts...</i> 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	7/8/2020	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.	Attachment 1 includes the approved WPS	5/20/2020	5-21-2020	Contractor	OSSQ

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
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	Kiewit to provide documentation for the notification of Witness Points no less than (10) business days to provide National Grid the opportunity to witness off-site testing, For this specific case Kiewit provided an opportunity to National Grid for review of the hydrotest documentation of the Coalescing Filter Tag# D-0200 on 2/13/2020. Report is attached. The Findings documented in the report have been closed and a copy of the Findings Log is included.	5/20/2020	5/26/2020	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.	Rebuild and replace tube bundle performing all required testing as per the contractual requirements.	5/26/2020	6/8/2020	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	Rebuild and replace tube bundle performing all required testing as per the contractual requirements.	5/26/2020	6/8/2020	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.	Kiewit will preform CAR's as trends are found . See attached 3 CAR's Kiewit and National Grid had a call between the quality groups and agreed on a path forward.	5/27/2020	7/8/2020	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.	Kiewit will updated the Quality Audit Schedule. Kiewit and National Grid quality groups meet via a conference call and agreed the attached audits performed by Kiewit meet the audit requirements. Kiewit will invite National Grid to attend future audits.	4/10/2020	6/4/2020	Quality	Quality
SR010-RPT-030		2/27/20	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.	Require Patterson Horth/Nucor to formally submit welding procedures and quality deliverables through TeamBinder for National Grid review and approval prior to commencing any welding work.	4/22/20	5/29/2020	Procurement	OSSQ

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-031		2/27/2020	<i>Fields Point Project Management of Change</i> Implementation process, dated March 15 th , 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 Kiewit agrees to the above disposition 4/1/2020	4/20/2020	5/29/2020	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	7/8/2020	Contractor	Construction
SR010-RPT-033		3/3/2020	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.	Kiewit to submit a plan to National Grid for review and approval that does not require a compressive strength values as a determine factor in form removal or submit a compressive strength value to be met prior to form removal.	6/24/2020	7/8/2020	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.	Kiewit will provide National Grid with an updated status for all open NCR's along with a schedule detailing projected dates for open NCR dispositions and closures. Kiewit will make NCR update party of the weekly client meeting with National Grid in order to keep the team focused on closing out the currently issued NCR's as well as any future NCR's issued on the project.	5/26/2020	5/28/2020	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	5/26/2020	7/17/2020	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.	5/29/2020	5/29/2020	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	Discipline
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.	Summarizing the actions from the Document Control Breakout Meeting on March 25, 2020, National Grid will expand the table in Section 4.4 of the Scope of Work and List of Deliverables to expand upon the deliverables National Grid would like to formally review and approve and Kiewit will determine the appropriate methodology to facilitate those reviews. Kiewit will update the Document Control procedure with the mutually agreed table and resolve any outstanding National Grid comments. In the interim, the project will continue the current document review communication process of National Grid/CHIV submitting comments, and Kiewit responding to all comments, even if the comment is not incorporate, and regardless of document type, content of comment, or timing (i.e. when the document was issued).	4/10/2020	5/29/2020	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.	4/3/2020	6/3/2020	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, specificationOs, 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	6/17/2020	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	Kiewit shall immediately produce and implement the Client's comments in the referenced Document Control Procedure and submit as IFC to the project.	6/2/2020	6/2/2020	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	7/8/2020	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.	5/21/20	7/22/2020	OSSQ	OSSQ

