



August 2, 2021

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 July 2021

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 July 2021 reporting period.

Pursuant to Section 388.113 of the Commission’s regulations, National Grid requests nonpublic treatment of the CEII documents contained in this submission so marked. The materials marked as “CUI//CEII” concern specific engineering and design information about the proposed liquefaction facilities that is customarily treated by the Commission as critical energy infrastructure information because it could be useful to a person planning an attack on critical infrastructure. The proposed Project once constructed will meet the definition of critical infrastructure in Section 388.113(c)(4) of the Commission’s regulations. National Grid requests that the marked CUI//CEII material maintain that designation for the duration of this proceeding or the life of the facility, whichever is later. A form of protective agreement was filed as Exhibit Z-1 to the certificate application and appears at Accession No. 20160401-5169.

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

Respectfully submitted,

/s/ Patrick A. Chaney

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

MONTHLY STATUS REPORT FOR JULY 2021

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 July 2021.

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 July 2021:

- Training in the Environmental Inspector (“EI”) duties occurred five (5) times this month
- Perimeter Air Quality Monitoring in accordance with the Rhode Island Department of Environmental Management Short Term Response Action Plan
- Continued with Pipe Installation: N/S Rack, E/W Rack, Compressor Building, E/W N2 sleeper rack, Pre-Treatment, Metering Skid.
- Began final fit-ups on Nitrogen Refrigeration (NR) system.
- Continued routing conduit and pulling cable, started terminations on NR system.
- Continued Earthwork, Concrete, Structural Steel, and Piping activities inside the Berm.
- Received and Set:
 - LN2 Storage Final Line Skid
- Set Chart Truck Loading Skid on foundation.

Work Planned for August 2021:

- Continue with Pipe Installation: N/S Rack, E/W Rack, Compressor Building, E/W N2 sleeper rack, Pre-Treatment, Metering Skid.
- Continue routing conduit, pulling cable, and terminations for the NR system.
- Complete Concrete and Structural Steel, and continue Piping activities of Area J – inside the berm.
- Begin grouting of NR system equipment and proceed with alignments.

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
07/01/2021	Silt sack in CB 3 requires cleaning. Remove sediments around CB.	Silt sack and area near CB cleaned.	07/06/2021	Effective, restored drainage of storm water.

07/01/2021	Silt sack in CB 1 requires replacement. Remove sediments around CB.	Silt sack replaced, area near CB cleaned.	07/06/2021	Effective, restored drainage of storm water.
07/01/2021	Roughen site entrance tracking and add stone in select areas.	Tracking pad roughened and stone added.	07/02/2021	Effective, restored tracking pad.
07/08/2021	Replace damaged section of filtrex soxx.	Filtrex soxx replaced.	07/08/2021	Effective, restored effectiveness of erosion control.
07/12/2021	Replace silt sack in dike catch basin and remove sediment in area.	Silt sack replaced; sediments removed.	07/13/2021	Effective, sediments removed, siltation control restored.
07/12/2021	Roughen entrance tracking pad.	Tracking pad roughened.	07/13/2021	Effective, restored tracking pad.
07/19/2021	Roughen entrance tracking pad.	Tracking pad roughened.	07/19/2021	Effective, restored tracking pad.
07/19/2021	Replace filtrex soxx at CB 15 and clean compost in area.	Filtrex soxx replaced and area cleaned.	07/19/2021	Effective, restored effectiveness of erosion control.
07/29/2021	Roughen entrance tracking pad.	Tracking pad roughened.	07/30/2021	Effective, restored tracking pad.
07/29/2021	Roughen entrance tracking pad near LNG tank.	Tracking pad roughened.	07/30/2021	Effective, restored tracking pad.
07/29/2021	Silt sack in CB 3 requires cleaning	Not Complete as of date of this report.	N/A	Will be tracked in August 2021 Status Report.

Releases				
Date	Material and Quantity Released	Cause	Description	Corrective Action Taken
07/06/2021	10 ounces hydraulic oil.	Leaking fitting.	Hydraulic oil leaked to asphalt surface.	Absorbent clay used to clean oil on asphalt surface.

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

See Attached Register and weekly reports

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 noted in the attachments

Special Inspector:

/s/ Charles Boisvert

Date:

July 31, 2021

SPECIAL INSPECTOR'S WEEKLY REPORTS

[SUBMITTED AS A SEPARATE FILE]

**CUI//CEII
CRITICAL ENERGY INFRASTRUCTURE INFORMATION
REMOVED PURSUANT TO 18 C.F.R. §388.113**

ATTACHMENT

NON-CONFORMANCE REGISTERS

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-001	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	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	07/31/19	9-30-2020	Vendor	Procurement
SR010-RPT-002	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	11/15/19	6/3/2020	Engineering	Engineering
SR010-RPT-003	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	07/31/19	09/27/19	Procurement	Vendor
SR010-RPT-004	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.	09/09/19	09/09/19	Contractor	Construction
SR010-RPT-005	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	08/27/19	09/27/19	Engineering	Engineering
SR010-RPT-006	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	10/21/19	10/21/19	Quality	Quality
SR010-RPT-007	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.	11/15/19	05/28/20	Procurement	Quality
SR010-RPT-008	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	09/27/19	09/27/19	Engineering	Engineering
SR010-RPT-009	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.	11/15/19	05/29/20	OSSQ	OSSQ
SR010-RPT-010	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	08/08/19	09/27/19	Procurement	Procurement

