



Upper Peninsula Power Company

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

February 26, 2014

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

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

Dear Secretary Bose:

Dead River Hydroelectric Project
2013 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;
- Summary of all gate and valve openings;
- Documentation of consultation on the draft report.

Ms. Kimberly D. Bose

February 26, 2014

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.

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

Sincerely,

A handwritten signature in black ink, appearing to read "G. Snyder", with a long horizontal flourish extending to the right.

Gil Snyder

Manager - Regional Generation

for Wisconsin Public Service Corporation

VES/ebr

Enc: Appendix 1 - UPPCO Agency Correspondence

Appendix 2 - UPPCO Annual Deviation Report

cc: 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 Ms. Patricia Grant, FERC - CRO
Ms. Joan Johaneck, WPSC - D2 Mr. John Zygaj, FERC - CRO
Mr. Robert Meyers, UPPCO - UISC

Appendix 1

Documentation of Consultation



Upper Peninsula Power Company

700 North Adams Street
P.O. Box 19001
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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

Dear Agency Representative(s):

Dead River Hydroelectric Project
2013 Annual Report - Operation Monitoring Plan & Report of Deviations Less Than Sixty Minutes

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- 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,

During 2013, due to an unplanned unit outage and high spring flows, McClure spilled into the bypass reach from April 29, 2013, to July 2, 2013. At times flows over the spillway exceeded 100 cfs, with a maximum flow release of approximately 1300 cfs on May 9, 2013. As a result, flushing flows were released and woody debris was transported downstream.

Please provide your comments on the annual report no later than February 24, 2014. 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

Appendix 2

Annual Report

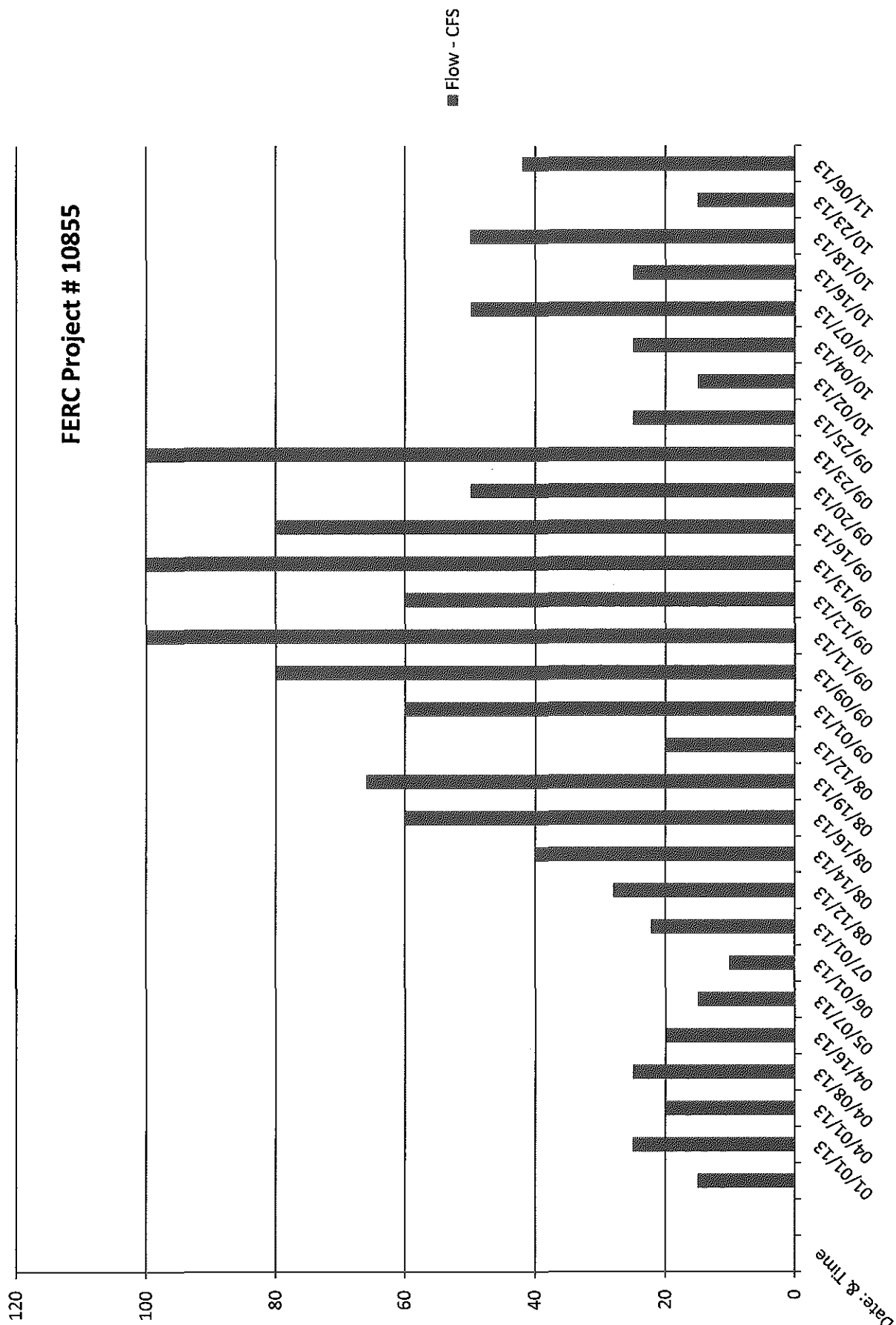
Point Info - UPPCO-SLK: Headwater Elevation

