U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

Special Permit Analysis and Findings

Class 1 to 3 Location

Special Permit Information:

Docket Number: PHMSA-2021-0052

Requested By: Sabal Trail Transmission, LLC

Operator ID#: 39167

Original Date Requested: August 5, 2021

Original Issuance Date: September 19, 2023

Code Section(s): 49 CFR 192.611

Purpose:

The Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), 1 provides this information to describe the facts of the subject special permit application submitted by Sabal Trail Transmission (STT), 2 to discuss any relevant public comments received with respect to the application, to present the engineering, and safety analysis of the special permit application, and to make findings regarding whether the requested special permit should be granted and, if so, under what conditions. STT requested that PHMSA waive compliance from the 49 Code of Federal Regulations (CFR) 192.611 for a natural gas transmission pipeline segment, where the class location has changed from a Class 1 to a Class 3 location.

¹ Throughout this special permit the usage of "PHMSA" or "PHMSA OPS" means the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

STT is a joint venture comprised of Spectra Energy Partners, LP (Enbridge), NextEra Energy, Inc., and Duke Energy, and is operated by Enbridge Inc. STT operates under operator identification (OPID) number 39617 issued by PHMSA

Pipeline System Affected:

This special permit application applies to the STT request for a waiver of the Class location change requirements in 49 CFR 192.611 for 53,486 feet (approximately 10.13 miles) of the 36-inch diameter Line 1 Pipeline in Sumter County, Florida (*special permit segment*). This special permit, if granted, would allow STT to operate the Line 1 pipeline *special permit segment* at a reduced maximum allowable operating pressure (MAOP) from 1,456 pounds per square inch gauge (psig) to 1,355 psig.

Special Permit Request:

On March 26, 2021, STT applied to PHMSA for a special permit seeking relief from 49 CFR 192.611 for the below-listed *special permit segment*, where class location changes have occurred from the original Class 1 locations to Class 3 locations in Sumter County, Florida.

Special Permit Segment:

This special permit applies to the *special permit segment* in **Table 1 – Special Permit Segment** and are identified using the STT survey station (SS) references.

Table 1 – Special Permit Segment									
Special Permit Segment Number	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station (SS)	End Survey Station (SS)	County or Parish, State	No. Dwellings	Year Installed	Seam Type
1	36	Line 1	53,486	22251+50 (MP 421.43)	22786+36 (MP 431.56)	Sumter, FL	680+	2017	HSAW, SAWL

Note: HSAW is helical arc welded seam type.

SAWL is longitudinal submerged arc welded seam type.

Special Permit Inspection Area:

The *special permit inspection area* is defined as the area that extends 220 yards on each side of the centerline as listed in **Table 2 – Special Permit Inspection Area**.

Table 2 – Special Permit Inspection Area								
Special Permit Inspection Area Number	Special Permit Segment(s) Included	Outside Diameter (inches)	Line Name	Start Survey Station (SS)	End Survey Station (SS)	Length ³ (miles)		
1	1	36	Line 1	15797+96 (MP 299.14)	25468+07 (MP 482.37)	183.23		

The special permit inspection area is in Marion and Sumter Counties, Florida.⁴

Public Notice:

On August 26, 2021, PHMSA posted a notice of this special permit request in the Federal Register (86 FR 47734) with a closing date of September 27, 2021. PHMSA received one (1) comment from the Pipeline Safety Trust as a result of this notice.

The Pipeline Safety Trust (PST) noted that the location of the STT Line 1 was a rural class 1 area when the pipeline was constructed. However, substantial development was predictable since the portion of the pipeline for the special permit was located just south of the one of the fastest growing census districts over the past decade, primarily because of a very large 55+ housing development, The Villages. The PST stated that the operator may not have known when its FERC certificate was granted in February of 2016 that the area in the permit application would be developed by the Villages within months, it certainly should have known that it was within the city limits of Wildwood, planned for dense development and should have built the line to Class 3 standards from the start. The PST also believed that the request to grant a future extension of a permit without another application should be denied. Any future class location changes in this area, while as foreseeable as these were, should require the operator to file a new application, with another opportunity for public and agency review of the operator's operational history.