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-011	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.	01/15/20	01/15/20	Engineering	Engineering
SR010-RPT-012	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	05/21/20	05/28/20	OSSQ	Procurement
SR010-RPT-013 R2	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	04/13/20	05/28/20	Vendor	Vendor
SR010-RPT-014r1	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	09/27/19	11/15/19	Vendor	Vendor
SR010-RPT-015 R2	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.	04/13/20	6/22/2020	Vendor	Vendor
SR010-RPT-016	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.	05/28/20	11/13/20	Vendor	Procurement
SR010-RPT-017	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.	05/28/20	10-6-2020	Vendor	Procurement

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-018	Kiewit Site Specific Procurement Plan requires all contracts with risk level of 4 or 5 to conduct kick-off meetings upon execution of the contact.	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	09/27/19	11/15/19	Procurement	Procurement
SR010-RPT-019	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	11/15/19	06/04/20	Procurement	OSSQ
SR010-RPT-020	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.	11/15/19	11/15/19	Contractor	Construction
SR010-RPT-021	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	04/03/20	6/23/2020	Contractor	Construction
SR010-RPT-022	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	01/07/20	01/07/20	Contractor	Construction
SR010-RPT-023	On October 11, 2019 Kiewit and National Grid attended a shop inspection to witness hydro testing of the L9020-A/B N2 storage vessels located at Chart Ind. New Prague, MN. Upon arriving, the (2) vessels of interest were set up to conduct a cold-stretch test in accordance with ASME Section VIII Appendix 44. The subsequent Off-Site Vendor Surveillance report 191011 per OSSQ stated that Chart conducted a Cold Stretch Test in Lieu of a hydro and further referenced ASME Section VIII Div. 1 Appendix 44 as reference. A review of the 2017 version of Mandatory Appendix 44 states in 44-6.1 (f) ...the pressure test required by UG-99 or UG-100 shall be applied after all welding on the pressure retaining parts... Kiewit has not provided National Grid written proof that a hydro test was performed and documented on the vessels in question.	Kiewit to provide National Grid proof that a hydro test was conducted as required by ASME VIII Div.1 or have Chart perform a hydro as required. National Grid will be notified as required to attend the testing of the vessels in question.	11/15/19	7/8/2020	Vendor	OSSQ

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-024	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	05/20/20	5-21-2020	Contractor	OSSQ
SR010-RPT-025	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.	05/20/20	5/26/2020	OSSQ	OSSQ
SR010-RPT-026	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.	05/26/20	6/8/2020	Vendor	OSSQ
SR010-RPT-027	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.	05/26/20	6/8/2020	Vendor	OSSQ
SR010-RPT-028	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.	05/27/20	7/8/2020	Quality	Quality

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-029	Kiewit document 102761-B-QLT-PRO-0009 Project Quality Audit procedure states this procedure is to verify the overall effectiveness of the quality program along with proper implementation. It will also ensure work is conducted in accordance with customer's quality expectations including contract, code, jurisdiction requirements and Cheme Project Quality Management system. This procedure applies to all Cheme'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.	04/10/20	6/4/2020	Quality	Quality
SR010-RPT-030	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.	04/22/20	5/29/2020	Procurement	OSSQ
SR010-RPT-031	<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	04/20/20	5/29/2020	Engineering	Engineering
SR010-RPT-032	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.	04/02/20	7/8/2020	Contractor	Construction

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-033	Kiewit Plain and Reinforced Concrete procedure 102761-B-STR-SPC-0024 rev 1 Section 4.6.2.3 states Form removal shall be in accordance with ACI 301/ACI 301M and the following, which further states certain forms could be removed in (48) hours. ACI 301 Section 2.1.2.1.c requires a submittal of a method for determining concrete strength for formwork removal is in accordance with 2.3.4.2 when a method other than field-cured cylinders is proposed. ACI 347 section 3.7.3.1 states the engineer/architect should specify a minimum strength of the concrete to be attained before removal of forms or shores. Section 3.7.2.3 states because the minimum stripping time is a function of concrete strength, the preferred method of determining stripping time is using tests of job-cured cylinders or concrete in place. An alternative method has not been submitted for approval and forms have been removed before a compressive strength test has been completed and accepted.	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	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.	05/26/20	5/28/2020	Quality	Quality
SR010-RPT-035	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	05/26/20	7/17/2020	OSSQ	OSSQ
SR010-RPT-036	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.	05/29/20	5/29/2020	Project Management	Project Management

