



Upper Peninsula Power Company

500 North Washington Street

Ishpeming, MI 49849

www.UPPCO.com

February 26, 2015

FERC Project No. 10855
NATDAM Nos. MI00175, MI00183,
& MI00197

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project
2014 Annual Report - Operation Monitoring Plan &
Report of Deviations Less Than Sixty Minutes

The Order Amending License for the Dead River Hydroelectric Project (FERC Project No. 10855) dated September 1, 2011, and the Order Modifying and Approving Article 405 Operations Monitoring Plan dated March 11, 2010, both require Upper Peninsula Power Company (UPPCO) to submit annual Operation Monitoring Reports.

UPPCO is required by the September 1, 2011 Order to provide the annual report to the resource agencies by January 31 each year and to the Commission by February 28 of each year.

UPPCO is also required by the March 11, 2010 Order to provide the annual report after a 30-day comment period and then to the Commission by February 28 of each year.

Furthermore, the 2011 Order's annual report requires UPPCO to submit all deviations less than 60 minutes that did not result in the observation or reporting of any negative environmental effects.

Consistent with the requirements of the 2011 and 2010 Orders, the following information has been enclosed at this time to fulfill the annual reporting requirements:

- A summary of reservoir surface elevations and flow data;
- Operational data necessary to determine compliance with the operating range requirement;
- A summary of all deviation(s) from required flows and reservoir elevations that occurred during the year (This includes the deviations less than 60 minutes as required by the 2011 Order);
- A description of any corrective measures implemented during the course of the year, and measures implemented or proposed to improve future compliance (if necessary) or a description of any corrective measures implemented at the time of the occurrence and the measures implemented or proposed to ensure that similar incidents do not recur;
- A record of flushing flows that occurred in the McClure Bypass reach indicating when and if wood debris was transported downstream during the event;

Ms. Kimberly Bose
February 27, 2015
Page 2 of 2

- Summary of all gate and valve openings;
- Documentation of consultation on the draft report.

The report, to the extent possible, identifies the cause, severity and duration of the incidents, and any observed or reported adverse environmental impacts resulting from the incidents.

If you have any questions regarding this letter, please contact Robert Meyers at (906) 485-2419 or Virgil Schlorke at (920) 485-2465.

Sincerely,



Gil Snyder
Manager – Regional Generation
for Wisconsin Public Service

VES/ebr

Enc: Appendix 1 - UPPCO Agency Correspondence
Appendix 2 - UPPCO Annual Deviation Report

cc: Mr. James Melchiori, UPPCO - UVD Mr. John Zygaj, FERC - CRO
Mr. Robert Meyers, UPPCO - UISC Mr. John Myers, IBS - D2
Mr. Keith Moyle, UPPCO - UISC Mr. Shawn Puzen, IBS - D2
Mr. Virgil Schlorke, UPPCO - UISC Mr. Ben Trotter, IBS - D2
Mr. David Tripp, UPPCO - UISC Ms. Joan Johaneck, WPS - D2

Appendix 1

Documentation of Consultation



Upper Peninsula Power Company
500 North Washington Street
Ishpeming, MI 49849
www.UPPCO.com

January 23, 2014

FERC Project No. 10855

Mr. Koren Carpenter - MDEQ
Ms. Diana Klemans - MDEQ
Mr. Gary Kohlheep - MDEQ
Mr. Kyle Kruger - MDNR
Mr. Burr Fisher - USFWS
Mr. Jim Grundstrom - DRCI

Dear Agency Representative(s):

Dead River Hydroelectric Project
2014 Annual Report - Operation Monitoring Plan &
Report of Deviations Less Than Sixty Minutes

The Order Amending License for the Dead River Hydroelectric Project (FERC Project No. 10855) dated September 1, 2011, and the Order Modifying and Approving Article 405 Operations Monitoring Plan dated March 11, 2010, both require Upper Peninsula Power Company (UPPCO) to submit annual Operation Monitoring Reports.

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UPPCO is also required by the March 11, 2010 Order to provide the annual report after a 30-day comment period and then to the Commission by February 28, of each year.

Furthermore, the 2011 Order's annual report requires UPPCO to submit all deviations less than 60 minutes that did not result in the observation or reporting of any negative environmental effects.

Consistent with the requirements of the 2011 and 2010 Orders, the following information has also been enclosed at this time to fulfill the annual reporting requirements:

- A summary of reservoir surface elevations and flow data;
- Operational data necessary to determine compliance with the operating range requirement;
- A summary of all deviation(s) from required flows and reservoir elevations that occurred during the year (This includes the deviations less than 60 minutes as required by the 2011 Order);
- A description of any corrective measures implemented during the course of the year, and measures implemented or proposed to improve future compliance (if necessary) or a description of any corrective measures implemented at the time of the occurrence and the measures implemented or proposed to ensure that similar incidents do not recur;
- A record of flushing flows that occurred in the McClure Bypass reach indicating when and if wood debris was transported downstream during the event;
- Summary of all gate and valve openings;

January 23, 2015

Page 2 of 2

The report, to the extent possible, identifies the cause, severity, and duration of the incidents, and any observed or reported adverse environmental impacts resulting from the incidents,

Please provide your comments on the annual report no later than February 23, 2015. Should you have any questions, please do not hesitate to contact me at (906) 485-2419.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bob J. Meyers".

Bob J. Meyers
Project Manager – Regional Generation

Rushford, Emily B

From: Carpenter, Koren (DEQ) <CarpenterK5@michigan.gov>
Sent: Monday, January 26, 2015 9:51 AM
To: Rushford, Emily B; Klemans, Diana (DEQ); Kohlhepp, Gary (DEQ); Kruger, Kyle (DNR); Burr_Fisher@fws.gov; jimgrundstrom@freichevy.com
Cc: Meyers, Robert J; Schlorke, Virgil E
Subject: RE: 2014 Annual Deviation & Operation Monitoring Plan Report

The MDEQ appreciates the opportunity to review the 2014 Annual Deviation and Operation Monitoring Plan Report and have no further comments at this time.

Regards,
Koren

Koren Carpenter
Environmental Engineer
Surface Water Assessment Section
Water Resource Division
Department of Environmental Quality
Phone: (517) 284-5541
Fax: (517) 373-9958

From: Rushford, Emily B [mailto:EBRushford@uppc.com]
Sent: Friday, January 23, 2015 1:03 PM
To: Carpenter, Koren (DEQ); Klemans, Diana (DEQ); Kohlhepp, Gary (DEQ); Kruger, Kyle (DNR); Burr_Fisher@fws.gov; jimgrundstrom@freichevy.com
Cc: Meyers, Robert J; Schlorke, Virgil E
Subject: 2014 Annual Deviation & Operation Monitoring Plan Report
Importance: High

Good Afternoon,

Please provide your comments on the annual report no later than February 23, 2015. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 27, 2015. Should you have any questions, please contact Bob Meyers at (906) 485-2419.

Thank you,

Emily B. Rushford
Executive Administrative Assistant

Upper Peninsula Power Company

906-485-2410
brushford@uppc.com

www.uppc.com

 Follow **UPPCOstorm** on Twitter for timely outage updates.

