



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

February 25, 2016

FERC Project Nos. 01864, 02402, & 02506
NATDAM Nos. MI00193, MI00203, MI00153,
MI00028, MI00052, MI00164,
MI00166, & MI00167

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

Dear Secretary Bose:

Bond Falls, Prickett, and Escanaba River Hydroelectric Projects
Annual Report of Deviations Less Than Sixty Minutes

According to the Orders dated August 12, 2011, August 16, 2011, and August 18, 2011; for the Prickett, Escanaba, and Bond Falls Hydroelectric Projects respectively; Upper Peninsula Power Company (UPPCO) is submitting a report containing all deviations, occurred after the Federal Energy Regulatory Commission (FERC) Order date, of less than 60 minutes that did not result in the observation or reporting of any negative environmental effects. UPPCO is to provide the annual report to the Commission by February 28 of each year.

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.

The report also includes: 1) operational data necessary to determine compliance with the operating range requirement; 2) a description of any corrective measures implemented at the time of the occurrences and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the resource agencies or other interested parties regarding the incidents.

A summary for each deviation and the required information for each have been enclosed. All deviations included in this report did not result in the observation or reporting of any negative environmental effects. The report is included in Appendix 1.

UPPCO also consulted with the resource agencies on the annual report. UPPCO did not receive any comments on the report from the resource agencies. Documentation of agency consultation is included in Appendix 1.

Ms. Kimberly D. Bose
February 25, 2016
Page 2 of 2

If you have any questions regarding this letter, please contact Jim Melchiori at (906) 553-2186, or Bob Meyers at (906) 485-2419.

Sincerely,



Virgil Schlorke
Director – Generation and Environmental Services
Upper Peninsula Power Company

JFN/ebr

Enc: Appendix 1 – Annual Deviation Report
Appendix 2 - Agency Consultation

cc:	Mr. James Melchiori, UPPCO	Mr. John Zygaj, FERC - CRO
	Mr. Robert Meyers, UPPCO	Mr. Jarrod Nelson, UPPCO
	Mr. Keith Moyle, UPPCO	Mr. David Tripp, UPPCO

Appendix 1

Documentation of Consultation



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

January 22, 2016

FERC Project No. 01864
NATDAM Nos. MI00203, MI00153,
MI00028 & MI00064

Mr. Burr Fisher - USFWS
Mr. Stephen Gilbert - WDNR
Mr. Kyle Kruger - MDNR
Mr. Gene Mensch - KBIC
Mr. Mark Fedora - USFS
Mr. James Schramm - MHRC

Dear Agency Representative:

Bond Falls Hydroelectric Project - Bond Falls, Victoria,
Lake Gogebic/Bergland, and Cisco Developments
Annual Report of Deviations Less Than Sixty Minutes

According to the Order dated August 18, 2011, Upper Peninsula Power Company (UPPCO) is submitting a report containing all 2015 deviations less than 60 minutes that did not result in the observation or reporting of any negative environmental effects. UPPCO is to provide the annual report for agency comment by January 31 of each year.

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.

The report also includes: 1) operational data necessary to determine compliance with the operating range requirement; 2) a description of any corrective measures implemented at the time of the occurrences and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the resource agencies or other interested parties regarding the incidents.

A summary for each deviation and the required information for each have been enclosed. All deviations included in this report did not result in the observation or reporting of any negative environmental effects.

Please provide your comments on the annual report no later than February 22, 2016. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 28, 2016. Should you have any question, please do not hesitate to contact me at (906) 553-2186.

Sincerely,

A handwritten signature in black ink that reads "Jim R. Melchiori". The signature is written in a cursive style with a large initial "J".

Jim R. Melchiori
Supervisor - Regional Generation West

Emily B. Rushford

From: Fedora, Mark -FS <mfedora@fs.fed.us>
Sent: Friday, January 22, 2016 10:50 AM
To: Emily B. Rushford
Cc: James R. Melchiori
Subject: RE: Annual Deviation Report for Bond Falls License

I have reviewed the Annual Deviation Report for Bond Falls and am satisfied with the actions taken and the consultation during these events throughout the year. Thank you for the opportunity to comment.

