

Exhibit C

Accufacts Inc. Report

INTERVENORS' ADDITIONAL COMMENTS ON FERC'S MARCH 2018
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE NORTHEAST SUPPLY ENHANCEMENT PROJECT
FERC DOCKET #CP17-101-000

SUBMITTED ON BEHALF OF:

NY/NJ Baykeeper,
Food & Water Watch,
Central Jersey Safe Energy Coalition, and
Princeton Manor Homeowners Association

BY:

Aaron Kleinbaum, Esq.
Raghu Murthy, Esq.
Eastern Environmental Law Center
50 Park Place, Suite 1025
Newark, NJ 07102

Accufacts Inc.

“Clear Knowledge in the Over Information Age”

8151 164th Ave NE
Redmond, WA 98052
Ph (425) 802-1200
Fax (805) 980-4204
kuprewicz@comcast.net

Date: May 9 2018

**To: Eastern Environmental Law Center
50 Park Pl., Suite 1025
Newark, NJ 07102
akleinbaum@easternenvironmental.org**

**Re: Accufacts Review of Transco’s Northeast Supply Enhancement (NESE) Project,
FERC Docket No. CP17-101-000**

Accufacts Inc. (“Accufacts”) was asked by the Eastern Environmental Law Center (“EELC”) to review various documents associated with the Transcontinental Gas Pipe Line Company, LLC (Transco) NESE Project (“Project”) Filing to FERC, Docket No. CP17-101-000. EELC is representing NY/NJ Baykeeper, Food & Water Watch, Princeton Manor Homeowner Association and the Central Jersey Safe Energy Coalition. I was specifically asked to review several documents submitted to FERC, including Transco’s Resource Report 11 on Reliability & Safety, and FERC’s Draft Environmental Impact Statement, or DEIS, dated March 2018 for the Project. EELC has asked me to identify any safety-related information that is missing or inadequate and any Project risks based on my extensive experience in pipeline infrastructure safety matters spanning over 40 years, and numerous pipeline failure investigations. Accufacts has five major observations concerning FERC’s failure to identify pipeline safety gaps in the Project. Consequently, my opinion is that the DEIS nor other related document filings to FERC do not prudently nor adequately demonstrate a safe Project.

A Quick Perspective on the Project

Transco claims the Project is needed to provide an incremental 400,000 dekatherms per day (Dth/d), or approximately 400 MMSCF/D, of added capacity to their existing interstate gas transmission system to provide additional gas to two entities of National Grid in New York. Transco claims this system capacity increase would be accomplished mainly by adding approximately 37 miles of new pipe looping (i.e. paralleling) to Transco’s existing gas transmission pipelines at various locations indicated below, while adding an approximately 22,000 hp electric driven compressor at the existing Compressor Station 200 in East Whiteland Township, Chester County, Pennsylvania, and an additional 32,000 hp at the proposed new gas fired turbine driven Compressor Station 206 to be located in Franklin Township, Somerset County, New Jersey. Compressor Station 206 would be located

approximately ten miles downstream from an existing Compressor Station 205 that has recently undergone significant horsepower additions).^{1, 2} The Project is claimed to also provide another major pipeline source of supply to New York’s National Grid system.

Summary of Project Pipeline Facilities³

Facility Looped pipe	Pipe Size (inch)	Onshore/Offshore	State	County	Length (miles)
Quarryville	42	Onshore	PA	Lancaster	10.17
Madison	26	Onshore	NJ	Middlesex	3.43
Raritan Bay	26	Onshore	NJ	Middlesex	0.16
Raritan Bay	26	Offshore	NJ	Middlesex	1.86
Raritan Bay	26	Offshore	NJ	Monmouth	4.09
Raritan Bay	26	Offshore	NY	Queens	6.44
Raritan Bay	26	Offshore	NY	Richmond	10.94
				Total	37.09

Given the above simple summary, I have five major findings concerning the Project:

1. The DEIS does not supply sufficient information to determine the suitability of the Project or the adequacy of alternatives presented.

Given the information provided in the DEIS, both for the Project’s stated objective and the various alternatives/options presented, including the proposed new Compressor Station 206 location as discussed in the next section, it is impossible to determine if the Project’s claims are bona fide, the DEIS alternatives and conclusions are rational, or whether there will be a significant impact to safety. **Additional information not provided in the DEIS is needed to independently validate that DEIS findings and assertions are reasonable.** Transco provided detailed information in various exhibits to FERC (i.e., Exhibit Gs), but these important applicant “system process parameters” exhibits are kept from public view by claims of “sensitivity,” such as national security and/or business trade secret protection claims, etc.⁴

¹ Project DEIS for FERC Docket No. CP17-101-000, “Figure 3.2.2-2 Northeast Supply Enhancement Project Compression and Looping Alternative, March 2018, p. 3-11.

² FERC Dockets Nos. CP13-551-000 and CP15-89-000.

³ From Project DEIS, “Table 11.1-1,” p 11-2, March 2018.

⁴ See Project DEIS, p 4-317.