NCR Ref:	Audit Ref:	Issue Date	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-043		4/24/2020	The Contract, Number 4400005216 between National Grid LLC and Kiewit Power Constructors Co. states in section 3.20.6 of the <i>Scope of Work and List of Deliverables</i> the Contractor shall be responsible for providing warehouse and storage facilities both on or off site. Also stated in this section " <i>It shall be the responsibility of the Contractor to store, protect and maintain all equipment and materials in accordance with SOW, the Supplier's preservation requirements and good practice.</i> " The final inspection and FAT testing were conducted on 3-5-2020 and National Grid's request for Preservation and Maintenance and inspection records have not been providing which indicates the P&M for the PDC and installed electrical equipment has not been performed in accordance with the manufacturer's requirements.	The equipment as noted above shall be inspected by either National Grid or a 3rd party inspector, suitable to National Grid to what ever extent necessary and then any repairs, if applicable, shall be corrected to National Grid's satisfaction. Kiewit shall immediately provide a P&M procedure which will include the building and installed electrical gear in accordance with the manufacturer's requirements. The P&M procedure shall provide details of how the preservation requirements will be maintained during shipment and during storage on site.	5/21/2020	5/13/2020	Engineering	Engineering
SR010-RPT-044		5/5/2020	The Prime Contract requires Kiewit to provide Client with a copy of any Supply Contract within (10) days after request by Owner. National Grid has requested Kiewit to provide a SDS (Supplier Document Schedule) showing quality deliverables and schedule for the Compressor Building contract. As of this writing, the SDS has not been provided.	Kiewit shall provide National Grid Supplier Document Schedule as requested.	5/21/2020	6/1/2020	Procurement	Procurement
SR010-RPT-045		5/5/2020	The Prime Contract, Vendor Contract and Vendor and Subcontractor Document Control and Expediting Procedure provide requirements for Vendors and Subcontractors to provide documentation deliverables per the Seller's Deliverable Schedule. The submittal process shall use the Vendor Data Module of InEight Document (TeamBinder). Additional requirements also state the type of quality deliverables required for submittal. The QA/QC program requirements are passed on to the second-tier suppliers and that the subcontractor enforces them. Nucor, a subcontractor to Patterson Horth has refused to submit the quality deliverables as so required through InEight for Owner review and approval.	Kiewit shall require NUCOR, as a subcontractor to Patterson Horth, to submit all required quality deliverables through the InEight/TeamBinder system for review and approval by Client.	5/20/20	Open	Procurement	OSSQ
SR010-RPT-046		6/2/2020	Section 3.10 of the Contract requires all welding procedures to be submitted to Owner for review and approval prior to construction. The Base plates for the PDC column drawing 102761-00-0000-sTR-SF-5806 detail 1 were modified to use a welded embed rod versus the anchor bolt as called out. The fabrication was performed off-site and subsequently installed without Owner approval of welding procedure or welder qualification.	Kiewit shall require the outside fabricator to provide a WPS, PQR and Welder Certifications for Client review. Kiewit shall also provide CMTR's for the base plate and embed rod used in this application. This NCR will prevent the setting of any equipment on the referenced foundation until the NCR is closed.	6/2/2020	Open	Procurement	Quality
SR010-RPT-047		6/2/2020	Drawing 102761-B-00-0000-STR-SF-5175 detail 8 shows using Mirafi 180N or equal geotextile fabric. The 3rd lift construction used Mirafi 140N instead of the required 180N. This substitution was not approved by Engineering prior to the placement and is considered non-compliant with the specification.	National Grid is requiring a Corrective Action Report be initiated for this specific occurrence and the CAR shall cover the procurement, receiving and installation of the non-compliant product. The CAR must follow the requirements of 102761-B-QLT-PRO-0011 Corrective and Preventive Action procedure.	Open	Open	Contractor	Quality
SR010-RPT-048		6/10/2020	Kiewit procured base plates for the PDC building columns from an outside vendor. The base plates required welding (4) 1" diameter embed rods to the plate in accordance with Kiewit RFI-000161 replacing the previously designed anchor bolts. The welding of the embed rods was performed and installed. A review of the Weld Procedure and Welder Qualification Records provided from the outside vendor showed the welder was qualified for maximum 3/4" thickness in accordance with AWS D1.1 but the overall rod welded was 1" diameter for which was outside the welder's qualified limitations. Kiewit failed to properly review and vet the	The base plates as installed are to be removed and properly welded with qualified welders and replaced by a method suitable to National Grid. The repeated failure by Kiewit to follow the contract and/or procedures will require a Corrective Action Report to be generated on this specific instance which will be submitted to NG for review and approval.	7/15/2020	Open	Contractor	Construction