/s/ Mark A. Fedora



Mark A. Fedora
Supervisory Hydrologist

Forest Service
Ottawa National Forest

p: 906-932-1330 x318

c: 906-285-2323

f: 906-932-0122

mfedora@fs.fed.us

E6248 US Highway 2

Ironwood, MI 49938

www.fs.fed.us



Caring for the land and serving people

From: Emily B. Rushford [<mailto:EBRushford@uppc.com>]

Sent: Friday, January 22, 2016 9:39 AM

To: 'burr_fisher@fws.gov'; 'stephen.gilbert@wisconsin.gov'; 'krugerk@michigan.gov'; 'gmensch@kbic-nsn.gov'; 'jdschramm@oceana.net'; Fedora, Mark -FS

Cc: James R. Melchiori; Jarrod F. Nelson; Virgil E. Schlorke

Subject: Annual Deviation Report for Bond Falls License

Importance: High

Good Morning,

Please provide your comments on the annual deviation report no later than February 22, 2016. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 28, 2016. Should you have any questions, please contact Jim Melchiori at (906) 553-2186.

Thank you,

Emily B. Rushford

Office Manager

Upper Peninsula Power Company

Office: 906-232-1401

Cell: 906-251-1862

ebrushford@uppc.com

www.uppc.com



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



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

January 22, 2016

FERC Project No. 02402
NATDAM No. MI00193

Mr. Kyle Kruger – MDNR
Mr. Burr Fisher – USFWS
Mr. Mark Fedora – USFS
Mr. Gene Mensch – KBIC

Dear Agency Representative:

Prickett Hydroelectric Project
Annual Report of Deviations Less Than Sixty Minutes

According to the Order dated August 12, 2011, Upper Peninsula Power Company (UPPCO) is submitting a report containing all 2015 deviations less than 60 minutes that did not result in the observation or reporting of any negative environmental effects. UPPCO is to provide the annual report for agency comment by January 31 of each year.

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.

The report also includes: 1) operational data necessary to determine compliance with the operating range requirement; 2) a description of any corrective measures implemented at the time of the occurrences and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the resource agencies or other interested parties regarding the incidents.

A summary for each deviation and the required information for each have been enclosed. All deviations included in this report did not result in the observation or reporting of any negative environmental effects.

Please provide your comments on the annual report no later than February 22, 2016. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 28, 2016. Should you have any question, please do not hesitate to contact me at (906) 553-2186.

Sincerely,

A handwritten signature in black ink that reads "Jim R. Melchiori". The signature is written in a cursive style.