There is a process, however, where Transco must provide such critical information to allow a truly independent analysis of the company's claims/assertions as well as to verify the reasonableness/thoroughness of FERC's analysis and various alternatives/conclusions in the DEIS, which to date have not been sufficiently demonstrated in the DEIS. Under FERC CEII protections and associated policy regulations, such important information is made available to individuals or groups meeting conditional requirements to permit such an independent analysis.⁵ These important details are prevented, via nondisclosure agreements (or NDAs), from public dissemination, though the general conclusions as to the soundness/completeness of the DEIS can be made public. At the request of EELC, Accufacts Inc. has applied through the FERC CEII process for Transco to supply certain detailed information to allow for such an independent analysis and verification of assumptions, assertions, and related conclusions. FERC has accepted my request and relayed my request to Transco. Delay on Transco's part in supplying such details must result in FERC extending the comment period, delaying the Project's DEIS approval, and/or denying the DEIS and Certificate. There is no justification for such important information not to be provided under a CEII obligation. My CEII application for this Project, listed the minimum details that I would expect to be provided to permit a proper and timely independent analysis of assumptions, claims, and conclusions to assure the Project's DEIS is rational and complete.

2. The need for the new Compressor Station 206 and its proposed location has not been adequately demonstrated.

The Project's DEIS indicates that the proposed new Compressor Station 206 will be located approximately 10 miles downstream from Compressor Station 205 that recently underwent major modifications and significant horsepower additions under Transco's Leidy Southeast Expansion and Transco's Garden State Expansion Projects.⁶ New compressor station siting so close to an existing compressor station raises serious questions about the hydraulic modeling or assumptions used for the Project. The Project's DEIS concluded, "Hydraulic modeling determined that the compressor station must be located near Transco's existing Mainline system between milepost 1780.0 in Mercer County, New Jersey and milepost 1790.8 in Middlesex County, New Jersey."⁷ Further independent analysis derived from more detailed CEII information as discussed previously is warranted to verify such a critical finding or assumption is supported.

⁵ CEII stands for Critical Energy Infrastructure Information, and the CEII process within FERC requires that certain detailed information declared sensitive be protected under NDAs, from public disclosure while providing an avenue for independent review and analysis.

⁶ FERC Docket No. CP13-551-000 and FERC Docket No. CP15-89-000, respectively.

⁷ Project DEIS statement, p. ES-10.

3. Extra precautions in excess of minimum federal pipeline safety regulations identified in the DEIS are only specific to the approximately 37 miles of new pipeline identified for the Project, not the many hundreds of miles of existing older pipelines that are impacted.

The additional requirements identified in the Project DEIS to i.e.: 1) radiologically inspect all girth welds, 2) provide the capability for inline inspection tools to be run, 3) design/install to higher area classification, 4) add a few remotely operated new valves and shorter valve spacing, and 5) to hydrotest to higher pressures, appear to apply to only the approximately 37 miles of new pipeline provided by the Project. As discussed later, the greater risk added by the Project relates to the possibility of pipeline rupture associated with the existing pipeline, especially those in proximity to the proposed modified and new Compressor Stations 200 and 206, as these pipes will see greater operating pressure and pressure cycling that can have an impact on possible crack threats that may exist on these older vintage pipelines.

4. Transco fails to meet the additional pipeline safety requirements mandated by New Jersey pipeline safety regulations for intrastate gas transmission pipelines.

Following the tragic gas transmission pipeline rupture in Edison New Jersey on March 23, 1994 of a Texas Eastern Transmission Corporation (TETCO) 36-inch diameter natural gas transmission pipeline, the state of New Jersey promulgated additional pipeline safety regulations.^{8, 9} These additional safety requirements include, among many additional obligations, installing gas transmission pipeline to class location 4 design requirements involving thicker pipe, special precautions in pipeline construction/laydown to assure the integrity of the pipeline, and mandating valve assessment and emergency closure drill plans along such pipelines. Unfortunately, the many additional NJ state pipeline safety regulations concerning such prudent additional safety approaches are preempted by federal minimum safety regulations. Federal pipeline safety establishes lower minimum pipeline safety standards for interstate pipeline, such as that for the proposed Transco Project, though there is nothing preventing the pipeline operator from exceeding these federal regulatory minimums in this Project.

⁸ National Transportation Safety Board (NTSB) addendum, “Proposed Revisions to Pages 21, 40, and 74 of Pipeline Accident Report – Texas Eastern Transmission Corporation Natural Gas Explosion and Fire Edison, New Jersey. March 23, 1994, revisions adopted May 18, 2001 from previous NTSB report adopted 1/18/1995 (NTSB/PAR-95-01).

⁹ The TETCO rupture was caused by third party damage at an industrial site that caused a gouge and subsequent crack that ruptured the gas transmission pipeline some years after an inline inspection tool run failed to properly ascertain damage to the pipeline.

5. The integrity of the existing older pipelines is unknown or undefined resulting in potential increased cracking failure risks from the Project.

