

Class Location Methodology

An Operator's Perspective

PHMSA Pipeline Class Location Methodology Workshop
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DISCLAIMER

The pipeline operations of local distribution operators are very diverse. The actions taken for Class Location change depends on the specific characteristics of each pipeline system. The actions taken or planned at Ameren Illinois may not be the same as actions taken by other operators.

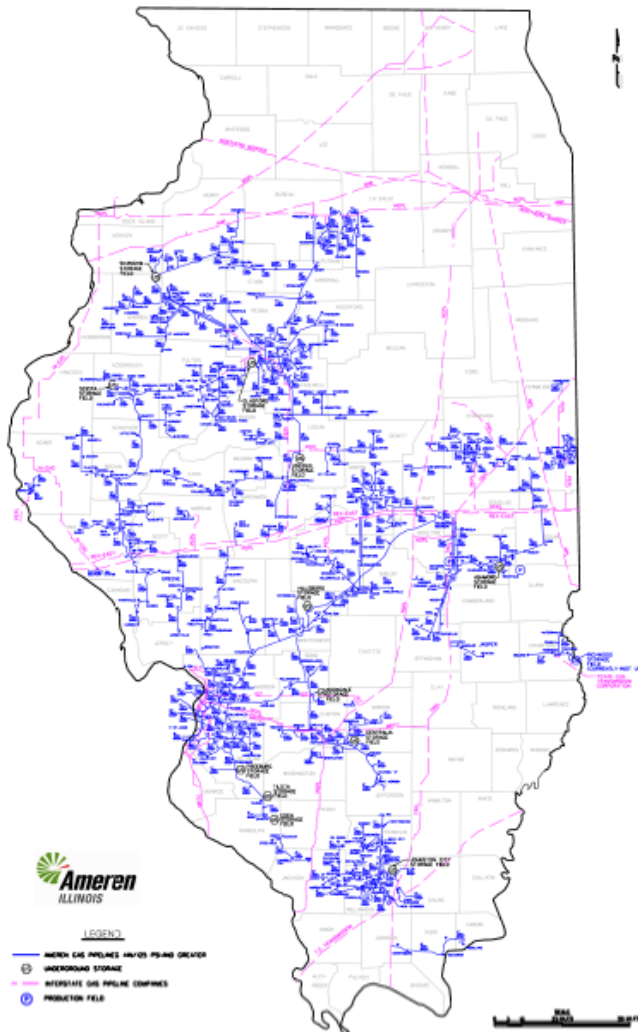
AMEREN ILLINOIS BACKGROUND

- Combination Utility operating both Electric and Natural Gas Distribution Systems
- Parent Company- Ameren Corporation
 - Headquartered in St. Louis, Missouri
- Ameren Illinois
 - Based in Collinsville, Illinois
 - 43,700 square miles in central & southern Illinois
- Ameren Illinois Customer Count
 - Electric = 1.2 Million
 - Natural Gas = 806,000
- Natural Gas System
 - Transmission Pipelines = 1,250 miles
 - Distribution Mains = 16,750 miles
 - 12 Underground Natural Gas Storage Fields

