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"Protecting Public Health and the Environment"

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August 13, 2020

Mr. Paul Hauch, P.E.
Bureau Chief
Department of Environmental Protection
Division of Water Quality
Municipal Finance and Construction Element
Bureaus of Construction, Payments & Administration
PO Box 420
Trenton, NJ 08625

NOTE: Items and pages may have been intentionally redacted or excluded by the EPA. Contact CWSRFWaiver@epa.gov for more information if necessary.

**RE: New Jersey Infrastructure Bank (NJIB)
Standby Power Generation Facility Project
NJEIT Project No.: S340689-23
AIS Availability Waiver – Class 150 Check Valve**

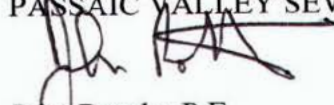
Dear Mr. Hauch, P.E.:

I hereby request a waiver from the American Iron and Steel ("AIS") requirement for the purchase of a 16-inch Class 150 wafer lug body, double-disc check valve for the PVSC Standby Power Generation Facility project located in Newark, New Jersey. The request is based on PVSC's determination that this iron and steel product is not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.

The check valve will be installed on the new natural gas service and is needed to protect the Gas Utility's natural gas distribution system from over pressurization. New gas booster stations (reciprocating compressors) will be served by this new gas service and will deliver high-pressure gas to the power generation equipment (combustion turbine technology). The approximate cost estimate of this check valve is [REDACTED]

I have included a justification document from the project's Engineer, Black & Veatch, Corp. for review considerations by the DEP and the Environmental Protection Agency. Please contact the project's Engineer, Mr. Domenick Loschiavo, at LoschiavoDA@bv.com if you need any additional information regarding this waiver request.

Very truly yours,
PASSAIC VALLEY SEWERAGE COMMISSION


John Rotolo, P.E.
Chief Engineer

cc: Gregory Tramontozzi, PVSC
John Bolcar, PVSC JTB
James McCarthy, PVSC
Thomas Laustsen, PVSC
Joe Frissora, AECOM+HDR JV
Domenick Loschiavo, Black & Veatch



August 11, 2020

Mr. Paul Hauch
Bureau Chief
Department of Environmental Protection
Division of Water Quality
Municipal Finance and Construction Element
Bureau of Construction, Payments & Administration
PO Box 420
Trenton, NJ 08625

Sent Via Email: Paul.Hauch@dep.nj.gov

Re: New Jersey Infrastructure Bank (NJIB)
Standby Power Generation Facility Project
NJEIT Project No.: S340689-23
Passaic Valley Sewerage Commission
AIS Availability Waiver – **Class 150 Check Valve**

Dear Mr. Hauch:

This letter serves as a request on behalf of the Passaic Valley Sewerage Commission ("PVSC") for an Availability Waiver of the American Iron and Steel ("AIS") requirements for a component of the above referenced project. Specifically, we are herein requesting permission to utilize non AIS compliant 16-inch Class 150 wafer lug body, double-disc check valve for the purpose of natural gas service for the proposed Standby Power Generation Facility ("SPGF"). The following information is included for your review and reference:

1. The referenced project is being constructed in Newark, New Jersey to provide PVSC reliable backup emergency power in the event of the loss of utility power. The project is part of PVSC's FEMA Resiliency Program. The project requires a new natural gas service dedicated for the operation of the SPGF.
2. Project Specification Section 40 05 51.13 – Valve Installation specified the check valve body to be of carbon steel construction outfitted with a 316 stainless steel disc, Viton seat, and Inconel X750 spring. Project P&ID I-6011 depicts the check valve within the natural gas piping network.
3. Following our determination that the specified valve is not domestically sourced, and no domestic manufacturer of 16-inch Class 150 wafer lug body, double-disc check valves exist, alternatives were explored. However, due to the flow requirements to supply adequate flow and pressure to the proposed new fuel gas compressors for the project, the valve could not be sized smaller than 16-inches. In addition, the installation of the check

valve is per the requirement of the Gas Utility (PSE&G) for a high-pressure gas service. For these reasons, such alternatives have not been further pursued. We have concluded that no valve between the sizes of 2-inch and 48-inch meeting the project's technical requirements are AIS compliant.

