

Date: _____

Michigan Public Service Commission

Case: _____

2018 Second Half Inspection

Company: _____

| Code | Question | Condition | EFA |
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| 192.150 (a) | Except as provided in paragraphs (b) and (c) of this section, is each new transmission line and replacement of line pipe, valve, fitting, or other line component in a transmission line designed and constructed to accommodate the passage of instrumented internal inspection devices? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.179 (a) | Does each transmission line have sectionalizing block valves spaced as follows: (1) Each point on the pipeline in a Class 4 location must be within 2½ miles of a valve. (5 mile spacing) (2) Each point on the pipeline in a Class 3 location must be within 4 miles of a valve. (8 mile spacing) (3) Each point on the pipeline in a Class 2 location must be within 7½ miles of a valve. (15 mile spacing) (4) Each point on the pipeline in a Class 1 location must be within 10 miles of a valve. (20 mile spacing) | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.179 (b) (1) | Do sectionalizing block valves on transmission lines have readily accessible operating devices to open or close the valve that are protected from tampering and damage? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.179 (b) (2) | Are sectionalizing block valves on transmission lines supported to prevent settling of the valve or movement of the pipe to which it is attached? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.179 (c) | Does each section of a transmission line between main line valves have a blowdown valve with sufficient capacity to blow down as rapidly as practicable? Is each blowdown discharge located so the gas can be blown to the atmosphere without hazard? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20407 (a) | SOUR GAS: If sour gas facilities contain more than 10 pounds of H ₂ S per mile, is each point on the pipeline within 3 miles of a sectionalizing block valve (6 mile spacing), and is a block valve located at each end of the pipeline? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20407 (b) | SOUR GAS: If sour gas facilities contain more than 10 pounds of H ₂ S per mile, do block valves automatically close upon low pressure readings? Does the system operate in the event of a power failure or malfunction of electronic devices? Is the system designed to fail in a closed position? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20407 (c) | SOUR GAS: If sour gas facilities contain more than 10 pounds of H ₂ S per mile, does operator maintain a SCADA system that: (i) Is monitored to ensure appropriate response to emergencies? (ii) Is programmed to automatically close block valves based on operating | <input type="checkbox"/> | <input type="checkbox"/> |

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| | data gathered at each metering site and at each automated block valve? | | |
| | (iii) Automatically closes the upstream and downstream sectionalizing block valves surrounding any sectionalizing block valve that is in an alarm condition? | | |
| | (iv) Allows the operator monitoring the SCADA system to close, but not open, any or all of the block valves and metering points? | | |
| R 460.20407 (d) | SOUR GAS: If sour gas facilities contain more than 10 pounds of H ₂ S per mile, are H ₂ S sensors located at all sectionalizing block valve sites? | <input type="checkbox"/> | <input type="checkbox"/> |
| | Do sensors provide a warning to the SCADA system at H ₂ S levels of 10 ppm and close the block valve at 30 ppm? | | |
| R 460.20407 (e) | SOUR GAS: If sour gas facilities contain more than 10 pounds of H ₂ S per mile, are control valves installed at appropriate locations at well sites or laterals to automatically shut off the flow of gas into the pipeline in the event of a line break or over pressure condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.303 | Is each transmission line or main constructed in accordance with comprehensive written specifications or standards consistent with Part 192? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.305 | Is each transmission line or main inspected to ensure that it is constructed in accordance with Part 192? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.307 | Is each length of pipe and each other component visually inspected at the site of installation to ensure that it has not sustained any visually determinable damage that could impair its serviceability? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.309 (a) | Is each imperfection or damage that impairs the serviceability of a length of steel pipe repaired or removed? | <input type="checkbox"/> | <input type="checkbox"/> |
| | If repaired by grinding, is the remaining wall thickness at least equal to either the minimum thickness required by the tolerances in the manufacturer's specification or the wall thickness required for the design pressure? | | |
| 192.309 (b) (1) | Are dents on steel pipe operating at or above 20% SMYS containing stress concentrators removed or repaired by a method that permanently restores the serviceability of the pipe? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.309 (b) (2) | Are dents on steel pipe operating at or above 20% SMYS that affects the longitudinal weld or a circumferential weld removed or repaired by a method that permanently restores the serviceability of the pipe? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.309 (b) (3) | Are dents on steel pipe operating at or above 40% SMYS that have depths of more than 1/4" in pipe 12 3/4" and less; or more than 2% pipe diameter in pipe over 12 3/4" removed or repaired by a method that permanently restores the serviceability of the pipe? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.309 (c) | Is each arc burn on steel pipe to be operated at 40% or more of SMYS repaired or removed? If repaired by grinding, is the arc burn completely removed and the remaining wall thickness at least equal to either the minimum wall thickness required by the tolerances in the manufacturer's | <input type="checkbox"/> | <input type="checkbox"/> |