AMEREN ILLINOIS SERVICE TERRITORY



AMEREN ILLINOIS PIPELINE SYSTEM



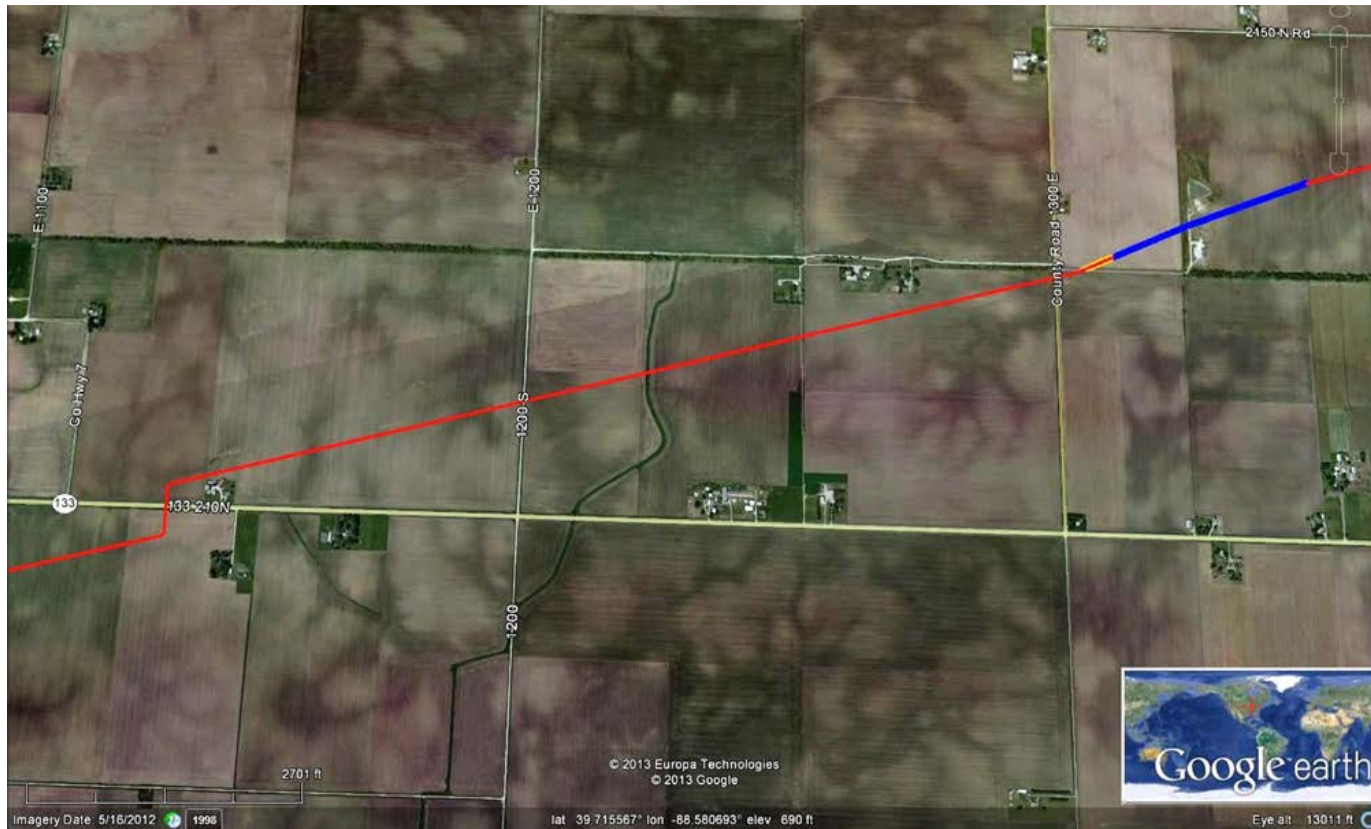
AMEREN ILLINOIS TRANSMISSION PIPELINE SYSTEM

Mileage	1,250 Miles
Material	Coated / Cathodically Protected Steel
Vintage	1930s - 2013
Class Locations	77% in Class 1 & 2 23% in Class 3