Appendix 2

Annual Report

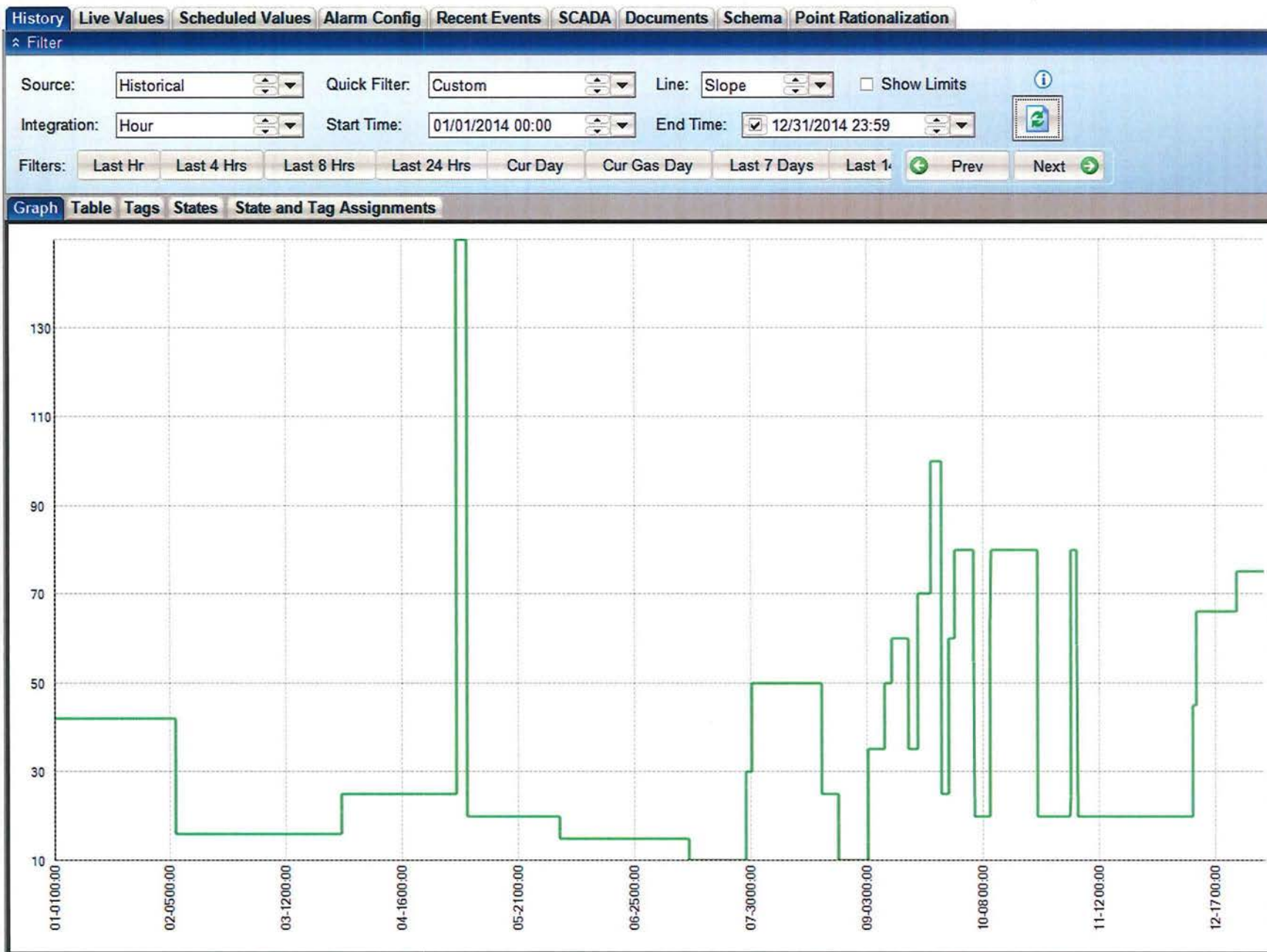
Appendix 1

Annual Report

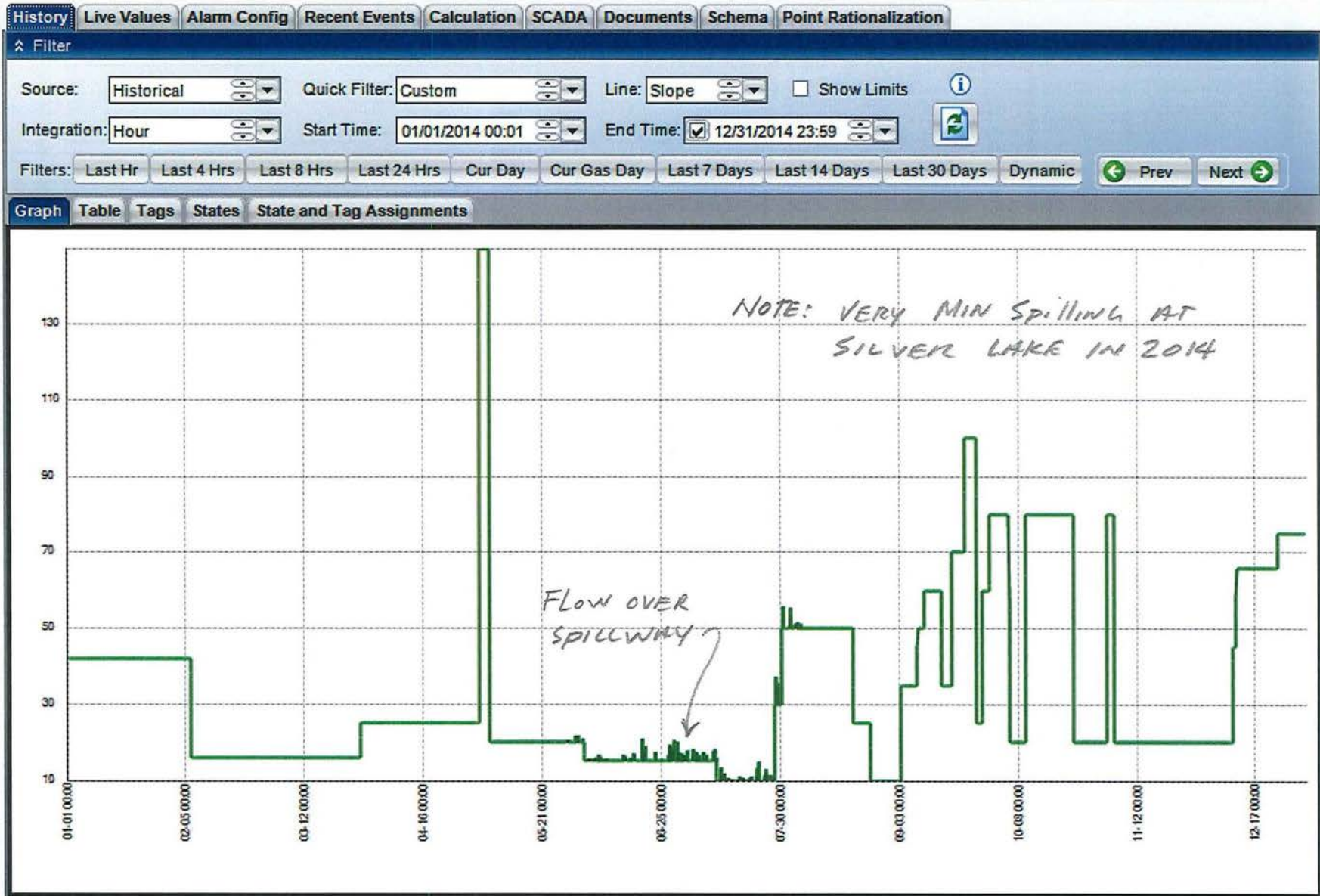
Point Info - UPPCO-SLK: Headwater Elevation



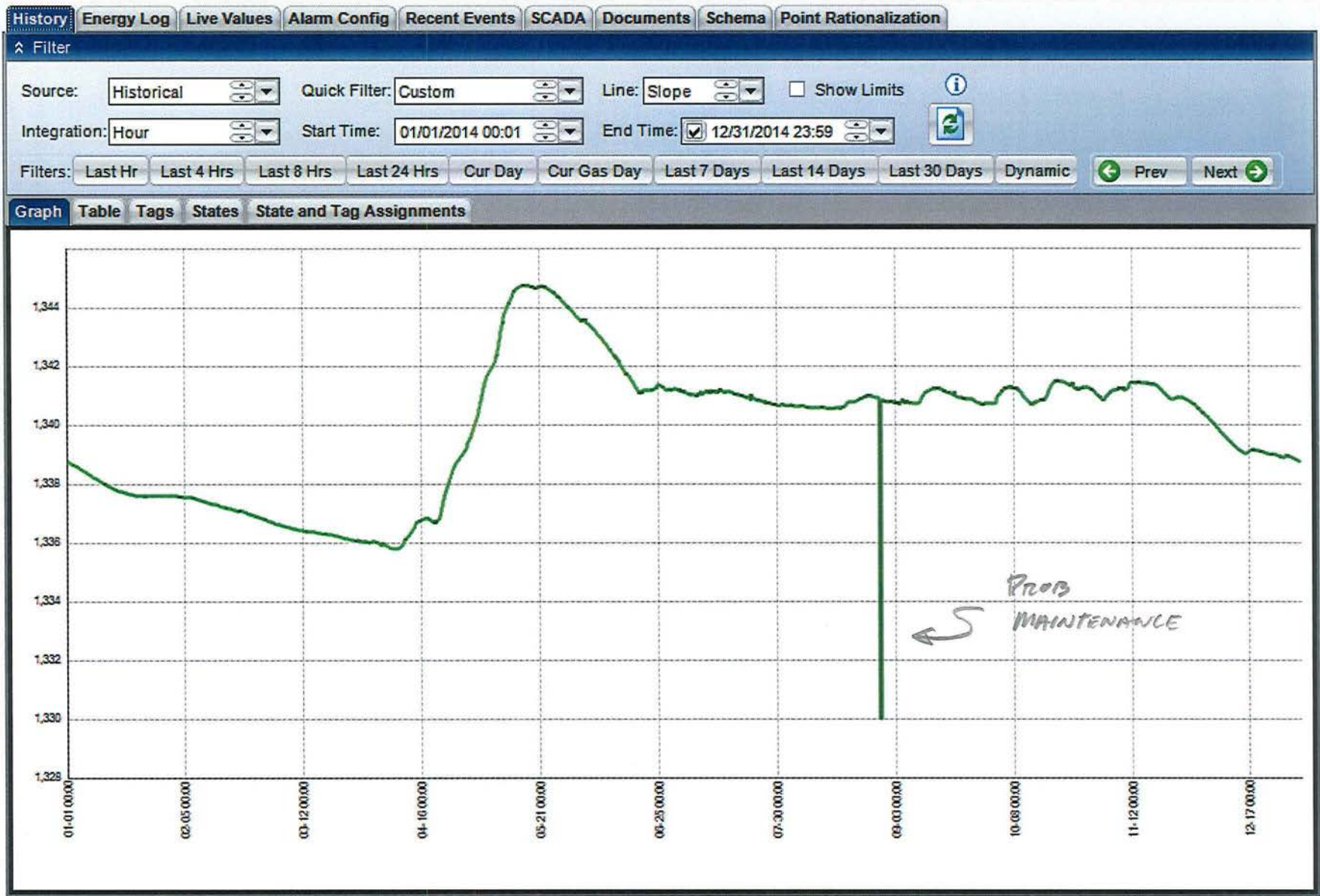
Point Info - UPPCO-SLK: LLO Flow - *GATE OPERATION*