For the reasons presented above, we hereby request a waiver for the AIS requirements for the 16-inch Class 150 wafer lug body, double-disc check valve such that any manufacturer meeting the project's technical specifications may be implemented. To our knowledge, no waiver requests for this product have been previously submitted to the United States Environmental Protection Agency ("EPA").

The basis of waiver request is predicated upon the AIS requirements allowing for the submission of a waiver request if "iron and steel products are not produced in in the United States ("US") in sufficient and reasonably available quantities and of a satisfactory quality".

Accordingly, should you find the above information and enclosed documentation suitable, we kindly request that you forward this request to the appropriate party of the EPA for their review and approval.

Should you have any further questions regarding this matter, please do not hesitate to contact me at (646) 779-8340 or LoschiavoDA@bv.com.

Sincerely,

Domenick A. Loschiavo, P.E.
Project Manager

cc: Curley, NJDEP
Rotolo\Bolcar\McCarthy, PVSC
Frissora, HDR
Robinson\Modi, B&V

Passaic Valley Sewerage Commission
 Standby Power Generation Facility Project
 Contract No.: B040

AIS Waiver

Item No.	Item Description	Value
1	Description of the Foreign and domestic construction materials	The foreign construction materials are as follows – Body: Carbon Steel (ASTM A216, Gr. WCB); Disc: Stainless Steel (ASTM A351, Gr. CF8M); Spring: Inconel X-750. Casting of the valve body is performed in China.
2	Unit Measure	Each
3	Quantity	One (1)
4	Price	Approximately [REDACTED]
5	Time of Delivery or Availability	Delivery of the valve is approximately 20 – 22 weeks from approval.
6	Location of the Construction Project	Passaic Valley Sewerage Commission 600 Wilson Avenue Newark, NJ 07105
7	Name and Address of the Proposed Supplier	Valve manufacturer, Keckley Company, is located at: 3400 Cleveland Street Stokie, Illinois 60076
8	A detailed justification for the use of foreign construction materials	API 594 & 6D check valve is required for the natural gas system for the facility. The flow requirements of the system specifically require the 16" check valve to be full port. Attempts were made to locate a valve meeting the requirements as well as AIS requirements, however such valve was not found.
9	Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals,	Attached is correspondence records between the Engineer (Black & Veatch) and valve suppliers regarding the ability to supply AIS compliant valves. The following manufacturers were contacted, Keckley Company, DeZurik, Titan Flow, Champion Valve and Sure Flow where Keckley, Sure

	contracts, and communication with the prime contractor	Flow and DeZurik only provided responses of which all three indicated their valve does not meet the project's requirements.
10	Project Schedule	The construction duration is anticipated to be 24 months. The piping system the valve will be integrated with is of welded and fixed joint assembly, thus it is imperative the valves be released and delivered in a timely manner so that it can be planned into the piping fabrication and layout as there is limited field adjustment for this high pressure and temperature system.

NEW JERSEY ENVIRONMENTAL INFRASTRUCTURE TRUST
PROJECT NO.: S340689-23
PASSAIC VALLEY SEWERAGE COMMISSION
STANDBY POWER GENERATION FACILITY
AIS AVAILIBITY WAIVER

TABLE OF CONTENTS

Section 4 – Project Specification, Project Drawings

Section 40 05 51.13 - VALVE INSTALLATION

PART 1 - GENERAL

1.1 SCOPE

- A. This section covers the installation of new valves and actuators purchased by Contractor as part of this Work and installation of new valves and actuators purchased by Others. The equipment to be furnished by Others for installation by Contractor is identified in the Piping & Instrument Diagrams.
- B. Cleaning, disinfection, pressure and leakage testing, insulation, and pipe supports are covered in other sections.
- C. The following specification sections are applicable to all valves installed by the Contractor.