SR010-RPT-049		6/11/2020	Kiewit's Thermal Control plan dated December 5, 2019 provides specifications and tolerances for mass concrete pour temperatures delta between core and near surface . Section "F" of this specification limits the temperature delta between the core and near concrete surface to a maximum of 35° F during the first 4 days. The pour was placed on 5/28/2020 and the attached data log shows for a period of approximately (8) hours between 5/30/2020 @ 5:08 AM until 5/30/2020 @ 12:08 PM the monitored temperature differential was in excess of 35° F (see attached log).	Further testing and observation found the concrete did not exceed the 185 degrees (F) per the Thermal Control Plan Table 6.2.2.2	7/5/2020	7/17/2020	Contractor	Construction
SR010-RPT-050		6/15/2020	Hudson Products, subcontractor to Kiewit, submitted their ASME Welding Process Usage Log for National Grid review and the review showed the continuity lacked full traceability to show the welders welded with their qualified process(es) during the previous welding periods as required by ASME Section IX. Hudson is contracted to provide Air Cooled Heat Exchangers and structural steel supports for this product. National Grid will not accept any welders used for the ACHE and/or structural steel fabrication that do not have full traceability of qualifications and welding continuity.	Continuity package to be reviewed prior to hydrotest	7/15	Open	Vendor	OSSQ

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SR010-RPT-051		6/16/2020	Kiewit provided National Grid with a data package to document current work as performed on the compressor building structural steel. The review identified (5) Welder Performance Qualification Records(WPQR) that were not signed by a qualified person at the time of welder testing rendering these records as non-compliant and the welders non-certified. AWS D1.1 Structural Welding Code - Steel requires qualified personnel to witness visual acceptance of the welds and visual acceptance of the destructive bend test. The welder I.D.'s are as follows: #7, #14, #15, #25, and #91.	All welds that were deposited by the above referenced welders are rejected and must be either cut-out and re-welded or replaced with completely new fabricated members. Other alternative corrective methods may be submitted to Client for their approval.	Open	Open	Vendor	OSSQ

Non-Conformance Log



NCR No.	Title	Description	Type (Internal / Supplier / Client)	Action By	Vendor	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Proposed Closure Date	Date Submitted to Client for Closure	Date Closed	Planned Action	ACTIVE	NGWP Activity
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			5/28/2019		6/26/2019	6/26/2019			6/26/2019		CLOSED	NO
0002		Damage to upper concrete driven pile DP-70 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			6/6/2019		8/13/2019	8/13/2019			8/13/2019		CLOSED	NO
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			6/11/2019		6/26/2019	6/26/2019			6/26/2019		CLOSED	NO
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.	Kiewit	OSSQ		5/16/2019		6/14/2019	6/14/2019	6/15/2020	7/8/2020	7/8/2020	NCR will remain open until equipment is re-painted	CLOSED	NO
0005		Absorber 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.	Kiewit	OSSQ	UOP	5/16/2019	6/13/2019	6/14/2019	6/14/2019	6/15/2020			NCR will remain open until equipment is re-painted. 7/15 - PAUT COMPLETE/ COATING TO BE COMPLETED BY 7/31 7/25 -CHC need 10 day notification for start of paint, may start 7/31 finish week of 8/10 8/1 - CHC Coating to start 8/24/with a (14) day coating cycle planned. Scheduled to complete 9/4 8/8/ CHC Coating SNF received from UOP and sent to NG. Coating to start Monday 8/24 and be completed by Monday 8/31. 8/15 CHC No Further Update 8/22 CHC - Do to a Tropical Storm scheduled to impact Houston, Coating is being rescheduled to start on 8/31 8/30 CHC Confirmed start date for coatings is 8/31 9/16 CHC Final Inspection Coating 9/19 CHC Final Inspection of Coating Accepted - Requested Coating Reports from Inspector Ruben Salazar to close out the NCR 9/26 CHC Final Inspection Coating Reports have been dssued to Close out NCR	OPEN	NO
0006		Absorber 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.	Kiewit	OSSQ	UOP	5/16/2019	6/13/2019	6/14/2019	6/14/2019	6/15/2020			NCR will remain open until equipment is re-painted. 7/15 - PAUT COMPLETE/ COATING TO BE COMPLETED BY 7/31 7/25 -CHC need 10 day notification for start of paint, may start 7/31 finish week of 8/10 7/29 EMR start 8/12 finish 8/21 approx.. 8/1 - CHC Coating to start 8/24/with a (14) day coating cycle planned. Scheduled to complete 9/4 8/8 CHC Coating SNF received from UOP and sent to NG. Coating to start Monday 8/24 and be completed by Monday 8/31. 8/15 CHC No Further Update 8/22 CHC - Do to a Tropical Storm scheduled to impact Houston, Coating is being rescheduled to start on 8/31 8/30 CHC Confirmed start date for coatings is 8/31 9/16 CHC Final Inspection Coating 9/16 9/19 CHC Final Inspection of Coating Accepted - Requested Coating Reports from Inspector Ruben Salazar to close out the NCR 9/26 CHC Final Inspection Coating Reports have been dssued to Close out NCR	OPEN	NO