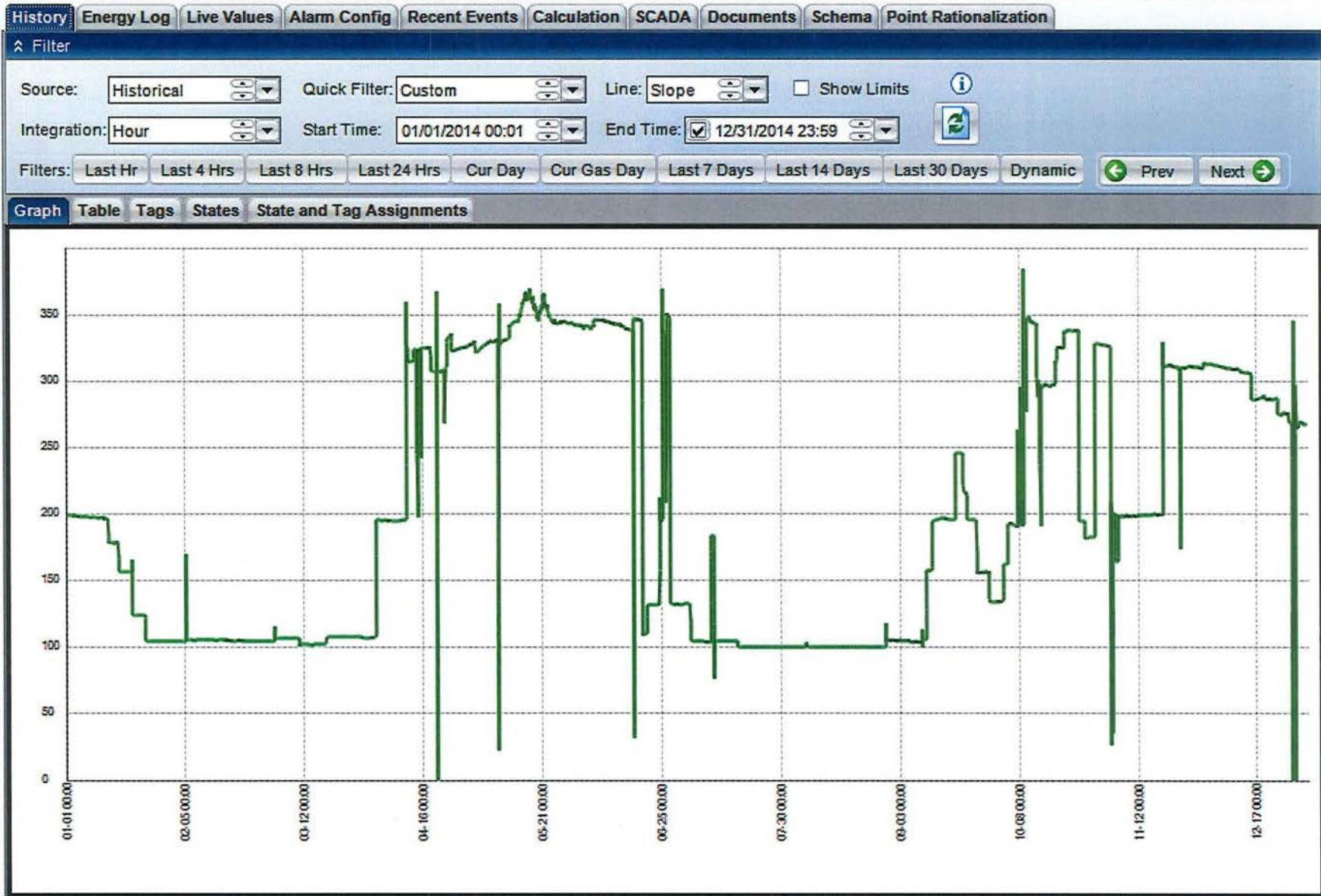
Point Info - UPPCO-SLK: Total Plant Flow



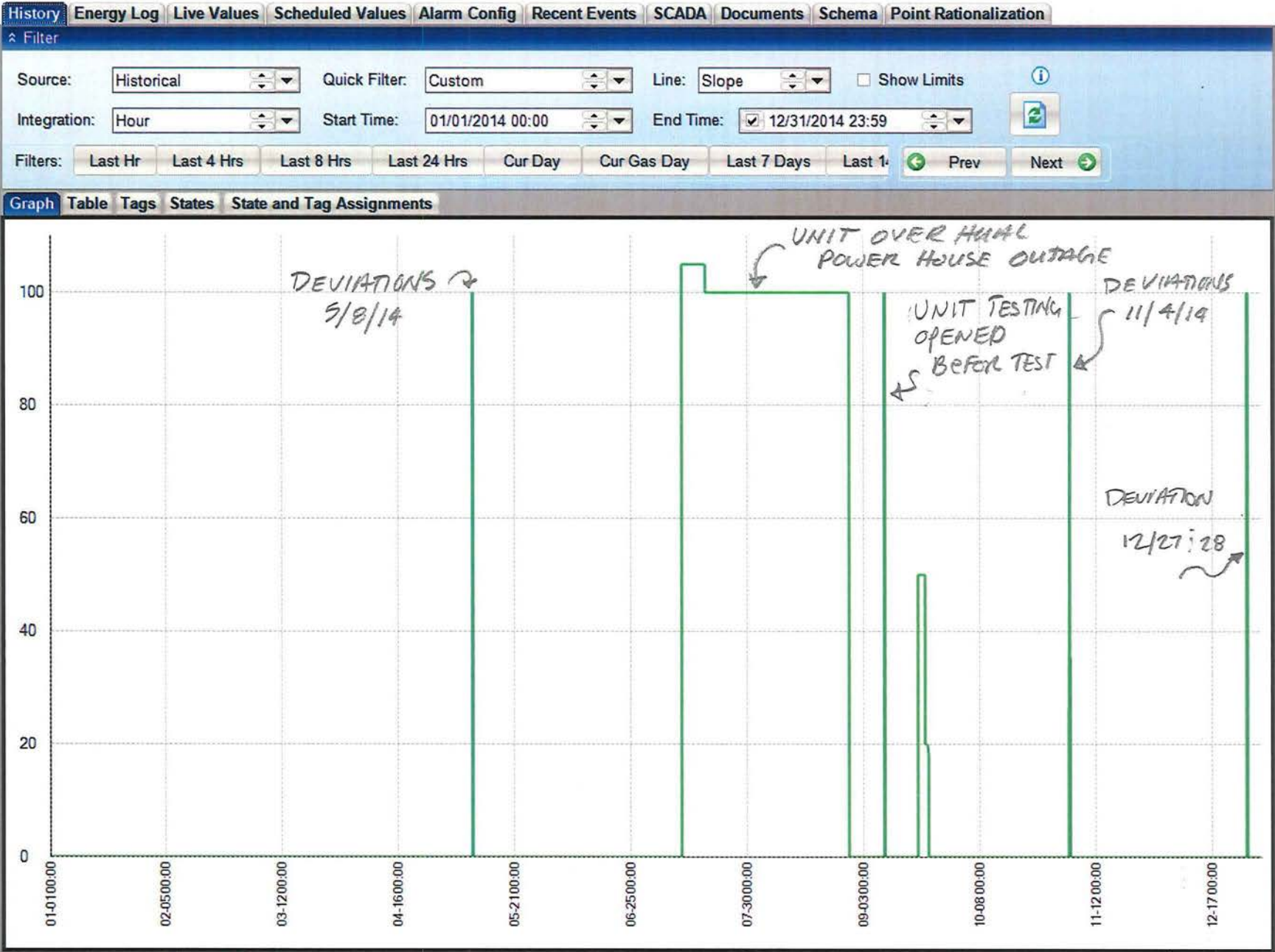
Point Info - UPPCO-HST: Headwater Elevation



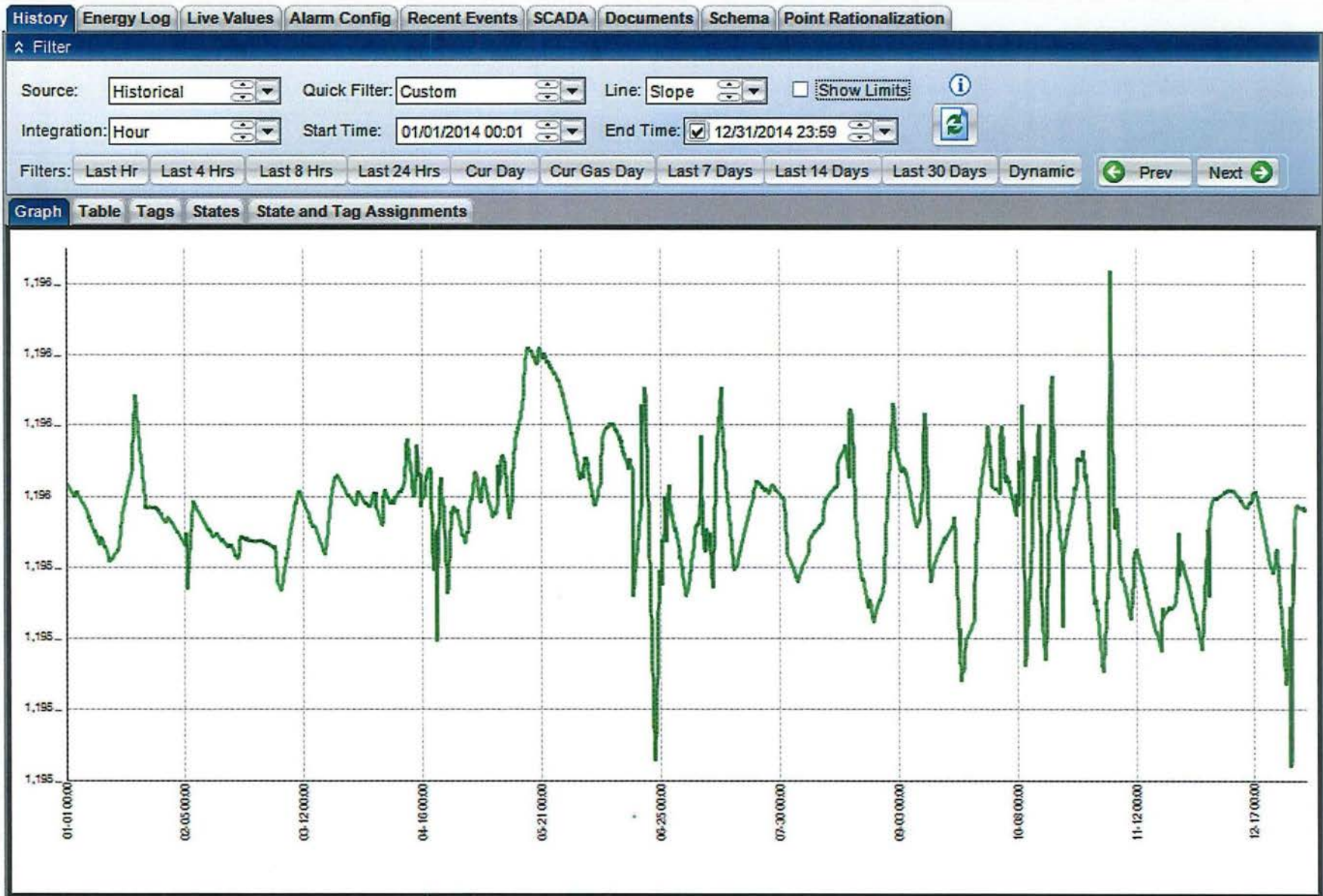
Point Info - UPPCO-HST: Total Plant Flow