Jim R. Melchiori
Supervisor – Regional Generation West Michigan

Appendix 2

Annual Report

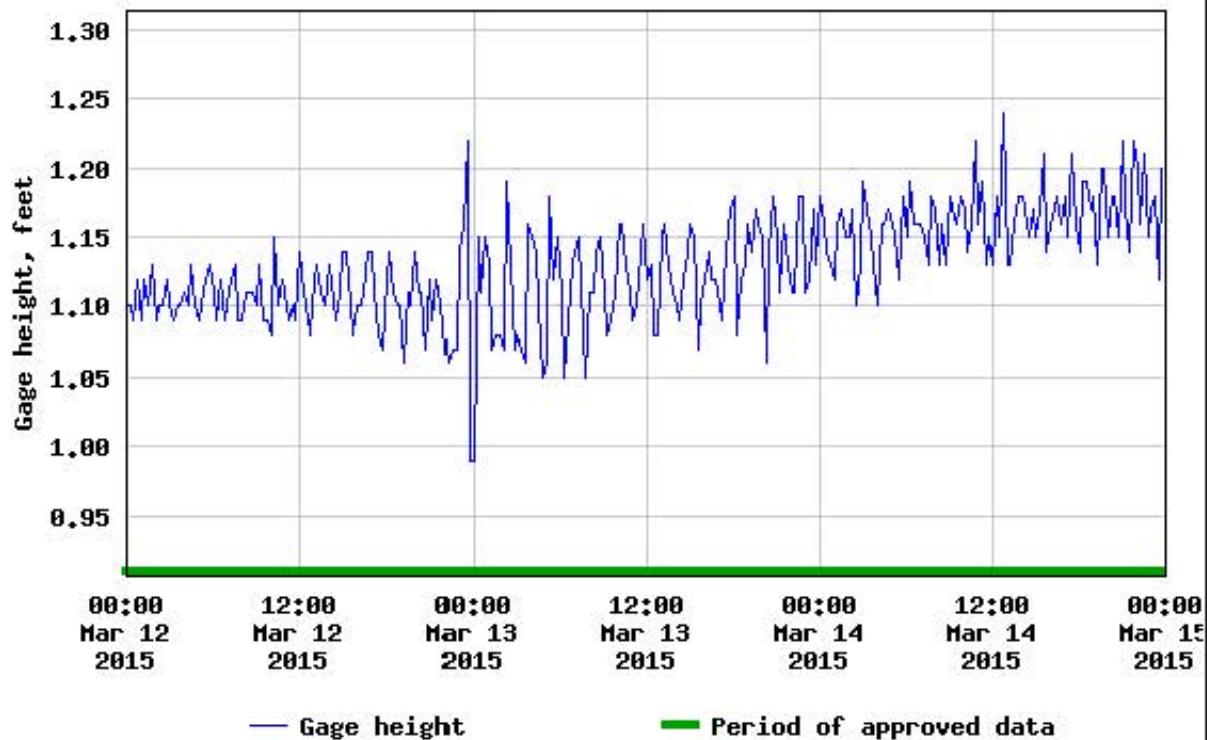
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7213		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	03/13/2015	Discovery Date/Time:	3/13/15 7:00
Event Title:	Lake Gogebic Article 401 Deviation 3/13/15 Less than 60 Minutes		
Event Details:	<p>At 2345 hours ET, the Lake Gogebic headwater elevation dropped slightly below the minimum license elevation for approximately 30 minutes. At 2345 and 0000 hours, the 15 minute USGS values were .99', the License minimum is 1.00'. The 15 minute intervals before and after the event indicated elevations above the License 1.0' minimum. The reservoir was being operated slightly below the License end of month target for February, and lower than the end of month target for March due to significant ice on there Lake, and substantial snow pack remaining in the area. The deviation appears to be directly related to high winds in the area, and history of Lake fetch seiche. The raising of the Lake level was being delayed to prevent ice damage to Lake residents facilities, and is coordinated with BFIT Article 401 Bergland Development rep Mark Fedora each year. Early spring runoff is anticipated to start any day, but the Dam was being operated conservatively to minimize impacts to Lake residents.</p>		
Immediate Action:	Reduced outflows (installed some flash boards), and consulted with BFIT Article 401 Bergland Development representative Mark Fedora, who supported our recommendation to operate at the lower level until ice is out, and runoff has started.		
Recommendations:	Continue to closely monitor elevations and flows, to avoid deviations. We allowed for a .10' buffer not expecting wind to result in seiche this time of year with ice cover, but wind still affected elevation.		
Potential Causes/Contributors to incident	Wind, Lake seiche, operations close to License minimum to benefit Lake residents.		
Entered By Name:	James R Melchiori	Creation Date/Time:	3/13/15 10:06
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	This event will be reported to Agencies in annual report of less than 60 minute deviations in 2016.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Headwater Minimum Elevation Deviation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Operations of Lake Gogebic Headwater slightly below end of month target, and close to License minimum resulted in slight deviation when high winds occurred. The Lake level elevation is normally kept as low as possible prior to ice out, to prevent damage to resident facilities and shoreline. the operating levels are discussed with BFIT Article 401 Bergland Development rep each year around this time.
Event Start:	3/12/2015 11:45 PM	Event End:	3/13/2015 12:15 AM
		Event Duration (HH:MM):	00:30
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	3/13/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	Lake Gogebic headwater elevation deviation on thursday 3/12 and Friday 3/13, 2015 occurred while operating headwater close to License minimum. Operations close to minimum to minimize Lake resident damage from ice until spring runoff starts and ice is out. Consultation with BFIT rep (Mark Fedora) completed today, to confirm our operations until ice is out.		
Causes:	Operations close to License minimum, wind and history of Lake seiche and fetch at Lake Gogebic.		
Primary Causes:	Weather		
Does Eval Require Seening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