SILVER LAKE POND
ELEVATION
FERC PROJECT
10855

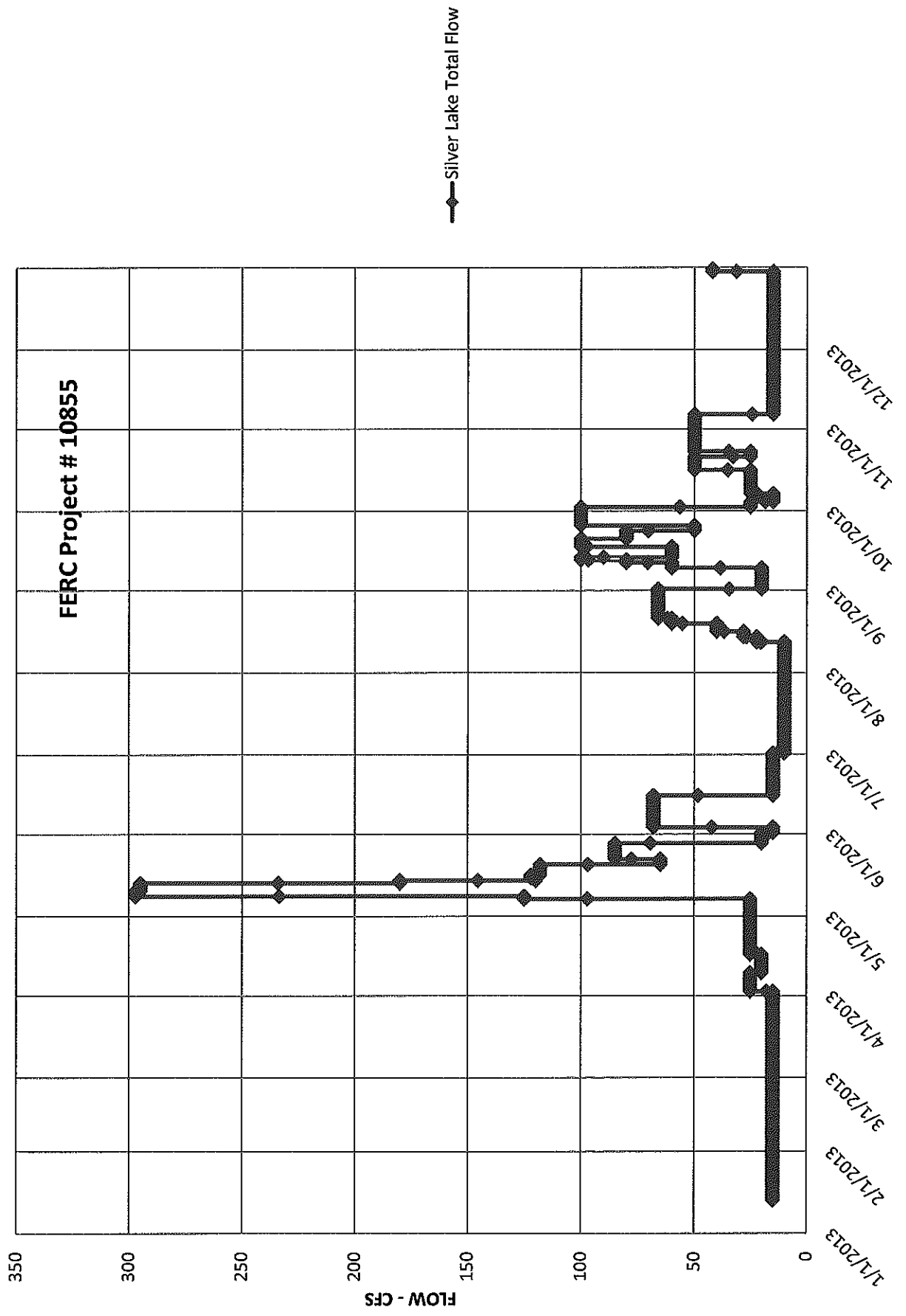


Silver Lake - Low Level Outlet Gate Operation Graph - 2013

FERC Project # 10855



Dead River - Silver Lake Total Flow

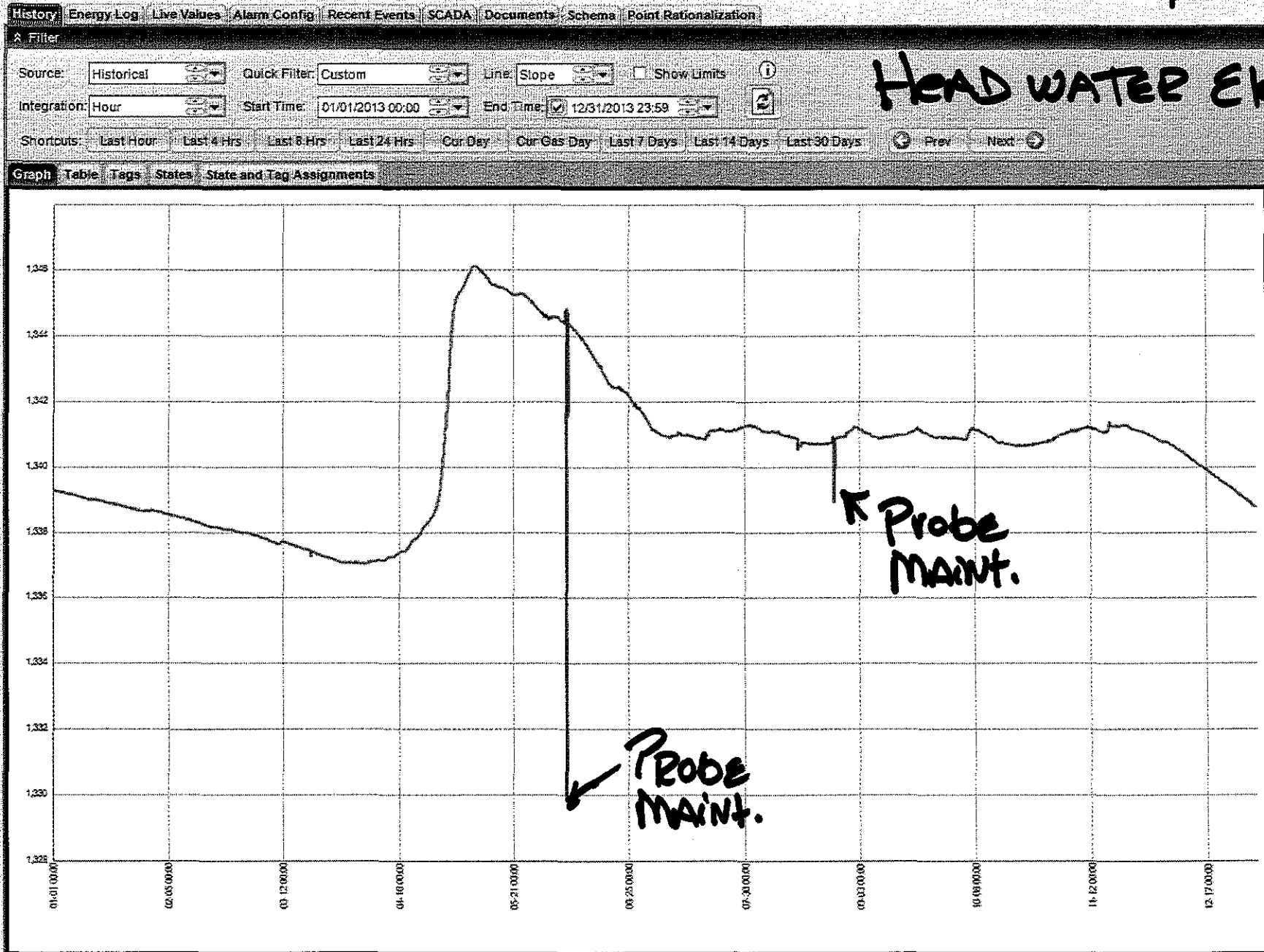


2013

Point Info - UPPCO-HST: Headwater Elevation

DEAD RIVER HOIST

FERC Project No. 10855



2013

Point Info - UPPCO-HST: Total Plant Flow

DEAD RIVER-HOIST
FERC Project-10855

History Energy Log Live Values Alarm Config Recent Events Calculation SCADA Documents Schema Point Rationalization

Filter

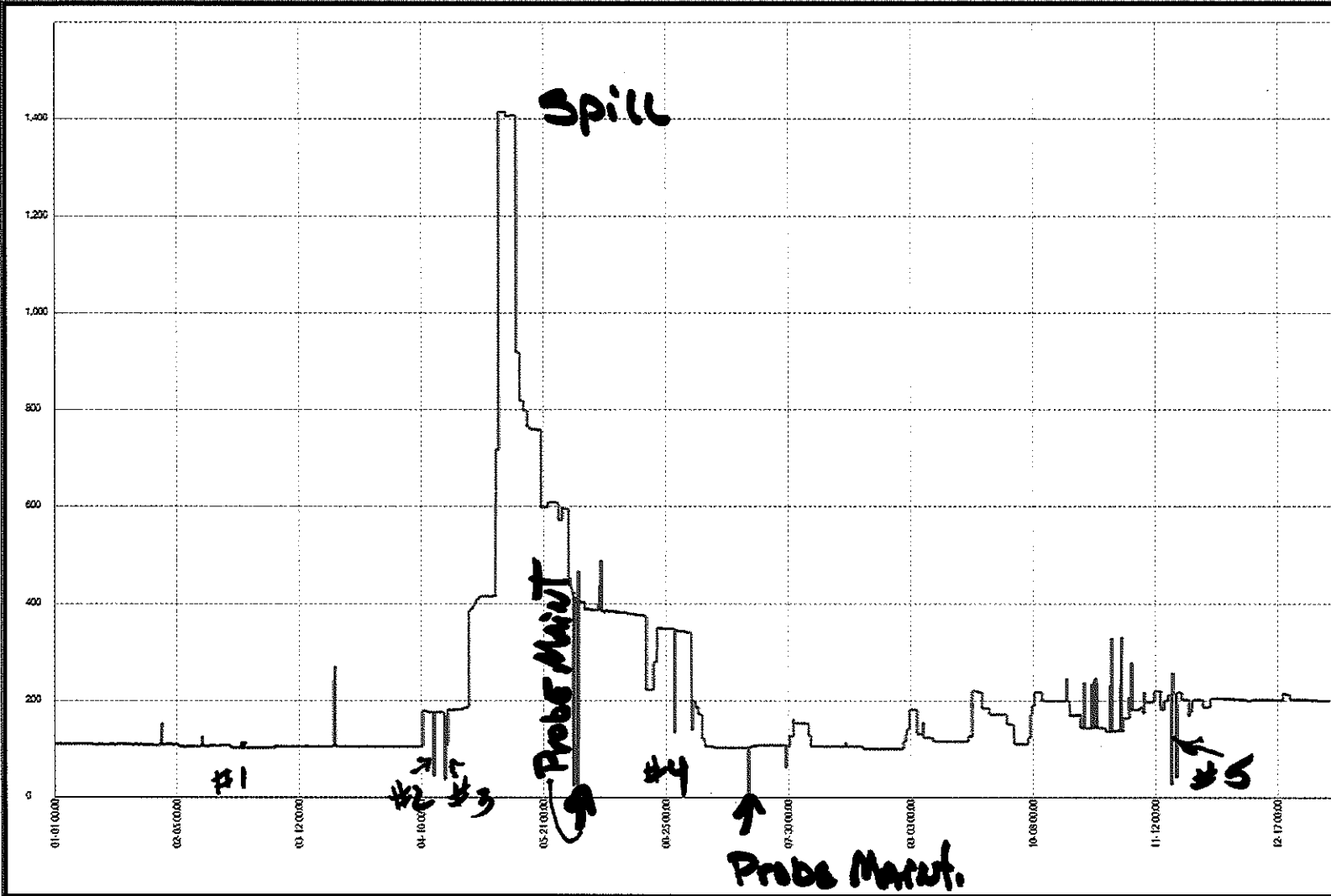
Source: Historical Quick Filter: Custom Line: Slope Show Limits

Integration: Hour Start Time: 01/01/2013 00:00 End Time: 12/31/2013 23:59

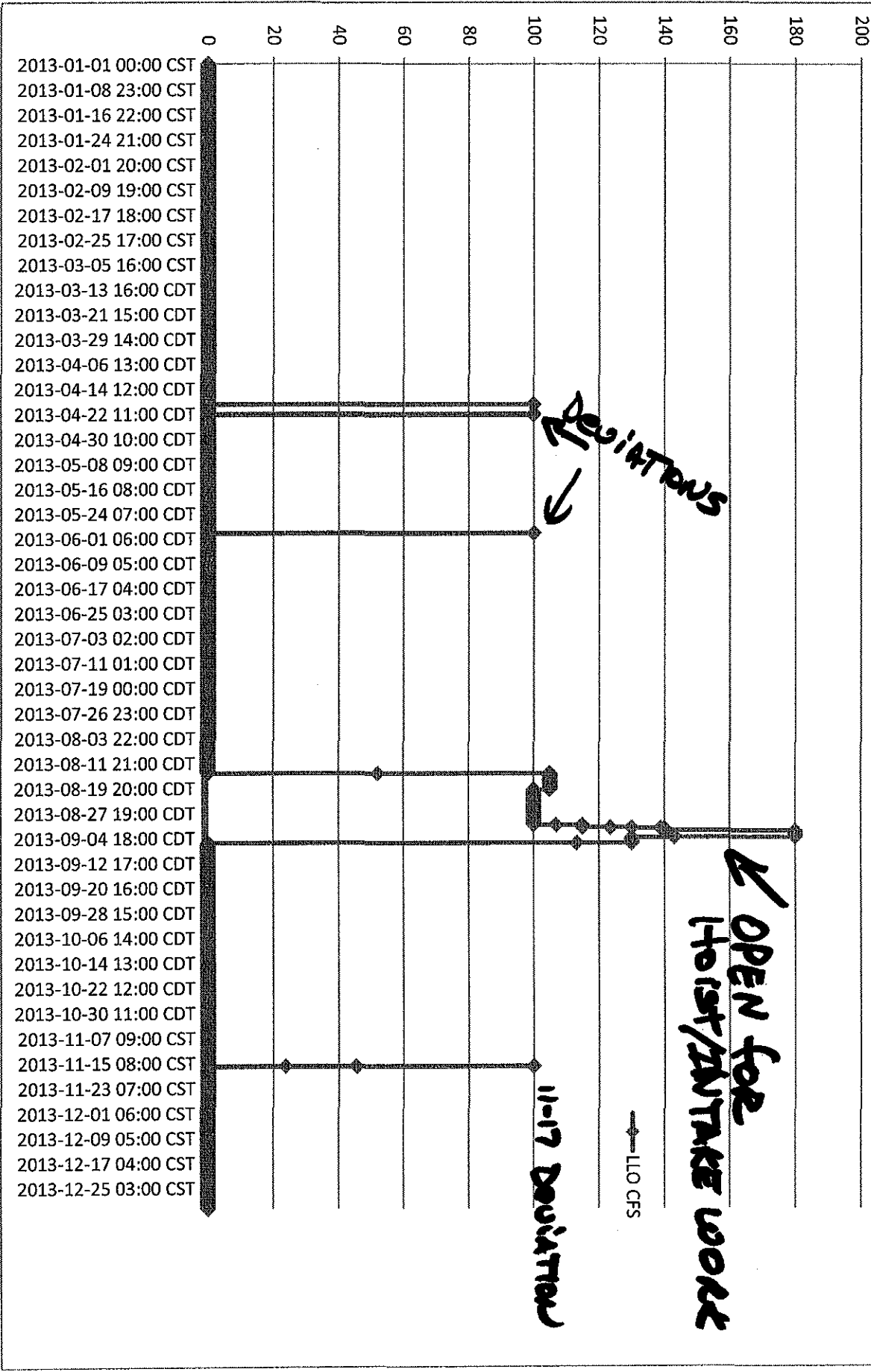
Shortcuts: Last Hour Last 4 Hrs Last 8 Hrs Last 24 Hrs Cur Day Cur Gas Day Last 7 Days Last 14 Days Last 30 Days Prev Next