1.2 GENERAL

- A. Equipment installed under this section shall be erected and placed in proper operating condition in full conformity with Drawings, Specifications, engineering data, instructions, and recommendations of the equipment manufacturer, unless exceptions are noted by Engineer.
- B. Any valves and actuators that are identified as being provided by others will be furnished complete for installation by Contractor. Technical specifications under which the equipment will be purchased are available.
- C. Coordination:
 - 1. When manufacturer's field services or installation check services are provided by the valve manufacturer, Contractor shall coordinate the services with the valve manufacturer. Contractor shall give Engineer written notice at least 30 days prior to the need for manufacturer's field services.
 - 2. Submittals for equipment that will be furnished by Others under each procurement contract will be furnished to Contractor upon completion of review by Engineer. Contractor shall review equipment submittals and coordinate with the requirements of the Work and the Contract Documents. Contractor accepts sole responsibility for determining and verifying all quantities, dimensions, and field construction criteria.
 - 3. Flanged connections to valves including the bolts, nuts, and gaskets are covered in the appropriate pipe specification section. Valve ends shall match piping.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 INSPECTION

- A. All valves and accessories shall be inspected for damage and cleanliness before being installed. Any material damaged or contaminated in handling on the job shall not be used unless it is repaired and re-cleaned to the original requirements by Contractor. Such material shall be segregated from the clean material and shall be inspected and approved by Owner or his representative before its use.

3.2 INSTALLATION

A. General:

- 1. Valves shall be installed with sufficient clearance for proper operation of any external mechanisms, and with sufficient clearance to dismantle the valve for in-place maintenance. Installation shall be in accordance with the valve manufacturer's recommendations.
- 2. Unless otherwise indicated on the Drawings or specified, all valves installed in horizontal runs of pipe having centerline elevations 4 feet 6 inches or less above the finish floor shall be installed with their operating stems vertical. Valves installed in horizontal runs of piping having centerline elevations between 4 feet 6 inches and 6 feet 9 inches above the finish floor shall be installed with their operating stems horizontal. If adjacent piping prohibits this, the stems and operating handwheel shall be installed above the valve horizontal centerline as close to horizontal as possible. Valves installed in vertical runs of pipe shall have their operating stems oriented to facilitate the most practicable operation, as reviewed by Engineer.

B. Installation Checks:

- 1. When specified in the valve sections, the valve manufacturer will provide installation checks. For installation checks, the manufacturer's field representative will inspect the valve installation immediately following installation by Contractor. The manufacturer's representatives will revisit the site as often as necessary to ensure installation satisfactory to Owner.
- 2. Contractor shall perform no work related to the installation or operation of materials or equipment furnished by others without direct observation and guidance of the field representative, unless Engineer and manufacturer furnishing such materials concur otherwise.

C. AWWA Butterfly Valves:

- 1. Butterfly valves shall be installed with the shaft horizontal unless otherwise necessary for proper operation or as acceptable to Engineer.

2. Whenever an actuator must be removed to permit installation of a valve, the actuator shall be promptly reinstalled and shall be inspected and readjusted by a representative of the valve manufacturer.

D. Check Valves:

1. Lift Check Valves:

- a. Horizontal lift checks shall be installed in a level horizontal position so that the internal parts rise and fall vertically, unless the valve is spring loaded. Angle pattern lift checks shall be installed in vertical pipe with flow upward from beneath the disc.

2. Swing Check Valves:

- a. Install valves oriented for the correct flow direction. Only valves designed for vertical installation shall be installed in vertical piping.

3. Low Pressure Air Service Check Valves:

- a. Dual disc wafer check valves installed in the discharge piping of centrifugal blowers shall be positioned with the valve hinge perpendicular to the impeller shaft of the blower.

E. Plug Valves:

1. Eccentric Plug Valves:

- a. Eccentric plug valves shall be installed with the shaft horizontal and the plug in the upper half of the valve body. Valves in horizontal wastewater, sludge, or scum lines shall be installed with the seat on the upstream end. Valves in all vertical piping shall be installed with the seat at the upper end of the valve.

F. Resilient Seated Gate Valves:

1. Resilient Seated Gate Valves:

- a. Valves shall be handled and installed in accordance with the recommendations set forth in the Appendices to ANSI/AWWA C509 and C515 and with the recommendations of the manufacturer.

