MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

400 North Fourth Street
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February 10, 2020

Caleb Simburger – Pipeline Safety Program Manager
North Dakota Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480

Subject: Response to January 10, 2020 Notice of Amendment – Case No. GS-20-015

Dear Mr. Simburger,

This letter is intended to address the January 10, 2020 Notice of Amendment identified by North Dakota PSC during the July 23, 2019 Operator Qualification Field Inspection conducted in Bismarck, ND.

NOTICE OF AMENDMENT

§192.605 Procedural manual for operations, maintenance, and emergencies.
(a) (a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response.

Audit Findings:
The Standards did not contain procedures (step-by-step instructions) for personnel performing the covered tasks. Procedures should be written to be uniformly interpreted by all personnel, to be thorough, and be applied in a consistent manner. Also, the Standards utilize suggestive wording, such as "should." The use of definitive words such as "shall" or "must" help clarify obligations.

MDU Response:
Montana-Dakota Utilities, Co. has been actively working on developing and implementing new procedures to be followed throughout our service territories. These procedures are intended to be more prescriptive and more helpful for the employees by leaving less room for individual interpretation. Attached please find the latest draft of the procedure corresponding to your inspection, OPS 500 – Regulator Station Inspection and Maintenance, which is expected to be implemented company-wide on March 12, 2020. Though we do not anticipate further revisions to this document, we will send you a final copy once implemented.

If you have any questions or need additional information, please contact Josh Sanders at (701) 222-7773.

Respectfully submitted,

Pat Darras
Vice President, Engineering & Ops Services
Montana-Dakota Utilities, Co.

PURPOSE (DRAFT 4v10)

Provide procedures for inspection and testing of regulating stations within the distribution system and ensure proper and sufficient overpressure safeguards to protect the system up to ten percent (10%) over maximum allowable operating pressure (MAOP).

REFERENCES

External References:
192.195 - Protection Against Accidental Over-Pressuring
192.199 - Requirements for Design of Pressure Relief and Limiting Devices
192.201 - Required Capacity of Pressure Relieving and Limiting Devices
192.605(b) (5) - Procedural Manual for Operations, Maintenance, and Emergencies
192.619 - Maximum Allowable Operating Pressure - Steel or Plastic Pipelines
192.621 - Maximum Allowable Operating Pressure - High Pressure Distribution Systems
192.739 - Pressure Limiting and Regulating Stations - Inspection and Testing
192.741 - Pressure Limiting and Regulating Stations - Telemetering or Recording
192.743 - Pressure Limiting and Regulating Stations - Testing of Relief Devices

Internal References: N/A
Forms: N/A

TRAINING AND QUALIFICATION

Technical Training is responsible for the development of training required for MDUG personnel who perform regulator station inspection and maintenance.

RECORD RETENTION

Record	Retention Period	Storage Location
Relief Capacity Check Report	Five years	Electronic copy in district Sharepoint folder
Regulator Station Maintenance Form	Five years	Compliance tracking software application. (Maximo) once implemented.
As-Builts and/or modifications	Life of pipe	Document repository system (Documentum)

DEFINITIONS

Town Border Station (TBS) A location at which gas may change ownership from one party to another (e.g., from a transmission company to a local distribution company), neither of which is the ultimate consumer. Legacy documents and certain facility names may include industry terms such as city gate, gate station, or tap, e.g., McCleary Gate Line Heater or Nampa Gate.
Refer to OPS 3 - Master Glossary

SCOPE

Applies to the inspection and maintenance of pressure regulating stations within the distribution system feeding more than two service lines (i.e. GIS Gas Service Point). For design of pressure regulating stations, refer to OPS 602.

PROCEDURE

1. REQUIREMENTS
    1.1. Periodic inspections and tests shall be performed on the following types of pressure regulation stations:
        1.1.1. Regulating stations that supply gas to high pressure main, transmission piping, and distribution piping;

1.1.2. Standalone relief devices that are essential *and/or* non-essential for overpressure protection; and

1.2. Regulator Stations are assigned an eight (8) digit unique identification (ID) number. The unique ID is auto-generated by the compliance tracking software. The unique ID will be preceded with the Company and Town Code.
- 1.2.1. Company_Town Code_Unique 8 digit ID
- 1.2.2. Example: 4842500012345

1.3. Each pressure limiting station or relief device and the associated equipment shall be inspected at least once each calendar year, with intervals not exceeding 15 months.