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| | specification or the wall thickness required for the design pressure? | | |
| 192.309 (d) | Are gouges, grooves, arc burns, or dents repaired by methods other than inserting patching or by pounding it out? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.309 (e) | Are gouges, grooves, arc burns, or dents that are removed from a length of pipe removed by cutting out the damaged portion as a cylinder? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20411 | SOUR GAS: Are sour gas pipeline imperfections or damages discovered during construction that impairs the serviceability of a length of steel pipe removed by cutting out the damaged portion of the pipe as a cylinder? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.325 (a) | Are transmission lines installed with at least 12 inches of clearance from any other underground structure or protected from damage if 12 inch separation is not practical? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.325 (c) | Is each plastic transmission line or main installed with sufficient clearance, or insulated, from any source of heat? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20413 | SOUR GAS: Are pipeline facilities used in the transportation of sour gas installed with not less than 48 inches of clearance from all other underground structures not associated with the pipeline, if not practical, the pipeline shall be protected from damage that might result due to its proximity to the other structure? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.327 (a) | Are transmission lines in normal soil buried at a minimum depth of cover of 30" in Class 1 locations and 36" in all other locations? (see exception) | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.327 (e) | Is all pipe installed in a navigable river, stream, or harbor installed with a minimum cover of 48 inches in soil or 24 inches in consolidated rock? (see exception) | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20414 | SOUR GAS: Are pipeline facilities used in the transportation of sour gas constructed to comply with all of the following provisions: buried (see exception), installed with a minimum cover of 48 inches, and where practical, installed with a warning tape not less than 12 inches directly above the pipeline, but not more than 36 inches below grade? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20415 | SOUR GAS: Are pipeline facilities used in the transportation of sour gas routed, if practical, to avoid class 3 and 4 locations, and to avoid road rights-of-way? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.605 (c) (1) | Does the O&M manual for transmission lines (excludes distribution operators operating transmission in connection with distribution) include procedures for responding to, investigating, and correcting the cause of: <ul style="list-style-type: none"> (i) Unintended closure of valves or shutdowns? (ii) Increase or decrease in pressure or flow rate outside normal operating limits? (iii) Loss of communications? (iv) Operation of any safety device? | <input type="checkbox"/> | <input type="checkbox"/> |