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-037	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).	04/10/20	5/29/2020	Engineering	Engineering
SR010-RPT-038	Section 2.25 Design and Engineering Work paragraph (f) of the contract states <u>As Built Drawings and Specifications</u> <i>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"</i> . 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.	04/03/20	6/3/2020	Engineering	Engineering
SR010-RPT-039	Section 3.3 Engineering Design listed under the Scope of Work states : <i>"Development of up-to-date equipment lists, Drawings, specification0s, 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	The contract requires Kiewit to develop within (45) days after Full Notice to Proceed (FNTP) a Project Procedure Manual and as the prime purpose of the PPM is to ensure consistent project processes and procedures. National Grid has requested that Kiewit develop a Site Specific Document Control procedure for over (8) months and as of this date the referenced procedure <i>102761-B-DMT-PRO-001 FPLP Document Control Procedure</i> has not fully addressed the Owner's comments as contractually required.	Kiewit shall immediately produce and implement the Client's comments in the referenced Document Control Procedure and submit as IFC to the project.	6/2/2020	6/2/2020	Project Management	Project Management
SR010-RPT-041	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.	04/01/20	7/8/2020	Project Management	Construction

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-042	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
SR010-RPT-043	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	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	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	8-13-2020	Procurement	OSSQ
SR010-RPT-046	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.	06/24/20	01/07/21	Procurement	Quality

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-047	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.	6/2/2020	8/18/2020	Contractor	Quality
SR010-RPT-048	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 outside vendor for the work performed.	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	10/15/2020	Contractor	Construction
SR010-RPT-049	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	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	7/15/2020	07/15/20	Vendor	OSSQ
SR010-RPT-051	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.	8/14/2020	8/14/2020	Vendor	OSSQ
SR10-RPT-052	Kiewit Specification 102761-B-MEC-SPC-0007 shows ASTM A182 fittings and flanges are allowed but Note (2) in the Fluid Limitation section states that material sourced from the Peoples Republic of China is not allowed for hazardous systems including but not limited to Fuel Gas, Feed Gas...etc. The Q-Sonic flow meter housing and various components show the material was manufactured in China as shown by the Material Test Reports.	Remove and replace the flow meter with a Q-sonic flow meter with non-Chinese materials per the project specifications.	01/07/21	01/07/21	Vendor	OSSQ

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-053	(1) APCI Line List shows line 2402 as a Nitrogen Service with a maximum design pressure of 1100 PSIG. (2) Kiewit's "Pressure Containing Material Sourced from The People's Republic of China Specification" 102761-B-MEC-SPC-007 under the notes section, states " Materials not specifically listed in this table are not allowed to be sourced from the People's Republic of China, unless specifically approved by the Contractor" (3) The Specification only allows P8-Stainless Steel Piping material under (500 psig) design pressure (higher pressures are not included for this material grade.)	Remove and replace the non-compliant material with non-Chinese material or a compliant project specific material which is acceptable	01/08/21	01/08/21	Vendor	OSSQ
SR010-RPT-054	Patterson Horth/Nucor drawings RXB010, RXB020, RXB030, RXB040 AND RXB050 show a vertical gusset weld detail with a (3/16") fillet weld 2-6" staggered on both sides of the gusset. The weld out did not meet this requirement which resulted in a weld-out of 2-12" on each side of the gusset. The attached pictures show the actual weld which is not compliant with the shop drawing weld detail.	Additional welds will be required to meet the shop detail of (3/16") fillet 2-6 staggered weld. Galvanizing is required to be completely removed to bare metal a minimum of 2-3" from the weld area and after acceptance of the final weld the welded area shall be coated with a cold galvanizing component.	10/8/20	10/21/20	Vendor	OSSQ
SR010-RPT-055	Section 4.9 Units and Scale Ratio's of the Contract Scope of Work states "Weights and measures shall be in the English system and all instruments such as pressure gauges, thermometers, etc., shall be graduated in English units as the primary scale" The ABB Transformer's oil temperature gauge is calibrated in Celsius units.	Replace the non-compliant temperature monitors with the proper scale as per the contract requirements.	10/20/2020	06/02/21	Vendor	OSSQ
SR010-RPT-056	The East West Pipe Rack Structural Steel Erection Sequence document 102761-B-STR-MEM-7101 Rev 1 states in the Exclusion and deviation for erection up to 34 ft TOS EL (bullet item #2) The valve access platform to the south of column line A between column lines 6 & 7 shall not be erected at this stage. This exclusion is based on completion of the 31' level and having the pipe craft install the piping prior to installation of the access platform.	A root cause analysis was performed and a Corrective Action Report detailing the plan to prevent recurrence has been developed. Please see CAR 003 for details of the cause and corrective actions to be implemented to prevent recurrence. The CAR will stay open until the corrective actions prove effective.	01/07/21	01/07/21	Contractor	Construction
SR010-RPT-057	Field construction attempted to install Column A-1 for the Compressor Building and were unable to complete the task because of rebar interference with the column key. The field construction commenced cutting the interfering rebar with a Sawzall before receiving authorization from Engineering to perform this task. See picture below. Changes made to design require Engineering written approval prior to performing work.	Engineering is to evaluate the cut rebar and determine if corrective action is required. Kiewit to perform a Root Cause Analysis to investigate the continuing action of performing work without written authorization and submit to National Grid for review and approval.	10/21/20	10/21/20	Contractor	Construction
SR010-RPT-058	Catch Basin CB107 was installed and found not to comply with project specifications resulting in the outlet opening being (1.8") higher than project requirements. This discrepancy changes the system invert elevation and has a potential impact on the overall storm water system operation. .	Kiewit's Civil engineer re-ran the Sewer and Sanitary Analysis (SSA) incorporating the change in CB-107 elevation. His analysis confirms that the change in invert elevation does not affect the sizes of underground pipes or storm water management. The calculation was reviewed and verified by National Grid Environmental. Re, RFI 000232	01/28/21	02/04/21	Contractor	Construction
SR010-RPT-059	Kiewit submitted a red-line drawings (see attached) that will change the original grounding grid design around the E/W Pipe rack. The drawing and changes have not been released by Kiewit Engineering and a RFI supporting the changes has not been submitted to National Grid for review and approval.	Kiewit Engineering shall review the proposed changes and submit a RFI to National Grid for review with proposed red-line drawing showing the necessary changes to be made.	06/03/21	06/03/21	Contractor	Construction