1.4. The set points for regulators and reliefs shall be determined in compliance with 192.201.

1.5. The inspections and tests specified in this procedure shall determine that the devices are:
- 1.5.1. In good mechanical condition and overall appearance;
- 1.5.2. Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
- 1.5.3. Set to control or relieve at the correct pressure, consistent with the pressure limits set by Engineering Services;
- 1.5.4. Properly installed and protected from insects, dirt, liquids, or other conditions that might prevent proper operation; and
- 1.5.5. Designed to prevent unauthorized operation of any valve that will make the pressure relief valve or pressure limiting device inoperative.

1.6. Pilot regulator heaters and filters should be checked for proper operation and maintained/replaced as needed.

2. PRELIMINARY INSTRUCTIONS

2.1. Prior to performing regulator maintenance, notify Gas Control if the regulator station is monitored by SCADA.

2.2. The following steps shall be taken prior to any regulator maintenance and/or inspections to ensure safe operating conditions:
- 2.2.1. Verify what the station outlet is providing gas to using maps, 3GIS, or Web Viewer.
- 2.2.2. Utilize approved gas monitoring equipment while performing regulator station inspections and/or maintenance.
- 2.2.3. Utilize two employees while performing maintenance on regulators/reliefs 6" and larger, unless otherwise approved by District Management. Additional employees may be needed when bypassing station.
- 2.2.4. Visually inspect the station for damage, atmospheric corrosion, or anything out of the ordinary.
- 2.2.5. Check the position and operation of the relief cap indicator flag/weather cap.
- 2.2.6. Confirm locking devices are on the bypass valve and the relief assembly.
- 2.2.7. Perform valve maintenance to plug valves with an approved grease gun. Each above ground valve on the station shall be maintained during annual maintenance.
- 2.2.8. Install a calibrated test gauge on the outlet side of regulation and monitor the pressure throughout the inspection process.

3. RELIEF VALVE INSPECTION & MAINTENANCE

3.1. When working on relief valves, the system pressure shall be monitored to ensure adequate system pressure. If you cannot see the gauge on the downstream side of the bypass valve while working on the relief valve, install a calibrated gauge on the inlet side of the relief block valve or ask for additional personnel assistance.

3.2. Slowly close the block valve to the relief assembly. Constantly watch the gauge on the system for any pressure change.

3.3. Install a high-pressure gas hose downstream of the block valve to properly test the relief.

3.4. Open the test fitting valve and allow high-pressure gas to open the relief valve. You shall verify that the seat has lifted off the main body. Close the test fitting valve.

3.5. Install the test tree on the other pressure tap between the relief valve and the block valve.

3.6. Slowly open the valve from the high-pressure hose and watch gauge on the test tree.

3.7. As the pressure slowly increases on the gauge, the set point for the relief valve is the highest pressure reached until it stops. You should hear the relief valve crack open and begin to start venting.
3.8. Adjust the relief valve (if necessary) to the correct set point as designated by Engineering Services.
3.9. Turn off the high-pressure supply and watch the gauge on the test tree to verify that the relief valve does not fall below the upstream regulator's lock-up pressure. This is the Relief Valve Leak Test.
3.10. Open the bleed on the test tree to relieve pressure from tree and high-pressure hose to less than the system pressure.
3.11. Close the bleed on the test tree and open the block valve supplying the relief valve.
3.12. Take a gauge reading on the test tree with the relief in operation for the Outlet Pressure Reading.
3.13. Remove the test tree and high-pressure hose and record the station inlet pressure with a gauge in the proper range.

