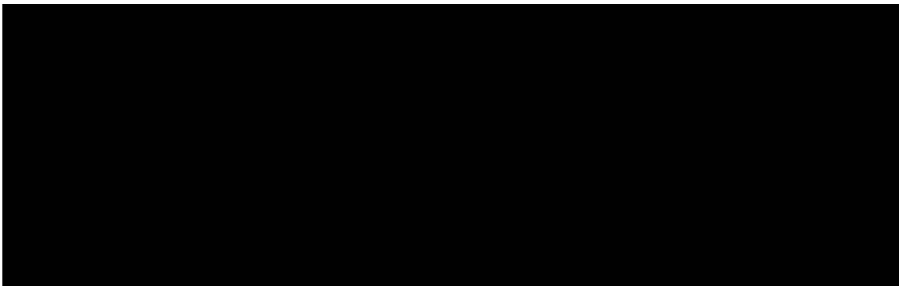
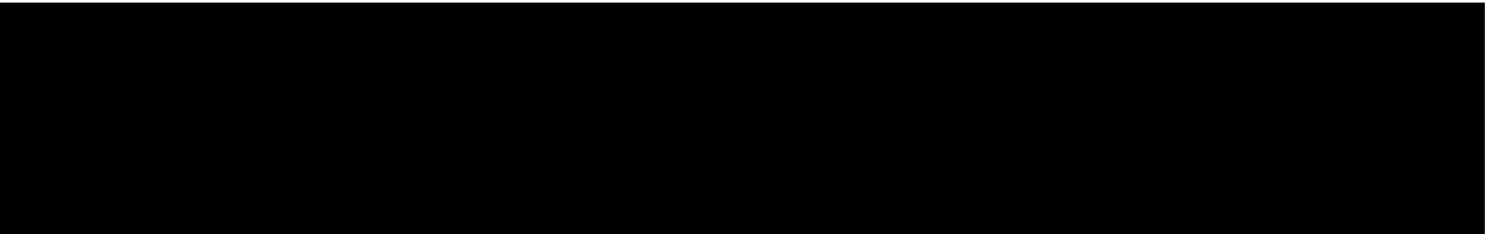




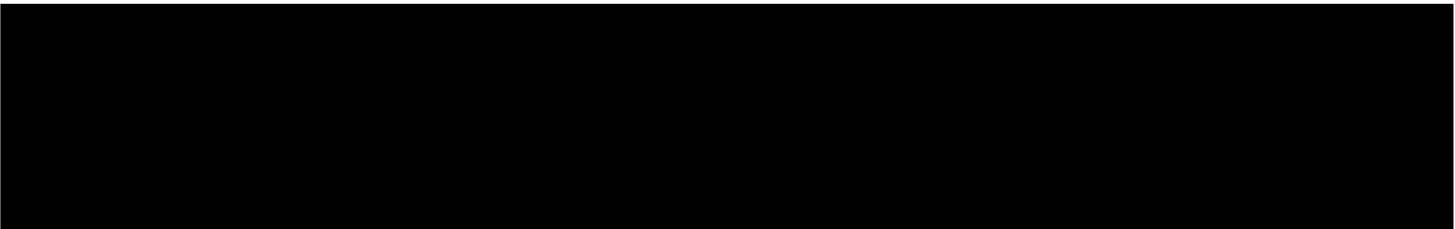
Christensen, Riley <riley.christensen@dnr.iowa.gov>

FW: Iowa City DCR Phase 1 AIS Availability Wavier - PRVs SRF #CS1921138 01



NOTE: Information in this waiver may have been redacted or removed due to issues of proprietary business information or incompatibility with Federal accessibility requirements. To request the information redacted for purposes of accessibility requirements, please email CWSRFWaiver@epa.gov.

Excellence in EngineeringSM



Subject: Iowa City DCR Phase 1 AIS Availability Wavier - PRVs SRF #CS1921138 01

Hello Brian,

We would like to request an availability waiver from the DNR/EPA for pressure reducing valves (PRVs). [REDACTED]
[REDACTED] has been in contact with a few suppliers who have reached out to several manufacturers to find that this material is not readily available as AIS compliant. The purpose of the product is to control the discharge pressure on the gas lines.

AIS De Minimis Waiver Criteria - Does not meet Criterion 2:

1. The product will be permanently installed on the project.
2. The valves are located on the main gas lines, so they cannot be considered incidental.
3. The item cost does not exceed 1% of the Total Materials Cost of the project.
4. The project-wide De Minimis list does not exceed 5% of the Total Materials Cost of the project.

SECTION 40 05 67.36
PRESSURE-REDUCING VALVES

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies pressure regulating valves for renewable natural gas (product gas) service up to 150 deg F at elevation 650' above sea level.