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| | (v) Any other foreseeable malfunction of a component, deviation from normal operation, or personnel error which may result in a hazard to persons or property? | | | | | | | | | | | | | | |
| 192.605 (c) (2) | Does the O&M manual for transmission lines (excludes distribution operators operating transmission in connection with distribution) include procedures for checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.605 (c) (3) | Does the O&M manual for transmission lines (excludes distribution operators operating transmission in connection with distribution) include procedures for notifying responsible operator personnel when notice of an abnormal operation is received? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.605 (c) (4) | Does the O&M manual for transmission lines (excludes distribution operators operating transmission in connection with distribution) include procedures for periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| R 460.20420 | SOUR GAS: Does the O&M manual for sour gas operators address the hazards inherent with the transportation of sour gas and include plans and procedures to minimize the health risk to employees and the public during abnormal operating conditions? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.703 (b) | Is each segment of unsafe pipeline replaced, repaired, or removed from service? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.703 (c) | Are hazardous leaks repaired promptly? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.705 (a) | Does patrol program observe surface conditions on and adjacent to transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.705 (b) | Is the frequency of patrols no longer than prescribed in the following table: <table border="0"> <thead> <tr> <th>Class</th> <th>Hwy/RR Crossings</th> <th>All other places</th> </tr> </thead> <tbody> <tr> <td>1,2.....</td> <td>2x year, NTE 7.5 mo.....</td> <td>1x year, NTE 15 mo</td> </tr> <tr> <td>3.....</td> <td>4x year, NTE 4.5 mo.....</td> <td>2x year, NTE 7.5 mo</td> </tr> <tr> <td>4.....</td> <td>4x year, NTE 4.5 mo.....</td> <td>4x year, NTE 4.5 mo</td> </tr> </tbody> </table> | Class | Hwy/RR Crossings | All other places | 1,2..... | 2x year, NTE 7.5 mo..... | 1x year, NTE 15 mo | 3..... | 4x year, NTE 4.5 mo..... | 2x year, NTE 7.5 mo | 4..... | 4x year, NTE 4.5 mo..... | 4x year, NTE 4.5 mo | <input type="checkbox"/> | <input type="checkbox"/> |
| Class | Hwy/RR Crossings | All other places | | | | | | | | | | | | | |
| 1,2..... | 2x year, NTE 7.5 mo..... | 1x year, NTE 15 mo | | | | | | | | | | | | | |
| 3..... | 4x year, NTE 4.5 mo..... | 2x year, NTE 7.5 mo | | | | | | | | | | | | | |
| 4..... | 4x year, NTE 4.5 mo..... | 4x year, NTE 4.5 mo | | | | | | | | | | | | | |
| 192.705 (c) | Is method of patrolling appropriate for the right-of-way conditions? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| R 460.20325 | Does operator patrol all transmission lines operating at 40% or more of SMYS at intervals of not more than 6 weeks, but not less than 12 times each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| R 460.20425 | SOUR GAS: Are sour gas pipeline facilities patrolled at intervals of not more than 6 weeks, but not less than 12 times each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |
| 192.706 | Are leakage surveys of transmission lines conducted at intervals not exceeding 15 months, but at least once each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | |

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| 192.706 (a) | Are leakage surveys using leak detector equipment of unodorized transmission lines in Class 3 locations conducted at intervals not exceeding 7½ months, but at least twice each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.706 (b) | Are leakage surveys using leak detector equipment of unodorized transmission lines in Class 4 locations conducted at intervals not exceeding 4½ months, but at least four times each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20426 | SOUR GAS: Are sour gas pipeline facilities leak surveyed using leak detection equipment at intervals of not more than 7½ months, but not less than 2 times each calendar year, for all areas falling within Class 1 and Class 2 locations? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.709 (a) | Are records (including date, location, and description) of transmission line repairs to pipe retained for as long as the pipe remains in service? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.709 (b) | Are records (including date, location, and description) of transmission line repairs made to parts other than pipe retained for at least 5 years? (Repairs generated by requirements of Subparts L and M must be retained in accordance with paragraph (c)) | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.709 (c) | Are transmission line records of each patrol, survey, inspection, and test required by subparts L and M of this part retained for at least 5 years or until the next interval, whichever is longer? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.711 (a) | Does operator take immediate temporary measures to protect the public whenever a leak, imperfection, or damage that impairs its serviceability is found in a segment of steel transmission line operating at or above 40% SMYS and when it is not feasible to make a permanent repair at the time of discovery? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.711 (b) (1) | Does operator make transmission pipeline system non-integrity management repairs as soon as feasible? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.711 (b) (2) | Does operator make transmission pipeline system integrity management repairs as prescribed by §192.933(d)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.711 (c) | Does operator not use welded patches as a means of repair on transmission lines? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20428 (1) (a) | SOUR GAS: Are temporary repairs prohibited on sour gas pipeline facilities? (see exception) | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20428 (1) (b) | SOUR GAS: Are sour gas pipeline facilities in need of repair removed from service until permanent repairs can be made? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.713 (a) | Is each imperfection or damage that impairs the serviceability of a steel transmission line operating at or above 40% SMYS removed by cutting out and replacing a cylindrical piece of pipe or repaired by a method that permanently restores the serviceability of the pipe? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.713 (b) | Are operating pressures at safe levels during repair operations on transmission lines? | <input type="checkbox"/> | <input type="checkbox"/> |