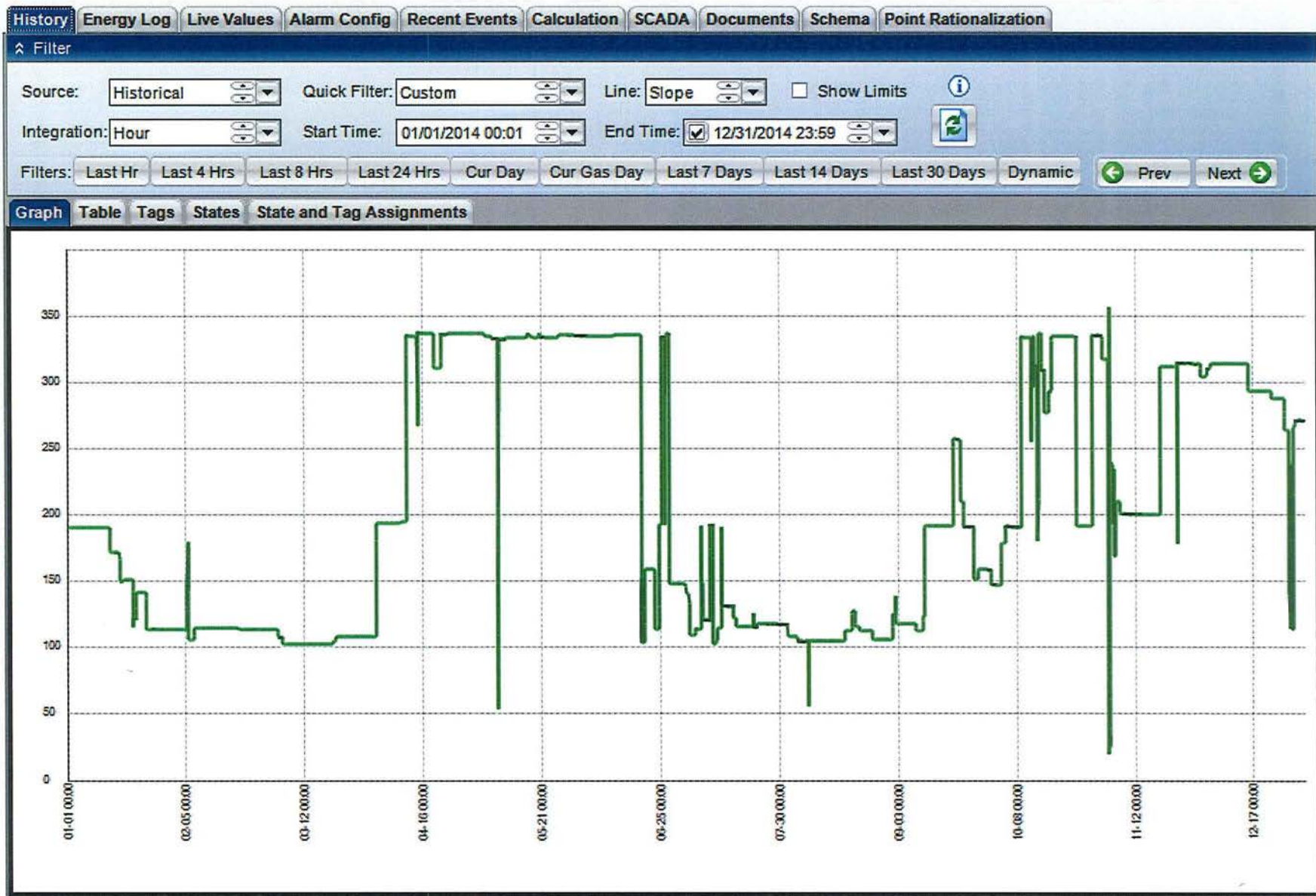
Point Info - UPPCO-HST: Lower Level Outlet Flow



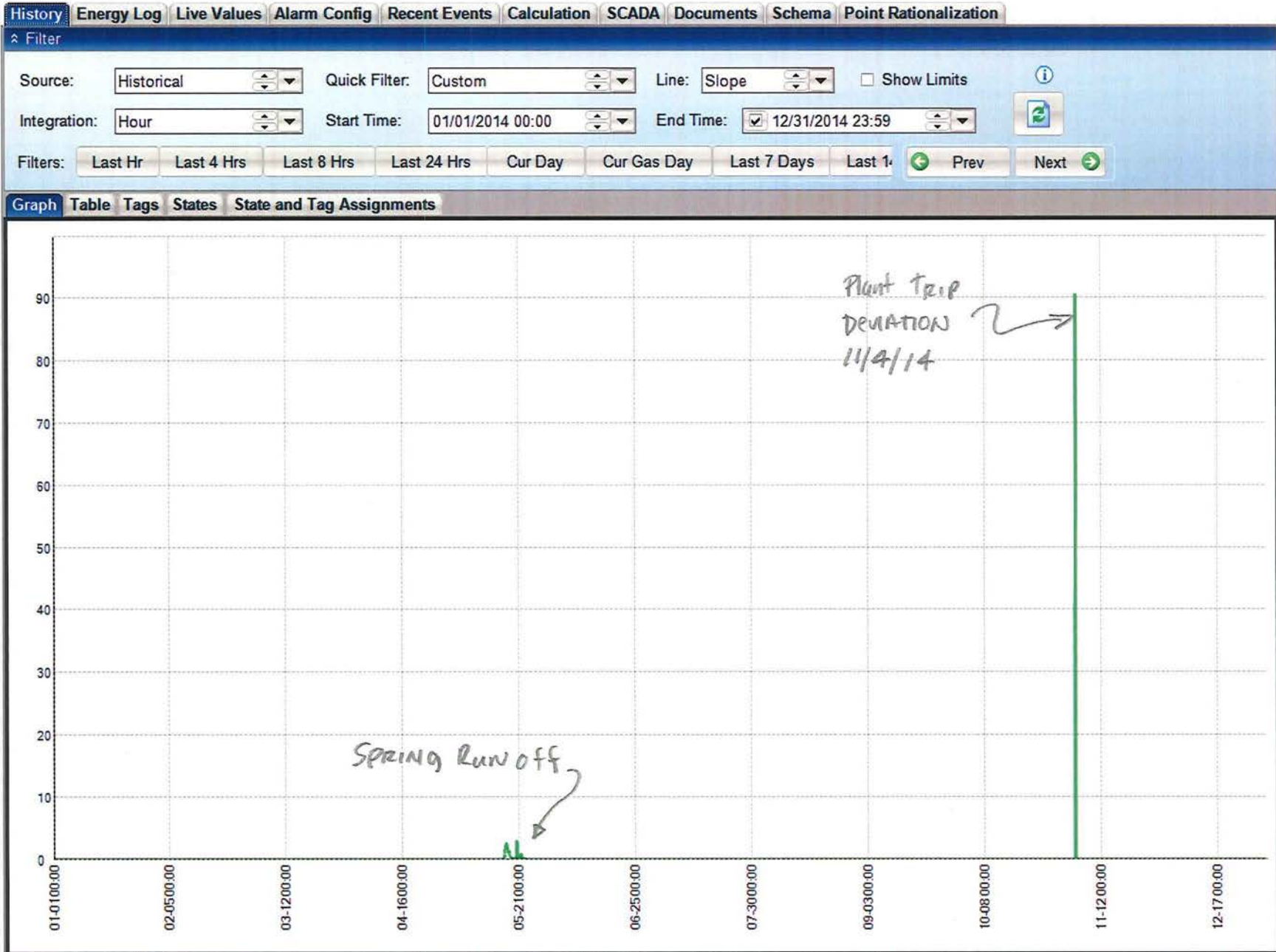
Point Info - UPPCO-MCLD: Headwater Elevation