B. Valve List:

VALVE	VALVE NO.
Pressure Reducing Valve	PV-V8912A
Pressure Reducing Valve	PV-V8913A
Pressure Reducing Valve	PV-V8998A
Pressure Reducing Valve	PV-V8999A

1.02 REFERENCED STANDARDS

A. This Section incorporates by reference the latest revisions of the embedded standard referenced herein. In case of conflict between the requirements of this Section and those of a listed document, the requirements of this Section shall prevail.

Reference	Title
ANSI B16.5	Steel Pipe Flanges, Flanged Valves and Fittings

1.03 SUBMITTALS

A. Procedures: Section 01 33 00.

B. Provide the following submittals:

- C. 1. Manufacturer's product data including Cv and FL valves
2. Hydrostatic test results.
3. Operations and Maintenance information as specified in Section 01 33 00.

1.04 SYSTEM DESCRIPTION

A. Design Requirements:

1. Direct-acting type pressure-regulating valves shall control the discharge pressure within +/-5 percent of set pressure.
2. Pilot-controlled type pressure-regulating valves shall maintain the set discharge pressure regardless of fluctuations in inlet pressure.
3. Compatible with safety override monitor pressure regulator.
 - a. Performance Requirements:

Valve number	Service	Line size, inches	Connection Type	Flow range	Inlet pressure range (psig)	Regulated outlet pressure range / initial setting (psig)
PV-V8912A	Product Gas	1	NPT	60 – 215 SCFM	700	150
PV-V8913A	Product Gas	1	NPT	60 – 215 SCFM	150	10
PV-V8998A	Product Gas	1	NPT	60 – 215 SCFM	700	630*
PV-V8999A	Product Gas	1	NPT	60 – 215 SCFM	700	620

*Regulated outlet downstream of V8999A. See P&IDs.

PART 2 PRODUCTS

2.01 GENERAL

- A. Flanged or threaded connections, as specified.
- B. For moving parts requiring lubrication, provide means to lubricate and lubricate prior to delivery.

2.02 GAS SERVICE PRESSURE-REGULATING VALVES

- A. AGA approved.
- B. Valves shall be preassembled into a manifold as shown in drawing M3.02, Section 3. Assembly shall be tested at the factory based on the performance criteria included in this specification prior to shipping to the site. See Specification 40 05 02.15 for piping requirements.
- C. Sized as recommended by the manufacturer for the intended use.
- D. Materials:
 - 1. Body, bonnet, spring case: Carbon steel
 - 2. Stem, plug, trim: Stainless steel
 - 3. Seats and seals: PTFE or fluoroelastomer (FKM).
 - 4. Acceptable manufacturer:

 - c. Approved Equal.

2.03 SOURCE QUALITY CONTROL

- A. Hydrostatic Test:
 - 1. Hydrostatic tests shall be conducted by the manufacturer for one valve of each type supplied for a particular service.
 - 2. Hydrostatic test steel-bodied valves in accordance with the requirements of ANSI B16.5.

3. Hydrostatic test aluminum-, bronze-, and brass-bodied valves at double the maximum pressure specified.
4. Leakage, sweating, or visible deformation at any point on the valve shall be cause for rejection of valves of that type and manufacturer.

PART 3 EXECUTION

3.01 GENERAL

- A. Install valves in accordance with manufacturer's instructions.
- B. Pressure reducing valves shall be insulated.

END OF SECTION



Christensen, Riley <riley.christensen@dnr.iowa.gov>

Iowa City DCR Phase 1 AIS Availability Wavier - Flanged Pressure Reducers SRF #CS1921138 01

We would also like to request an availability waiver from the DNR/EPA for the flanged pressure reducers. [REDACTED] has been in contact with a few suppliers who have reached out to several manufacturers to find that this material is not readily available as AIS compliant. The purpose of the product is to control the LRNG distribution line pressure.

AIS De Minimis Waiver Criteria - Does not meet Criterion 2:

1. The product will be permanently installed on the project.
2. The valves are not incidental to the project.
3. The item cost does not exceed 1% of the Total Materials Cost of the project.
4. The project-wide De Minimis list does not exceed 5% of the Total Materials Cost of the project.

Information required for the availability waiver:

- Supplier information/pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials.
 - AIS compliant valve was not found.
- Documentation of the assistance recipient's efforts to find available domestic sources.
 - See attached.
- Project Schedule
 - See attached.
- Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials.
 - See attached. Two are required.
- Statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought.
 - See attached.

Please let me know if we need to provide additional information.

Thank you,

SECTION 23 05 23

GENERAL-DUTY VALVES FOR HVAC PIPING

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: Valve specifications for all Division 23 systems unless otherwise noted.
- B. Related Section and Divisions: Applicable provisions of Division 01 govern work under this section.