2. Double Disc Gate Valves:

- a. Valves shall be handled and installed in accordance with the recommendations set forth in the Appendix to ANSI/AWWA C500 and with the recommendations of the manufacturer.

G. Air Release and Combination Air Valves:

1. The exhaust from each valve shall be piped to a suitable point acceptable to Engineer. Air release valve exhaust piping leading to a trapped floor drain shall terminate at least 6 inches above the floor.

H. Hydrants:

1. Yard Hydrants:

- a. A concrete slab 18 inches square and 4 inches thick shall be provided around the top of each 3/4 inch and 1-1/2 inch yard hydrant. Hydrants shall be installed plumb. Hydrant drainage shall be provided by installing below each hydrant at least 1 cubic foot of gravel or crushed stone.
- b. Each 4 inches yard hydrant shall be set on a reinforced concrete foundation at least 18 inches square and 6 inches thick. Each hydrant shall be anchored in place or adequately blocked to prevent the hydrant from blowing off the supply connection. Hydrant drainage shall be provided by installing at least 7 cubic feet of gravel or crushed stone around the hydrant and below the top of the hydrant supply pipe.
- c. An operating wrench shall be provided for each yard hydrant.

2. Fire Hydrants:

- a. Fire hydrants shall be set so that at least the minimum pipe cover is provided for the branch supply line and the nozzles are at least 12 inches above finished grade. Each hydrant shall be set on a concrete foundation at least 18 inches square and 6 inches thick. Each hydrant shall be blocked against the end of the trench with concrete or shall be suitably anchored.
- b. Hydrant drainage shall be provided by installing at least 7 cubic feet of gravel or crushed stone around the hydrant and below the top of the hydrant supply pipe.
- c. All hydrants shall stand plumb. Hydrants with pumper nozzles shall have hose nozzles parallel with, and the pumper nozzle perpendicular to, the curb line. Hydrants having hose nozzles 90 degrees apart shall be set so that the line bisecting the angle between the nozzles is perpendicular to the curb line. Hydrants located behind curbs, where sidewalks extend close to or abut the curb, shall be set so that no portion of the pumper or hose nozzle caps will be less than 6 inches or more than 12 inches from the gutter face of the curb. Where set between the curb and sidewalk, or between the sidewalk and property line, no portion of the hydrant or nozzle cap shall be within 6 inches of the sidewalk.
- d. Immediately before installation of a fire hydrant, the following procedure shall be followed: (a) the hydrant shall be thoroughly inspected; (b) the hydrant interior shall be thoroughly cleaned; and (c) the hydrant shall be opened and closed as many times as may be necessary to determine if all parts are in proper working order, with valves seating properly and the drain valve operating freely.

I. Valve Boxes:

1. Valve boxes shall be set plumb. Each valve box shall be placed directly over the valve it serves, with the top of the box brought flush with the finished grade. After each valve box is placed in proper position, earth fill shall be placed and thoroughly tamped around the box.

3.3 VALVE ACTUATORS

- A. Valve actuators and accessories shall be factory mounted on the valve, calibrated, and tested by the valve or actuator manufacturer.

3.4 FIELD QUALITY CONTROL

- A. Field Testing:
 - 1. After installation, all valves shall be tested in accordance with Section 40 05 24 – General Service Pipe.
 - 2. Pressure Tests:
 - a. Pressure testing shall be in accordance with Section 40 05 24 – General Service Pipe.
 - 3. Leakage Tests:
 - a. All valves shall be free from leaks. Each leak that is discovered within the correction period stipulated in the General Conditions shall be repaired by and at the expense of Contractor. This requirement applies whether pressure testing is required or not.

3.5 ADJUSTING

- A. After installation, the opening and closing time shall be adjusted as needed for each pneumatic, hydraulic and electric actuated valve.