PHMSA acknowledges PST's comments and has structured the special permit conditions requiring STT to reduce the MAOP by 101 psig for the approximately 80-mile section of pipe that includes the *special permit segment*. This restricts the operating pressure to no greater than

If the special permit inspection area footage does not extent from launcher to receiver, then the special permit inspection area would need to be extended.

⁴ The special permit inspection area includes the special permit segment.

67% specified minimum yield strength (SMYS) in Class 3 locations. In addition, the special permit conditions require integrity management type assessments to maintain safety along the *special permit segment*. Finally, STT will have to apply for further class changes on the pipeline to facilitate public and PHMSA review. PHMSA has limited the special permit to the *special permit segment* initially requested and if an extension of the segment is necessary due to a class change, STT must either replace the pipe with stronger pipe, lower the MAOP of the pipeline, or apply for an additional special permit at that time.

The STT application letter, Federal Register notice, and all other pertinent documents are available for review in Docket No. PHMSA-2021-0052 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

Analysis:

Background: On June 29, 2004, PHMSA published in the Federal Register (69 FR 38948) the criteria it uses for the consideration of applications for class location change waivers, now being granted or denied through a special permit. First, certain threshold requirements should be met on a pipeline *special permit segment* for a class location change special permit to be granted. Second, the age and manufacturing process of the pipe; system design, and construction; environmental, operating and maintenance histories; and integrity management program elements are evaluated as significant criteria. These significant criteria are presented in matrix form and can be reviewed in the FDMS, Docket No. PHMSA–RSPA-2004-17401. Third, special permits will only be granted when pipe conditions and active integrity management provides a level of safety greater than or equal to a pipe replacement or pressure reduction. The operator's Federal pipeline safety regulation compliance history is also evaluated as part of the criteria matrix for acceptability prior to issuance of a special permit.

<u>Threshold Requirements</u>: Each of the threshold requirements published by PHMSA in the June 29, 2004, Federal Register notice is discussed below regarding the STT special permit request.

- 1) No pipeline segments in a class location changing to Class 4 location will be considered.
 - This special permit request is for one (1) *special permit segment* on the STT Line 1 pipeline, where a change has occurred from a Class 1 location to a Class 3 location.
 - STT has met this requirement.

- 2) No bare pipe will be considered.
 - The STT *special permit segment* is externally coated with fusion bonded epoxy.
 - STT has met the requirement.
- 3) No pipe containing wrinkle bends will be considered.
 - There are no wrinkle bends in the *special permit segment*.
 - STT has met this requirement.
- 4) No pipe segments operating above 72% of the SMYS will be considered for a Class 3 location special permit.
 - The *special permit segment* operates at or below 72% SMYS.
 - The *special permit segment* pipe for Line 10 is 36-inch diameter, 0.520-inch wall thickness, and pipe yield strength of 70,000 psig. The pipe seam is a helical submerged arc welded (HSAW) seam and was manufactured in 2016 by Berg Steel Pipe Corporation.
- 5) Records must be produced that show a hydrostatic test to at least 1.25 x MAOP and 90% of SMYS.
 - STT records submitted show that the *special permit segment* being considered met this requirement.
 - Special permit segment was pressure tested in 2017 at 2,183 psig.
 - STT has met this requirement.
- 6) In-line inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems such as stress corrosion cracking (SCC).
 - No "immediate" defects or anomalies with corrosion greater than 30% of the wall thickness were found on the most recent ILI for the *special permit inspection area*.
 - STT has met this requirement.
- 7) Criteria for consideration of a class location change waiver, being considered through the special permit, published by PHMSA in the Federal Register (69 FR 38948), define a *waiver* inspection area (special permit inspection area) as up to 25 miles of pipe on either side of the waiver segment (special permit segment).

A special permit would be contingent upon STT's incorporation of the *special permit inspection area* in its written integrity management program as covered segments in a
 high consequence area (HCA) in accordance with 49 CFR 192.903.

<u>Criteria Matrix</u>: The data submitted by STT for the *special permit segment* has been compared to the class location change special permit criteria matrix.