4. REGULATOR INSPECTION & MAINTENANCE
4.1. The designated set pressure of regulators may be set during flow conditions provided the regulator locks up at a pressure equal to or less than the MAOP.
4.2. On a dual-run station with identical runs (regulators are of the same type/model) the primary regulator and secondary/standby regulator should be switched during annual maintenance.
4.3. Switching Current Standby Regulator to Operating Regulator:
4.3.1. Begin by installing the test tree on the secondary standby/ run.
4.3.2. Open bleed valve on tree to protect the gauge if regulator fails to lock-up. Slowly close the downstream block valve on the standby regulator (if sensing line is downstream of the regulator's downstream block valve, utilize station outlet valve instead) and watch the monitoring gauge on the bypass line to verify that there is no drop in system pressure. Close the bleed valve on the test tree so the gauge can indicate the lock-up of the regulator.
4.3.3. Note: If the operating regulator does not provide proper pressure or is a single run regulator station, the station may be bypassed during the regulator maintenance. Refer to Step 5 for bypass procedures.
4.3.4. Turn the adjustment screw on the regulator and bring the standby pressure up to the preferred operating pressure for the operating regulator, as set by Engineering Services. The lock-up pressure shall be set at or below the designated maximum set point for the station. Never set a regulator to lock-up above MAOP.
4.3.5. If the regulator fails to lock-up, disassemble the regulator and pilot (if applicable), clean, and/or repair and retest for lock-up.
4.3.6. Fully open the bleed valve on the test tree and verify that the regulator will flow and then close the bleed valve to verify that the regulator locks up at the proper set pressure.
4.3.7. If regulator run has a monitor regulator, repeat steps 4.3.1 through 4.3.5 for monitor regulator. Set monitor to pressure as specified by Engineering Services. If regulator run is a "working monitor", verify first stage pilot controls the monitor regulator at the pressure designated by Engineering Services. Ensure second stage pilot locks up the monitor regulator at pressure specified by Engineering Services. Ensure operating worker regulator is aligned and controlling pressure for the regulating run prior to moving to next step.
4.3.8. Slowly open the downstream regulator block valve, making the standby regulator the new operational regulator.
4.4. Switching Current Operating Regulator to Standby Regulator:
4.4.1. Install the Test Tree on the opposite regulator run. This regulator will now be set as the standby regulator.
4.4.2. Open the Test Tree bleed valve to protect the gauge if the regulator does not lock-up. Close the downstream block valve and watch the monitoring gauge on the bypass line

to verify that there is no drop in system pressure. Close the bleed valve on the Test Tree so the gauge can indicate the lock-up of the regulator.

4.4.3. Open the bleed valve slightly on the Test Tree to relieve pressure between the regulator and the downstream valve and turn the adjustment screw on the regulator to bring the pressure to the standby pressure setting.

4.4.4. Close the needle valve on the Test Tree and adjust the regulator to the proper lock-up pressure for the standby regulator. If the regulator fails to lock-up, disassemble the regulator and pilot (if applicable), clean and/or repair and test for lock-up.

4.4.5. Fully open the bleed valve on the Test Tree to verify that the regulator will flow and then close the bleed valve to verify that the regulator locks up at the proper set pressure.

4.4.6. If regulator run has a monitor regulator, repeat steps 4.3.2 through 4.3.5 for monitor regulator. Set monitor to lock up pressure as specified by Engineering Services. If regulator run is a "working monitor," verify first stage pilot controls monitor regulator at pressure designated by Engineering Services, then ensure second stage pilot locks up monitor regulator at pressure specified by Engineering Services. Ensure operating worker regulator is aligned and controlling pressure for the regulating run prior to moving to step 3.1.9

4.4.7. Slowly open the downstream block valve and put the standby regulator into service.

5. BYPASSING REGULATOR STATION

5.1. When it becomes necessary to bypass a regulator station the following procedure should be followed:

5.1.1. Unless performed during normal maintenance, bypassing any station shall be done at the direction of Field Operations Management and/or Engineering Services.

5.1.2. Engineering Services may assist with planned bypasses involving pressure differentials; however, bypasses involving the same pressure do not require Engineering review.

5.1.3. Prior to bypassing, if more than one person is necessary to safely bypass, designate one person as the lead and discuss the entire procedure with remaining personnel present at the station.