National Grid NON-CONFORMANCE REGISTER



Project #: 90000130901

Project Name: Field Point Liquefaction Project Providence, RI

NCR Ref:	NCR Description	Agreed NCR Corrective Action	Date of Agreed Disposition	Date of Closure	Probable Cause	Discipline
SR010-RPT-060	Prime Contract 4400005216 Scope of Work Section 4.12 Erection Procedure states "The Contractor shall submit copies of the erection procedure for all LNG Facility equipment and systems to the Owner's Representative for information prior to such erection being carried out on the Work Site." National Grid requested a N/S Pipe Rack Erection Sequence and was told Kiewit did not have a final copy for distribution at the time. A period of several days transpired without a submittal of the procedure and Kiewit continued to erect the N/S Pipe rack which is in violation of the Contract as noted above.	Voided	Voided	Voided	Contractor	Construction
SR010-RPT-061	Prime Contract 4400005216 Scope of Work Section 4.12 requires the Contractor to submit copies of the erection procedure for all LNG Facility equipment and systems to the owner's representative prior to such erection being carried out on the work site. Additional requirements are addressed in Section 3.21.2 which requires the Contractor to submit detailed method statements and risk assessments to be prepared and made available to the owner for review and comment at least one week in advance of the commencement of the related Work Site construction activities. Kiewit has placed several pieces of equipment on the project without submitting the required erection procedures.	Kiewit is to follow the Contract requirements as listed in Section 4.12 and Section 3.21.2 by providing detailed method stated and risk assessments to Nation Grid at least one week in advance of the construction activities. These method statements shall be required for erection of all LNG Facility Equipment and systems as noted in Section 4.12	01/11/21	01/11/21	Contractor	Construction
SR010-RPT-062	The Atlas Copco Equipment Preservation Plan for the Feed Gas Booster Compressor - L0309 requires in Section 5.3.2 that the equipment must be covered with a tarp or tent to shed to protect the equipment from the elements. There should be no standing water beneath the equipment and the tarp should not have direct contact with the equipment. The Booster Compressor was received on site and proper storage in accordance with the Compressor Preservation Plan was not in place upon receipt and has remained deficient as of this writing.	Follow the complete set of requirements for the storage of the Booster Compressor as noted in the Lay-Up Plan for the L-0309 Compressor. Hold a pre-activity meeting within a week of equipment arrival to cover requirements for the initial inspection, preservation and rigging/setting plan. Built Tent per section 5.3.2 of the ACC preservation requirements. Compressore was set on 10/7/2020; Covered with temp tarp on 10/8/2020; semi permanent scaffold and cover completed on 10/10/2020.	12/03/20	12/07/20	Contractor	Construction