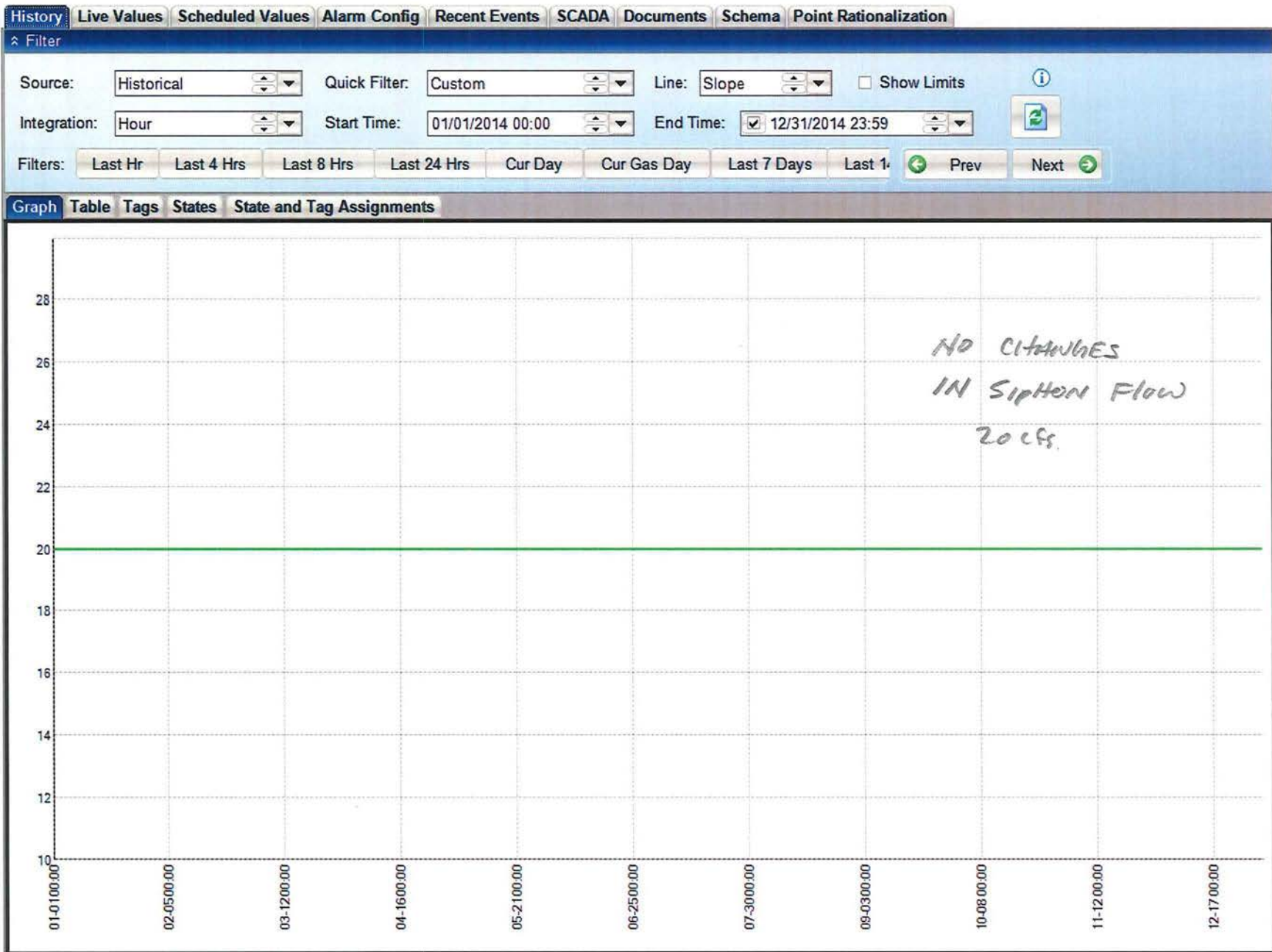
Point Info - UPPCO-MCL: Total Plant Flow



Point Info - UPPCO-MCL: Spillway Flow



Point Info - UPPCO-MCL: Siphon Flow



Appendix 2
Summary of Deviation
And
Deviation Reports

Dead River Project FERC No. 10855, Deviation Summary for 2014

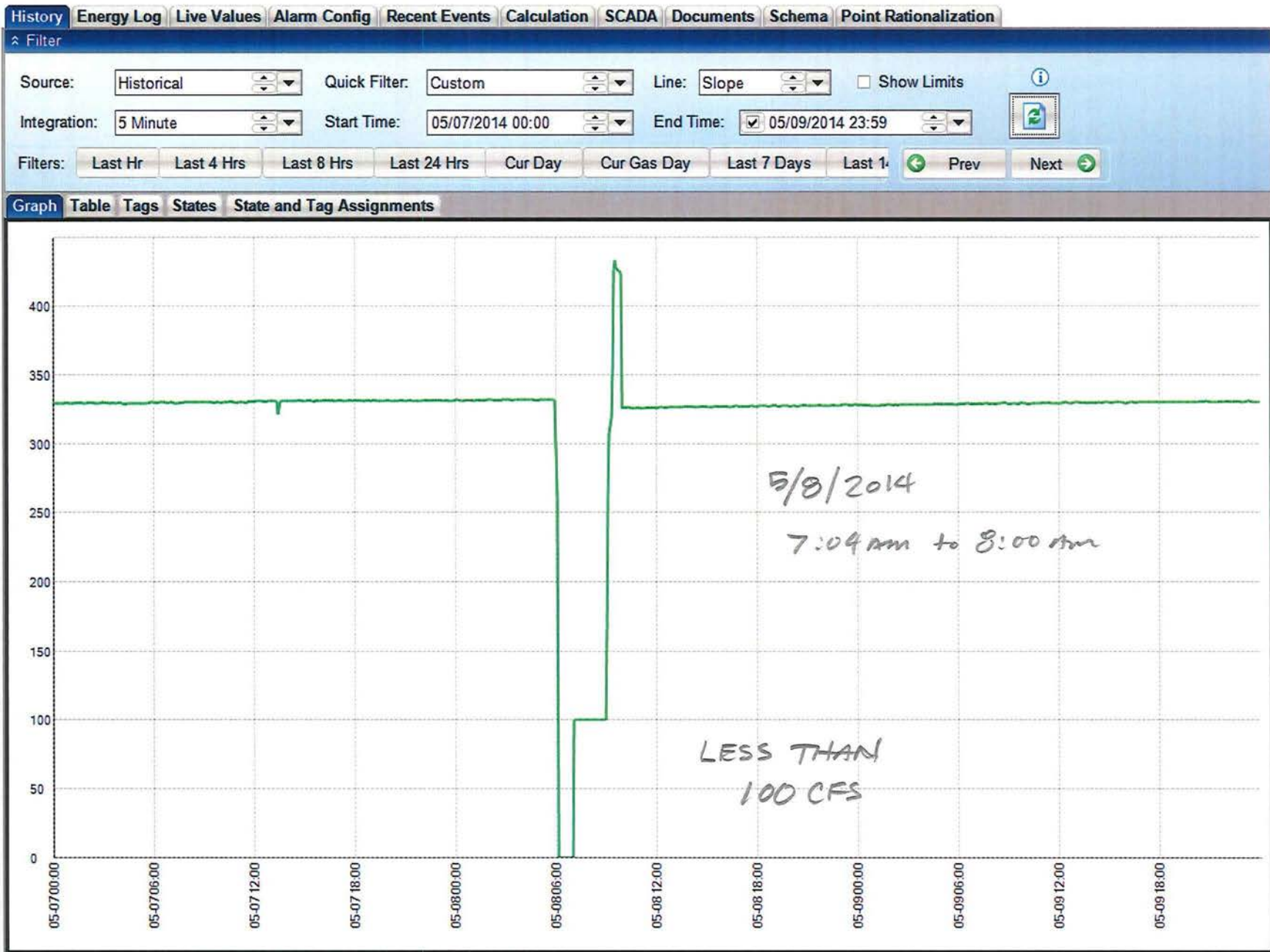
Deviations less than 60 minutes			
Project	Date	Type of Deviation	Reason
Hoist	5/8/2014	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
McClure	5/8/2014	Less than 80 CFS from Plant	Transmission Problem Tripping Plant/Storm
McClure	8/7/2014	Less than 80 CFS from Plant	Relay Testing Resulted in Tripp
Deviation greater than 60 Minutes			
Hoist	2/25/2014	Lower Target Elevation Exceedance	Dry year consulation, started 2/16/2014
Hoist	4/20/2014	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
Hoist	4/26/2014	Upper Target Elevation Exceedance	Dry year consulation ended
Hoist	6/16/2014	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
Hoist/McClure	11/4/2014	less than 100,80 CFS from Plants & Upper Target Elevation Exceedance	Transmission Problem Tripping Plants/Storm
Hosit	12/27/2014	Less than 100 CFS from Plant	Transmission Problem Tripping Plants/Storm
Hoist	12/28/2014	Less than 100 CFS from Plant	Transmission Problem Tripping Plants/Storm

Non-Conformance Event Record Detail



NC Record Number:	NCREG6087		Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Hoist Hydro			
Event Date:	05/08/2014	Discovery Date/Time:	5/8/14 6:03	
Event Title:	Plant tripped offline			
Event Details:	At 06:03 CDT on 5/8/14, the Hoist plant tripped offline and flow went to zero. A local operator was dispatched. The Lower Level Outlet was opened at 07:00 CDT to reestablish minimum flow. Generation was online again at 09:00 CDT (unit #3) and 09:22 CDT (unit #2), and the LLO was then closed.			
Immediate Action:	Local operator was dispatched.			
Recommendations:	-			
Potential Causes/Contributors to Incident	Loss of power to plant caused by storms / lightning in the area			
Entered By Name:	Kevin S Willey	Creation Date/Time:	5/8/14 11:11	
Entered By Department:	Energy Supply and Control	Status:	Closed	
Reportable to External Agency:	no	Basis for Reportability:	Will be part of End of Year Report	
Additional Followup Required:	yes			
Category:	Regulatory	Type:	FERC Deviation	
Sub Type:	Trans. Sys. (storm related)	Description:	< 60 minutes event	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Units at plant tripped, minimum flow re-established with LLO	
Event Start:	5/8/2014 7:04 AM	Event End:	5/8/2014 8:00 AM	Event Duration (HH:MM): 00:56
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Approver Name		
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Scening Committee Approval upon Completion	no			
Evaluation Reviewed/Approved by Screening Committee				