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| 192.715 (a) | Are transmission line welds found unacceptable under §192.241(c) repaired in accordance with §192.245 with the segment taken out of service if feasible? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.715 (b) | If unfeasible to be taken out of service, are unacceptable transmission line welds repaired with the segment in service only if the weld is not leaking, the pressure is reduced to less than 20% SMYS, and grinding of the defective area is limited so that at least 1/8" thickness in the pipe weld remains? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.715 (c) | Are defective transmission line welds which cannot be repaired in accordance with §192.715(a) or (b) repaired by installing a full encirclement welded split sleeve? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.717 | <p>Are permanent field repairs of transmission line leaks made by removing the leak by cutting out and replacing a cylindrical piece of pipe?</p> <p>If not removed by cutout, are permanent field repairs of transmission line leaks made by one of the following methods:</p> <p>(1) A full encirclement welded split sleeve unless the line is joined by mechanical couplings and operates below 40% SMYS?</p> <p>(2) If due to corrosion pits, a properly designed bolt-on-leak clamp?</p> <p>(4) If on submerged pipeline in navigable waters, a mechanically applied full encirclement split sleeve of appropriate design?</p> <p>(5) A method that permanently restores the serviceability of the pipe?</p> | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20326 (1) | <p>Does operator repair leaks due to corrosion or leaks on transmission lines joined by mechanical couplings operating at less than 40% SMYS through any of the following procedures:</p> <p>(a) Removing the leak by cutting out and replacing a cylindrical piece of pipe?</p> <p>(b) Installing a full encirclement welded split sleeve of appropriate design? (Unless coupled transmission line below 40% SMYS)</p> <p>(c) If the leak is due to a corrosion pit, install a properly designed bolt-on-leak clamp?</p> | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20326 (2) | Does operator not repair leaks due to corrosion or leaks on transmission lines joined by mechanical couplings operating at less than 40% SMYS through use of a fillet welded patch? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20429 | SOUR GAS: Are leaks on sour gas pipeline facilities permanently repaired by cutting out a cylindrical piece of pipe and replacing it with pipe of similar or greater design strength which meets the design criteria for facilities used in the transportation of sour gas? | <input type="checkbox"/> | <input type="checkbox"/> |

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| 192.719 (a) | If a segment of transmission line is repaired by cutting out the damaged portion, is the replacement pipe tested to the pressure required for a new line installed in the same location? (This may be pretested pipe) | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.719 (b) | Are transmission line repairs made by welding examined in accordance with §192.241? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.745 (a) | Are transmission line valves that might be required during any emergency inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> |
| 192.745 (b) | Does operator take prompt remedial action to correct any valve found inoperable, unless an alternative valve is designated? | <input type="checkbox"/> | <input type="checkbox"/> |
| R 460.20431 | SOUR GAS: Are valves used in the transportation of sour gas that might be required during an emergency inspected and partially operated at intervals of not more than 7½ months, but not less than twice each calendar year? | <input type="checkbox"/> | <input type="checkbox"/> |
| PSIA 2002 | Do records indicate NPMS submissions were updated every 12 months if system modifications occurred, and that if no modifications occurred, an email was submitted stating that fact? (excludes distribution lines and gathering lines) | <input type="checkbox"/> | <input type="checkbox"/> |
| ADB-2014-04 | <p>Where an operator has implemented or plans to implement flow reversals, product changes, or conversions to service, can the operator demonstrate how impacts to operation, maintenance, emergency plans, control room management, operator qualification, emergency responder, public awareness, maps and records, and integrity management programs were addressed?</p> <p>Has the operator taken into account potential required changes to facilities such as compressor stations, In-Line Inspection (ILI) launching/receiving, flow meters, liquid separators, corrosion control devices, leak detection devices, control valves, and sectionalizing valves?</p> <p>Has the operator made the proper notifications to PHMSA and MPSC for the following (if applicable):</p> <ul style="list-style-type: none"> • Where change costs exceed \$10 million (§191.22(c))? • Where there is a special permit or waiver? • Where changes will substantially affect the integrity management program, its implementation, or modify the schedule (§192.909)? • Has operator included changes due to conversion to service and product changes on subsequent Annual Report (§191.17) and National Pipeline Mapping System submissions (The Pipeline Safety Improvement Act of 2002)? • Has operator submitted a comprehensive written plan to the appropriate PHMSA regional office prior to performing flow reversals, product changes, and conversions to service (strongly encouraged)? | <input type="checkbox"/> | <input type="checkbox"/> |