NCR No.	Title	Description	Recommended Corrective Action	Type (Internal / Supplier / Client)	Action By	Vendor	Discipline	Disposition	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Date Submitted to Client for Closure	Date Closed	ACTIVE
0051	Cold Box Heat Exchanger Non-Compliance	Cold Box Heat Exchanger. See actual NCR for detailed description.	See Disposition & Required Actions	Kiewit	OSSQ	APCI	Mechanical	Rework	Re-fabricate	See NCR for details	6/30/2020	7/8/2020	7/22/2020	7/23/2020	1/7/2021	1/7/2021	CLOSED
0052	Shipment to NUCOR material with Open NCR	Shipment of Material with Open NCR	See Disposition & Required Actions	Kiewit	OSSQ	Patterson Horth	Quality	Rework	Structural Steel Rejected and sent off-site	see NCR for details	7/20/2020	N/A	7/22/2020	8/5/2020	8/5/2020	8/5/2020	CLOSED
0053 R2	Aether Skid Q-Sonic Ultrasonic Flowmeter - Material country of origin	Aether Skid Q-Sonic Ultrasonic Flowmeter has pressure retaining components that originate from The People's Republic of China (PRC). This violates Kiewit specification 102761-B-MEC-SPC-0007 (Pressure Containing Material Sourced from The People's Republic of China Specification). Chinese material is not permitted for hazardous systems per note 2 of appendix 2. The flowmeter system is for Feed gas and is therefore hazardous.	See Disposition & Required Actions	Kiewit	OSSQ	Aether	Quality	Remove and Replace	Remove and Replace	Kiewit shall amend specification to remove note (2) of appendix 2 and allow PRC sourced materials on a case-by-case. Basis with engineering approval.	7/28/2020	9/9/2020	1/7/2021	1/7/2021	11/16/2020	1/7/2021	CLOSED
0054 R4	ACC Booster Compressor - Missing Charpy & Incorrect NDE %	ACC performed Charpy Impact Testing on carbon steel welding procedure 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. ACC 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 1. Charpy V-Notch Toughness testing of the base metal and base metal heat affected zone in accordance with the requirements of ASME Section IX; Sub paragraph 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. ACC performed NDE on Booster Compressor Process Piping except for the lube oil system in accordance with the Kiewit Detailed Design Criteria, NFPA 59A and ASME B31.3. ACC performed NDE on the lube oil system per Kiewit Design Criteria and B31.3. BUT did not perform additional NDE on the lube oil system 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.	N/A	Kiewit	OSSQ	ACC	Quality	Use-As-Is	Rework to Acceptable Standard	See NCR for details	7/31/2020	12/15/2020	8/19/2020	1/7/2021	1/7/2021	1/7/2021	CLOSED
0055	GCAW Regeneration Gas Separator LDD-1011	Cold Box Aluminum WPSs will not be included in Final Doc Pack due to vendor placing proprietary stamp on them.	N/A	Kiewit	OSSQ	APCI	Mechanical	Use-As-Is	Vendor will allow review @ fabrication facility of the Aluminum WPSs by Kiewit and NG. After acceptable review submit a COC in lieu of actual WPS in the final package.	Communicate all client requirements down to all vendors and sub prior to fabrication	8/12/2020	1/6/2021	1/7/2021	1/7/2021	1/7/2021	1/7/2021	CLOSED
0056 R2	UOP 3 point inspection not completed per NGWP	UOP performed final visual weld inspection on all piping welds on the Pretreatment Skids in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. UOP did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar log form to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	UOP	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	8/19/2020	11/30/2020	8/25/2020	12/7/2020	12/9/2020	12/9/2020	CLOSED
0057	Chart Industries did not provide proper NDE on the Thermal Vaporizer	Chart Industries did not provide proper NDE on the Thermal Vaporizer	N/A	Kiewit	OSSQ	CHART	Quality	VOID	VOID	VOID	8/19/2020	VOID	VOID	VOID	VOID	VOID	VOID
0058 R1	APCI 3 point inspection not completed per NGWP	APCI performed final visual weld inspection on all piping welds on the Compressor Skid package and the N2 Compressor Skid package, in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. APCI did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar log form to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Use As Is	See NCR for details	8/19/2020	11/30/2020	8/25/2020	12/7/2020	12/9/2020	12/9/2020	CLOSED
0059	Cryo and Non Cryo Control Valves	Puffer Swiven has supplied control valves that have components originating from People's Republic of China (PRC). This violates Kiewit's specification 102761-B-MEC-SPC-0007 (Pressure Containing Material Sourced from the People's Republic of China Specification). Chinese material is not permitted for hazardous system per note 2 of appendix 2. Below are valve tags with PRC content	N/A	Kiewit	OSSQ	Various	Quality	Use-As-Is	Use As Is Based on Engineering approval	Kiewit shall amend specification to remove note (2) of appendix 2 and allow PRC sourced materials on a case-by-case. Basis with engineering approval.	9/8/2020	9/8/2020	4/5/2021	4/5/2021	4/5/2021	4/5/2021	CLOSED
0060	On Off Valves	Puffer Swiven has supplied On/Off valves that have components originating from People's Republic of China (PRC). This violates Kiewit's specification 102761-B-MEC-SPC-0007 (Pressure Containing Material Sourced from the People's Republic of China Specification). Chinese material is not permitted for hazardous system per note 2 of appendix 2.	N/A	Kiewit	OSSQ	Various	Quality	Use-As-Is	Use As Is Based on Engineering approval	Kiewit shall amend specification to remove note (2) of appendix 2 and allow PRC sourced materials on a case-by-case. Basis with engineering approval.	9/8/2020	9/8/2020	4/5/2021	4/5/2021	4/5/2021	4/5/2021	CLOSED
0061	Non Cryo Manual Valves	Surber Supply has supplied Non-Cryo valves that have components originating from People's Republic of China (PRC). This violates Kiewit's specification 102761-B-MEC-SPC-0007 (Pressure Containing Material Sourced from the People's Republic of China Specification). Chinese material is not permitted for hazardous system per note 2 of appendix 2.	N/A	Kiewit	OSSQ	Various	Quality	Use-As-Is	Use As Is Based on Engineering approval	Kiewit shall amend specification to remove note (2) of appendix 2 and allow PRC sourced materials on a case-by-case. Basis with engineering approval.	9/8/2020	9/8/2020	2/2/2021	2/2/2021	2/2/2021	2/2/2021	CLOSED
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.	Nucor confirmed calculations as fabricated.	Kiewit	OSSQ	Patterson Horth	Quality	Use-As-Is	Use As Is Based on Engineering approval	See NCR for details	9/9/2020	10/13/2020	11/6/2020	11/10/2020	11/6/2020	11/12/2020	CLOSED
0063-R1	ACC Booster Compressor 3 Point Inspection	ACC performed final visual weld inspection on all piping welds on the Booster Compressor in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. ACC did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar log form to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	ACC	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/10/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0064-R1	APCI N2 Compressor Skid 3 - Point Inspection	APCI performed final visual weld inspection on all piping welds on the N2 Compressor in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. APCI did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar log form to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0065-R1	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 Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. Aether did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar log form to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	Aether	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED

NCR No.	Title	Description	Recommended Corrective Action	Type (Internal / Supplier / Client)	Action By	Vendor	Discipline	Disposition	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Date Submitted to Client for Closure	Date Closed	ACTIVE
0066-R1	APCI ColdBox - 3 Point Inspection	APCI performed final visual weld inspection on all piping welds on the ColdBox in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. APCI did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar logform to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0067-R1	APCI Crossover Box - 3 Point Inspection	APCI performed final visual weld inspection on all piping welds on the Crossover Box in accordance with the Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. APCI did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar logform to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0068-R1	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 Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. Chart did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar logform to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	Chart	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0069-R1	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 Project specifications, ASME B31.3, the Contract, and the National Grid Weld Policy. Chart did not document weld joint fit-up and weld root inspection on all welds as described in the National Grid Weld Policy Section 5.3 Welder Qualification c. Responsibilities 2) The Welding Inspector shall be responsible for completion of a Weld Record Inspection Report Attachment B (No actual Attachment B in the contract, assuming to be Attachment 2 Weld Record and Inspection Report Gas Transmission (125 PSIG and greater). Use this report form or similar logform to document the weld inspections. The alternate form must meet the minimum record requirements of API 1104 section 9.	N/A	Kiewit	OSSQ	Chart	Quality	Use-As-Is	Verify Final Visual Inspection was performed in accordance with B31.3 and if acceptable Use As Is	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/9/2020	12/9/2020	CLOSED
0070-R1	Atlas Copco Comtec - Booster Compressor - Base Metal Charpy SS	Atlas Copco Comtec 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."	N/A	Kiewit	OSSQ	ACC	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/7/2021	12/4/2020	1/7/2021	CLOSED
0071-R1	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 project specifications, 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/7/2021	12/4/2020	1/7/2021	CLOSED
0072-R1	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 project specifications, 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/7/2021	12/4/2020	1/7/2021	CLOSED
0073-R1	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 project specifications, 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/7/2021	12/4/2020	1/7/2021	CLOSED
0074-R1	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 project specifications, 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	5/27/2021	12/4/2020	5/27/2021	CLOSED
0075-R1	UOP - Gas Pretreatment Package - Base Metal Charpy CS	UOP 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 project specifications, 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 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; Sub paragraph 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"	N/A	Kiewit	OSSQ	UOP	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/4/2020	12/9/2020	CLOSED
0076-R2	Chart - Final Line 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 Final Line Skid in accordance with the project specifications, 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."	N/A	Kiewit	OSSQ	Chart	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020				OPEN
0077-R1	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 project specifications, 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."	N/A	Kiewit	OSSQ	Chart	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	3/3/2021	12/4/2020	3/3/2021	CLOSED