- The *special permit segment* falls in the *probable acceptance* column of the criteria matrix for:
 - Pipe manufacture, pipe material, design stress, pipe girth welds, pipe coating, test
 pressure, test failures, depth of cover, local geology, leaks and failures, type service,
 pressure fluctuations, cathodic protection, safety related condition reports, and ILI type.
- The *special permit segment* falls in the *possible acceptance* column of the criteria matrix for:
 - o Class Location Change (1 to 3), HCA, and ILI program.
- The *special permit segment* falls in the *requires substantial justification* column of the criteria matrix for:
 - o Enbridge Inc., overall enforcement findings fall in the *requires substantial justification* category. STT's 10-year enforcement findings do not fall within this category.
 - o This special permit requires STT to implement the special permit conditions that include safety requirements on the operations, maintenance, and integrity management of the *special permit segment (10.130 miles)* and the *special permit inspection area (183.23 miles)*. Therefore, the safety benefits are obtained well beyond the portion of the pipeline that experienced a class location change.
 - o STT will be required to submit an annual report for this special permit on integrity threats to the pipeline in the *special permit segment* and the *special permit inspection area*.

Operational Integrity Compliance:

To inform PHMSA's decision about whether a special permit could provide a level of safety greater than or equal to a pipe replacement or pressure reduction and is consistent with pipeline safety, PHMSA reviewed this special permit request to understand the known type of integrity threats that are in the *special permit segment* and *special permit inspection area*. This integrity

information was used for any special permit conditions to provide a systematic program to review and remediate the pipeline for safety concerns if a special permit was granted. Additional operational integrity review and remediation requirements would be required by a special permit to ensure that the operator has an ongoing program to locate and remediate safety threats. These threats to integrity and safety include any issues with the pipe coating quality, cathodic protection effectiveness, operations damage prevention program, pipe depth of soil cover, weld seam and girth weld integrity, anomalies in the pipe steel and welds, and material and structures either along or near the pipeline that could cause the cathodic protection system to be ineffective. PHMSA would have to carefully design a comprehensive set of conditions that STT would have to implement for the special permit to be granted.

Past Enforcement History – January 1, 2013, through February 14, 2023:

From January 1, 2013 (STT started transporting gas in 2017), through February 14, 2023, STT was cited in one (1) enforcement case with a total of \$19,000 in assessed civil penalties. PHMSA initiated one (1) Notice of Probable Violations against STT due to 49 CFR Part 192 violations. The enforcement case was for test requirements and welding of steel in pipeline. The type of 49 CFR Part 192 enforcement violations against STT from 2013 through 2023 includes: 49 CFR 192.225(a), 192.235, and 192.505(d).

Summary of Enforcement Findings for Enbridge:

From January 1, 2013 through February 14, 2023, Enbridge, the operator of STT, was cited in 53 enforcement actions with a total of \$1,901,900 in assessed civil penalties on its Algonquin Gas Transmission, LLC, (OPID 288), East Tennessee Natural Gas (OPID 04070), Enbridge Pipelines, LLC (OPID 31448), Enbridge Pipelines, LLC (Ozark) (OPID 31947), Enbridge Pipelines, LLC (Southern Lights) (OPID 32502), Maritimes & Northeast Pipeline, LLC (OPID 31335), Nexus Gas Transmission, LLC (OPID 39192), Sabal Trail Transmission (OPID 39167), Steckman Ridge, LP (OPID 32380), and Texas Eastern Transmission, LP (OPID 19235) pipeline systems. PHMSA issued three (3) Corrective Action Orders, 22 Notices of Probable Violation, 13 Notices of Amendment, and 15 Warning Letters to Enbridge.

Tables 3 and 4 below show PHMSA's enforcement actions and civil penalties for Enbridge on these 10 pipeline systems.

Table 3: Enbridge Enforcement Matters from January 1, 2013, through February 14, 2023								
Status	Corrective Action Order	Notice of Probable Violation	Notice of Amendment	Safety Order	Warning Letter	Total		
CLOSED	2	19	13	0	15	49		
OPEN	1	3	0	0	0	4		
Total	3	22	13	0	15	53		

Table 4: Enbridge Enforcement Civil Penalty Status January 1, 2013, through February 14, 2023							
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected			
\$2,233,700	\$193,700	\$1,901,900	\$105,300	\$1,261,600			

The type of 49 CFR Part 192 enforcement violations against Enbridge on these 10 pipeline systems from January 1, 2013, through February 14, 2023, were as follows:

Summary of Enforcement Endings for the 10 Enbridge pipeline systems include:

Atmospheric Corrosion Control: Monitoring; Construction: Compliance with specifications or standards, General Inspection, and Repair; Corrosion Control: Corrosion Control Records; Design: Compressor Stations Emergency Shutdown; Enforcement Procedures: Inspections and Investigations, Integrity Management (IM): Conducting IM Baseline Assessment, Continual Process of Evaluation and Assessment, Elements and Implementation, Preventative and Mitigative Measures, Program Elements, Record Keeping, and Threat Identification; OME Procedural Manual: Abnormal Operations, General, and Maintenance and normal operations; Maintenance: Auxiliary Power Sources, Control Systems, Procedures, Transmission lines-leak surveys, Transmission lines-patrolling, Transmission lines-Record keeping, and Valve Maintenance Transmission Lines; Operations: Change in Class Location (Confirmation or Revision of MAOP), Change in Class Location (Required Study), Continuing Surveillance, Emergency Plans, General, Procedures, and Transfer Procedures; Operator Qualification: Qualification Program; Public Awareness: Develop and Implement Public Awareness, Follow API RP 1162, and Justification for not following API RP 1162; Test Requirements: SMYS >

30%; **Gas Transportation:** Underground Natural Gas Storage Facilities; **Welding:** Preparation for Welding, Procedures, and Qualification of Welders.

49 CFR 192.7, 192.105, 192.12, 192.167, 192.225, 192.227, 192.233, 192.235, 192.303, 192.305, 192.307, 192.455, 192.461, 192.463, 192.465, 192.469, 192.475, 192.481, 192.491, 192.503, 192.505, 192.507, 192.517, 192.603, 192.605, 192.609, 192.611, 192.613, 192.615, 192.616, 192.619, 192.705, 192.706, 192.709, 192.736, 192.745, 192.801, 192.805, 192.907, 192.911, 192.917, 192.921, 192.933, 192.935, 192.937, and 192.947.

Table 5 below gives a complete summary of the findings and the specific 49 CFR Parts 191 and 192 violation:

Table 5: Summary of Enforcement Findings for Enbridge								
January 1, 2013, through February 14, 2023								
Notice of Amendment								
Construction	tion 4 Integrity Management 3 OME Procedural Manual		4					
Operator Qualification	1	Public Awareness	6	Transportation of Gas	2			
Welding of Steel in Pipelines	3							
				Notice of Amendment Total:	23			
		Notice of Probable Viole	atior	1				
Construction	Construction 2 Corrosion Control 6 Design			1				
Integrity Management	5	OME Procedural Manual	5	Operation and/or Maintenance	4			
Public Awareness 2 Reporting		Reporting	2	Welding of Steel in Pipelines	2			
			Not	ice of Probable Violation Total:	29			
		Warning Letter						
Construction	4	Corrosion Control	5	Integrity Management	2			
National Pipeline Mapping System	1	OME Procedural Manual	9	Operation and/or Maintenance	6			
Operator Qualification	1	Public Awareness	4	Test Requirements	1			
Transportation of Gas	1	Welding of Steel in Pipelines	1					
Warning Letter Total:								
Grand Total:								

Findings:

Based on the information submitted by STT and PHMSA's analysis of the technical, operational, and safety issues, PHMSA finds that granting this special permit to STT to operate the *special*

permit segment on the 36-inch diameter Line 1 pipeline in Sumter County, Florida, for 53,486

feet (approximately 10.13 miles) of Class 1 location pipe in a Class 3 location is consistent with

pipeline safety.

PHMSA has designed special permit conditions to effectively assess and remediate threats to the

special permit segment and special permit inspection area, including assessments to evaluate

the pipeline for corrosion, cracking, 3rd party damage, leaks, and other identified threats to the

special permit segment. To ensure STT properly implements the special permit conditions, STT

will be required to give PHMSA an annual review of their compliance with the special permit.

PHMSA finds that no significant negative impact to human safety and the environment will

result from the issuance and full implementation of a special permit that waives the requirements

of 49 CFR 192.611 for class location changes to a Class 3 location. This permit requires STT to

implement the special permit conditions with include safety requirements on the operations,

maintenance, and integrity management of the special permit segment and the special permit

inspection area.

Prepared by: PHMSA OPS - Engineering and Research Division

Date: September 19, 2023

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