TOTAL FLOW PLANT/DAM

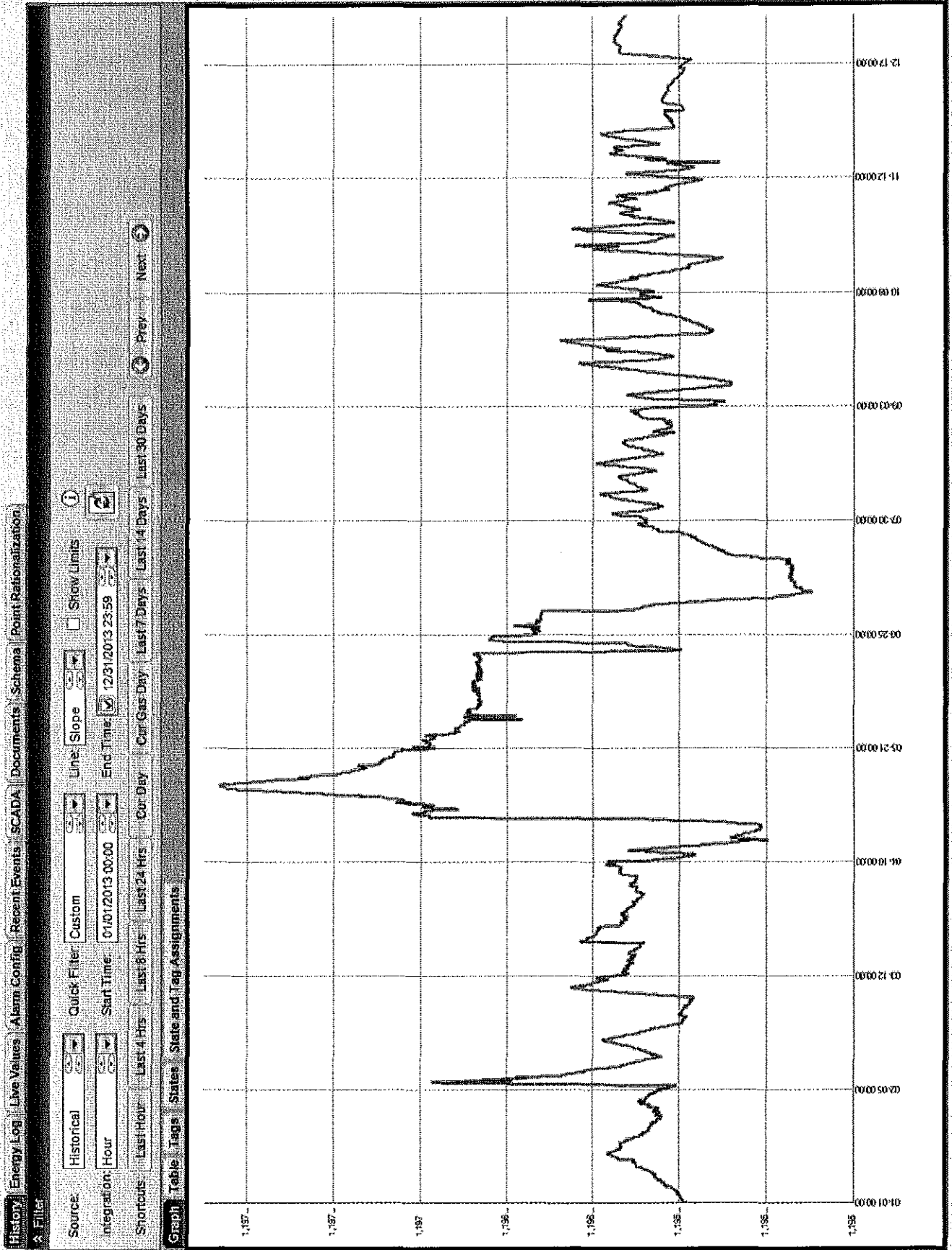
Graph Table Tags States State and Tag Assignments



HOIST Low Level Outlet Flow - CFS 2013
FERC Project No. 10855

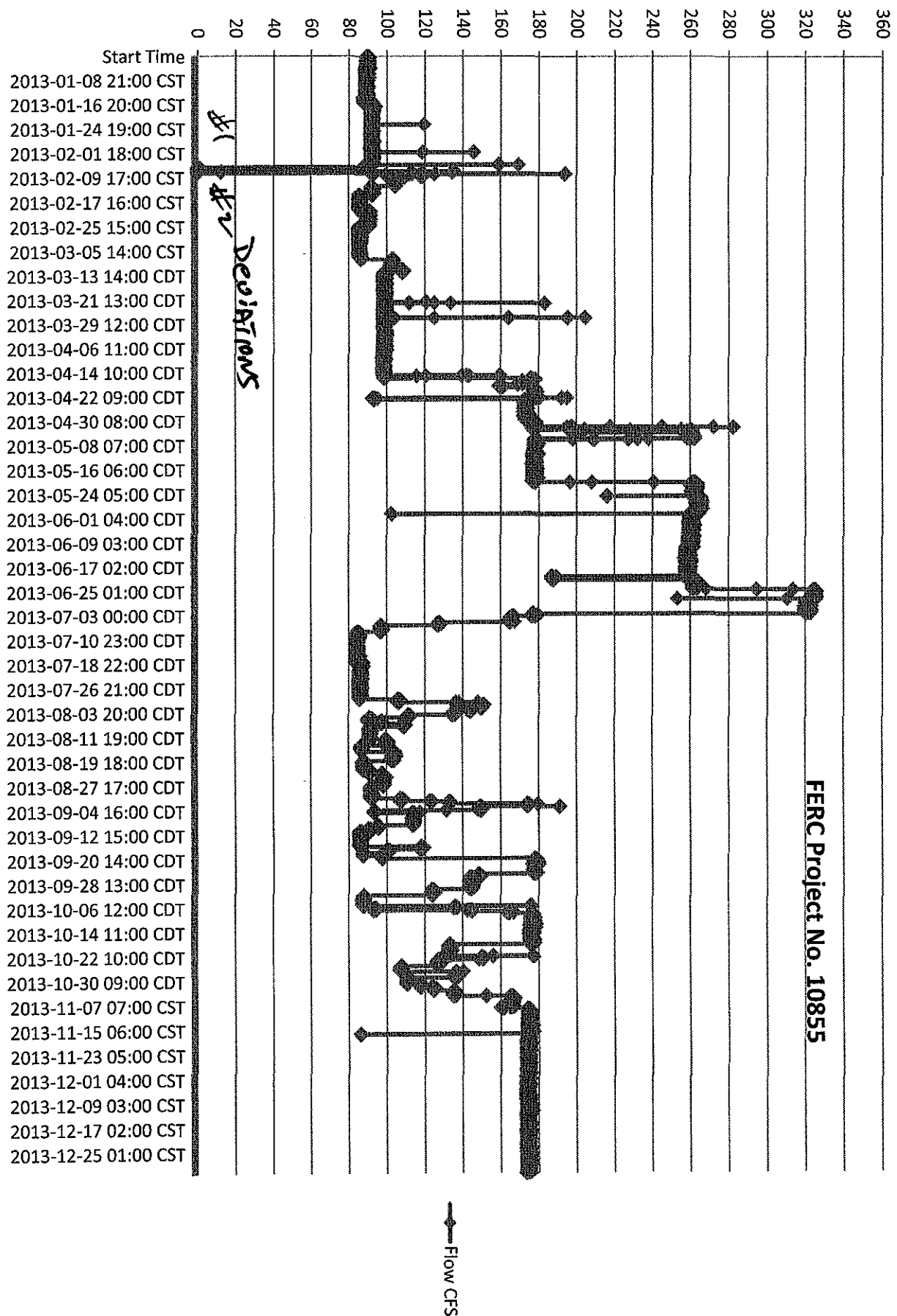


Point Info - UPPCO-MCLD: Headwater Elevation



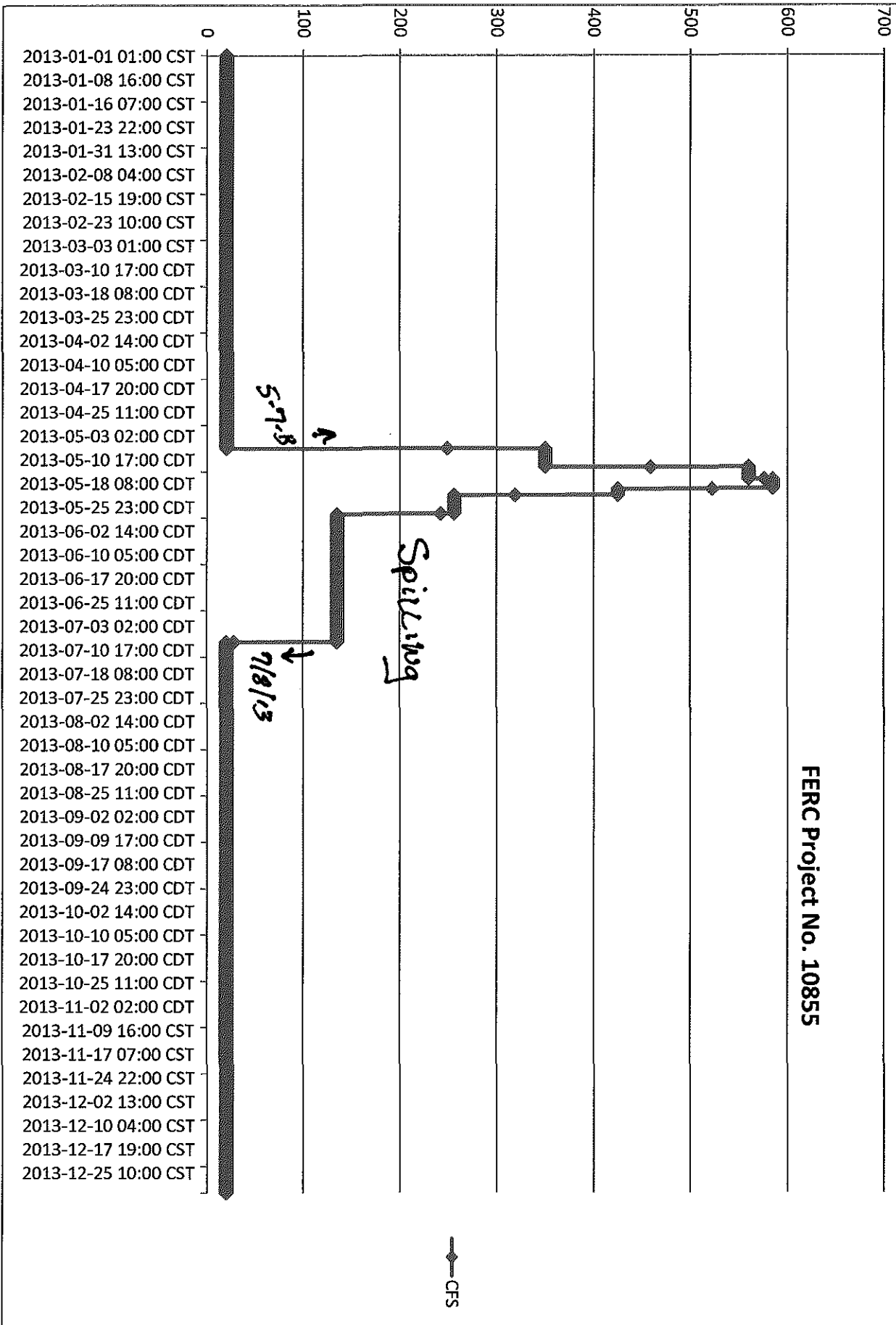
Dead River Hydro - McClure Plant Flow - 2013