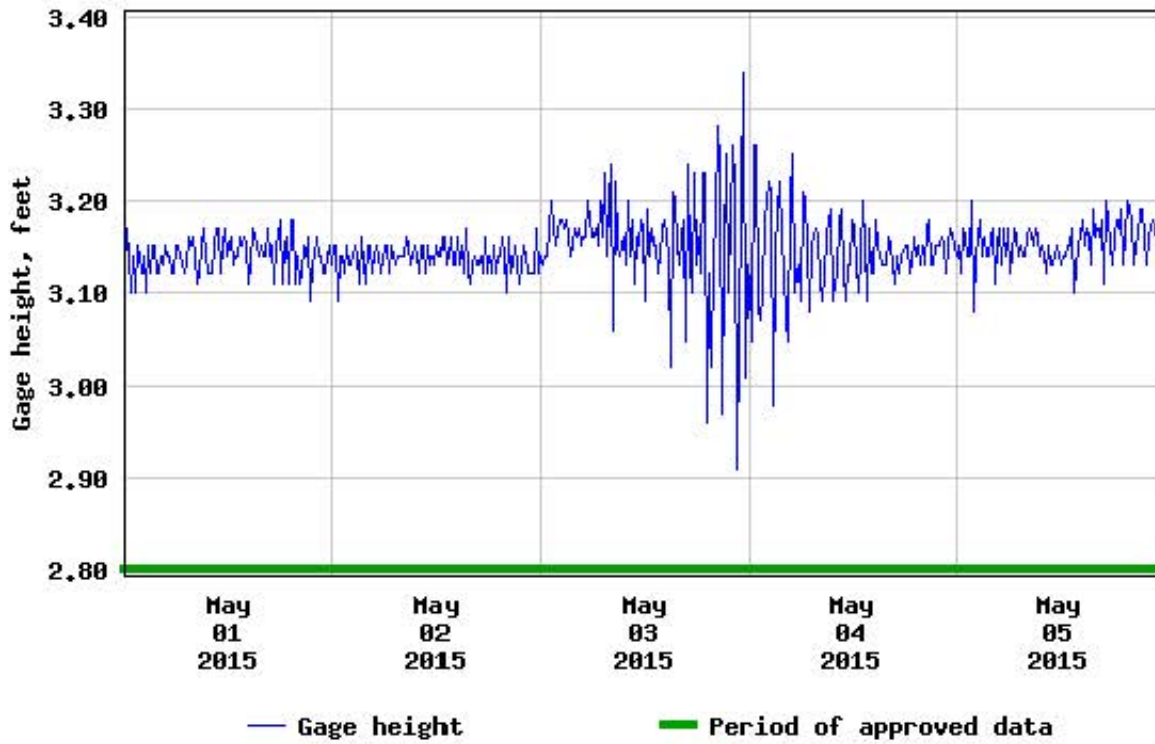
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7389		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	05/03/2015	Discovery Date/Time:	5/4/15 7:30
Event Title:	Lake Gogebic Article 401 Deviations (3) Less than 60 Minutes May 3, 2015		
Event Details:	On Sunday May 3, 2015 on three occasions the Lake Gogebic headwater elevation dropped slightly below the minimum License limit of 3.0' local for short durations of time. The deviations were related to high winds and historical Lake seiche. The headwater was being operated close to License midpoint, and very close to the License end of month target. The deviations occurred at 1915 EST (2.98' local), 2100 EST (2.99' local) and 2230 EST (2.93' local) as part of the 15 minute USGS postings for this gauging station.		
Immediate Action:	N/A - Lake was being operated close to License midpoint and end of month target, Lake Gogebic has history of seiche when high wind conditions are present.		
Recommendations:	N/A, continue to operate close to midpoint.		
Potential Causes/Contributors to incident	Wind, Lake seiche, License limits on headwater limits from April 25 (ice out) to June 10 (3.0' local minimum to 3.5' local maximum).		
Entered By Name:	James R Melchiori	Creation Date/Time:	5/6/15 10:31
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Will be reported with other Less than 60 minute deviations for 2015, in 2016. JRM
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Lake Gogebic Headwater Elevation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Article 401 Headwater deviation result of high winds while operating near License midpoint and end of month target elevation.
Event Start:	5/3/2015 8:45 PM	Event End:	5/3/2015 9:15 PM
		Event Duration (HH:MM):	00:30
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	5/6/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	Article 401 Lake Gogebic headwater elevation deviations, three occurrences, all related to wind and lake seiche while operating very close to License midpoint and end of month target.		
Causes:	Wind, Lake seiche, Headwater limits from April 25 (ice out) to June 10 of 3.0' local to 3.5' local.		
Primary Causes:	Weather		
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