Point Info - UPPCO-HST: Total Plant Flow

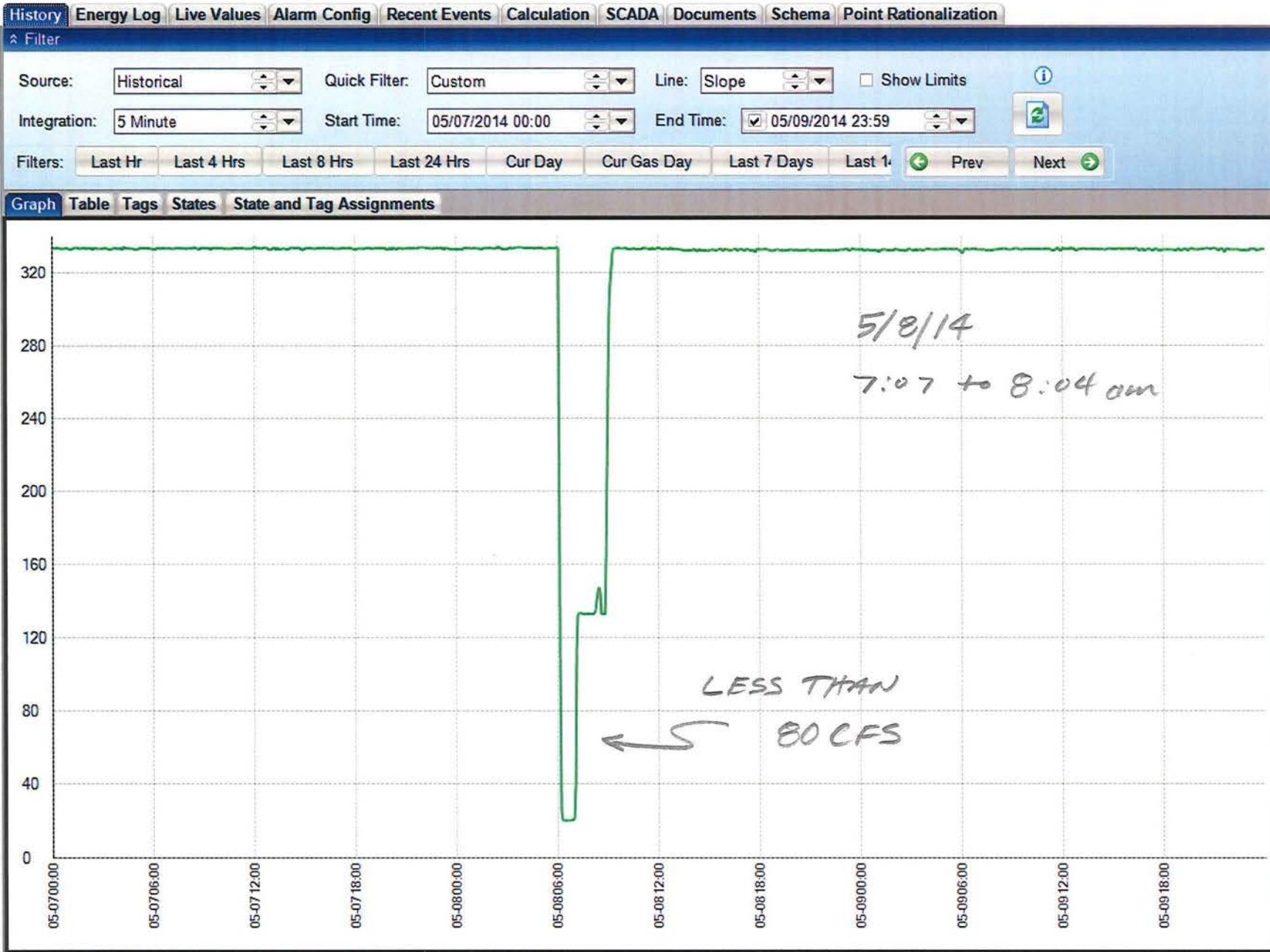


Non-Conformance Event Record Detail



NC Record Number:	NCREG6088	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-McClure Hydro		
Event Date:	05/08/2014	Discovery Date/Time:	5/8/14 6:06
Event Title:	Plant tripped offline		
Event Details:	At 06:06 CDT on 5/8/14, the McClure plant tripped offline causing the total plant flow to drop below the minimum flow requirement. A local operator was dispatched. Generation was restored and minimum flow was reestablished at approximately 07:04 CDT.		
Immediate Action:	Local operator was dispatched.		
Recommendations:	-		
Potential Causes/Contributors to incident	Presumed to be storm / lightning related.		
Entered By Name:	Kevin S Willey	Creation Date/Time:	5/8/14 11:16
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Will be part of end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	<60 minutes
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Units tripped from power outage at nearby substation, operator responded and returned unit under 60 minutes
Event Start:	5/8/2014 7:07 AM	Event End:	5/8/2014 8:04 AM
		Event Duration (HH:MM):	00:57
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:		Acceptance Comments:	
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name:	
Analysis Description:			
Causes:			
Primary Causes:			
Does Eval Require Scening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-MCL: Total Plant Flow

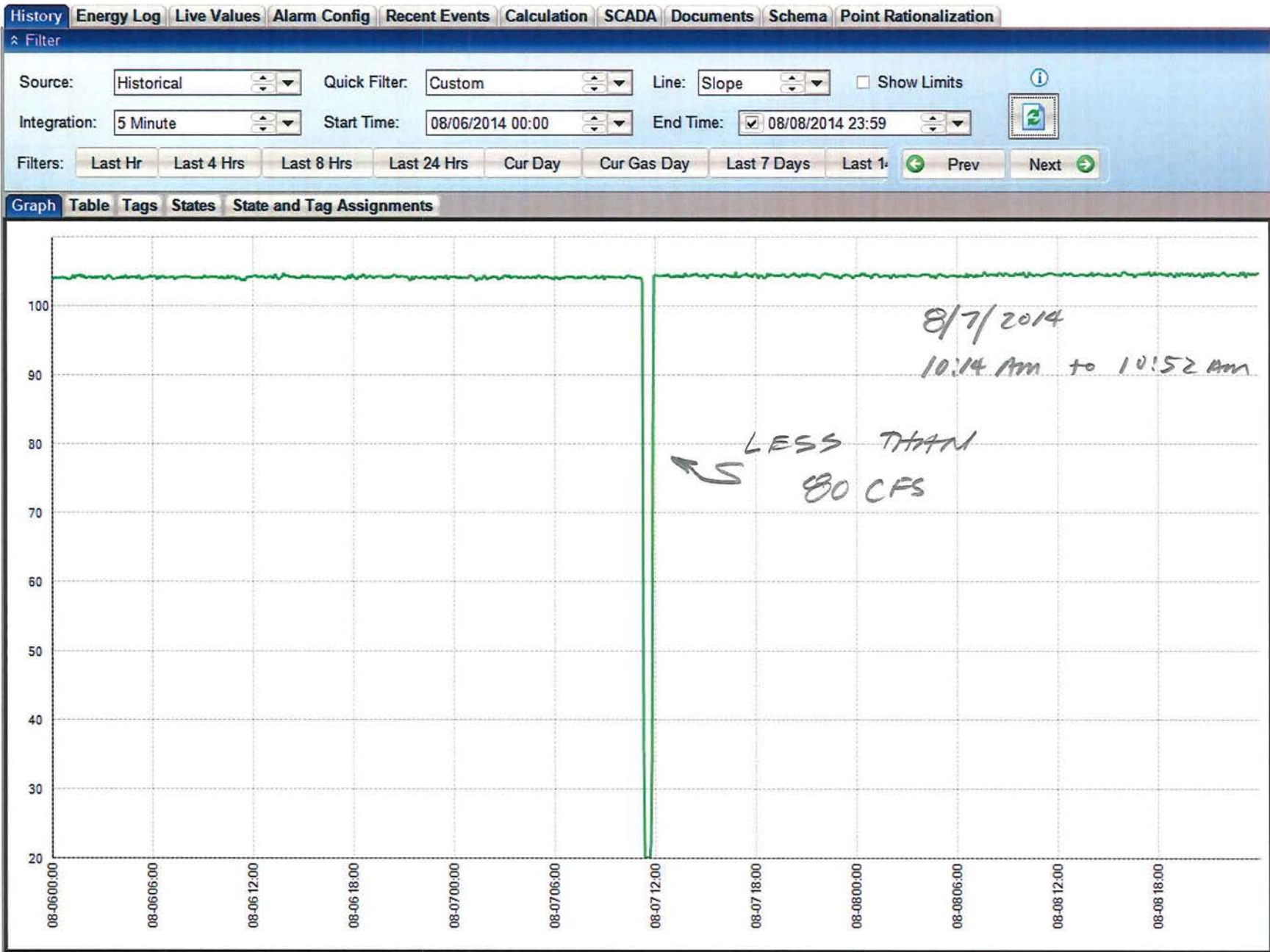


Non-Conformance Event Record Detail



NC Record Number:	NCREG6436	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-McClure Hydro		
Event Date:	08/07/2014	Discovery Date/Time:	8/7/14 11:15
Event Title:	unit 2 trip		
Event Details:	Unit 2 tripped off line while I&C was performing relay testing interrupting ROR		
Immediate Action:	called out operator		
Recommendations:	none		
Potential Causes/Contributors to incident	I&C tech indicated it is probably a wiring problem with the Generator 1 Breaker Failure Relay; he is planning to investigate further.		
Entered By Name:	Kenneth C Luckereth	Creation Date/Time:	8/7/14 14:12
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Will be reported on End of Year report to FERC for less than 60 minute events
Additional Followup Required:	yes	Type:	FERC Deviation
Category:	Regulatory	Description:	Meter Testing
Sub Type:	Plant equip. failure	Causal Analysis Basis:	Unit tripped from Substation Tech working on testing relays in plant, operator was called and got unit returned to service. Going thru the process, found that these relays have a trip built into the connection levels that was not indicated on the blue prints and/or other literature on these relays from the manufacturer and was not found during the inticial start up of these relays.
Causal Analysis Level:	Closed - No further action required		
Event Start:	8/7/2014 10:14 AM	Event End:	8/7/2014 10:52 AM
		Event Duration (HH:MM):	00:38
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:		Acceptance Comments	
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name	
Analysis Description:			
Causes:			
Primary Causes:			
Does Eval Require Scening Committee Approval upon Completion			no
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-MCL: Total Plant Flow





Upper Peninsula Power Company

700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.uppco.com

March 25, 2014

FERC Project No. 10855
NATDAM Nos. MI00175 and MI00183

Ms. Kimberly D. Bose, Secretary
The Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project – Hoist & McClure Developments
Article 402 & 403 Planned Deviation – Dry Year Consultation Starting

In accordance with Article 402 & 403 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002, and as amended on September 1, 2011, the licensee is required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with elevations and flows (planned or unplanned). Please consider this letter as fulfillment of the notification requirement of deviations.