FERC Project No. 10855



DEAD River - McClure Flow from Dam/ Siphon & Spill - 2013

FERC Project No. 10855



← CFS

Appendix 2

Summary of Deviations & Deviation Reports

Dead River Project FERC No. 10855, Deviation Summary for 2013

Project	Date	Deviations < 60 minutes	Reason
Hoist	2/8/2013	Less than 100 CFS from Plant	Units were being Started and Shut Off
Hoist	4/19/2013	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
Hoist	4/22/2013	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
Hoist	6/27/2013	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
Hoist	11/17/2013	Less than 100 CFS from Plant	Transmission Problem Tripping Plant/Storm
McClure	2/1/2013	Less than 80 CFS from Plant	Tie Breaker Opened Startig Plant - Electrical Issue
McClure	2/7/2013	Less than 80 CFS from Plant	Mechanical Issue with One Unit Tripping
McClure	9/3/2013	Less than 80 CFS from Plant	Mechanical Issue with One Unit Tripping

Deviations > 60 minutes

Hoist/McClure	4/19/2013	Less than 100, 80 CFS from Plants	Transmission Problem High Winds/Storm
Hoist/McClure	4/22/2013	Less than 100, 80 CFS from Plants	Transmission Problem High Winds/Storm
McClure	4/29/2013	Pond Level Exceedance	Spring Condition - High Flow in River
Hoist	5/29/2013	Less than 100 CFS from Plant	Transmission Problem Storm/Tree
Hoist	5/30/2013	Less than 100 CFS from Plant	Transmission Problem Storm/Trees
Hoist/McClure	6/27/2013	Less than 100,80 CFS from Plants	Transmission Problem Storm/Lightning

Hoist/McClure	7/18/2013	Less than 100,80 CFS from Plants	Transmission Problem Storm/Lightning
Hoist/McClure	7/18/2013	Less than 100,80 CFS from Plants	Transmission Problem Lightning Strike
Hoist	7/29/2013	Less than 100 CFS from Plant	Transmisison Problem Lightning Strike

Non-Conformance Event Record Detail

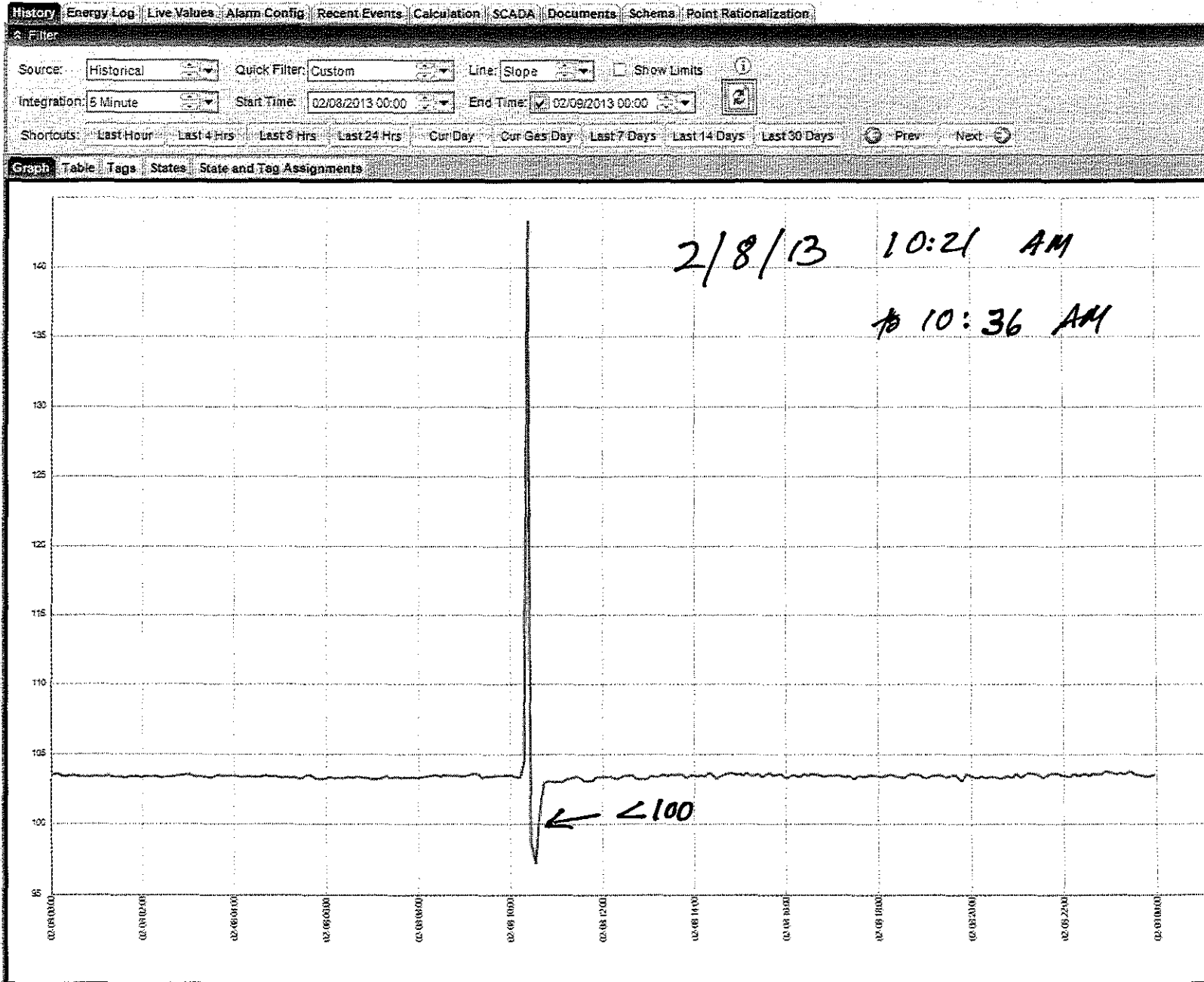
#1



NC Record Number: NCREG4602		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Hoist Hydro			
Event Date:	02/08/2013	Discovery Date/Time:	2/8/13 10:26
Event Title: Hoist plant flow <100 cfs during unit swap.			
Event Details: While the local Operator was adjusting flow following swapping of the units, the indicated flow temporarily fell below 100 cfs.			
Immediate Action: Indormed local Operator.			
Recommendations: none			
Potential Causes/Contributors to incident		Possibly the lack of good local flow indication.	
Entered By Name:	Thomas R Grow	Creation Date/Time:	2/8/13 10:50
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Not a deviation, flucuation from swapping units
Additional Followup Required:	no		
Category:	Other	Type:	
Sub Type:		Description:	Instrument flucuation
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Bounce in the reading for flow with two units one, during the a plant unit swap
Event Start:	2/8/2013 10:21 AM	Event End:	2/8/2013 10:36 AM
		Event Duration (HH:MM):	00:15
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 Sceening Committee Approval upon Completion		no	
Evaluation Reviewed/Approved by Screening Committee			

60

Point Info - UPPCO-HST: Total Plant Flow



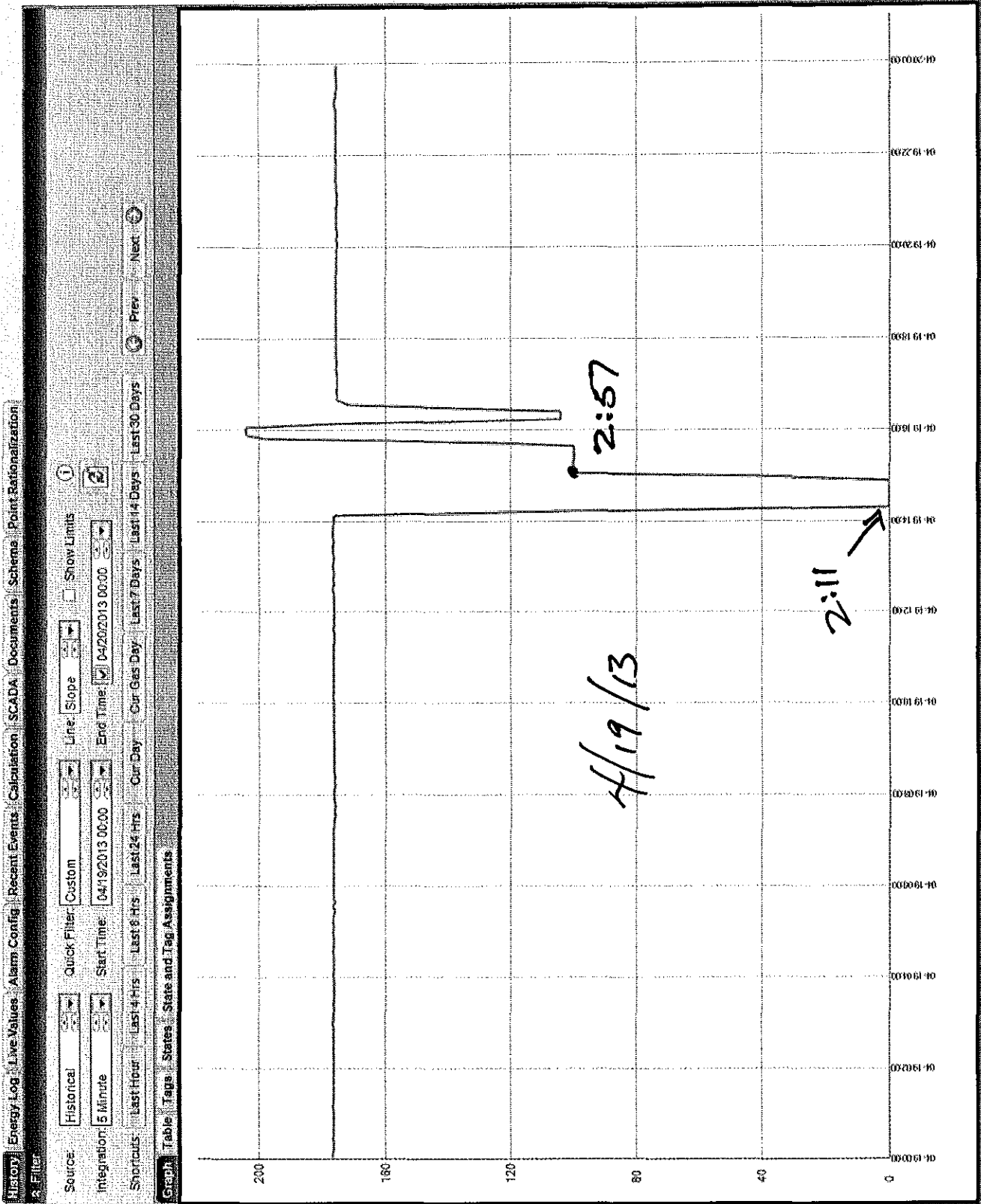
Non-Conformance Event Record Detail

#2



NC Record Number: NCREG4776		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Hoist Hydro			
Event Date:	04/19/2013	Discovery Date/Time:	4/19/13 14:12
Event Title:	Run of River deviation		
Event Details:	Plant trip due to power outage		
Immediate Action:	Notified hydro operator.		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Terrie S Taylor	Creation Date/Time:	4/19/13 14:24
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	yes	Basis for Reportability:	Part of A FERC Deviation letter submitted May 2nd to VS
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Event happened, unit tripped and came back on
Event Start:	4/19/2013 2:11 PM	Event End:	4/19/2013 2:57 PM
		Event Duration (HH:MM):	00:46
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:		Acceptance Comments	L60
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name	
Analysis Description:			
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion			no
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-HST: Total Plant Flow



