FirstEnergy Nuclear Operating Company

Marty L. Richey Site Vice President Beaver Valley Power Station P.O. Box 4 Shippingport, PA 15077

> 724-682-5234 Fax: 724-643-8069

June 16, 2017 L-17-198

10 CFR 50, Appendix E, Section VI

ATTN: Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

SUBJECT: Beaver Valley Power Station, Unit No. 1 Docket No. 50-334, License No. DPR-66 Emergency Response Data System Data Point Library Update

In accordance with reporting requirement 10 CFR 50; Appendix E, Section VI.3.a, updates of the Emergency Response Data System (ERDS) Data Point Library (DPL) for Beaver Valley Power Station, Unit No. 1 (BV1) are provided. The attachment includes the required details of the changes, and the enclosure provides copies of the updated DPL pages.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Brian D. Kremer, Manager – Regulatory Compliance, at 724-682-4284.

Sincerely,

Marty L. Richev

Attachment: Summary of Changes to Data Point Library

Enclosure: Beaver Valley Power Station ERDS Data Point Library, Updated Pages

cc: NRC Region I Administrator NRC Resident Inspector NRC Project Manager (w/o enclosure) Director BRP/DEP Site BRP/DEP Representative

ADZLO NRR

# Attachment L-17-198

.

# Summary of Changes to Data Point Library Page 1

Reactor	DPL	
Unit	Point	Description of Change(s)
		Create new point named R1011A with same fields as XR013.
BV1	R1011A	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Create new point named R1013A with same fields as XR015.
BV1	R1013A	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Create new point named R1021A with same fields as XR005.
BV1	.R1021A	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Create new point named R1023A with same fields as XR007.
BV1	R1023A	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Create new point named R1031A with same fields as XR009.
BV1	R1031Ã	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Create new point named R1033A with same fields as XR011.
BV1	R1033A	Date: changed to "5/30/17", Data Feeder: changed to "IPC"
		Date: changed to "5/30/17"
		Unique System Desc.: "Point deleted per ECP-14-0464"
		Clear all other fields except Date, Reactor Unit, Data Feeder,
BV1	XR013	Point ID.
		Date: changed to "5/30/17"
		Unique System Desc.: "Point deleted per ECP-14-0464"
		Clear all other fields except Date, Reactor Unit, Data Feeder,
BV1	XR015	Point ID.
		Date: changed to "5/30/17"
		Unique System Desc.: "Point deleted per ECP-14-0464"
D) //	VDOOD	Clear all other fields except Date, Reactor Unit, Data Feeder,
BV1	XR005	Point ID.
		Date: changed to "5/30/17"
		Unique System Desc.: "Point deleted per ECP-14-0464"
BV1	XR007	Clear all other fields except Date, Reactor Unit, Data Feeder, Point ID.
DAT		
		Date: changed to "5/30/17" Unique System Desc.: "Point deleted per ECP-14-0464"
		Clear all other fields except <b>Date, Reactor Unit, Data Feeder</b> ,
BV1	XR009	Point ID.
	711003	Date: changed to "5/30/17"
		Unique System Desc.: "Point deleted per ECP-14-0464"
		Clear all other fields except Date, Reactor Unit, Data Feeder,
BV1	XR011	Point ID.

# Enclosure L-17-198

# Beaver Valley Power Station ERDS Data Point Library, Updated Pages (12 pages follow)

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

.

Point ID: XR005

Plant Spec Point Desc .:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

•

Point ID: XR007

Plant Spec Point Desc.:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

.

Point ID: XR009

Plant Spec Point Desc.:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

•

.

Point ID: XR011

Plant Spec Point Desc.:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

.

Point ID: XR013

Plant Spec Point Desc.:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

Date: 5/30/2017

Reactor Unit: BV1

Data Feeder: ARERAS

NRC ERDS Parameter:

.

Point ID: XR015

Plant Spec Point Desc.:

Generic/Cond Desc.:

Analog/Digital:

Engr Units/Dig States:

Engr Units Conversion:

Minimum Instr Range:

Maximum Instr Range:

Zero Point Reference:

Reference Point Notes:

PROC or SENS:

Number of Sensors:

How Processed:

Sensor Location:

Alarm/Trip Set Points:

NI Detector Power Supply Cut-Off Power Level:

NI Detector Power Supply Turn-ON Power Level:

Instrument Failure Mode:

Temperature Compensation for DP Transmitters:

Level Reference Leg:

Unique System Desc.: point deleted per ECP 14-0464

.

•

Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EFF-GAS-RAD1
Point ID:	R1021A
Plant Spec Point Desc .:	1RM-VS-109 LRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	A
Engr Units/Dig States:	uCi/sec
Engr Units Conversion:	Xe133 CF = cps/uCl/cc
Minimum Instr Range:	2.9E+01
Maximum Instr Range:	2.9E+05
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Alert=7.92E+2, High=1.584E+3
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1VS-109 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. The listed minimum and maximum instrument ranges listed are based on system software parameter limitations and pathway ODCM release flow rate. In addition, the maximum range is based on a release concentration of 1E-2 uCi/cc, limited by the automatic swap to the high range monitor. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1VS-109 monitors for low range noble gases at the discharge of the Auxiliary Building shielded area exhaust fans and at the discharge of the Containment Refueling Purge and Exhaust fan (during refueling). Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data.