0007		absorber 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.	Kiewit	OSSQ	UOP	5/16/2019	6/13/2019	6/14/2019	6/14/2019	5/1/2020			NCR will remain open until equipment is re-painted. 7/15 - PAUT COMPLETE/ COATING TO BE COMPLETED BY 7/31 7/25 -CHC need 10 day notification for start of paint, may start 7/31 finish week of 8/10 7/29 EMR start 8/12 finish 8/21 approx.. 8/1 - CHC Coating to start 8/24/with a (14) day coating cycle planned. Scheduled to complete 9/4 8/8 CHC Coating SNF received from UOP and sent to NG. Coating to start Monday 8/24 and be completed by Monday 8/31. 8/15 CHC No Further Update 8/22 CHC - Do to a Tropical Storm scheduled to impact Houston, Coating is being rescheduled to start on 8/31 8/30 CHC Confirmed start date for coatings is 8/31 9/16 CHC Final Inspection Coating 9/16 9/19 CHC Final Inspection of Coating Accepted - Requested Coating Reports from Inspector Ruben Salazar to close out the NCR 9/26 CHC Final Inspection Coating Reports have been dssued to Close out NCR	OPEN	NO
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.	Kiewit	OSSQ	UOP	5/22/2019		1/29/2020	1/29/2020	5/15/2020	7/8/2020	7/8/2020	NCR will remain open until equipment is re-painted	CLOSED	NO
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.	Kiewit	OSSQ	UOP	5/22/2019		1/29/2020	1/29/2020	5/15/2020	7/8/2020	7/8/2020	NCR will remain open until equipment is re-painted	CLOSED	NO
0010		Failure to meet pressure testing requirements as outlined in specification NFPA 59A 2001 Edition	Kiewit			6/18/2019		6/18/2019	6/18/2019	6/5/2020	5/29/2020	5/29/2020	NCR will remain open until re-testing is completed and documentation has been received and reviewed.	CLOSED	NO

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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	APCI	6/19/2019		2/7/2020	2/12/2020	5/31/2020	6/24/2020	7/1/2020	NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.	CLOSED	NO
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	APCI	6/19/2019		2/7/2020	2/12/2020		6/24/2020	6/24/2020	NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.	CLOSED	NO
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	Kiewit	OSSQ	APCI	6/19/2019		2/7/2020	2/12/2020	5/15/2020	6/24/2020	7/1/2020	NCR will remain open until we have seen that the "New" preservation procedure has been implemented and recorded.	CLOSED	NO
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			8/27/2019		9/10/2019	9/10/2019			9/11/2019		CLOSED	NO
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			6/27/2019		7/8/2019	7/8/2019			7/8/2019		CLOSED	NO
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			7/10/2019		7/15/2019	7/15/2019			9/11/2019		CLOSED	NO
0017		Air Content was observed as being 3.3% per the required 4.5%-7.5%. Resulting in failure per the mix design.	Kiewit	Engineering		9/30/2019		3/20/2020	7/8/2020		6/22/2020	7/8/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.	CLOSED	NO
0018		Air Content was observed as being 4.0% per the required 4.5%-7.5%. Resulting in failure per the mix design.	Kiewit	Engineering		9/30/2019		3/20/2020	7/29/2020		6/22/2020	7/29/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time. CLIENT DIDN'T AGREE ON DISPOSITION/ KIEWIT DOESN'T AGREE WITH THE REJECTION OF DISPOSITION - WORK WITH RICHIE FOR REWRITE. CAMERON TO GET DENNIS TO GET FEEDBACK 7/17 7/22 EMR NCR disposition was rewritten - DO WE NEED to update signature???? 7/29 EMR we need to send to NG for disposition re write review. New signatures are not required.	CLOSED	NO
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	Kiewit	OSSQ	UOP	9/30/2019		7/22/2020	7/30/2020		7/29/2020	9/9/2020	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 (Info Shots) then that needs to be part of the explanation. 7/22 EMR - Engineering approved disposition needs to be sent to NG for disposition review 7/29 sent to NG with reports for disposition and closure. 7/29 8/15 CHC - Awaiting Response from National Grid 8/30 CHC Awaiting response from National Grid	CLOSED	NO
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			10/9/2019		11/23/2019	1/13/2020			1/13/2020		CLOSED	NO
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			10/15/2019		11/23/2019	1/10/2020			1/10/2020		CLOSED	NO
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			10/16/2019		1/8/2020	1/16/2020	5/8/2020	5/27/2020	5/27/2020	This NCR should be ready to close. Tommy H./Jason R. to Gasher 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	CLOSED	NO
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		10/22/2019		1/22/2020	1/23/2020			1/23/2020		CLOSED	NO
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			10/24/2019		1/14/2020	1/14/2020			1/14/2020		CLOSED	NO
0025		Atlas Copco Air Cooled Heat Exchanger was pressure tested to 1.3 instead of the 1.5 required	Kiewit			11/1/2019		1/10/2020	1/14/2020			1/14/2020		CLOSED	NO

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0026		The Regen 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	Kiewit	OSSQ	UOP	11/1/2019		11/23/2019	6/24/2020		6/24/2020	7/1/2020	Submitted for closure to NG with UOP signoff or their NCR	CLOSED	NO
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.	Kiewit	Engineering		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.	CLOSED	NO
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.	Kiewit			11/9/2019		11/23/2019	1/21/2020	5/15/2020		3/9/2020		CLOSED	NO