History | Energy Log | Live Values | Alarm Config | Recent Events | Calculation | SCADA | Documents | Schema | Point Rationalization | Filter

Source: Historical | Quick Filter: Custom | Line: Slope | Show Limits: | Integration: 5 Minute | Start Time: 04/19/2013 00:00 | End Time: 04/20/2013 00:00 | Shortcuts: Last Hour | Last 4 Hrs | Last 8 Hrs | Last 24 Hrs | Cur Day | Cur Gas Day | Last 7 Days | Last 14 Days | Last 30 Days | Prev | Next

Graph | Table | Tags | States | State and Tag Assignments

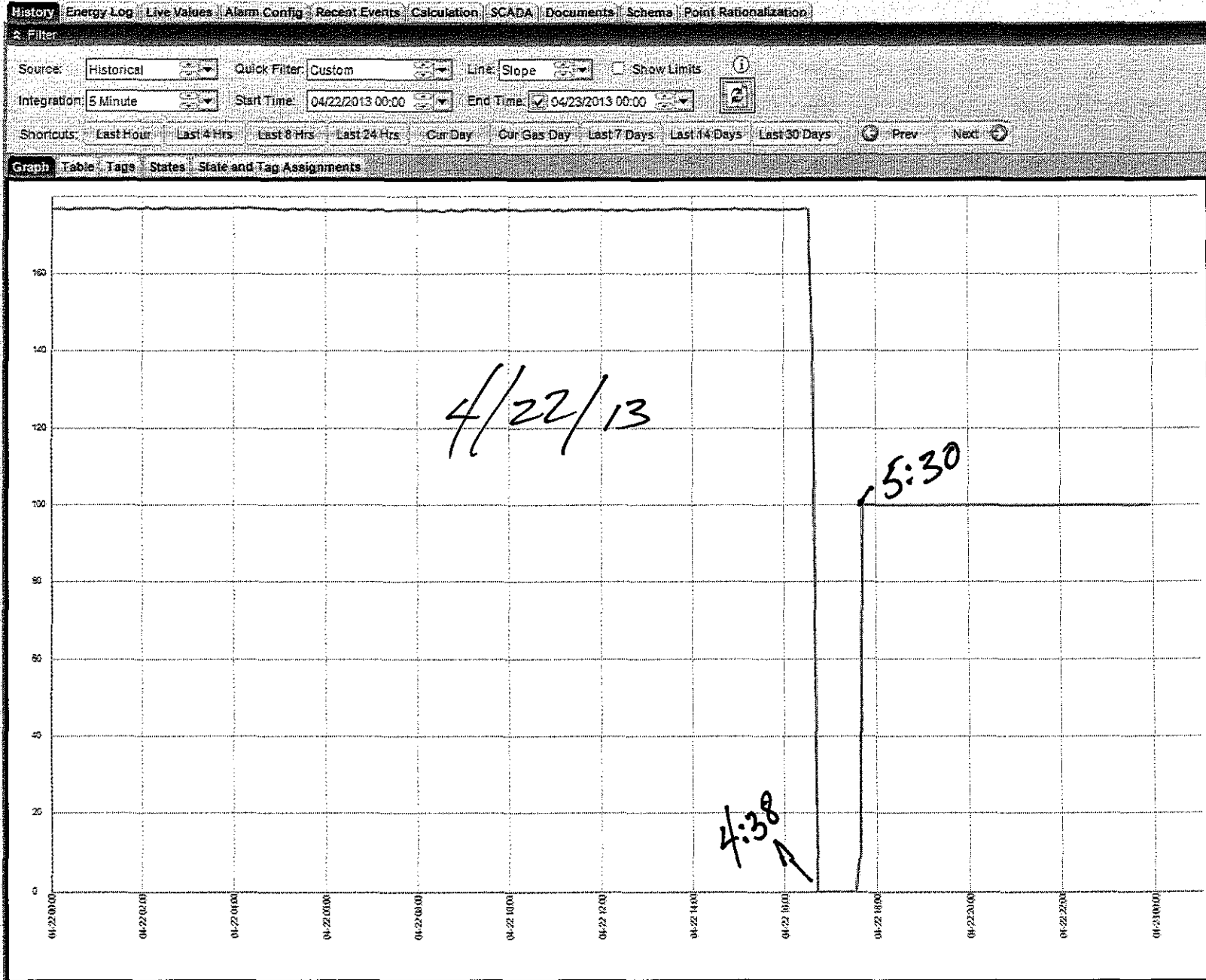
Non-Conformance Event Record Detail



NC Record Number:	NCREG4788		Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Hoist Hydro			
Event Date:	04/22/2013	Discovery Date/Time:	4/22/13 16:39	
Event Title:	Unit tripped offline			
Event Details:	Unit tripped offline due to a possible distribution system event			
Immediate Action:	ARCOS call for operator (s)			
Recommendations:	n/a			
Potential Causes/Contributors to Incident	possible distribution event..			
Entered By Name:	David C Paananen	Creation Date/Time:	4/22/13 17:41	
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed	
Reportable to External Agency:	yes	Basis for Reportability:	Part of a FERC letter drafted to VES May 2nd	
Additional Followup Required:	no			
Category:	Regulatory	Type:	FERC Deviation	
Sub Type:	Trans. Sys. (storm related)	Description:		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Event happened and units retrund to servic	
Event Start:	4/22/2013 4:38 PM	Event End:	4/22/2013 5:30 PM	Event Duration (HH:MM): 00:52
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				

60

Point Info - UPPCO-HST: Total Plant Flow



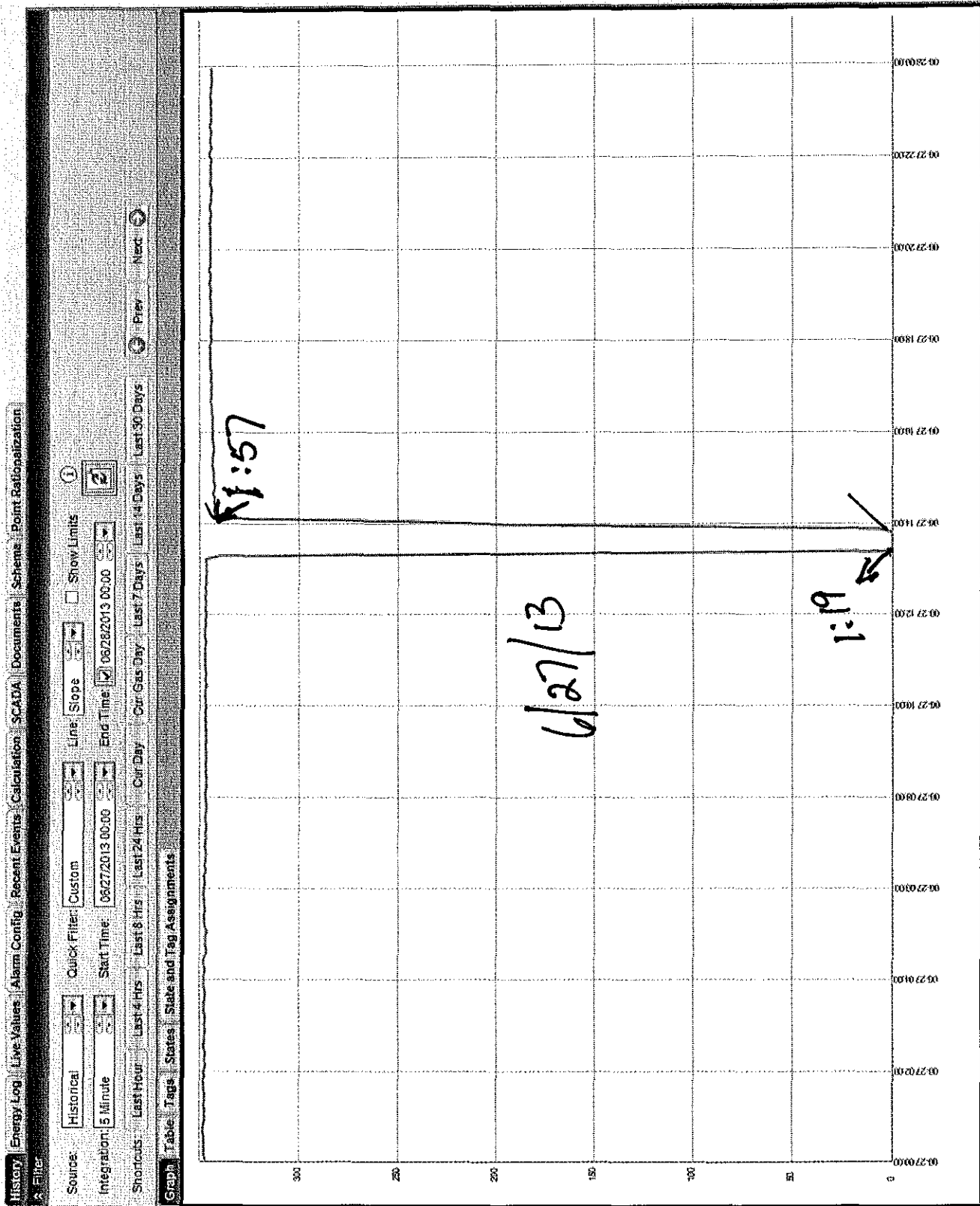
Non-Conformance Event Record Detail

#4



NC Record Number: NCREG5013		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Hoist Hydro			
Event Date:	06/27/2013	Discovery Date/Time:	6/27/13 13:19
Event Title:	Hoist generators trip		
Event Details:	Both units tripped. Had difficulty contacting operators due to intermittent phone problem. Contacted local operator at 13:33.		
Immediate Action:	Contacted operator.		
Recommendations:	n/a		
Potential Causes/Contributors to incident	weather		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	6/27/13 14:49
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	yes	Basis for Reportability:	Letter to FERC - Draft to VES 7/15
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Units put back on line
Event Start:	6/27/2013 1:19 PM	Event End:	6/27/2013 1:57 PM
		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-HST: Total Plant Flow