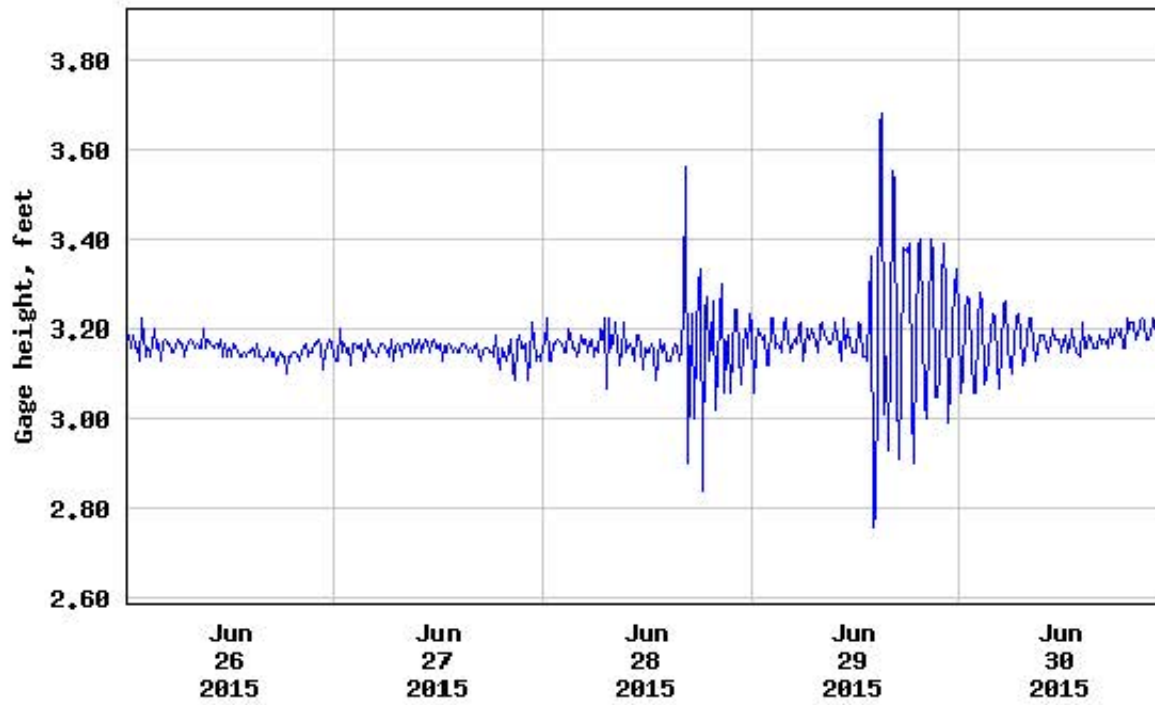
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7579		Entity:	Regional Generation	
Company - Level 1 - Level 2:	UPP-Lake Gogebic				
Event Date:	06/29/2015	Discovery Date/Time:	6/29/15 9:39		
Event Title:	June 28, 2015 Lake Gogebic Article 401 Deviation (Maximum Elevation)				
Event Details:	<p>On Sunday June 28, 2015 at approximately 1630 EST, the Lake Gogebic headwater elevation peaked at 3.56' local (1296.26' msl), slightly above the License maximum of 3.5' local (1296.2' msl) for a short duration of time. The Lake level was below the 3.5' local for the 15 minute interval and recorded readings before and after the event. The deviation was the result of high winds and a storm in the area reported by Kevin Poissant. The event duration was approximately 15 minutes and will be reported with the annual report of deviations that were less than 60 minutes. The headwater was being operated slightly lower than the License end of month target at the time, and Lake Gogebic has a history of minor deviations related to seiche. No adverse environmental affects were observed related to the deviation.</p>				
Immediate Action:	None. Headwater elevation was being operated slightly under License end of month target elevation, wind and related storm in area caused sieche and slioght deviation.				
Recommendations:	None, continue to operate headwater per License.				
Potential Causes/Contributors to incident	Operations close to License target limits, storm and wind related seiche.				
Entered By Name:	James R Melchiori	Creation Date/Time:	6/29/15 9:47		
Entered By Department:	Western Hydros	Status:	Approved		
Reportable to External Agency:	no	Basis for Reportability:	Will be reported as part of annual report for deviation under 60 minutes for 2015.		
Additional Followup Required:	no				
Category:	Regulatory	Type:	FERC Deviation		
Sub Type:	River cond. (drought, highflows, etc)	Description:	Wind seiche		
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Storm and wind cause seiche while operating headwater slightly under the License end of month target resulted in slight headwater deviation (approximately 15 minutes).		
Event Start:	6/28/2015 4:22 PM	Event End:	6/28/2015 4:37 PM	Event Duration (HH:MM):	00:15
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros		
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved		
Eval Due Date:	6/29/2015	Eval Completion Date:			
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R		
Analysis Description:	On Sunday June 28, 2015 at approximately 1630 EST, the Lake Gogebic headwater exceeded the License limit of 3.50' local to 3.56' local for approximately 15 minutes. The deviation was the result of a storm and associated wind seiche, which is common at thei reservoir.				
Causes:	Storm, wind and seiche.				
Primary Causes:	Weather				
Does Eval Require Seening Committee Approval upon Completion	no				
Evaluation Reviewed/Approved by Screening Committee					