PART 4 - ATTACHMENTS

4.1 VALVE LIST

- A. The following is included as an attachment to this section:
 - 1. CUUU-M0300 Valve List

End of Section

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TAG NUMBER	VALVE DESCRIPTION	DWG NUMBER	SYS CODE	PURCH SPEC	INSTALL SPEC	TYPE	BODY STY	SIZE IN	SIZE OUT	CLASS	MATERIAL	END PREP	UTILITIES REQUIRED	DESIGN PI	UNITS	DESIGN TEMP	UNITS2	PIPE SPEC	MANUF.	MODEL	OR EQUAL?	FLUID	REMARKS	Rev
BALV-167800002	FG SUPPLY PRESSURE REGULATOR 1 ISO VALVE	I-6011	FGA	B040	B040	BV	BA	16		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800005	FG SUPPLY PRESSURE REGULATOR 1 ISO VALVE	I-6011	FGA	B040	B040	BV	BA	16		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800006	FG SUPPLY PRESSURE REGULATOR 2 ISO VALVE	I-6011	FGA	B040	B040	BV	BA	16		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800009	FG SUPPLY PRESSURE REGULATOR 2 ISO VALVE	I-6011	FGA	B040	B040	BV	BA	16		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167810001	FG COMPRESSOR 1 INLET ISO VALVE	I-6011	FGA	B040	B040	BV	BA	12		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
CV-167800001	FG SUPPLY HEADER CHECK VALVE	I-6011	FGA	B040	B040	CK	CD	16		150	CS	LUG WAFER	N	60	PSIG	130	"F	11CE2H	KECKLEY	DL	Y	FUEL GAS	A216-WCB BODY, 316 SS DISC W/ VITON SEAT, INCONEL X750 SPRING	A
BALV-167820001	FG COMPRESSOR 2 INLET ISO VALVE	I-6011	FGA	B040	B040	BV	BA	12		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167830001	FG COMPRESSOR 3 INLET ISO VALVE	I-6011	FGA	B040	B040	BV	BA	12		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167810002	FG COMPRESSOR 1 OUTLET ISO VALVE	I-6012	FGA	B040	B040	BV	BA	6		300	CS	RF FLANGE	N	500	PSIG	130	"F	12CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167810005	FG COMPRESSOR 1 RECYCLE ISO VALVE	I-6012	FGA	B040	B040	BV	BA	6		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167820002	FG COMPRESSOR 2 OUTLET ISO VALVE	I-6013	FGA	B040	B040	BV	BA	6		300	CS	RF FLANGE	N	500	PSIG	130	"F	12CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167820005	FG COMPRESSOR 2 RECYCLE ISO VALVE	I-6013	FGA	B040	B040	BV	BA	6		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167830002	FG COMPRESSOR 3 OUTLET ISO VALVE	I-6014	FGA	B040	B040	BV	BA	6		300	CS	RF FLANGE	N	500	PSIG	130	"F	12CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167830005	FG COMPRESSOR 3 RECYCLE ISO VALVE	I-6014	FGA	B040	B040	BV	BA	6		150	CS	RF FLANGE	N	200	PSIG	130	"F	11CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT	A
BALV-167800010	FG FILTER/SEPARATOR 1 INLET ISO VALVE	I-6015	FGA	B040	B040	BV	BA	8		300	CS	RF FLANGE	N	500	PSIG	250	"F	12CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800011	FG FILTER/SEPARATOR 1 OUTLET ISO VALVE	I-6015	FGA	B040	B040	BV	BA	8		300	304SS	RF FLANGE	N	500	PSIG	250	"F	12SDNH			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800012	FG FILTER/SEPARATOR 2 INLET ISO VALVE	I-6015	FGA	B040	B040	BV	BA	8		300	CS	RF FLANGE	N	500	PSIG	250	"F	12CE2H			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A
BALV-167800013	FG FILTER/SEPARATOR 2 OUTLET ISO VALVE	I-6015	FGA	B040	B040	BV	BA	8		300	304SS	RF FLANGE	N	500	PSIG	250	"F	12SDNH			Y	FUEL GAS	API 6D; TOP ENTRY, TRUNNION MOUNTED, RPTFE SEATS; API-607 RATED; GRAPHITE PACKING; AIS COMPLIANT; GEAR OPERATOR	A

NOTES

1. List is exclusive of valves for building services, including plumbing and HVAC.