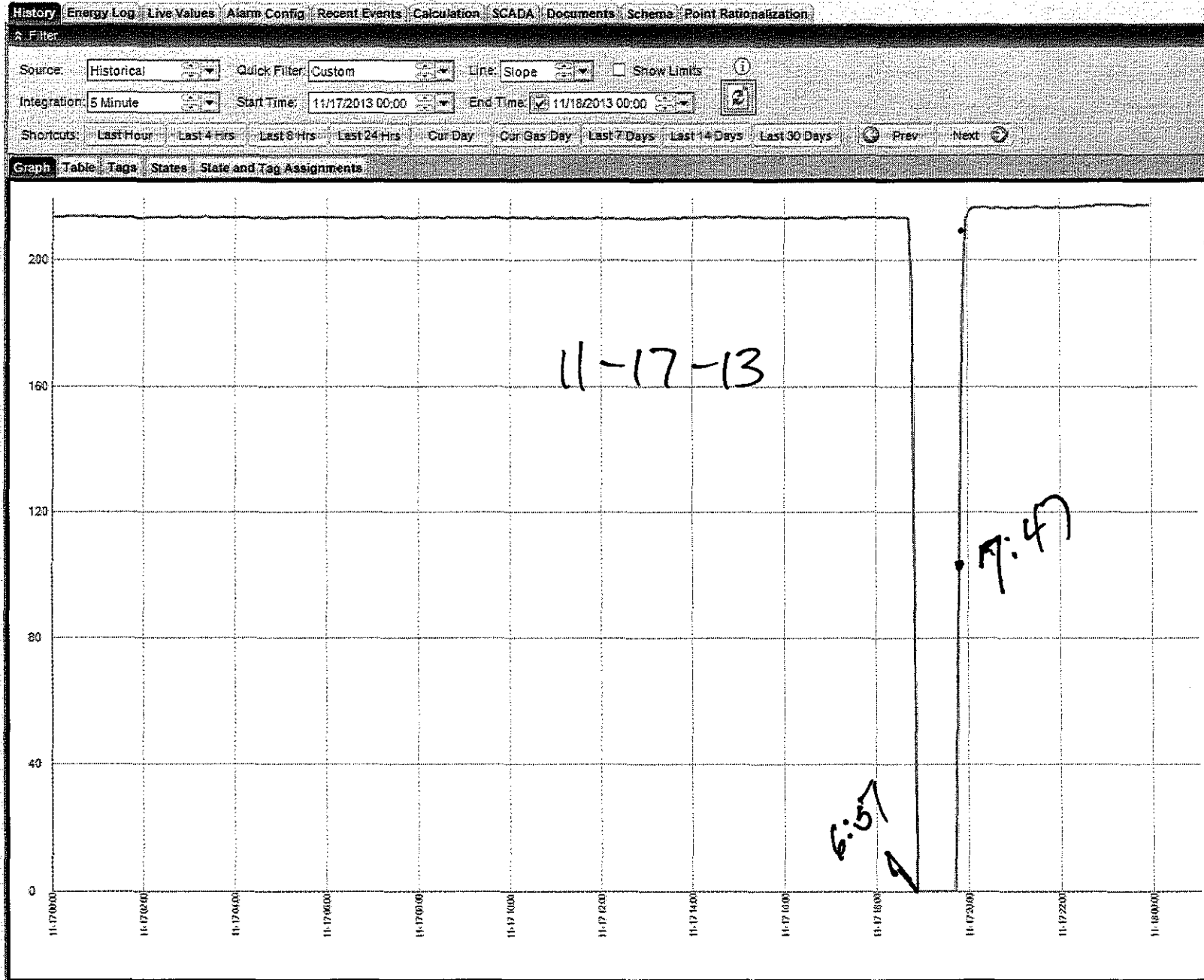
#5



Non-Conformance Event Record Detail

NC Record Number:	NCREG5507	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Hoist Hydro		
Event Date:	11/17/2013	Discovery Date/Time:	11/17/13 18:49
Event Title:	Hoist Unit 3 Tripped		
Event Details:	Unit #3 tripped offline due to generator overspeed		
Immediate Action:	Called out local operator		
Recommendations:	None		
Potential Causes/Contributors to incident	Generator overspeed - possibly weather related, high winds		
Entered By Name:	Brian K Ellison	Creation Date/Time:	11/17/13 20:52
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 minutes, end of year reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	high winds
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	High winds caused the transmission system to trip, operator was called out and got the plant back on line < 60 minute time frame
Event Start:	11/17/2013 6:51 PM	Event End:	11/17/2013 7:47 PM
		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 Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-HST: Total Plant Flow



Non-Conformance Event Record Detail

#1



NC Record Number: NCREG4582		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-McClure Hydro			
Event Date:	02/01/2013	Discovery Date/Time:	2/1/13 12:30
Event Title:	Total Generator Flow alarm		
Event Details:	Local hydro operator was attempting to start unit #2 and the-breaker opened - this caused unit #1 to trip off line at 13:01 EST and at 13:32 EST.		
	This resulted in ZERO generation flow - there was 20 CFS Siphon Flow.		
Immediate Action:	Tie breaker was closed and unit #1 was put back on-line.		
Recommendations:	na		
Potential Causes/Contributors to Incident	Local hydro operator was attempting to start unit #2 and the tie breaker opened causing unit #1 to trip off-line.		
Entered By Name:	Mark A Nemetz	Creation Date/Time:	2/1/13 12:46
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of annual report < 60 minute event
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	High Vibrations
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	unit had tripped, and put back on when electrical problem resolved
Event Start:	2/1/2013 12:30 PM	Event End:	2/1/2013 12:46 PM
		Event Duration (HH:MM):	00:16
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 Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

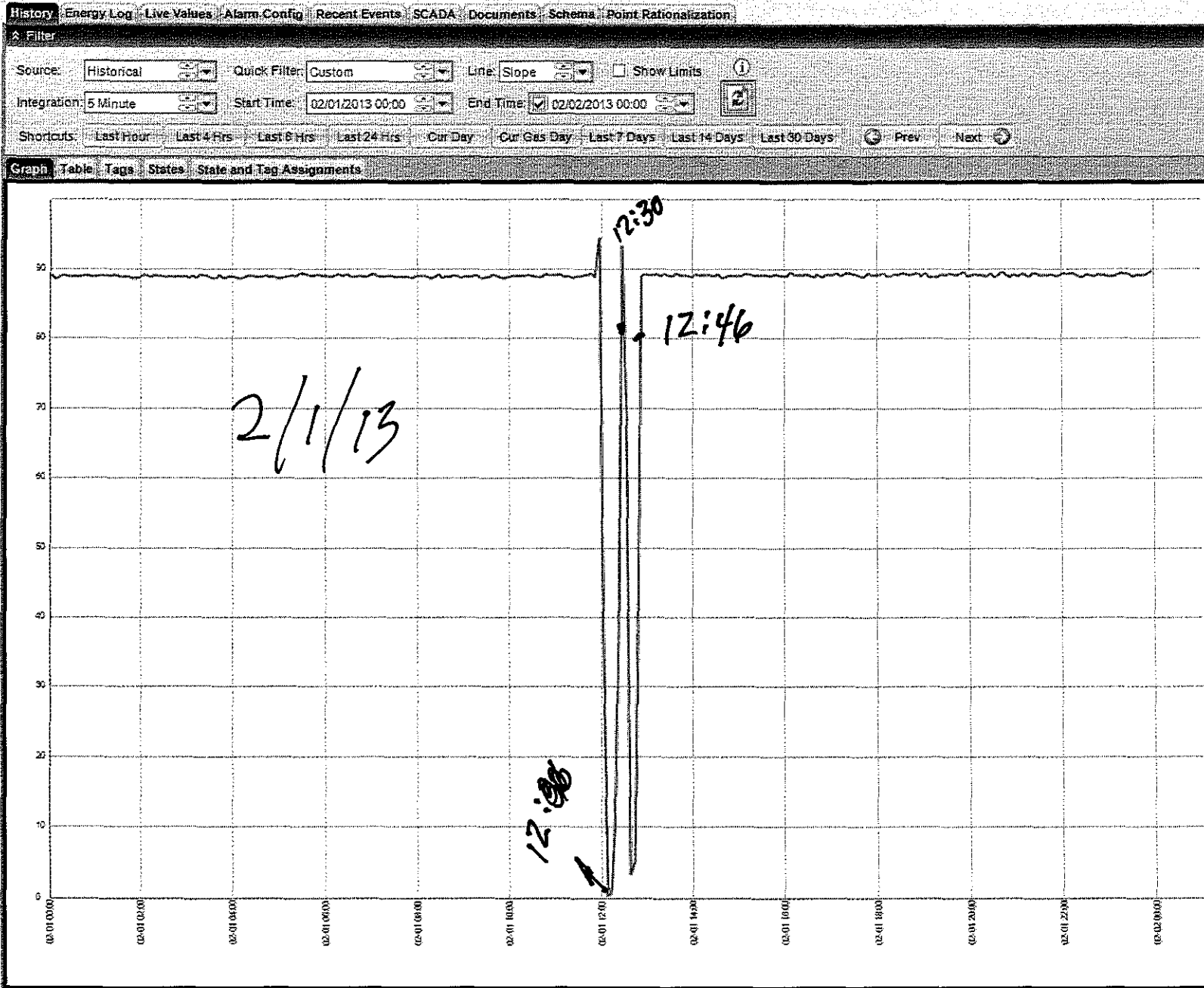
Non-Conformance Event Record Detail

#2



NC Record Number:	NCREG4599	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-McClure Hydro		
Event Date:	02/07/2013	Discovery Date/Time:	2/7/13 22:50
Event Title:	McClure Unit #1 Trip		
Event Details:	At 2056 on 2-7-2013 McClure unit #1 tripped offline. Dave Grigg and Tim Derwin went out. They found that unit #1 had a Thrust Bearing oil leak. They were unable to fix it tonight so the unit is staying offline. The Headlevel is 1196.63 so the plant is spilling. I called Marquette Power and Light to let them know.		
Immediate Action:	Paged out operator.		
Recommendations:	None.		
Potential Causes/Contributors to incident	Thrust Bearing Oil Leak.		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	2/7/13 22:56
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 Minute event
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	Substation Tie Breaker problem
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Unit 2 was trying to be started, Unit 1 was on, tie breaker and PT fuse problem
Event Start:	2/1/2013 12:06 PM	Event End:	2/1/2013 12:47 PM
Evaluator Name:	Meyers, Robert J	Evaluator Dept:	UPPCO-GENCO
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: Powerhouse Penstock Flow