On Wednesday, February 26, 2013, Dry Year Consultation began with the Michigan Department of Natural Resources (MDNR), Michigan Department of Environmental Quality (MDEQ), U.S. Fish and Wildlife Services (USFWS) and the Dead River Campers Inc. (DRCI) when the Hoist Reservoir elevation dropped below the required minimum of 1337.0 feet NGVD on Tuesday, February 25, 2013. The Keweenaw Bay Indian Community (KBIC) was invited, but did not participate.

Based on the Dry Year Consultation discussion, no adjustments were made and the Hoist Reservoir Elevation would be allowed to continue to decline. No adverse environmental impacts were observed as a result of the Hoist Reservoir elevation dropping below the required minimum elevation. UPPCO will notify the Commission when the current dry-year consultation has ended.

During the consultation, UPPCO also proposed an early spring/late winter drawdown to accommodate spring runoff. The projections of snow pack at the time of the meeting indicate at least a drawdown to a minimum elevation of 1334.0 feet NGVD would be necessary to attempt to restrict the maximum elevation during spring runoff to 1342.0 feet NGVD. The necessary consulting agencies agreed with the planned deviation. No adverse environmental impacts are anticipated as a result of the planned drawdown for spring runoff.

Ms. Kimberly D. Bose
March 25, 2014
Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906)485-2419 or Virgil Schlorke at (906)485-2465.

Sincerely,



Gil Snyder
Manager - Regional Generation
for Wisconsin Public Service Corporation

RJM/ebr

Enc. E-mail correspondence

cc: Mr. John Myers, IBS - D2
 Mr. Shawn Puzen, IBS - D2
 Mr. Ben Trotter, IBS - D2
 Ms. Joan Johaneck, WPSC - D2
 Mr. Robert Meyers, UPPCO - UISC
 Mr. Keith Moyle, UPPCO - UISC
 Mr. Virgil Schlorke, UPPCO - UISC
 Mr. John Zyga, FERC (CRO)

 Mr. Burr Fisher, FWS
 Mr. Koren Carpenter, MDEQ
 Ms. Diana Klemans, MDEQ
 Mr. Gary Kohlhepp, MDEQ
 Mr. Kyle Kruger, MDNR
 Mr. Jim Grundstrom, DRCI
 Mr. Gene Mensch, KBIC



Upper Peninsula Power Company

700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.uppco.com

May 19, 2014

FERC Project No. 10855
NATDAM No. MI00183

Ms. Kimberly D. Bose, Secretary
The Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project - Hoist Development
Article 403 Deviation of Minimum Flows

In accordance with Article 403 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002, and as amended on September 1, 2011, the licensee is required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with flows and the steps used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

The Hoist plant tripped at 02:56 EDT, Sunday, April 20, 2014, due to transmission system fault. Poor weather conditions (rain/snow) resulted in an insulator failing causing a system fault. The insulator was replaced and the transmission system returned to service. An operator was called onsite and returned a unit to service at 04:37 EDT, re-establishing minimum flow.

No adverse environmental impacts have been observed as a result of this deviation and Upper Peninsula Power Company did not receive any comments from the resource agencies after the deviation incident. Due to the nature of the event UPPCO is not proposing any corrective actions at this time.

Ms. Kimberly D. Bose

May 19, 2014

Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906)485-2419 or Virgil Schlorke at (920)485-2465.

Sincerely,



Gil Snyder
Manager - Regional Generation
for Wisconsin Public Service

RJM/ebr

Enc. Operational data

cc:	Mr. John Myers, IBS - D2	Mr. John Zygaj, FERC - CRO
	Mr. Shawn Puzen, IBS - D2	Ms. Patricia Grant, FERC - CRO
	Mr. Ben Trotter, IBS - D2	Mr. James Grundstrom, DRCI
	Ms. Joan Johaneck, WPS - D2	Mr. Burr Fisher, FWS
	Mr. Jim Melchiori, UPPCO - UVD	Mr. Koren Carpenter, MDEQ
	Mr. Robert Meyers, UPPCO - UISC	Ms. Diana Klemans, MDEQ
	Mr. Keith Moyle, UPPCO - UISC	Mr. Gary Kohlhepp, MDEQ
	Mr. Virgil Schlorke, UPPCO - UISC	Mr. Kyle Kruger, MDNR



Upper Peninsula Power Company

700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

www.uppco.com

June 3, 2014

FERC Project No. 10855
NATDAM No. MI00175

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project - Hoist Development
Articles 402 & 403 Planned Deviation - Dry Year Consultation Ending

In accordance with Articles 402 & 403 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002, and as amended on September 1, 2011, the licensee is required to strive to operate the existing project facilities to achieve the start of month target elevations while also maintaining established minimum flows. The licensee is also required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with elevations and flows and the steps they used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

Through the Dry Year Consultation process, Upper Peninsula Power Company (UPPCO) obtained mutual agreement among the Michigan Department of Natural Resources (MDNR), Michigan Department of Environmental Quality (MDEQ), Dead River Campers, Inc. (DRCI), and the U.S. Fish and Wildlife Services (USFWS) with respect to planned deviations on the Dead River. The planned deviations started February 26, 2014 when the Hoist Reservoir Elevation dropped below the End of Month required minimum elevation of 1337.0 feet NGVD. It was agreed to monitor the reservoir elevations and bring down the Hoist to a low of 1334.0 feet NGVD to accommodate spring runoff and to change the target elevations for Silver Lake to 1485.2 feet NGVD for May and June. The start of Dry Year Consultation letter was sent March 25, 2014 informing the commission of the conditions of the elevations and flows.

On April 26, 2014, the Hoist Reservoir elevation was at 1338.7 feet NGVD which is above the monthly target elevation of 1338.5 feet NGVD triggering the end of the Dry Year Consultation process and thus the planned deviations.

Ms. Kimberly D. Bose

June 3, 2014

Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906) 485-2419 or Virgil Schlorke at (920) 485-2465.

Sincerely,



Gil Snyder
Manager – Regional Generation
for Wisconsin Public Service

RJM/ebr

cc: Mr. John Myers, IBS - D2 Mr. John Zygaj, FERC - CRO
 Mr. Shawn Puzen, IBS - D2 Ms. Patricia Grant, FERC - CRO
 Mr. Ben Trotter, IBS - D2 Mr. James Grundstrom, DRCI
 Ms. Joan Johaneck, WPS - D2 Mr. Burr Fisher, FWS
 Mr. James Melchiori, UPPCO - UVD Mr. Koren Carpenter, MDEQ
 Mr. Robert Meyers, UPPCO - UISC Ms. Diana Klemans, MDEQ
 Mr. Keith Moyle, UPPCO - UISC Mr. Gary Kohlhepp, MDEQ
 Mr. Virgil Schlorke, UPPCO - UISC Mr. Kyle Kruger, MDNR



Upper Peninsula Power Company

700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.uppco.com

July 16, 2014

FERC Project No. 10855
NATDAM No. MI00175

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project - Hoist Development
Article 403 Deviation of Minimum Flows

In accordance with Article 403 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002, and as amended on September 1, 2011, the licensee is required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with flows and the steps they used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

On Monday, June 16, 2014, at 19:20 CDT, the Hoist plant tripped as a result of a transmission system fault due to a tree on the line. An operator was dispatched to the plant and re-established minimum flows at 20:45 CDT.

The fault was attributed to poor weather conditions (strong winds and rain) which caused a tree off the right-of-way to fall on the transmission system. The line was cleared and the transmission system returned to service.

No adverse environmental impacts have been observed as a result of this deviation and Upper Peninsula Power Company did not receive any comments from the resources agencies after the deviation incident. Due to the nature of the event UPPCO is not proposing any corrective actions at this time.

Ms. Kimberly D. Bose
July 16, 2014
Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906) 485-2419 or Virgil Schlorke at (920) 485-2465.

Sincerely,



Gil Snyder
Manager – Regional Generation
for Wisconsin Public Service

RJM/ebr

Enc: Operational Data

cc:	Mr. John Myers, IBS - D2	Mr. John Zygaj, FERC - CRO
	Mr. Shawn Puzen, IBS - D2	Ms. Patricia Grant, FERC - CRO
	Mr. Ben Trotter, IBS - D2	Mr. Jim Grundstrom, DRCI
	Ms. Joan Johaneck, WPS - D2	Mr. Burr Fisher, FWS
	Mr. James Melchiori, UPPCO - UVD	Mr. Koren Carpenter, MDEQ
	Mr. Robert Meyers, UPPCO - UISC	Ms. Diana Klemans, MDEQ
	Mr. Keith Moyle, UPPCO - UISC	Mr. Gary Kohlhepp, MDEQ
	Mr. Virgil Schlorke, UPPCO - UISC	Mr. Kyle Kruger, MDNR



Upper Peninsula Power Company

500 North Washington Street

Ishpeming, MI 49849

www.UPPCO.com

December 3, 2014

FERC Project No. 10855

NATDAM Nos. MI00183 & MI00175

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project – Hoist and McClure Developments
Article 402 & 403 Deviation of Reservoir Elevation and Minimum Flows

In accordance with Article 403 & 402 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002 and as amended on September 1, 2011, the licensee is required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with flows and/or elevations and the steps they used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

The Hoist and McClure plants both tripped at 01:13 EST, Tuesday, November 4, 2014, due to severe weather causing an electrical outage on the transmission system. An operator was dispatched to both plants. Flow at the Hoist was re-established at 02:40 EST by opening up the low level outlet. A line inspection was completed with no issues identified indicating the fault was caused by a tree which had cleared. Normal plant operation was re-established at 7:36 EST at the Hoist, but was again interrupted by another fault on the transmission system at 08:54 EST, and the low level outlet was opened at 09:15 EST. Inspections identified a shorted insulator lead. Switching was completed enabling normal plant operations to be re-established at the Hoist, with repairs completed at 10:02 EST. The McClure powerhouse was returned to normal operation following completion of repairs at 14:58 EST re-establishing minimum flows.