NCR No.	Title	Description	Recommended Corrective Action	Type (Internal / Supplier / Client)	Action By	Vendor	Discipline	Disposition	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Date Submitted to Client for Closure	Date Closed	ACTIVE	
0078-R1	APCI - N2 Compressor Skid - NDE Requirements	APCI 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all NDE was performed in compliance with B31.3 and detailed engineering design and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/15/2021	1/15/2021	1/15/2021	CLOSED	
0079-R1	APCI - Comander - NDE Requirements	APCI 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."	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all NDE was performed in compliance with B31.3 and detailed engineering design and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/15/2021	1/15/2021	1/15/2021	CLOSED	
0080-R1	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."	N/A	Kiewit	OSSQ	UOP	Quality	Use-As-Is	Verify all NDE was performed in compliance with B31.3 and detailed engineering design and if acceptable Use As Is.		9/10/2020	9/11/2020	9/12/2020				OPEN	
0081-R1	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."	N/A	Kiewit	OSSQ	CHART	Quality	Use-As-Is	Verify all NDE was performed in compliance with B31.3 and detailed engineering design and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	1/7/2021	1/7/2021	11/7/2021	CLOSED	
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 to make room for the column's shear lug prior to receiving written RFI approval to do so.	N/A	Kiewit	Construction	N/A	Civil	Use-As-Is	As a result, the work has been stopped and an alternate RFI #236 has been written that has approved the trimming of steel column 1A's shear lug that allows it to fit properly within the shear key pocket above the partially cut horizontal reinforcement steel resolving the encountered conflict. In addition, the Engineer of Record has examined the partially cut horizontal reinforcement steel bar and has determined that it is of adequate strength to utilize in place as is.	See NCR for details	9/10/2020	9/11/2020	8/19/1010	9/18/2020	10/13/2020	10/13/2020	CLOSED	
0083-R1	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 project specifications, 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; Sub paragraph 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"	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/4/2020	12/9/2020	CLOSED	
0084-R1	APCI - Comander 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 Comander Skid in accordance with the project specifications, 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; Sub paragraph 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"	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/4/2020	12/9/2020	CLOSED	
0085-R1	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 project specifications, 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; Sub paragraph 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"	N/A	Kiewit	OSSQ	APCI	Quality	Use-As-Is	Verify all Procedure Qualification Records contain Charpy impact testing results in compliance with B31.3 and if acceptable Use As Is.	See NCR for details	9/10/2020	9/11/2020	9/12/2020	12/9/2020	12/4/2020	12/9/2020	CLOSED	
0086-R1	Chart - Nitrogen Final Line Skid - 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 Final Line Skid piping in accordance with the project specifications, 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; Sub paragraph 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"	N/A	Kiewit	OSSQ	Chart	Quality	VOID	VOID	VOID	VOID	9/10/2020	9/11/2020	9/12/2020	VOID	12/4/2020	12/9/2020	VOID
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).	N/A	Kiewit	Construction	N/A	Civil	Use-As-Is	Increase quality visual. Review specification with supervision	See NCR for details	9/22/2020	N/A	1/7/2021	1/7/2021	11/17/2020	1/7/2021	CLOSED	
0088	Duck bank conduit D0125 Off coordinates	Conduit D-0125 moved during concrete placement encroaching on the Termination Cabinet Steel Support base plate for the Feed Gas Booster Compressor.	N/A	Kiewit	Construction	N/A	Civil	Use-As-Is	RFI-000240 Generated. Field cut the 2 west anchor bolts and post install 2 - 3' anchor bolts 3" to the east from the original anchor location.	See NCR for details	10/1/2020	10/5/2020	10/6/2020	1/7/2021	10/6/2020	1/7/2021	CLOSED	
0089	Road Clash	Roadway section as shown on 102761-B-CIV-CD-3003 detail STA. 14+81.20 does not account for 4' 6" wide section of Rip Rap R-6 gradation as shown on 102761-B-STR-SF-5175 detail 8 (Thornton Tomasetti). This results in a 46" road width reduction unless modifications are made to 102761-B-STR-SF-5175 detail 8 to widen the roadway.	N/A	Kiewit	Engineering	N/A	Civil	Use-As-Is	Investigate potential to widen roadway with Thornton Tomasetti. See NCR for additional information and FERC submittals for this NCR.	N/A	10/1/2020	N/A	5/18/2021	5/18/2021	5/18/2021	5/18/2021	CLOSED	
0090	Compressor Building Anchor Bolt Off Coordinates	COLUMN B1 anchor bolts off location	N/A	Kiewit	Engineering	N/A	Civil	Use-As-Is	see disposition	See NCR for details	10/2/2020	12/11/2020	1/7/2021	1/7/2021	1/7/2021	1/7/2021	CLOSED	
0091	PSI CR Images quality for shop welds on spool fabrication	PSI CR images from spool fabrication were found to have excessive film artifacts per ASME Section V III-287 and T-281.	N/A	Kiewit	OSSQ	PSI	Quality	Re-shot all welds that have non-code compliant CR images.			12/17/2020						OPEN	
0092	Grout Breaks test results at 28 days are below Specification Requirements	Some Grout 28 day Break test results are below the 8000 psi requirement of 102761-B-STR-SPC-0022 Nonshrink Cementitious Grout. Section 2.0 Modifications to PIP STS03600, Item 3 "replace 5,000 psi with 8,000 psi."	N/A	Kiewit	Engineering	N/A	Civil	Use-As-Is	Revised the procedure and engineering to disposition any grout breaks that are below the 6500 per the revised procedure requirements thru specific NCRs.		1/5/2021	N/A	4/26/2021	4/26/2021	4/26/2021	4/26/2021	CLOSED	
0093	Incorrect SMAW filler used on CS welds	5 welds were completed using E7018 vs E7018-1 as required per WPS 1-1-BA-02128-C. Those welds were: F-NR-2008-01-FW-01 B-NR-2101-02-FW-01 F-FGT-1014-01-FW-01 F-FGT-1014-01-FW-04 M-NR-2010-01-FW-01	Filler metal purchasing will follow the procedure PKS-PRO-WELD-4.05. A second check for ANY filler purchased for the job is now in place. This required Project quality manager to sign off on filler metal purchasing. All 7018 filler was removed from the job site. Only 7018-1 is allowed going forward. Training was held with the welders, foreman, and FE/Supers to review this incident and review filler metal control program and everyone's part.	Kiewit	Quality	N/A	Quality	Remove and Replace	See NCR for details	See NCR for details	1/20/2021	N/A	2/11/2021	2/11/2021	2/11/2021	2/11/2021	CLOSED	
0094	ER70S-2 used in lieu of 80S-N1	2 welds were found to have ER70S-2 used for GTAW versus the 80S-N1 required per WPS 1-1-BA-01195-C. Welds affected by this are D-NR-2105-FW-01, D-NR-2010-03-FW-02.	N/A	Kiewit	Quality	N/A	Quality	Remove and Replace	See NCR for details	See NCR for details	1/26/2021	N/A	2/11/2021	2/11/2021	2/11/2021	2/11/2021	CLOSED	
0095	Incorrect GTAW filler was found in tube issued to the welder and in the filler metal control room	During a routine inspection of subject field weld and associated filler metal, the Quality Control Inspector discovered that the rod caddy contained two different classifications of filler metal (ER70S-2 and ER80S-N1). It was assumed that both types of filler metals were included in the weld.	Close down the filler metal control room, audit each filler metal issue slip and rod caddy, and perform a cause analysis to determine why two types of filler metals were issued in the same rod caddy.	Kiewit	Quality	N/A	Quality	Use-As-Is	Cut out and replace the welds with correct filler material per the approved WPS. Remove all GTAW rod caddies from the field and reissue all new GTAW filler material per the approved WPS.		1/26/2021	N/A	4/26/2021	4/26/2021	4/26/2021	5/5/2021	CLOSED	