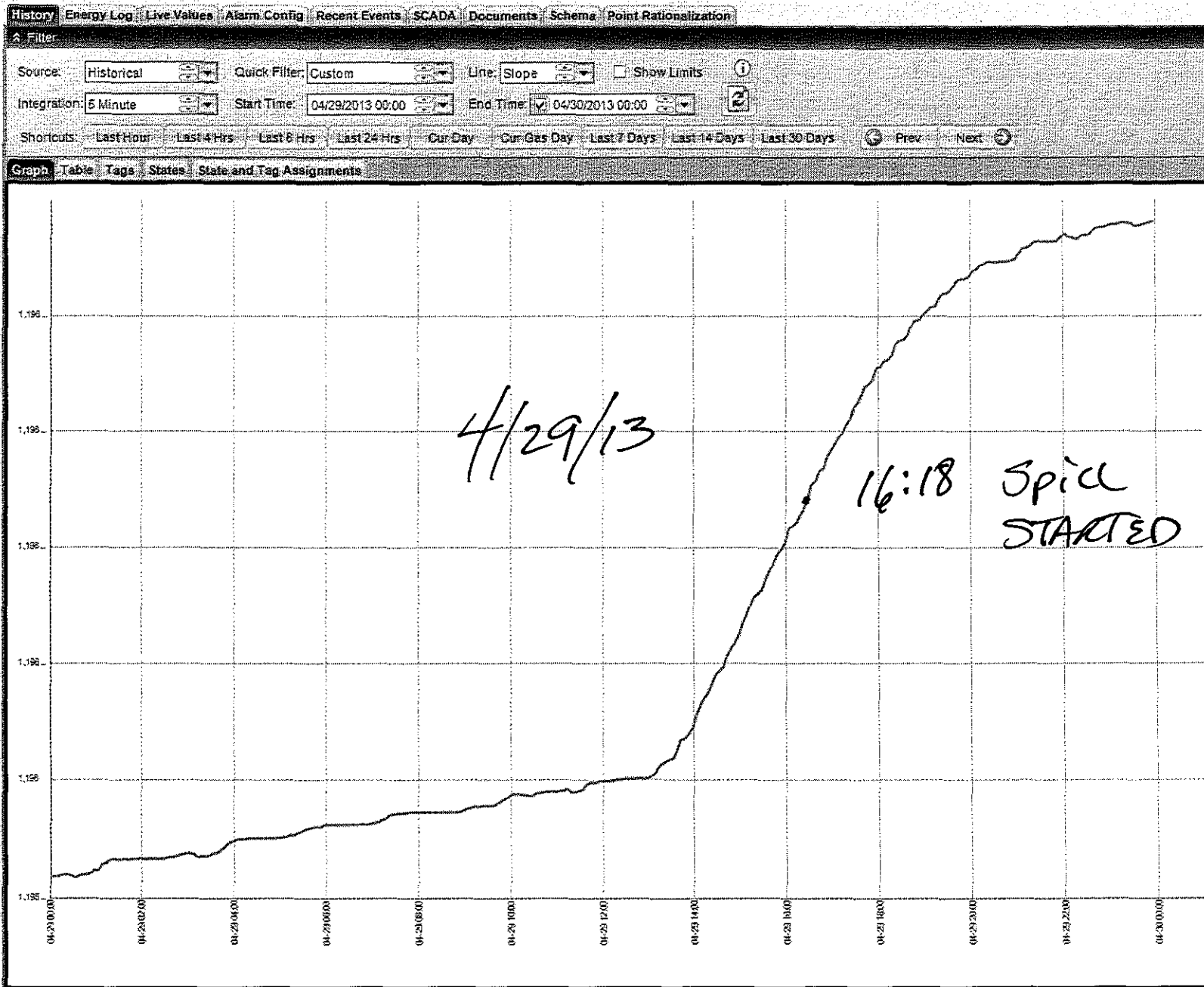


Non-Conformance Event Record Detail



NC Record Number:	NCREG4817	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-McClure Hydro		
Event Date:	04/29/2013	Discovery Date/Time:	4/29/13 15:56
Event Title:	McClure greater than elevation alarm limit		
Event Details:	Due to higher inflows, McClure elevation exceeds alarm setpoint and the pond is spilling.		
Immediate Action:	documented		
Recommendations:	none		
Potential Causes/Contributors to Incident		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	4/29/13 15:56
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	yes	Basis for Reportability:	FERC Letter required
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Water increase from Spring run off
Event Start:		Event End:	Event Duration (HH:MM):
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-MCLD: Headwater Elevation



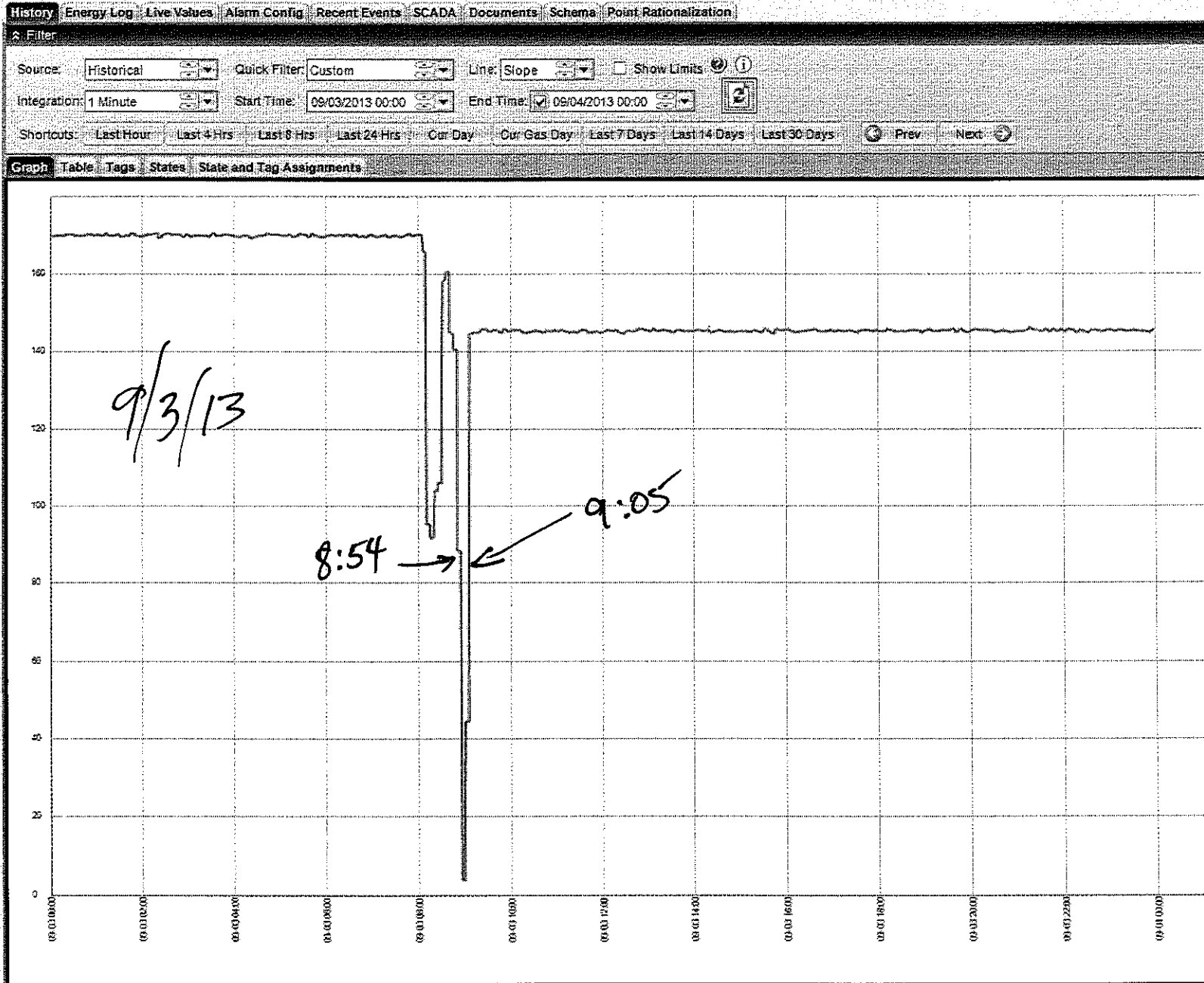
Non-Conformance Event Record Detail

#4



NC Record Number: NCREG5272		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-McClure Hydro			
Event Date:	09/03/2013	Discovery Date/Time:	9/3/13 9:05
Event Title:	Unit Trip		
Event Details:	John ia at McClure to swap units. Unit #1 was put online and #2 was taken offline. After the swap at 0851 unit #1 tripped offline due to a bearing temp. alarm, I called the plant and John said they would be putting unit #2 back online. While both units were off the flow dropped below 80 cfs. At 0903 unit #2 was back online and flows were back above 80 cfs.		
Immediate Action:	Called the plant and they placed unit #2 back online.		
Recommendations:	None		
Potential Causes/Contributors to incident	Bearing Temperature alarms on unit#1.		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	9/3/13 9:12
Entered By Department:	Energy Supply & Control-GenCo	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Will be done as part of the Year end report of events < 60 minutes
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	Unit trip
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Units were being swapped as part of the normal monthly operation, unit one was started up, after it was steady on line, unit two was removed from service. about 1 minute after unit two was removed, Unit one tripped on high bearing oil temperature. Unit two was put back on line.
Event Start:	9/3/2013 8:53 AM	Event End:	9/3/2013 9:04 AM
		Event Duration (HH:MM):	00:11
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 Scenning Committee Approval upon Completion			no
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-MCL: Powerhouse Penstock Flow





Upper Peninsula Power Company
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.uppc.com

May 17, 2013

FERC Project No. 10855
NATDAM No. MI00183, 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 and McClure Developments
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/or elevations and the steps they used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

On April 19, 2013, at 15:11 EDT, the Hoist and McClure plants tripped off-line due to loss of the transmission system from a storm and high winds, and therefore deviated from the minimum flow condition of 100 cfs at the powerhouse at Hoist, and 80 cfs at McClure. Operators were dispatched to the plants, and at 15:57 EDT, reestablished the 100 cfs minimum flow by opening the Low Level Outlet at Hoist. Unit operation was returned to normal service at 16:45 EDT, and the LLO was closed at 17:08 EDT, on April 19, 2013. At the McClure plant the 80 cfs was reestablished at 17:20 EDT, when the unit was returned to service.

On April 22, 2013, at 17:38 EDT, the plants at Hoist and McClure were again tripped off-line due to the loss of the transmission system from a storm and high winds, and therefore deviated from the minimum flow condition of 100 cfs at the powerhouse at Hoist, and 80 cfs at the McClure. Operators were dispatched to the plants, and at 19:30 EDT, the Low Level Outlet was opened to establish the 100 cfs minimum flow. The plant went back into operation on April 23, 2013 at 01:25 EDT, and the LLO was closed at 01:30 EDT. At McClure, the plant tripped at 17:38 EDT, and went back on line at 18:51 EDT on April 22, re-establishing the minimum 80 cfs flow.