During this event the headwater (pond) elevation at McClure exceeded the limit of 1196.4 at 08:58 EST, peaked at 15:05 EST at 1196.63 and returned to normal range at 18:04 EST.

No adverse environmental impacts have been observed as a result of this deviation and Upper Peninsula Power Company did not receive any comments from the resource agencies after the deviation incident. Due to the nature of the event (severe weather causing an insulator to fail) UPPCO is not proposing any corrective actions at this time.

Ms. Kimberly Bose
December 4, 2014
Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906) 485-2419 or Virgil Schlorke at (920) 485-2465.

Sincerely,



Gil Snyder
Manager – Regional Generation
for Wisconsin Public Service

RJM/ebr

Enc: Operational Data

cc:	Mr. John Myers, IBS - D2	Mr. John Zygaj, FERC - CRO
	Mr. Shawn Puzen, IBS - D2	Ms. Patricia Grant, FERC - CRO
	Mr. Ben Trotter, IBS - D2	Mr. Jim Grundstrom, DRCI
	Ms. Joan Johaneck, WPS - D2	Mr. Burr Fisher, FWS
	Mr. James Melchiori, UPPCO - UVD	Mr. Koren Carpenter, MDEQ
	Mr. Robert Meyers, UPPCO - UISC	Ms. Diana Klemens, MDEQ
	Mr. Keith Moyle, UPPCO - UISC	Mr. Gary Kohlhepp, MDEQ
	Mr. Virgil Schlorke, UPPCO - UISC	Mr. Kyle Kruger, MDNR



Upper Peninsula Power Company
500 North Washington Street
Ishpeming, MI 49849
www.UPPCO.com

January 26, 2015

FERC Project No. 10855
NATDAM No. MI00175

Ms. Kimberly D. Bose, Secretary
The Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Secretary Bose:

Dead River Hydroelectric Project – Hoist Development
Article 403 Deviation of Minimum Flows

In accordance with Article 403 of the Order Issuing License for the Dead River Hydroelectric Project dated October 4, 2002, and as amended on September 1, 2011, the licensee is required to report to the Federal Energy Regulatory Commission (FERC) any deviations associated with flows and the steps used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

The Hoist plant tripped Saturday, December 27, 2014, at 11:53 CST, due to a transmission system fault. An operator was called and after arriving at the plant the low level outlet was opened at 13:40 CST, re-establishing minimum flow. The plant tripped again on Sunday, December 28, 2014 at 10:32 CST, and an operator was called and after arriving at the plant opened the low level outlet at 12:45 CST, re-establishing minimum flow.

The transmission system faults were caused by poor weather conditions; heavy amounts of snow clinging to the transmission lines causing them to sag, and high winds causing the lines to slap together, opening up the breakers and tripping the units. The transmission system was visually inspected following the faults with no obvious conditions noticed.

No adverse environmental impacts have been observed as a result of this deviation and Upper Peninsula Power Company did not receive any comments from the resource agencies after the deviation incident. Due to the nature of the event UPPCO is not proposing any corrective actions at this time.

Ms. Kimberly Bose
January 26, 2015
Page 2 of 2

If you have any questions regarding this letter, please contact Robert Meyers at (906)485-2419 or Virgil Schlorke at (920)485-2465.

Sincerely,

Gil Snyder
Manager – Regional Generation
for Wisconsin Public Service

RJM/ebr

Enc. Operational data

cc: Mr. John Myers, IBS - D2
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Mr. Virgil Schlorke, UPPCO - UISC
Mr. John Zygaj, FERC - CRO
Ms. Patricia Grant, FERC - CRO
Mr. James Grundstrom, DRCI
Mr. Burr Fisher, FWS
Mr. Koren Carpenter, MDEQ
Ms. Diana Klemens, MDEQ
Mr. Gary Kohlhepp, MDEQ
Mr. Kyle Kruger, MDNR

Appendix 3
Summary of Gate
And
Valve Openings



Geotechnical
Environmental and
Water Resources
Engineering

June 23, 2014
Project No. 1325480

Mr. Robert Meyers
Upper Peninsula Power Company
500 North Washington Street
Ishpeming, MI 49849

**RE: Results of 2014 Flow Assessment Study -18-inch By-Pass Pipe,
McClure Hydroelectric Dam, Marquette County, Michigan**

Dear Mr. Meyers:

GEI Consultants, Inc. (GEI) is pleased to provide you with a summary of the flow measurements conducted on the 18-inch HDPE by-pass pipe at the above-referenced project. The flow measurements were performed on Friday, June 20, 2014.

Description of Work

Jeff Bal, P.E. and Rick Sheltrow of GEI Consultants conducted flow measurements on the 18 inch HDPE bypass pipe at the McClure Dam. Jeff and Rick were assisted by UPPCO personnel. The measurements as summarized below were taken using a Dynasonics (Model TXFP) Portable Ultrasonic Transit Time Flow Meter. The meter was installed on the horizontal section of bypass pipe located at the base of the stairs located on the crest of the Dam. The meter was positioned at the same location as that used during last year's test. Measurements were recorded during varying "open" valve positions of the bypass pipe. Pertinent data taken at the time of the test is also included below:

Date Work Performed: Friday, June 20, 2014

Time of Test: Start at 12:45 pm. (EST)

Air Temperature: 52 degrees F

Surface Water Temperature: 68 degrees F

Water Elevation: 1196.93

Equipment: Dynasonics Model TXFP Transit Time Meter

Test Location: 18" HDPE bypass pipe – horizontal run below stairs at top of dam.
Meter centered on horizontal run.

Mr. Robert Meyers

- 2 -

June 23, 2014

Test Parameter Conditions and Results

Discharge Valve Position (inches open)	Discharge Valve Max. Open (inches)	Percent Open	Metered Flow Rates	
			cu. ft./sec	gal/min
13.75 (Initial Position)	18.5	74.32	24.34	10,924
10.50	18.5	56.76	17.70	7,944
11.25	18.5	60.81	19.50	8,752
12.25	18.5	66.22	21.00	9,425
12.75	18.5	68.92	22.25	9,986
13.75	18.5	74.32	23.31	10,462
7	18.5	37.84	10.00	4,488
11.5	18.5	62.16	20.00	8,976

The initial flow rate was observed to be 24.79 cubic feet per second. The valve was closed to reduce flows to 17.70 CFS and then gradually opened and spot readings were taken until the flow rate had increase up to 23.31. Then the valve was shut to the point where a flow of 10 CFS was observed and that position was recorded. At the completion of the flow testing, the bypass discharge valve was positioned so that the flow rate of 20 cfs was observed.

We appreciate the opportunity to have provided these services and would like to thank your staff for assisting us during this work. If you have any questions concerning the data or results, please do not hesitate to contact Jeff Bal at (906) 214-4146.

Sincerely,

GEI CONSULTANTS OF MICHIGAN, P.C.



Jeff Bal, P.E.
Senior Project Engineer

JRB:plw

cc: Mike Carpenter, GEI

Silver Lake		Low Level Outlet Gate Operation		
Date	Pond Elev	LLO Position Open-Inch	Flow (CFS)	
01/01/14	1479.72	10.00	42	
02/16/14	1477.50	5.25	16	
03/18/14	1476.70	7.25	25	
05/02/14	1480.56	25.50	150	
05/05/14	1480.83	6.00	20	
06/02/14	1484.46	4.75	15	
07/01/14	1484.02	3.75	10	
07/28/14	1483.75	7.75	30	
07/30/14	1483.64	10.50	50	
08/20/14	1482.17	6.50	25	
09/03/14	1482.10	8.50	35	
09/08/14	1482.00	10.75	50	
09/10/14	1481.72	12.50	60	
09/15/14	1481.69	8.50	35	
09/18/14	1481.58	14.00	70	
09/22/14	1481.17	17.50	100	
09/25/14	1480.00	7.00	25	
09/27/14	1480.73	12.50	60	
09/29/14	1480.45	16.00	80	
10/05/14	1480.00	6.00	20	
10/10/14	1480.06	16.50	80	
10/24/14	1479.46	6.00	20	
11/03/14	1479.85	16.00	80	
11/05/14	1479.84	6.00	20	
12/09/14	1480.85	10.00	45	
12/11/14	1480.80	13.50	66	
12/23/14	1480.29	15.00	75	

HOIST		2014 Low Level Outlet Gate Operation			
Date	Time	Pond Elev	LLO Position Open/Closed-Turns	Flow (CFS)	
01/01/14	0:00		0	0	
05/08/14	0:00	1342.35	100	100	
05/08/14	10:55	1342.36	100	0	
07/10/14	10:18	1341.07	105	105	
08/29/14	17:41	1340.78	100	0	
09/09/14	11:05	1340.69	100	100	
09/09/14	14:30	1340.69	100	0	
09/19/14	10:30	1341.05	50	50	
09/21/14	15:30	1340.89	30	20	
09/22/14	14:50	1340.89	20	0	
12/27/14	14:30	1338.88	100	100	
12/27/15	22:49	1338.92	100	0	

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