5.1.4. Verify relief isolation valve is open and operational.

5.1.5. At minimum, the inlet bypass valve should always be padlocked in the closed position when not being used.

5.1.6. When bypassing into a distribution system use a properly rated gauge. The gauge should be installed at a test point where it can be clearly observed.

5.1.7. Observe the current station outlet pressure and **DO NOT EXCEED THE OBSERVED OPERATING PRESSURE of the station** while on bypass. If the current station outlet pressure is significantly below a normal operating pressure, then:

5.1.7.1. Customers in outlying areas of the distribution system may have lost service. Their service condition will need to be verified and shut off, if necessary, along with Engineering Services approval before the distribution pressure could be increased to a normal operating pressure.

5.1.8. When bypassing into a high-pressure system use a gauge that is capable of reading from zero to the highest pressure possible in the system. The gauge should be installed on a test point where it can be clearly observed while operating the bypass valve.

5.1.9. Bypass valve should be opened with the proper sized wrench. If the valve does not turn easily, sealant should be added prior to bypassing. This can be done by taking a couple turns on the button head fitting or applying sealant with a sealant gun.

5.1.10. Open the valve gradually to let pressure seep by the valve. During bypass process the pressure on the gauge shall be monitored continuously. Observe the pressure and control it. The system pressure shall not be allowed to go over system's observed operating pressure.

5.1.11. When bypassing is no longer necessary, the bypass valve will be closed, and the locking device will be installed.

5.1.12. The system pressure will be observed to make sure the regulator station is working correctly and is able to keep up with the current system demand.

5.1.13. Pressure gauge should be removed, and the test point doped and plugged.
5.1.14. Bypass valve should be double checked to make sure it is in the off position and lock is in place.

6. BLOWING RELIEF VALVE
6.1. Personnel will notify District Management as soon as reasonably possible that a relief valve is blowing. If MAOP was or may have been exceeded, contact System Integrity to initiate an over-pressure investigation.
6.2. Personnel responding to a blowing relief valve should have the following:
6.2.1. A list of stations in the District with the current set pressures.
6.2.2. Normal hand tools.
6.2.3. Two gauges with at least one capable of reading from zero to the highest pressure possible in the District.
6.3. If the relief valve is blowing when you arrive at the station:
6.3.1. Install the highest-pressure gauge on the downstream side of the bypass valve and read the pressure.
6.3.2. If the pressure is lower than 100 psi, you may elect to install and read the lower pressure gauge.
6.3.3. Note the pressures on the regulator labels, the label on the relief valve and the list for the station.
6.4. Downstream pressure on gauge higher than the station's set pressure
6.4.1. This indicates that the bypass valve (if present) has been turned to the open position or one of the regulators did not lock-up and is delivering too much pressure.
6.4.2. If the bypass valve has been opened, close it immediately. This should allow the pressure to return to normal and the relief valve to stop blowing.
6.4.3. To determine, if the problem is caused by a regulator which did not lock-up, do the following:
6.4.3.1. Slowly close the inlet valve on the operating regulator and watch the gauge installed on the downstream side of the bypass valve.
6.4.3.2. If the pressure drops down to normal and the relief valve closes, you have found the problem. With the inlet valve on the regulator run in the off position, watch the gauge and make certain the bypass valve does not need to be opened to maintain pressure on the system.
6.4.3.3. After closing the inlet valve to the operating regulator, if the pressure on the gauge remains high and the relief valve still blows, turn the inlet valve back on and follow the same procedure on the standby regulator. If either regulator does not lock-up, it requires immediate repair.
6.5. If the gauge pressure is less than the system set pressure, the problem is likely the relief valve.
6.5.1. Slowly close the block valve ahead of the relief valve and watch the system gauge. If the pressure on the gauge rises to the relief set point pressure, turn the relief block valve back open. This would indicate a problem described above.
6.5.2. If the pressure on the gauge stabilizes to a proper setting after turning off the relief block valve, the relief valve shall be repaired.
6.6. Do not leave the system with any block valve, except the bypass, in the "off" position.
6.7. Always install a gauge on the outlet side of the bypass valve before any block valve is turned.
6.8. Stay at the station and watch the gauge until repairs are made and pressures are normal.
6.9. If the problem cannot be resolved after following this procedure, contact manager or supervisor to request assistance from another service person with experience in regulator operation and maintenance.