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7587		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	06/29/2015	Discovery Date/Time:	6/30/15 7:30
Event Title:	6/29/15 1730 ET Lake Gogebic Article 401 Headwater (Max) Deviation		
Event Details:	On Monday June 29, 2015 at approximately 1730 hours ET, the Lake gogebic headwater elevation rose above the Article 401 License maximum of 3.5' local to 3.55' local, and returned to normal range by 1800 hours ET. The deviation was result of storm, wind, seiche and operations slightly below License end of month target.		
Immediate Action:	None		
Recommendations:	None		
Potential Causes/Contributors to incident	Storm, wind, lake seiche (historical), operations close to end of month target.		
Entered By Name:	James R Melchiori	Creation Date/Time:	6/30/15 10:17
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Will be reported with other under 60 minute deviations with annual report.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Lake Gogebic Article 401 max headwater elevation deviation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Storm, wind, lake seiche and operations close to but slightly below end of month target resulted in minor maximum headwater deviation.
Event Start:	6/29/2015 5:30 PM	Event End:	6/29/2015 6:00 PM
Event Duration (HH:MM):	00:30		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	6/30/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	On Monday June 29, 2015 Lake gogebic headwater elevation exceed the License maximum for approximately 30 minutes. Deviation result of storm, wind, lake seiche and operations close to but slightly below License end of month target.		
Causes:	Storm, wind, seiche and operations slightly below License end of month target.		
Primary Causes:	Weather		
Does Eval Require Scening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

