June 2, 2023

Mr. Robert Burrough
Director, Eastern Region
Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628

RE: CPF 1-2023-032-NOA – NOTICE OF AMENDMENT – TC ENERGY RESPONSE

Mr. Burrough,

On May 4, 2023, TC Energy, on behalf of its subsidiary, Columbia Gas Transmission, LLC (TCO) received CPF 1-2023-032-NOA – Notice of Amendment (Notice) from the Pipeline and Hazardous Material Safety Administration Eastern Region for apparent inadequacies found within TC Energy plans or procedures. TC Energy has reviewed the Notice and does not contest the finding. Accordingly, TC Energy provides the following response for the item listed in the Notice in addition to amendments to specific procedures.

To ensure TC Energy procedures address PHMSA's concerns directly and present the specific process for attaining and/or establishing material records the affected procedures and sections, noted below, are amended with proposed changes to the most current published versions. The amended edits ensure appropriate referencing to the process for attaining material properties in the ***TC Energy Gas O&M Manual*** & ***TEN-IN-SPOP-G Pipeline Population Sampling (US)***.

*The TEN-**IN-MAOP-G MAOP Confirmation Standard (US) (Rev. 02)** has been amended not yet published as defined,*

- Section 3.1.5 – Added reference to both O&M procedure 192.607 (opportunistically) and O&M 192.624 (where applicable), when its determined records supporting MAOP cannot be located.
- Section 3.5.1 – Added specific reference to O&M procedure 192.607 when evaluating maximum safe pressure.
- Section 5.2.4 - Added reference to O&M procedure 192.607 Material Verification when records documenting material properties are not available.
- Section 5.3.4 – Added reference to O&M procedure 192.607 Material Verification for opportunistic material verification when records are not available.
- Section 5.4.2 - Reference to TEN-IN-SPOP-G and MAOP Reconfirmation procedures when MAOP is insufficiently documented.
- Section 6.1.1 - Added reference to O&M procedure 192.607 Material Verification to determine applicability and remediation for segments needing further verification.

***The TEP-IN-MAOP-G MAOP Verification Procedure (US) (Rev. 05)** has been amended not yet published* as defined,

- Section 4 – Design Pressure Verification; References TEN-IN-SPOP-G for opportunistic material verification when materials records are non-TVC.
- Section 4.3.2 - Reference TEN-IN-SPOP-G for both NS (material properties *Not Supported*) and PS (material properties Partially *Supported*) segments fir opportunistic material verification.
- Section 7 – Max Safe Pressure; Added reference O&M Procedure 192.607 Material Verification when evaluating maximum safe pressure.

***The Maximum Allowable Operating Pressure Reconfirmation (US)* (Rev.02)** has been amended *not yet published* as defined,

- Section 8.2(iii)(D) – included reference to SPOP when Method 2 pressure reduction is selected for MAOP reconfirmation
- Section 8.7 - *MAOP Reconfirmation Decision Guidance Step 1;* included a SPOP reference when only missing material properties records additional verification may be developed in accordance with SPOP for opportunistic gathering of records.
- Section 8.7 - *MAOP Reconfirmation Decision Guidance Step 10;* included reference to O&M 192.607 where it is identified TVC records are missing.

***The TEP-IN-MV-G Material Verification Procedure (US) (Rev.02)** has been amended not yet published as defined,*

- Section 3.7 Material Verification Results – 3.7.1 includes reference ensuring material verification results are documented and communicated in accordance with SPOP.
- Section 3.7.2 – ensures that if sampled material properties are found to be inconsistent with expected population that next steps are determined by SPOP, process for identifying material verification opportunities.