7. LINE HEATERS
7.1. Low Temperature Alerts
7.1.1. Locations with heaters will be set up with a low temperature "alert" rather than an alarm as temperature alerts do not require immediate first response. When an alert condition

occurs, the telemetry or SCADA system will be configured to automatically email the district managers and RD that oversee that area.

7.1.2. If alert email is viewed during normal business hours, local management will generally direct the Meter Inspector or designee to respond to the site that business day

7.1.3. If alert email is viewed outside normal business hours, local management will generally direct the Meter Inspector or designee to respond to the site within 24 hours.

7.1.4. Weather or other operating conditions may warrant a more expedient response.

7.2. High Temperature Alarm

7.2.1. Locations with heaters will also be set up with a high temperature "alarm". When a high temperature alarm condition occurs, Gas Control will receive an alarm and dispatch a first responder via their typical procedure.

7.2.2. In response to a high temperature alarm, the First Responder will shut down the heater and contact management to get Meter Inspector support to troubleshoot and resolve the heater problem.

7.3. Unless alternate personnel are specifically approved by management, Meter Inspectors will be the only personnel permitted to startup and troubleshoot the heater. Other First Responders will be trained on heater shutdown and to contact a Meter Inspector to investigate potential heater problems.

7.4. If First Responders detect any AOC that requires immediate heater shutdown, they can shut down the heater prior to the Meter Inspectors arrival. These AOC's may include:

7.4.1. Gas leaks or reliefs blowing on gas train or heater controls;

7.4.2. Over heating – high temp shut down failure or high temperature alarm condition;

7.4.3. Glycol leak;

7.4.4. Low glycol – low glycol level failure; or

7.4.5. Apparent physical damage to any component.

7.5. Email alert notifications will be as follows:

7.5.1. Bellingham 1 Heater – Bellingham DM, Bellingham DOM, RD

7.5.2. Stanwood Heater – Mt Vernon DM, Mount Vernon DOM, RD

7.5.3. Shelton Heater – Aberdeen DM, Longview DM, RD

7.5.4. McCleary Heater – Aberdeen DM, Longview DM, RD

7.6. Belllingham 1, Shelton Gate and McCleary Gate Line Heater Procedure:

7.6.1. Lock out heater

7.6.1.1. Close main burner manual valve.

7.6.1.2. Close pilot valve.

7.6.1.3. Turn off ignitor (Bellingham 1 only).

7.6.2. Inspect heater

7.6.2.1. Check for leaks.

7.6.2.2. Verify pressures.

7.6.2.3. Check regulators for lock-up.

7.6.2.4. Check glycol level.

7.6.2.5. Check high temp shut off (has it tripped?)

7.6.2.6. Give the heater a general overall inspection.

7.6.3. Start the heater

7.6.3.1. Check for gas in the ignition chamber.

7.6.3.2. Install Igniter pack (located in telemetry building) on fitting (Shelton Gate only).

7.6.3.3. Turn on pilot valve.

7.6.3.4. Turn on/push ignition.

7.6.3.5. Hold down pilot button until pressure to pilot holds (McCleary & Bellingham 1).

7.6.3.6. Visually check the pilot light.

7.6.3.7. Slowly open the main burner manual valve. If the heater bath is cold you may have to just "crack" the burner valve, let the burner light. Once the main burner is lit and stable, open the valve slowly to "full" as the heater warms and the draft improves.

7.6.3.8. Visually inspect the main burner.

7.6.4. Shutdown the heater

7.6.4.1. Close main burner manual valve.
7.6.4.2. Turn off pilot valve.
7.6.4.3. Turn off ignitor (Bellingham 1 only).
7.6.4.4. Turn off inlet gas train valve for extended shutdowns.
7.6.5. Emergency Line Heater Shutdown Procedure
7.6.5.1. Turn off inlet gas train valve for extended shutdowns.