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.	Kiewit	Engineering		12/2/2019		3/20/2020	7/22/2020	5/15/2020		7/24/2020	KOE currently reviewing issue and will provide proposed disposition no later than 3/26/2020. 7/22 EMR sent to NG for disposition review 7/29 EMR Quality needs to sign and close 7/29	CLOSED	NO
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		1/8/2020		2/18/2020	2/27/2020			3/9/2020		CLOSED	NO
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.	Kiewit	Engineering		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.	CLOSED	NO
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.	Kiewit	Engineering		1/8/2020		3/19/2020	6/16/2020	4/17/2020	4/14/2020	6/16/2020	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	CLOSED	NO
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			1/8/2020		1/21/2020	1/21/2020			1/21/2020		CLOSED	NO
0034		During driving of concrete piles obstructions were encountered and forced one (1) pile (5640-F-DP-03) out of tolerance.	Kiewit	Engineering		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	CLOSED	NO
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.	Kiewit	Engineering		1/8/2020		3/19/2020	6/16/2020	4/17/2020	4/14/2020	6/16/2020	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	CLOSED	NO
0036		During driving of concrete piles obstructions were encountered and forced one (1) pile (5980-I-DP-09) out of tolerance.	Kiewit	Engineering		1/8/2020		3/20/2020	6/16/2020	4/17/2020	4/14/2020	6/16/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.	CLOSED	NO
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		1/8/2020		2/18/2020	2/27/2020			3/10/2020		CLOSED	NO
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		1/8/2020		2/18/2020	2/27/2020	4/17/2020	4/14/2020	5/27/2020	This NCR should be ready to close. Tommy H./Jason R. to Gasher revised engineering documents to facilitate closure of NCR and present to NG week of 3/16/2020.	CLOSED	NO
0039		During driving of concrete piles obstructions were encountered and forced one (1) pile (5951-L-DP-14) out of tolerance.	Kiewit	Engineering		1/8/2020		3/20/2020	6/8/2020	4/17/2020	4/14/2020	6/8/2020	KOE will have EOR sign off on disposition week of 3/16/2020. Expect to use as is and close NCR at same time.	CLOSED	NO
0040		During driving of concrete piles obstructions were encountered and forced two (2) piles (5870-M-DP-03 & 5870-M-DP-09) out of tolerance.	Kiewit	Engineering		1/8/2020		2/18/2020	2/20/2020			2/20/2020		CLOSED	NO
0041		Upon cutting off of the 16" driven concrete piles it was found that the tension connector tubes were not in the correct location embedded in the pile, per Dwg. 102761-B-00-0000-STR-SF-6021 Rev.3 Gen. Notes 8. has a tolerance of +1/8"	Kiewit			10/16/2019		1/8/2020	1/16/2020	5/15/2020	5/27/2020	5/27/2020	This NCR should be ready to close. Tommy H./Jason R. to Gasher 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	CLOSED	NO
0042		5870-M-MP-03 was drilled an additional 5 feet in depth total (it achieved a tip elevation of approximately -78.8 feet and the minimum required elevation was -70 feet). As scheduled, 25 feet of casing was pulled. However, with the extra five feet of drilling, we have a total of 70.7 feet of casing on the pile, which is 6.4 feet more than the casing length given for the pile on Sheet 102761-B-00-0000-STR-SF-5872. The tolerance for the casing length is plus or minus 3 feet. Due to length of the subsequent casing sections, pulling an additional 5 feet of casing out (30 total) was not a readily available option for this pile.	Kiewit	Engineering		1/9/2020		2/7/2020	2/12/2020			3/9/2020		CLOSED	NO

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0043		After drilling Micropile 5870-M-MP-07 to full depth (90'), the operation was shut down due to a safety stand down following a safety incident (12/12/19). Operation was anticipated to resume 12/18/19. Construction put in an RFI asking for the path forward and clarification of same day grout requirement. Recommendation per RFI was not followed per the Engineers approved resolution.	Kiewit	Engineering		1/31/2020		1/31/2020	2/3/2020			3/11/2020		CLOSED	NO
0044		During the demolition of an existing slab for the propane foundation Duct Bank #5 was impacted with the excavator mounted hammer. Resulting in the concrete from the Duct Bank being damaged and a 4" conduit being cracked.	Kiewit	Construction		3/20/2020		3/24/2020	6/26/2020		6/26/2020	6/26/2020	NG requesting a RCA to be performed for the safety factor	CLOSED	NO
0045		Micropile 5871-D-MP-02 was found during as-builts to be drilled out of tolerance	Kiewit	Construction		4/14/2020		5/11/2020	5/28/2020	5/15/2020	5/11/2020	6/17/2020		CLOSED	NO
0046		Micropile 5570-B-MP-35 and 5570-B-MP-37 was found during as-builts to be drilled out of tolerance	Kiewit	Construction		4/14/2020		5/11/2020	5/28/2020	5/15/2020	5/11/2020	6/17/2020		CLOSED	NO
0047		Duct bank foundation #2 (Duct bank #3) was backfilled with structural fill at 87% compressive strength. The guide for form removal, curing and loading of concrete specifies a compressive strength of 100% before it can be backfill with structural fill material.	Kiewit	Construction		6/3/2020		6/5/2020	6/5/2020		6/5/2020	6/24/2020		CLOSED	NO