.

•

Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EFF-GAS-RAD3
Point ID:	R1023A
Plant Spec Point Desc.:	1RM-VS-109 HRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	Α
Engr Units/Dig States:	uCi/sec
Engr Units Conversion:	Xe133 CF = amps/uCl/cc
Minimum Instr Range:	1.8E+03
Maximum Instr Range:	7.9E+12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Alert=5.28E+5, High=1.18E+6
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	Ν
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1VS-109 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. Minimum and maximum instrument ranges listed are based on Xe-133 and pathway ODCM release flow rate. Maximum range is based on monitor parameter setting and ODCM release flow rate. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1VS-109 monitors for high range noble gases at the discharge of the Auxiliary Building shielded area exhaust fans and at the discharge of the Containment Refueling Purge and Exhaust fan (during refueling). Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and decay period. Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data. 1-88

.

E	RDS DATA POINT LIBRARY
Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EFF-GAS-RAD4
Point ID:	R1031A
Plant Spec Point Desc.:	1RM-VS-110 LRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	A
Engr Units/Dig States:	uCi/sec
Engr Units Conversion: 3	Xe133 CF = cps/uCl/cc
Minimum Instr Range:	2.3E+01
Maximum Instr Range:	2.3E+05
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Alert=1.137E+3, High=2.274E+3
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	Ν
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1VS-110 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. The listed minimum and maximum instrument ranges listed are based on system software parameter limitations and pathway ODCM release flow rate. In addition, the maximum range is based on a release concentration of 1E-2 uCi/cc, limited by the automatic swap to the high range monitor. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1VS-110 monitors for low range noble gases at the discharge of the Leak Collection Area Exhaust Fans before the Elevated Release Vent. Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data.

.

٠

4

Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EFF-GAS-RAD6
Point ID:	R1033A
Plant Spec Point Desc .:	1RM-VS-110 HRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	Α .
Engr Units/Dig States:	uCi/sec
Engr Units Conversion:	Xe133 CF = amps/uCl/cc
Minimum Instr Range:	1.5E+3
Maximum Instr Range:	6.3E+12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Alert=7.58E+5, High=1.56E+6
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	Ν
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1VS-110 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. Minimum and maximum instrument ranges listed are based on Xe-133 and pathway ODCM release flow rate. Maximum range is based on monitor parameter setting and ODCM release flow rate. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1VS-110 monitors for high range noble gases at the discharge of the Leak Collection Area Exhaust Fans before the Elevated Release Vent. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and flow rate differences depending on selected default source term and decay period. Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data.

•

•

Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EXTRA15
Point ID:	R1011A
Plant Spec Point Desc.:	1RM-GW-109 LRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	A
Engr Units/Dig States:	uCi/sec
Engr Units Conversion:	Xe133 CF = cps/uCl/cc
Minimum Instr Range:	6.8E-1
Maximum Instr Range:	6.8E+3
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Normally n/a
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1GW-109 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. The listed minimum and maximum instrument ranges listed are based on system software parameter limitations and pathway ODCM release flow rate. In addition, the maximum range is based on a release concentration of 1E-2 uCi/cc, limited by the automatic swap to the high range monitor. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1GW-109 monitors for low range noble gases at the discharge of the Gaseous Waste Disposal Blowers. Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data.

Date:	5/30/2017
Reactor Unit:	BV1
Data Feeder:	IPC
NRC ERDS Parameter:	EXTRA17
Point ID:	R1013A
Plant Spec Point Desc.:	1RM-GW-109 HRNGM
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASSES
Analog/Digital:	Α
Engr Units/Dig States:	uCi/sec
Engr Units Conversion:	Xe133 CF = amps/uCl/cc
Minimum Instr Range:	4.3E+1
Maximum Instr Range:	1.8E+11
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Location:	SEE UNIQUE SYSTEM DESCRIPTION FIELD
Alarm/Trip Set Points:	Alert=3.27E+5, High=6.55E+5
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-ON Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON FAILURE MODE
Temperature Compensation for DP Transmitters:	Ν
Level Reference Leg:	N/A
Unique System Desc.:	1 minute average data. System design is such that either the RM-1GW-109 low range or high range noble gas monitor for each pathway will be in service. At a concentration of 1E-2 uCi/cc on the low range monitor, flow will normally swap to the high range monitor. Minimum and maximum instrument ranges listed are based on Xe-133 and pathway ODCM release flow rate. Maximum range is based on monitor parameter setting and ODCM release flow rate. Note Because actual pathway release flow rate may vary, the "Minimum Instr Range" and "Maximum Instr Range" may not reflect the actual instrument ranges. Site dose assessment corrects the uCi/s for source term and flow rate differences depending on selected default source term and decay period. RM-1GW-109 monitors for high range noble gases at the discharge of the Gaseous Waste Disposal Blower. Site dose assessment corrects the uCi/s for source term and decay period. Provides alarms to warn the operator of abnormal releases and provides input to calculate integrated release data. 1-92