No adverse environmental impacts have been observed as a result of this deviation.

Ms. Kimberly D. Bose
May 17, 2013
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,



Terry P. Jensky
Vice President – Generation Assets
for Wisconsin Public Service Corporation

RJM/ebr

Enc. Operational Data

cc: Mr. Gil Snyder, WPSC - D2
Mr. Shawn Puzen, IBS - D2
Ms. Joan Johaneck, WPSC - D2
Mr. Conrad Weis, IBS - D2
Mr. Ben Trotter, IBS - D2
Mr. John Myers, IBS - D2
Mr. Keith Moyle, UPPCO - UISC
Mr. Virgil Schlorke, UPPCO - UISC

Mr. Robert Meyers, UPPCO - UISC
Mr. Bill Taft, MDEQ
Mr. John Zygaj, FERC - CRO
Mr. Kyle Kruger, MDNR
Mr. Mitch Koetje, MDEQ
Mr. Burr Fisher, FWS
Mr. James Grundstrom, DRCI



Upper Peninsula Power Company

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

June 25, 2013

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 they used to mitigate them. Please consider this letter as fulfillment of the notification requirement of deviations.

The Hoist plant tripped at 16:58 CDT, Thursday, May 29, 2013, due to a transmission system fault. An operator was dispatched and after arriving at the plant, the fault had already been cleared and therefore put a unit online re-establishing minimum flow at 18:24 CDT. The fault was due to a storm which caused a tree off the right away to fall onto the line. The tree cleared itself, and the breaker was reset.

The Hoist plant tripped again at 17:50 CDT, Friday, May 30, 2013, due to another transmission system fault. An operator was dispatched and after arriving at the plant, opened the Low Level Outlet reestablishing minimum flow of 100 cfs at 19:09 CDT. The fault was cleared and the plant returned to normal operations at 20:59 CDT. The fault was due to a storm which caused trees off the right away to fall onto the line. The trees were removed and the line was put back in service.

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

Ms. Kimberly D. Bose
June 25, 2013
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,



Terry P. Jensky
Vice President - Generation Assets
for Wisconsin Public Service Corporation

RJM/ebr

Enc. Operational Data

cc:	Mr. Gil Snyder, WPSC - D2	Mr. John Zygaj, FERC - CRO
	Mr. Shawn Puzen, IBS - D2	Mr. Gary Kohlhepp, MDEQ
	Ms. Joan Johaneck, WPSC - D2	Mr. Koran Carpenter, MDEQ
	Mr. Conrad Weis, IBS - D2	Ms. Diana Klemans, MDEQ
	Mr. Ben Trotter, IBS - D2	Mr. Kyle Kruger, MDNR
	Mr. John Myers, IBS - D2	Mr. Burr Fisher, FWS
	Mr. Keith Moyle, UPPCO - UISC	Mr. James Grundstrom, DRCI
	Mr. Robert Meyers, UPPCO - UISC	



Upper Peninsula Power Company

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

July 23, 2013

FERC Project No. 10855
NATDAM No. MI00183, 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 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 13:19 CDT, Thursday, June 27, 2013, due to a lightning strike that caused an electrical outage on the transmission system. An operator was dispatched to both plants. Flows at the Hoist were re-established at 13:57 CDT, Thursday, June 27, 2013, and flows were re-established at the McClure powerhouse at 14:20 CDT.

In addition, high spring inflows to the Upper Dead River System caused a deviation to the headwater elevation at the McClure Reservoir. The upper elevation of 1196.4 feet NGVD was first exceeded on Monday, April 29, 2013, at 15:45 CDT. This deviation period was sustained until Wednesday, June 19, 2013, at 13:45 CDT. On Saturday, June 22, 2013, at 17:15 CDT the upper elevation of 1196.4 feet NGVD was again exceeded until Tuesday, July 2, 2013, at 08:15 CDT.

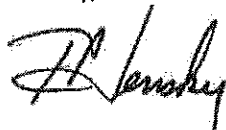
The cause of both upper headwater deviations was because the output from the Hoist Development was greater than the capacity of the McClure Development (UPPCO was utilizing reasonable measures as required by the license to return the Hoist Reservoir to 1341.0 feet and when the inflow to the McClure Development exceeds the powerhouse capacity plus the bypass reach siphon, the reservoir elevations increase until it spills over the spillway. Unfortunately, the upper reservoir elevation of 1196.4 feet NGVD is the same as the spillway elevation. Therefore, any time the spillway activates, there is a deviation of the upper headwater elevation at the McClure Reservoir).

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 (high inflows at McClure exceeding the powerhouse hydraulic capacity) UPPCO is not proposing any corrective actions at this time.

Ms. Kimberly D. Bose
July 23, 2013
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,



Terry P. Jensky
Vice President - Generation Assets
for Wisconsin Public Service Corporation

RJM/ebr

Enc. Operational Data

cc:	Mr. Gil Snyder, WPSC - D2	Mr. Robert Meyers, UPPCO - UISC
	Mr. Shawn Puzen, IBS - D2	Mr. John Zygaj, FERC (CRO)
	Ms. Joan Johaneck, WPSC - D2	Ms. Diana Klemans, MDEQ
	Mr. Conrad Weis, IBS - D2	Mr. Gary Kohlhepp, MDEQ
	Mr. Ben Trotter, IBS - D2	Mr. Koran Carpenter, MDEQ
	Mr. John Myers, IBS - D2	Mr. Kyle Kruger, MDNR
	Mr. Keith Moyle, UPPCO - UISC	Mr. Burr Fisher, FWS
	Mr. Virgil Schlorke, UPPCO - UISC	Mr. James Grundstrom, DRCI



Upper Peninsula Power Company

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

August 15, 2013

FERC Project No. 10855
NATDAM No. MI00183 and 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 and McClure Developments
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.

The Hoist and McClure plants tripped at 15:42 CDT, Thursday, July 18, 2013, due to a lightning strike that caused a fault on the transmission system. An operator was dispatched, and after arriving at the plants, put a unit back online re-establishing minimum flow at both the Hoist powerhouse at 17:07 CDT, and the McClure powerhouse at 17:52 CDT.

The Hoist plant tripped again on Monday, July 29, 2013, at 06:27 CDT, due to another lightning strike. An operator was dispatched and after arriving at the plant, put a unit online re-establishing minimum flow at 07:32 CDT.

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

Ms. Kimberly D. Bose
August 15, 2013
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,

Handwritten signature of Terry P. Jensky, with the word "for" written below it.

Terry P. Jensky
Vice President - Generation Assets
for Wisconsin Public Service Corporation

RJM/ebr

Enc. Operational Data

cc: Mr. Gil Snyder, WPSC - D2
Mr. Shawn Puzen, IBS - D2
Ms. Joan Johaneck, WPSC - D2
Mr. Conrad Weis, IBS - D2
Mr. Ben Trotter, IBS - D2
Mr. John Myers, IBS - D2
Mr. Keith Moyle, UPPCO - UISC
Mr. Virgil Schlorke, UPPCO - UISC

Mr. Robert Meyers, UPPCO - UISC
Mr. John Zygaj, FERC (CRO)
Mr. Kyle Kruger, MDNR
Mr. Koran Carpenter, MDEQ
Ms. Diana Klemans MDEQ
Mr. Gary Kohlhepp, MDEQ
Mr. Burr Fisher, FWS
Mr. James Grundstrom, DRCI

Appendix 3

Summary of Gate and Valve Openings



Geotechnical
Environmental and
Water Resources
Engineering

July 24, 2013
Project No. 1325480

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

**RE: Results of 2013 Flow Assessment Study – 18-inch Bypass Pipe,
McClure Hydroelectric Dam, Marquette County, Michigan**

Dear Mr. Meyers:

GEI Consultants of Michigan, 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 Wednesday, July 24, 2013.

Description of Work

Jeff Bal, P.E. and Mike Gatzow, P.E. of GEI conducted flow measurements on the 18-inch HDPE bypass pipe at the McClure Dam. Jeff and Mike 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 exact 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: Wednesday, July 24, 2013

Time of Test: Start at 10:10 a.m. (EST)

Air Temperature: 66.0 degrees F

Surface Water Temperature: 70.0 degrees F

Water Elevation: 1195.68

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 -

July 24, 2013

Test Parameter Conditions and Results

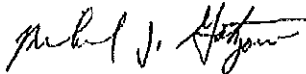
Discharge Valve Position (inches open)	Discharge Valve Max. Open (inches)	Percent Open	Metered Flow Rates	
			cu. ft./sec	gal/min
12.75	18.5	68.9%	18.83	8451
8.125	18.5	43.9%	10.25	4601
8.0	18.5	43.2%	10.00	4488
13.625	18.5	73.6%	19.5	8752
13.875	18.5	75%	20.0	8977

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 Mike Gatzow at (906) 214-4153.

Sincerely,

GEI CONSULTANTS OF MICHIGAN, INC.



Michael J. Gatzow, PE
Senior Practice Leader

MJG:plw

cc: Mike Carpenter, GEI

Silver Lake - Low Level Outlet Gate Operation Log - 2013**FERC Project - 10855**

Date: & Time	Pond Elevation feet - NGVD	LLO Position Open - Inch	Flow - CFS	Operator
01/01/13	1479.84	5.5	15	RM
04/01/13	1479.38	7	25	DG
04/08/13	1479.35	6	20	DG
04/16/13	1479.56	7	25	TD
05/07/13	1485.3	5.5	20	DG
06/01/13	1485.24	4.63	15	JH
07/01/13	1484.84	3.5	10	ST
08/12/13	1484.52	6	22.2	DG
08/14/13	1484.42	7	28	DG
08/16/13	1484.36	9	40	TD
08/19/13	1484.12	12	60	JH
08/12/13	1483.96	13	66	TD
09/01/13	1483.05	6.5	20	JH
09/09/13	1482.74	12	60	JH
09/11/13	1482.56	15.25	80	JH
09/12/13	1482.4	18	100	JH
09/13/13	1482.27	12.5	60	JH
09/16/13	1482.35	18	100	TD
09/20/13	1481.36	15.5	80	JH
09/23/13	1480.88	10	50	DG
09/25/13	1480.74	18.5	100	JH
10/02/13	1479.65	7	25	DG
10/04/13	1479.55	5	15	JH
10/07/13	1479.9	7.5	25	DG
10/16/13	1479.8	11.5	50	JH
10/18/13	1479.68	7	25	ST
10/23/13	1479.62	11.25	50	DG
11/06/13	1479.08	5	15	JH
12/30/13	1479.72	10	42	DG

Document Content(s)

20140226 DRV out.PDF.....1-2

20140226 DRV out attach a.PDF.....3-5

20140226 DRV out attach b.PDF.....6-48