0048		After removal of the forms for the PDC column pedestals it was found that there was areas of concrete that wasn't completely consolidated	Kiewit	Construction		6/3/2020		7/1/2020	7/8/2020		7/8/2020	7/29/2020	7/15 DENNIS REJECT TILL SUPPLEMENTAL STEEL IS ERECTED. STEEL ERECTION START 8/3 COMPLETE 8/7 7/22 attach RFI to NCR resubmit for closure-Cameron 7/29 need to send out.	CLOSED	NO
0049		Embed Plates called out in RFI-000161 were fabricated by a welder qualified only to 3/4" thickness, and actual welds were 1" thickness.	Kiewit	Construction		6/20/2020		7/1/2020	7/8/2020				7/22 EMR Supplemental Steel Erection Must Be complete to close NCR.	OPEN	NO
0050		In the area of the nitrogen access road, reusable on-site soils were placed and not structural fill. There is concern that on-site reusable soils were placed beneath the roadway.	Kiewit	Construction		6/24/2020		6/30/2020	7/1/2020		7/9/2020	7/9/2020		CLOSED	NO
0051		Cold Box Heat Exchanger	Kiewit	OSSQ	APCI	6/30/2020		7/22/2020	7/23/2020				7/22 EMR need to send Disposition review to NG 8/30 CHC - No Further update 9/19 CHC APCI continues to work with Chart on the refabrication of the Heat Exchangers to be incorporated into the Cold Boxes. APCI to provide Kiewit a Witness Point Schedule by COB 9/25 9/26 CHC APCI has issued Witness Point Schedule and first Supplier Notification Form for 10/7/2020. Witness Points to be completed by end of October.	OPEN	NO
0052		Shipment of Material with Open NCR	Kiewit	OSSQ	P/H	7/20/2020		7/22/2020			8/5/2020	8/5/2020	7/22 EMR Send to NG for Disposition Review 7/29 EMR sent to NG for disposition 7/22	CLOSED	NO
0053 R2		Aether Skid Q-Sonic Ultrasonic Flowmeter Material country of origin.	Kiewit	OSSQ	Aether	7/28/2020		9/2/2020					8/5 - EMR working for replacement/disposition 8/19 EMR Issue USE AS IS with supplement information from VICE and sign. 9/19 CHC National Grid has been issued a "(5) Day Letter" to request Use-As -Is or pay to replace 9/26 CHC Awaiting response from National Grid	OPEN	NO
0054 R1	ACC Booster Compressor - NDE % & Charpy Impacts	ACC Booster Compressor - NDE % & Missing Charpy	Kiewit	Engineering	ACC	7/31/2020		8/19/2020					8/5 - EMR drafting	OPEN	YES
0055		Cold Box Aluminum WPSs will not be included in Final Doc Pack due to vendor placing proprietary stamp on them.	Kiewit	Engineering	APCI	8/12/2020							8/19 EMR write up disposition - Kiewit to review un redacted review. Redacted version with Letter state ting review from Kiewit in final package. Client option to attend if they can. Noble to set up WPS review with Justin M. 8/30 CHC Kiewit Welding Engineer conducted Weld Procedure review at APCI on 8/27. All Weld Procedures for the Cold Box approved. Working with APCI to obtain copies of reviewed Weld Procedures	OPEN	NO
0056		UOP 3 point inspection not completed per NGWP	Kiewit	Engineering	UOP	8/19/2020		8/25/2020						OPEN	YES
0057		Chart Industries did not provide proper NDE on the Thermal Vaporizer	Kiewit	Engineering	CHART	8/19/2020		8/25/2020						OPEN	NO

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0058		APCI 3 point inspection not completed per NGWP	Kiewit	Engineering	APCI	8/19/2020		8/25/2020						OPEN	YES
0059		Cryo and Non Cryo Valves	Kiewit	OSSQ	Various	9/8/2020	9/8/2020						9/26 CHC - What is this for?	OPEN	NO
0060		On_Off Valves	Kiewit	OSSQ	Various	9/8/2020	9/8/2020						9/26 CHC - What is this for?	OPEN	NO
0061		Non Cryo Manual Valves	Kiewit	OSSQ	Various	9/8/2020	9/8/2020						9/26 CHC - What is this for?	OPEN	NO
0062	Compressor Bldg. NUCOR Rafter Welds	Description: Pieces RXB030 and RXB080 were examined for weld discontinuities. On piece #RXB030, out of 16 welds inspected, 10 were found to be undersized or not of sufficient length/spacing (in the case of stitch welds) as per weld symbols. On piece# RXB080, out of 20 welds inspected, 10 were found to be undersized. Pieces taken as representative of entire shipment of steel	Kiewit	OSSQ	Patterson Horth	9/9/2020							9/26 CHC - No update	OPEN	NO
0063	ACC Booster Compressor 3 Point Inspection	Atlas Copco performed final visual weld inspection on all piping welds on the Booster Compressor in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Atlas Copco did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	ACC	9/10/2020	9/10/2020	9/12/2020						OPEN	YES
0064	APCI N2 Compressor Skid 3 Point Inspection	APCI performed final visual weld inspection on all piping welds on the N2 Compressor Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0065	Aether Feed Gas Metering Skid - 3 Point Inspection	Aether performed final visual weld inspection on all piping welds on the Feed Gas Metering Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Aether did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	Aether	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0066	APCI ColdBox - 3 Point Inspection	APCI performed final visual weld inspection on all piping welds on the ColdBox in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0067	APCI Crossover Box - 3 Point Inspection	APCI performed final visual weld inspection on all piping welds on the Crossover Box in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0068	Chart Truck Loading Skid - 3 Point Inspection	Chart performed final visual weld inspection on all piping welds on the Truck