Federal pipeline safety regulations permit several methods to establish a transmission pipeline's Maximum Allowable Operating Pressure, or MAOP, a condition at which a pipeline may be operated. There is no time limit for MAOP determination, so a pipeline can be operated at MAOP, even if this parameter was determined many decades previously, such as is apparent for Transco's existing pipelines.

To further complicate this issue, MAOP can be established without the use of important hydrotests via "grandfathering" federal pipeline safety regulations that exempt older pipelines from such an important proof verification strength test.¹⁰ Lack of hydrotesting, in combination with deficient and ineffective integrity management approaches by the pipeline operator PG&E, were major factors contributing to the San Bruno gas transmission pipeline crack rupture and tragedy of September 9, 2010.^{11, 12}

The Project DEIS states that FERC does not have pipeline safety jurisdiction for the Project, and the agency that has such safety responsibility, the Pipeline and Hazardous Material Safety Administration, or PHMSA, does not have jurisdiction until the Project goes operational. Such DEIS statements do not absolve the pipeline operator from its pipeline safety responsibilities that may be at risk from the Project. Since the compressor station additions will increase the operating pressure, and associated pressure cycling that can destabilize and/or accelerate cracks, of associated pipeline segments (such as pipeline at-risk from vintage electric resistance welded ("ERW") or stress corrosion cracking ("SCC")), **FERC must require** Transco to clearly supply for the pipeline segments impacted by the compressor station modifications, in addition to the CEII information I have requested:¹³

¹⁰ 49CFR§192.619(c).

¹¹ NTSB, "Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire San Bruno, California September 9, 2010 – Accident Report," NTSB/PAR-11/01, adopted August 30, 2011.

¹² Assertions by some in Pacific Gas and Electric ("PG&E") and within the pipeline industry to attempt to deflect the cause of the San Bruno failure to third party activities by the City of San Bruno necessitated that the NTSB address this misinformation in their investigation report on the San Bruno rupture. A close examination of the above NTSB Accident Report will demonstrate that the rupture was caused by pressure cycling induced crack growth on a section of pipeline (pup) of non-specification pipeline grade whose hydrotest records could not be produced, even though California required hydrotesting well before promulgation of federal pipeline safety regulations.

¹³ There is another family of crack risk associated with girth welding, but this risk can be lessened in locations where soil conditions are stable so as to not place abnormal loading on girth welds or their associated heat affect zones in the mainline pipe.

- a. Identify by pipeline name (Line A, B, etc.) and approximate milepost, the year the MAOP was established for the pipelines, and their method of determination (e.g., hydrotest and associated hydrotest pressure, or if not hydrotested, the method/date of grandfathering).
- b. Identify which sections, if any, are at crack risks, and the type of crack threat (vintage LF-ERW, SCC. etc.).
- c. Describe how Transco is establishing the suitability of the existing pipelines to avoid rupture failure from the identified crack threats.

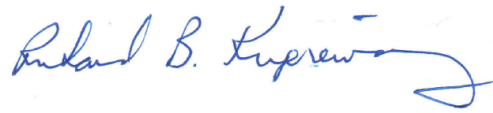
This is especially important as recent PHMSA research has demonstrated that certain types of crack threats such as vintage ERW cannot be reliably assessed with inline inspection (“ILI”) tools and associated engineering critical assessments that may be utilized to try and estimate time to rupture failure.¹⁴

Conclusion

Given the five major gaps in safety related information, I conclude that the DEIS is incomplete and significant impacts to public safety are likely. Transco, the Project’s applicant, can address the major safety-related gaps identified above by timely and clearly providing the requested information to me under a CEII NDA. Accufacts understands that much of this information could be CEII sensitive but, nevertheless, a truly independent analysis of the DEIS, and additional integrity threat risks are needed to assure that the pipeline operator is well ahead of possible threats that could result in a gas transmission pipeline rupture.

The above information needs to be provided to assure a proper and independent verification of the Project’s risks and the adequacy of the applicant’s integrity management approach. It is within the capacity of many gas transmission pipeline operators to clearly demonstrate where they exceed minimum federal pipeline safety regulations, especially in the area of integrity management. Some pipeline operators understand this point and clearly demonstrate pipeline integrity prudence while, unfortunately, some pipeline operators don’t understand the intent of such important regulations. I can complete an independent analysis quickly after receiving the information identified above.

¹⁴ Principal Investigators: B. N. Leis and B. A. Young, Battelle, J. F. Kiefner and J. B. Nestleroth, Kieffner and Associates, J. A. Beavers, G. T. Quickel, and C. S. Brossia, Det Norske Veritas, on PHMSA funded, “Final Report – Task 4.5, Final Summary Report and Recommendations for the Comprehensive Study to Understand Longitudinal ERW Seam Failures – Phase One, Contract N. DTPH56-11-T-000003, October 23, 2013. Accufacts Inc.

A handwritten signature in blue ink that reads "Richard B. Kuprewicz". The signature is fluid and cursive, with a long, sweeping tail that loops back under the name.

Richard B. Kuprewicz,
President,
Accufacts Inc.