7.7. Stanwood-Oak Harbor Gate Line Heater Procedure:
7.7.1. Stanwood – Heater Ignition Procedure
7.7.1.1. Verify the following:
7.7.1.1.1. Gas valve (V1) in "on" position.
7.7.1.1.2. Gas pressure is at 7".
7.7.1.1.3. Glycol level is cold, CFL Mark and Operating=NOL.
7.7.1.1.4. Vacuum pressure is in range of -10 to -26.
7.7.1.1.5. Check for leaks.
7.7.1.1.6. Check position of gas valve (V2) located in the cabinet. Ensure it is OFF to start
7.7.1.1.7. Check 10# switch (S1). Set point is 10. Reset using the red reset button.
7.7.1.1.8. Check level reset on float (S2). There is no set point so reset with white button.
7.7.1.1.9. Check emergency stop to ensure it is in the out position.
7.7.1.1.10. Give the heater a general overall inspection.
7.7.1.2. Starting the heater
7.7.1.2.1. Turn on main gas valve on piping.
7.7.1.2.2. Turn gas valve to "pilot" position – inside cabinet.
7.7.1.2.3. Push down and hold pilot switch.
7.7.1.2.4. Use black box electronic ignitor and insert in female receptacle while pushing red button 3 to 4 times.
7.7.1.2.5. Hold pilot switch on for 60 seconds.
7.7.1.2.6. Release and view burner area through viewing window of flash back arrestor.
7.7.1.2.7. If pilot is lit, wait 5 minutes and turn gas valve to "on" position.
7.7.1.2.8. View burner and listen to gas ignition.
7.7.1.2.9. View gas pressure gauge on right side which should be at 9".
7.7.1.2.10. If no ignition, start procedure again.

7.7.2. Stanwood - Heater Shutdown Procedure
7.7.2.1. Verify inlet temperature (Summer= 100 degrees, Winter=60 degrees).
7.7.2.2. Verify outlet temperature. If unit is on, it should be between 100-140 degrees.
7.7.2.3. Turn gas valve (V2) in cabinet to "off" position.
7.7.2.4. Shut off inlet gas supply in case of emergency.
7.7.2.5. Push in ESD (Emergency Stop Device) on side of cabinet.
7.7.2.6. Turn off the main gas supply (V1).

8. POST-INSPECTION INSTRUCTIONS

8.1. Required corrective maintenance (i.e. deficiencies) not repaired at the time of inspection will be completed no later than the following time frames:

Deficiency	Days
Site Condition Unacceptable	180
Station Locks Condition Unacceptable	45
Signage/Station ID Unacceptable	45
Pipeline Markers Unacceptable – Washington	45
Pipeline Marker Unacceptable	90
Pipe and Equipment Condition Unacceptable	45
Station Valves Condition Unacceptable	45
Strainers Condition Unacceptable	45
Ventilating Equipment Condition Unacceptable	45
Relief Stack Condition Unacceptable	45
Recording/Indicating Gauges Unacceptable	180
Soil-to-Air Interface Condition Unacceptable	180
Pit Condition Unacceptable	45
Reg Not Vented Downward	45
Weather Caps Not Operable	45
Pipe Supports Unacceptable	180
Atmospheric Corrosion Found	180
Paint Condition Unacceptable	365
Regulator 1 Lockup Performed Properly – No	45
Regulator 1 Operated Properly – No	45
Regulator 2 Lockup Performed Properly – No	45
Regulator 2 Operated Properly – No	45
Regulator 3 Lockup Performed Properly – No	45
Regulator 3 Operated Properly – No	45
Regulator 4 Lockup Performed Properly – No	45
Regulator 4 operated Properly – No	45
Relief Operated Properly – No	45
Relief Isolation Valve Locked Open – No	45
Relief 2 Operated Properly – No	45
Relief 2 Isolation Valve Locked Open – No	45
Valves Left in Proper Position – No	45
Regulator 1 Rebuilt - Yes	(If YES to all, reset 10 year clock)
Regulator 2 Rebuilt – Yes	
Relief Valve Rebuilt - Yes	

8.2. The following steps shall be taken when maintenance or inspection has been completed:

8.2.1. Verify that all valves on the station are in their proper position and that the locking devices are installed and secured on both the bypass valve and the relief block valve.