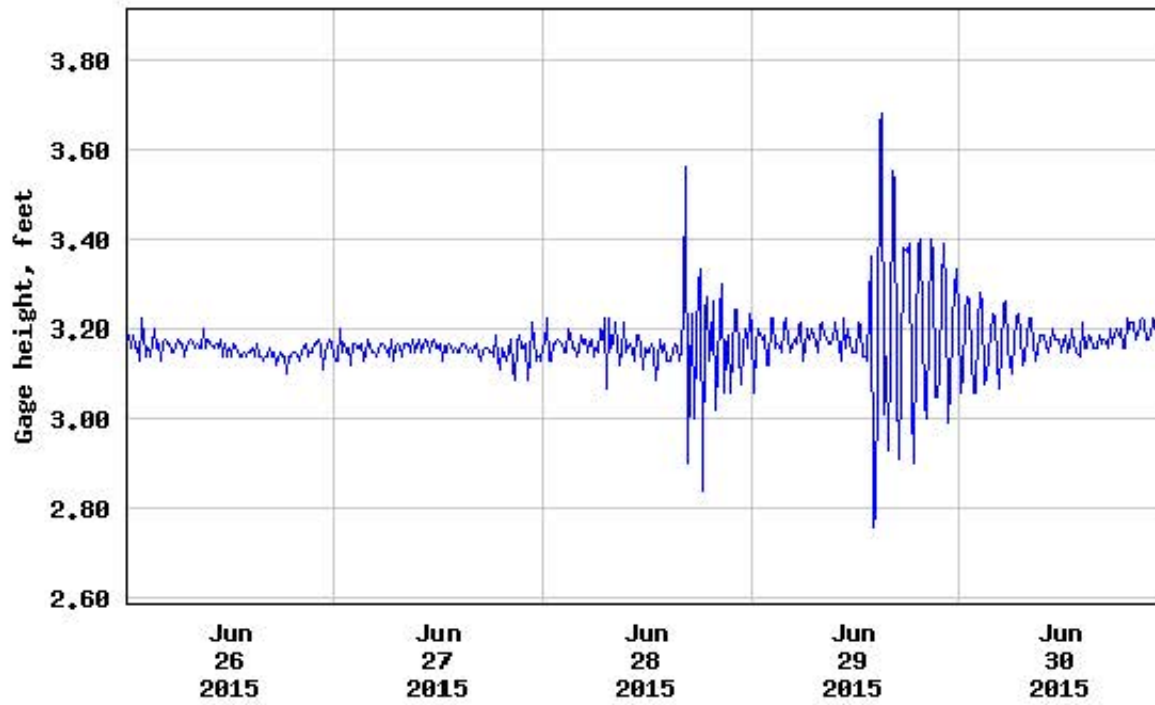
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7586		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	06/29/2015	Discovery Date/Time:	6/30/15 7:30
Event Title:	6/29/15 1600 ET Lake Gogebic Article 401 Headwater Elevation Deviation (Maximum)		
Event Details:	On Monday June 29, 2015 at just before 1600 hours ET, the Lake Gogebic headwater elevation increased above the License maximum of 3.5' local, and remained above 3.5' local until a time just before 1630 hours ET. The maximum measured headwater elevation for the deviation was 3.68' local, as measured by USGS gauging station 04035995. The reservoir was being operated slightly below the License end of month target at the time of the deviation, and a severe storm in the area with high winds caused a lake seiche and resulted in the deviation.		
Immediate Action:	None, operations close to the License end of month target elevations and wind related lake seiche resulted in deviation.		
Recommendations:	None.		
Potential Causes/Contributors to incident	Operations close to License end of month target, storm and related wind, history of seiche on the reservoir.		
Entered By Name:	James R Melchiori	Creation Date/Time:	6/30/15 9:56
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Deviation will be reported with other less than 60 minutes deviations for year as part of annual report.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Headwater Elevation (max) Deviation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Deviation result of Operations slightly below License end of month target, storm, wind and Lake seiche.
Event Start:	6/29/2015 4:00 PM	Event End:	6/29/2015 4:30 PM
		Event Duration (HH:MM):	00:30
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	6/30/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	On Monday June 29, 2015 at approximately 1600 hours ET, the Lake gogebic headwater elevation rose above 3.5' local to 3.68' local and returned to normal level by 1630 hours ET. The deviation was result of storm and wind, which cause seiche and deviation. Reservoir was being operated slightly below License end of month target at the time.		
Causes:	Storm, wind, seiche and operations slightly below, but very close to License end of month target.		
Primary Causes:	Weather		
Does Eval Require Scening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