1.02 SUBMITTALS

- A. Submit product data under provisions of Section 01 33 00—Submittals.
- B. CONTRACTOR shall submit a schedule of all valves indicating type of service, dimensions, materials of construction, and pressure/temperature ratings for all valves to be used on the project. Temperature ratings specified are for continuous operation.

1.03 OPERATION AND MAINTENANCE DATA

- A. All operations and maintenance data shall comply with the submission and content requirements specified under Section 01 33 00—Submittals.

1.04 DESIGN CRITERIA

- A. Where valves are specified for individual mechanical services (i.e., hot water heating, steam, etc.) all valves shall be of the same manufacturer.

PART 2—PRODUCTS

2.01 GENERAL

- A. Manufacturers: Acceptable manufacturers are [REDACTED]

2.02 NATURAL GAS SYSTEM

- A. Exterior Aboveground Shutoff Valves: Black body, brass plug type with square head, top check and lock wing stop lock, threaded ends for 25 psi or less gas pressure requirements, McDonald No. 10687B, or equal.
- B. Pressure Regulators:
 - 1. Manufacturers: [REDACTED] or equal.
 - 2. All pressure regulators shall be designed, manufactured and approved for natural gas service.
 - 3. Pressure regulators for individual service lines shall be capable of reducing distribution line pressure to pressures required for users. Pressure relief shall be set at a lower

pressure than would cause unsafe operation of any connected user. Regulator shall have a single port with orifice diameter no greater than that recommended by manufacturer for the maximum gas pressure at the regulator inlet. Regulator vent valve shall be of resilient materials designed to withstand flow conditions when pressed against valve port. Regulator shall be capable of limiting buildup of pressure under no-flow conditions to 50% or less of the discharge pressure maintained under flow conditions. Provide commercial-grade diaphragm type with internal relief valve, vent valve, cast iron body, and Buna-N diaphragm.

4. Pressure regulators indicated to be installed on gas piping exceeding 2 psig shall be provided with a tested and approved, integral overpressure protection device (OPD). Pressure regulators and OPD shall comply with ANSI Z21.80 (line regulators) or ANSI Z21.18 (appliance regulators).
5. Appliance regulators may be provided with a vent limiting device, where entire regulator and vent limiter complies with ANSI Z21.80 as an assembly and is installed in accordance with manufacturer's recommendations and NFPA 54.

PART 3-EXECUTION

3.01 GENERAL

- A. Properly align piping before installation of valves in an upright position; operators installed below the valves will not be accepted.
- B. Install valves in strict accordance with valve manufacturer's installation recommendations. Do not support weight of piping system on valve ends.
- C. Install all valves with the stem in the upright position. Valves may be installed with the stem in the horizontal position only where space limitations do not allow installation in an upright position or where large valves are provided with chain wheel operators. Where valves 2 1/2-inch and larger are located more than 12-foot 0-inch above mechanical room floors, install valve with stem in the horizontal position and provide a chain wheel operator. Valves installed with the stems down, will not be accepted.
- D. Prior to flushing of piping systems, place all valves in the full-open position.
- E. Install all valves, and piping specialties, including items furnished by others, as specified and/or detailed. Make connections to all equipment installed by others where that equipment requires the piping services indicated in this section.
- F. Install valves for shutoff and to isolate equipment, parts of systems, or vertical risers. All valves shall be located such that servicing and operation is possible with adequate clearance for access. Install line shutoff valve at each branch connection to riser. Branch line shutoff valves shall be automatic type where shown on Drawings. Install valves with stems upright or horizontal, not inverted unless required otherwise by the valve manufacturer.
- G. Valves, regulators, flanges, unions, and similar appurtenances shall be accessible for operation and servicing and shall not be located within chases, above ceilings, within walls/partitions, or nonaccessible locations.

- H. Identify all gas regulators, including utility-provided regulators, in accordance with Section 20 05 53—Identification for Fire Suppression, Plumbing, and HVAC Piping and Equipment.
- I. Locate all valves so that the removal of their bonnets is possible. All flanged valves in horizontal lines with the valve stem in a horizontal position shall be positioned so that the valve stem is inclined one bolt hole above the horizontal position. Screw pattern valves placed in horizontal lines shall be installed with their valve stems at a minimum 30-degree angle above the horizontal position. All valves must be true and straight at the time the system is tested and inspected for final acceptance. Install valves as close as possible to the locations indicated on the Drawings. Any change in valve location must be so indicated on the Record Drawings.
- J. Shut-Off Valves: Install shut-off valves at all equipment, at each branch take-off from mains, and at each automatic valve for isolation or repair.
- K. Gas Pressure Regulators: When the gas pressure regulator is equipped with a vent connection, run a connection size vent to outside air in accordance with codes. Use a larger size vent when required by the manufacturer's installation instructions.

END OF SECTION