8.2.2. Install labels (replace old labels if necessary) that identify the lock-up pressure on the operating and standby runs as well as the set pressure on the relief, using stickers or tags (e.g. Impresso tags, brass tags, etc.).

9. REBUILDS

9.1. Rebuilds are performed when a regulator, relief device, or pilots are inspected both externally and internally. A rebuild may be performed as emergent work when a device malfunctions, or as preventative maintenance.

9.2. Preventative maintenance requires that all devices at a station be rebuilt. Preventative rebuilds are scheduled every 10 years. Such rebuilds can be performed at the same time as that year's annual maintenance.

9.2.1. Follow applicable procedures for inspections under step 3 and 4 of this procedure when taking the station out of service to rebuild the regulators, and/or when returning the station back to service.

9.2.2. Disassemble each regulator and relief valve. Soap test newly installed regulators, pilots and tubing connections.

9.2.3. Replace any worn metal parts and rubber parts including diaphragms, seats, O-rings, tubes, etc.

9.2.4. Visually inspect regulators and associated parts for any unusual condition.

9.2.5. If the full preventative rebuild is performed before the 10-year due date, the clock restarts for the next 10-year period.

10. NEW REGULATOR STATIONS

10.1. For a new regulator station, refer to OPS 602 – Design of Pressure Regulating Stations. Asset information will be recorded within approved compliance tracking software application (e.g. Maximo) by designated qualified personnel.

10.2. Engineering Services will review and calculate the required capacity of the relief device at each station prior to the installation or modification of any regulator station.

11. RECORDS

11.1. Work performed on regulator stations shall be documented appropriately within approved compliance tracking software application (e.g. Maximo, Pipeline Inspection Manager).

11.2. Company approved software:

11.2.1. MDUG GIS System will be official regulator station list.

11.2.2. Approved compliance tracking software application (e.g. Maximo) will be the official regulator station maintenance checklist repository and regulator equipment list repository.

11.3. Company will use compliance tracking software application to ensure that each regulator station is maintained annually.

11.3.1. The District will review for accuracy and completeness.

11.3.2. Engineering Services will coordinate with Operations Systems regarding any necessary changes needed to compliance tracking software application.

12. PIPELINE CONTROLLED REGULATOR STATIONS

12.1. The following interstate pipeline companies may provide pressure control and over-pressure protection for Cascade's facilities at gate stations:

12.1.1. Northwest Pipeline (NWP), a subsidiary of the Williams Companies

12.1.2. Gas Transmission Northwest (GTN), a subsidiary of TransCanada Corporation.

12.2. The following interstate pipeline companies may provide pressure control and over-pressure protection for Montana-Dakota Utilities' facilities at gate stations:

12.2.1. NorthWestern Corporation, d/b/a NorthWestern Energy (NWE).

12.2.2. WBI Energy, an MDU Resources Group company.

12.3. The pipelines are responsible for inspecting these regulators stations at least once each calendar year with intervals not exceeding 15 months.

12.3.1. It is the responsibility of Engineering Services to obtain the inspection documentation from the pipeline within the required interval. These inspection records shall be stored in the districts SharePoint folder.

12.3.2. It is the responsibility of Engineering Services to ensure the regulator and relief set-points are within acceptable ranges and to include the station in the annual relief capacity review.

ADMINISTRATION

The Vice President, Engineering & Operations Services of the MDU Utilities Group is responsible for establishing this policy. Administration of this policy is the responsibility of the Director, Policy & Procedures. A designated individual will be further identified in each Company for the development, application and administration of this policy and its provisions.

Reviewed: _____
Director, Policy & Procedures

Date: _____

Approved: _____
Vice President,
Engineering & Operations Services

Date: _____

REVISIONS

Major Revision Summary	Initials	Date
Original procedure as part of O&M manual integration. Supersedes CNGC CP 745, IGC 4306 and MDU GDS Sec 9, pg. 134.		

Minor Revision Summary	Initials	Date