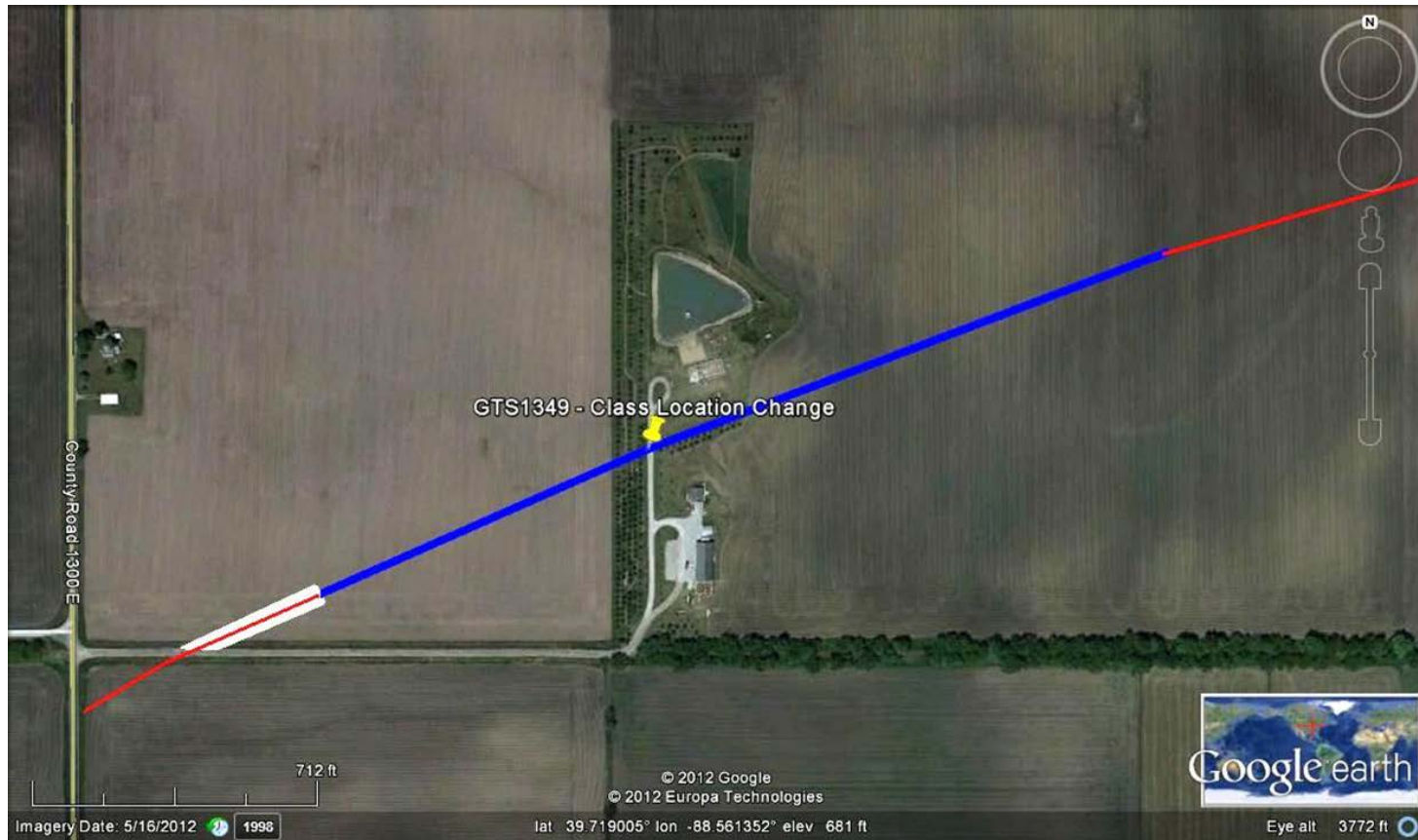


CLASS LOCATION CHANGE

- Ameren Illinois Example



CLASS LOCATION CHANGE



CLASS LOCATION CHANGE



Old Pipe: 20 inch DIA ST
0.250 wall X-52

New Pipe: 20 inch DIA ST
0.375 wall ERW X-60

Cost Approximately \$1,300,000

CLASS LOCATION CHANGES – DIFFERENT APPROACH NEEDED

- Current waiver/special permit process very burdensome
- Renewal process increasingly more complex
- Outcome is uncertain

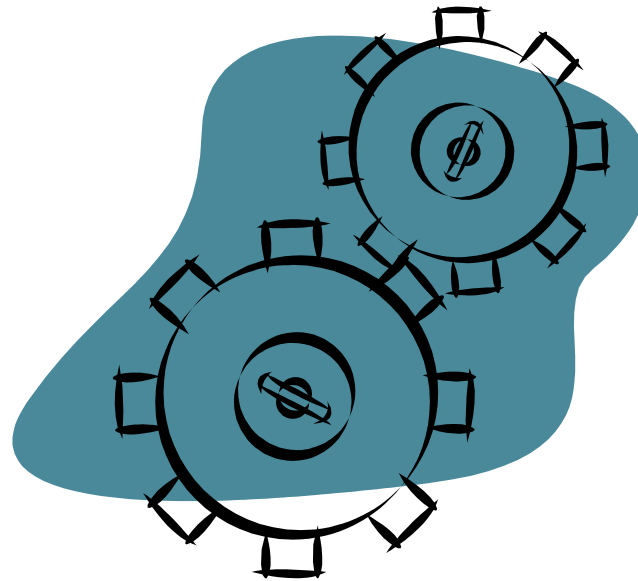


CLASS LOCATION CHANGES – DIFFERENT APPROACH NEEDED

- Eliminate the waiver/special permit process for Class Location changes
- Incorporate specific requirements into the 192 code



Switching Gears



CLASS LOCATION CHANGES – DIFFERENT APPROACH

- Develop an alternative solution to maintain the MAOP by confirming the integrity of the existing transmission pipeline.
 - Additional actions to insure the integrity of the pipeline
 - Credit provided for additional actions already being taken
 - Risk based assessment
- Operators may continue to operate using current Class Location change methodology.



COMPLEXITY OF CLASS LOCATION AND THE 192 CODE

Subpart A	192.5	Definition of Class Location
	192.9	Definition of Gathering Line
Subpart C	192.105	Steel Pipe Design Formula
	192.111	Steel Pipe Design Factors
Subpart D	192.150	Passage of ILI Devices
	192.179	Transmission Line Valve Spacing
Subpart E	192.243	NDT of Welds
Subpart G	192.327	Depth of Cover
Subpart J	192.503	Pressure Test Limitations Regarding Testing by Gas
	192.505	Strength Test Requirements for > 30% SMYS
Subpart K	192.555	Upgrading > 30% SMYS

Subpart L	192.609	Change in Class Location Study
	192.611	Change in Class Location – Confirmation or Revision of MAOP
	192.614	Damage Prevention Programs
	192.619	MAOP – Test Factors
	192.620	Alternative MAOPs
Subpart M	192.625	Odorization of Gas
	192.705	Patrolling
Subpart O	192.706	Leakage Surveys
	192.903	Definitions Regarding HCAs
	192.905	How to Identify HCAs
	192.935	Additional P&M Measures

- Addressing the use of Class Locations in 49CFR 192 is very complex
- It occurs 23 times throughout code

IMPACT ON FEDERAL AND STATE REGULATIONS

- The use of Class Locations is found in several states' regulatory requirements
- Eliminating the need for Class Location Special Permits reduces burden on Federal and State Regulators



SUMMARY

- Class Location is fully embedded in the 192 code
- Complete elimination of Class Location will be very complex
- The Special Permit outcome is uncertain
- The Special Permit requirements for a Class Location change should be incorporated into the 49 CFR 192.

IN CONCLUSION

- A change in Class Location should not result in the replacement of perfectly good pipe
- Resources should be allocated to higher risk infrastructure replacements
- Positive impact on Regulatory Agencies

CLASS LOCATION METHODOLOGY an OPERATORS PERSPECTIVE

- Questions