To clarify, TC Energy identifies material verification opportunities by continuously reviewing planned pipeline projects against non-TVC segments and developing projects where geospatial overlaps occur, in accordance with ***TEP-IN-SPOP-G Pipeline Population Sampling (US)***, Sections 5.1 and 5.2, which states:

> *"5.1.1 Mega Rule Team must identify Population sampling opportunities by continuously reviewing planned Pipeline projects against Actionable and Applicable Segments and determining where geospatial overlaps occur."*
>
> *"5.2.1 Where material verification opportunities are identified for Actionable Segments, the Mega Rule Team must create a project in Master Plan, linked to the parent project."*
>
> *"5.2.2 Where material verification opportunities are identified for Applicable Segments, the Mega Rule Team may create a project in Master Plan, linked to the parent project."*

TC Energy has implemented a material verification process for opportunistic gathering of material data within pipeline segments that may not be identified as requiring 192.624 MAOP reconfirmation but have been identified as segments that may not have TVC material records. This is performed through the designation of Actionable & Applicable segment as is expand further below.

Actionable Segments are defined in the Glossary and Section 3.2 of ***TEP-IN-SPOP-G*** as follows:

> **Glossary:** *"Segment that meets the applicability criteria established for inclusion within a defined Sample Population (missing TVC Material Properties to support MAOP) and that meets the regulatory threshold for opportunistic materials verification required in compliance with 49 CFR 192.607. Segments must have Material Properties verified through opportunistic or planned work activities (e.g., HCA Crack Assessments, Expanded Assessments, MAOP Reconfirmation)."*
>
> 3.1.2 Actionable Segments are segments that are:
>
> - "applicable under O&M procedure 192.624, lacking TVC Material Records, and identified for remediation using:
> - hydrotest (method 1)
> - pressure reduction (method 2)
> - Engineering Critical Assessments in accordance with O&M procedure 192.632
> - Applicable under O&M procedure 192.712, lacking TVC Material Records, and requiring anomaly assessment referenced in O&M sections 192.714, 192.933 or 192.917"

Applicable Segments are defined in the Glossary and Section 3.1 of TEP-IN-SPOP-G as follows:

> ***Glossary:*** *"Segment missing TVC Material Properties to support MAOP that has no regulatory requirement to opportunistically gather Material Properties in compliance with 49 CFR 192.607. Applicable Segments are missing TVC Material Properties but may not meet any 49 CFR 192.607 regulatory obligation to collect those properties"*
>
> *3.1.2 Applicable segments are "segments that do not meet the criteria for actionability but lack TVC Material Records"*

Material verification is conducted during the execution of the parent project, in accordance with ***TEP-IN-SPOP-G Pipeline Population Sampling (US)***, Sections 5.2.5, which states:

> "5.2.5 Project Management must ensure required sampling is conducted as follows:
>
> - for NDE, during the execution of the parent project
> - for destructive testing, within 60-days after the Sample is received by lab"

Upon the completion of the opportunistic material verification, TC Energy documents the results in T-FORMs which will serve as the material record for the population, in accordance with ***TEP-IN-SPOP-G Pipeline Population Sampling (US)***, Section 11.1:

> "***11.1.1*** *Records established for the Pipeline attributes and properties, or pipe components are stored electronically in the T-FORMS system or Master Material Database and must be maintained for the life of the Pipeline."*

Attached as part of this response TC Energy is providing the published ***TEP-IN-SPOP-G Pipeline Population Sampling (US)***.

Within TC Energy O&M Manual Procedure; ***192.607 Verification of Pipeline Material Properties and Attributes: Onshore Steel Transmission Pipelines*** when a segment is identified with insufficient material property records it is noted that sampling and material verification opportunities are completed in accordance with the ***TEP-IN-SPOP-G Pipeline Population Sampling Procedure.***

> *"Requirements for Sampling Multiple Segments*
> 1. *To verify material properties and attributes for a population of multiple, comparable segments of pipe without traceable, verifiable, and complete records, the sampling is conducted in accordance with* ***TEP-IN-SPOP-G Pipeline Population Sampling Procedure****."*

By taking these actions, TC Energy contends that the requirements of the Notice have been satisfied. Should you wish to discuss further, please contact me at 701-290-1176.

Respectfully,

Daniel C Cerkoney

Daniel C. Cerkoney
Senior Manager, Regulatory Compliance