NCR No.	Title	Description	Recommended Corrective Action	Type (Internal / Supplier / Client)	Action By	Vendor	Discipline	Disposition	Disposition & Required Actions	Recommended Preventative Actions	Date Issued	ENG Signature Date	Date Disposition Submitted to Client	Date Disposition Approved By Client	Date Submitted to Client for Closure	Date Closed	ACTIVE
0096	Cold Box crossover box	EMT & Flexible Conduit may only be used within areas as specified in Spec 102761-B-ELE-SPC-0021 Par 3.2.2a, 3.3.4 & 3.35 & NFPA ART 356.6, 358.12 (4), ART 501.10 (A) (1) & (B) (1)	EMT & Flexible Conduit must be replaced with RGS conduit & Flexible Conduit per above specifications & NFPA Articles	Kiewit	Construction	N/A	Electrical	Remove and Replace			2/11/2021						OPEN
0097	Chromatograph Gas Analyzer Panel components not Class 1 Div 2 and not under purge	The area location of the Cort Pri and inside the panel is Class 1 Div. 2. The Phoenix relays and the fuse holders must meet area classification. No conduit seals or purge on this panel. Labels on the Norseman heater just inside the door of the analyzer shelter reads that it meets CL 1 Div. 2 but it also reads that it requires a conduit seal.	Need to install conduit seals and have a purge on this panel to meet Class 1 Div 2 requirements.	Kiewit	Construction	N/A	Electrical	Remove and Replace			2/11/2021						OPEN
0098	Grout Breaks test results at 28 days are below Specification Requirements	The compressive strength samples for the Compressor Building column base plates at gridlines 1 @ A to C, 4 @ C and 5 @ A-C are below the 6500 psi requirement of 102761-B-STR-SPC-0022 Nonshrink Cementitious Grout, Section 2.0 Modifications to PIP STS03600 and RFI # 344 changing the 28day grout strength requirements from 8000 psi to 6500 psi.	N/A	Kiewit	Engineering	N/A	Civil	Use-As-Is	The achieved grout compressive strength at 28 days of 6,008 is acceptable as it meets the design requirements. The base plate/anchors rods design for all columns of Compressor Building was based on the concrete compressive strength at 28 days which is 5,000. Therefore, the grout strength of 6,008 psi is greater than 5,000psi on the design.	N/A	3/3/2021	4/30/2021	5/7/2021	5/7/2021	5/7/2021	5/7/2021	CLOSED
0099	Grout Breaks test results at 28 days are below Specification Requirements	The compressive strength samples for the Keyway at the south LNG diversion trench are below the 6500 psi requirement of RFI #283 and RFI # 344 changing the 28day grout strength requirements from 8000 psi to 6500 psi	N/A	Kiewit	Engineering	N/A	Quality	Use-As-Is	The achieved grout compressive strength at 28 days of 5,814 psi is acceptable as it meets the design requirements. All the keyways design for south LNG diversion trench was based on the concrete compressive strength at 28 days which is 5,000 psi. Therefore, the grout strength of 5,814 psi used on the design.	N/A	3/3/2021	4/30/2021	5/7/2021	5/7/2021	5/7/2021	5/7/2021	CLOSED
0100	Grout Breaks test results at 28 days are below Specification Requirements	The compressive strength samples for the cable tray support base plates at the PDC building are below the 6500 psi requirement of 102761-B-STR-SPC-0022 Nonshrink Cementitious Grout, Section 2.0 Modifications to PIP STS03600 and RFI # 344 changing the 28day grout strength requirements from 8000 psi to 6500 psi.	N/A	Kiewit	Engineering	N/A	Civil	Use-As-Is	The achieved grout compressive strength at 28 days of 5,820 psi is acceptable as it meets the design requirements. All the base plates/anchors rods design for cable trays supports at the PDC Building was based on the concrete compressive strength at 28 days which is 5,000 psi. Therefore, the grout strength of 5,820 psi used on the design.	N/A	3/3/2021	4/30/2021	5/7/2021	5/7/2021	5/7/2021	5/7/2021	CLOSED
0101	Chart N2 Vessel A/B WPS/PQRs not submitted to NG for review and approval.	Chart did not submit all of the WPS/PQRs for the fabrication of the Nitrogen storage tanks A/B to Kiewit for subsequent submittal and review by NG.	N/A	Kiewit	Engineering	Chart	Mechanical	Use-As-Is	Chart did not submit all of the WPS/PQRs for the fabrication of the Nitrogen storage tanks A/B to Kiewit for subsequent submittal and review by NG.		6/11/2021						OPEN