Loading Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Chart did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	Chart	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0069	Chart Nitrogen Vaporization Package - 3 Point Inspection	Chart performed final visual weld inspection on all piping welds on the Nitrogen Vaporization Package in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Chart did not perform weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.2 Welder Qualification; Paragraph d. Procedures; Subsection 4 Witnessing and Documentation of Test Welds; Subparagraph ii. "The designated welding inspector shall ensure conformance to the applicable WPS and as a minimum perform the following inspections: joint fit-up, root pass inspection prior to the hot pass being deposited and the cap pass prior to radiographic testing."	Kiewit	Engineering	Chart	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0070	Atlas Copco Comptec - Booster Compressor - Base Metal Charpy SS	Atlas Copco Comptec performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Booster Compressor in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Atlas Copco did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping.."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	ACC	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0071	APCI - N2 Compressor Skid - Base Metal Charpy SS	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the N2 Compressor Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping.."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES

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0072	APCI - Compander Skid - Base Metal Charpy SS	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Compander Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0073	APCI - Crossover Box - Base Metal Charpy SS	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Crossover Box in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0074	APCI - Cold Box - Base Metal Charpy SS	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the ColdBox in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0075	UOP - Gas Pretreatment Package - Base Metal Charpy CS	UOP performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Gas Pretreatment Package in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. UOP did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	UOP	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0076	Chart - Nitrogen Vaporizer - Base Metal Charpy SS	Chart performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Nitrogen Vaporizer in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Chart did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	UOP	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0077	Chart - Truck Loading Skid - Base Metal Charpy SS	Chart performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Truck Loading Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Chart did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	Chart	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0078	APCI N2 - Compressor Skid - NDE Requirements	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the N2 Compressor Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0079	APCI - Compander NDE Requirements	APCI performed Charpy Impact Testing on stainless steel welding procedures for the weld metal and heat affected zone for the Compander in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5.5 In-Service Welder Procedure Specification; Paragraph c. Procedure Qualifications; Subsection 1) All welding procedure qualifications for Austenitic Stainless Steel piping..."; Subparagraph i. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone."	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0080	UOP - Gas Pretreatment Package - NDE Requirements	UOP performed NDE on Gas Pretreatment Package Piping in accordance with the Kiewit Detailed Design Criteria, NFPA 59A and ASME B31.3. UOP did not perform additional NDE per Contract Scope of Work 3.10 Welding Requirements: 100% of welds performed on gas piping with a design pressure of 125 psig or greater shall be non-destructively examined by radiograph, ultrasonic, magnetic particle or liquid dye penetrant methods as specified in the National Grid Weld Policy."	Kiewit	Engineering	UOP	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0081	Chart - Nitrogen Vaporization Package - NDE Requirements	Chart performed NDE on Nitrogen Vaporization Piping in accordance with the Kiewit Detailed Design Criteria, NFPA 59A and ASME B31.3. Chart did not perform additional NDE per Contract Scope of Work 3.10 Welding Requirements: 100% of welds performed on gas piping with a design pressure of 125 psig or greater shall be non-destructively examined by radiograph, ultrasonic, magnetic particle or liquid dye penetrant methods as specified in the National Grid Weld Policy."	Kiewit	Engineering	CHART	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0082	Partially Cut Shear Key Pocket Horizontal Reinforcement Steel Bar	While attempting to install steel column number A1 into its shear key pocket that is located on the new compressor building concrete foundation structure, it has been discovered that the exposed horizontal reinforcement steel within the bottom of the shear key pocket prohibits the full penetration of the steel column's shear lug down into the pocket as required. Field crews began cutting the horizontal rebar out of the way in order to resolve the conflict and to make room for the column's shear lug prior to receiving written RFI approval to do so.	Kiewit	Construction	Site	9/10/2020	9/11/2020	8/19/1010						OPEN	NO
0083	APCI - N2 Compressor Skid - Base Metal Charpy CS	APCI performed Charpy Impact Testing on carbon steel welding procedure for the weld metal and heat affected zone for the N2 Compressor Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5 Content; Subsection 5.1 Scope; Paragraph d. Procedures; Subsection 2) Testing; Subparagraph i. Charpy V-Notch Toughness testing of the base metal and base metal heat affected zone in accordance with the requirements of ASME Section IX; Subsubparagraph 1. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone and shall meet the following specified maximum test temperatures: a. 20 ft-lbs. at +20 degrees F for buried transmission and distribution piping systems, b. 20 ft-lbs. at 0 degrees F for above ground transmission and distribution piping and c. 20 ft-lbs. at -20 degrees F for National Grid Gas Station piping systems"	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES

Non-Conformance Log



NCR No.	Title	Description	Type (Internal / Supplier / Client)	Action By	Vendor	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Proposed Closure Date	Date Submitted to Client for Closure	Date Closed	Planned Action	ACTIVE	NGWP Activity
0084	APCI - Compander Skid - Base Metal Charpy CS	APCI performed Charpy Impact Testing on carbon steel welding procedure for the weld metal and heat affected zone for the Compander Skid in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5 Content; Subsection 5.1 Scope; Paragraph d. Procedures; Subsection 2) Testing; Subparagraph i. .Charpy V-Notch Toughness testing of the base metal and base metal heat affected zone in accordance with the requirements of ASME Section IX; Subsubparagraph 1. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone and shall meet the following specified maximum test temperatures: a. 20 ft-lbs. at +20 degrees F. for buried transmission and distribution piping systems, b. 20 ft-lbs. at 0 degrees F for above ground transmission and distribution piping and c. 20 ft-lbs. at -20 degrees F for National Grid Gas Station piping systems"	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0085	APCI - Cold Box - Base Metal Charpy CS	APCI performed Charpy Impact Testing on carbon steel welding procedure for the weld metal and heat affected zone for the Cold Box in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. APCI did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5 Content; Subsection 5.1 Scope; Paragraph d. Procedures; Subsection 2) Testing; Subparagraph i. .Charpy V-Notch Toughness testing of the base metal and base metal heat affected zone in accordance with the requirements of ASME Section IX; Subsubparagraph 1. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone and shall meet the following specified maximum test temperatures: a. 20 ft-lbs. at +20 degrees F. for buried transmission and distribution piping systems, b. 20 ft-lbs. at 0 degrees F for above ground transmission and distribution piping and c. 20 ft-lbs. at -20 degrees F for National Grid Gas Station piping systems"	Kiewit	Engineering	APCI	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0086	Chart - Nitrogen Vaporizer - Base Metal Charpy CS	Chart performed Charpy Impact Testing on carbon steel welding procedure for the weld metal and heat affected zone for the Nitrogen Vaporizer in accordance with the Kiewit Detailed Design Criteria, ASME B31.3, the Contract and the National Grid Weld Policy. Chart did not perform charpy impact testing for the base metal as described in the National Grid Weld Policy Section 5 Content; Subsection 5.1 Scope; Paragraph d. Procedures; Subsection 2) Testing; Subparagraph i. .Charpy V-Notch Toughness testing of the base metal and base metal heat affected zone in accordance with the requirements of ASME Section IX; Subsubparagraph 1. Three (3) test specimens shall be tested from each weldment location, i.e., base metal, weld metal, and heat affected zone and shall meet the following specified maximum test temperatures: a. 20 ft-lbs. at +20 degrees F. for buried transmission and distribution piping systems, b. 20 ft-lbs. at 0 degrees F for above ground transmission and distribution piping and c. 20 ft-lbs. at -20 degrees F for National Grid Gas Station piping systems"	Kiewit	Engineering	Chart	9/10/2020	9/11/2020	9/12/2020						OPEN	YES
0087	Use Of releasing agent on Concrete forms	After removal of formwork, portions of the concrete placed this Wednesday were observed to have porous surface areas. This surface issue is believed to be the result of Kiewit placing concrete without coating the job-built forms with a release agent (the job-built forms were observed to have concrete adhered to their face after removal).	Kiewit	Construction	Site	9/22/2020								OPEN	NO