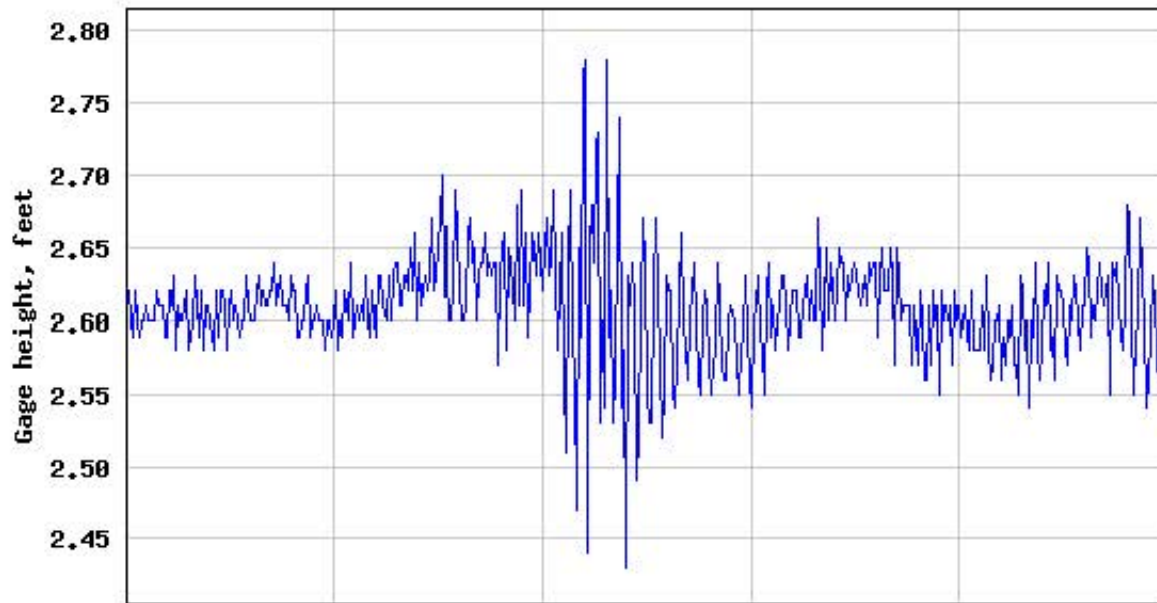
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7898		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	08/31/2015	Discovery Date/Time:	8/31/15 10:13
Event Title: August 29, 2015 Lake Gogebic Article 401 Headwater Minimum Deviations			
Event Details: ON August 29, 2015 at 0345, 0445, 0930 and 1045 hours EST the Lake Gogebic headwater elevation dropped slightly below the License minimum of 2.5' local for short durations of time (under 30 minutes for each instance. The lowest elevation reached was 2.43' local which occurred at the 0930 EST stamp. The deviations were result of wind and related seiche while operating slightly below the end of month target, and operating very close to the License minimum outflow. The entire Bond Falls watershed has been operating under dry year consultation for several months.			
Immediate Action: None. Facility operating at License minimums due to dry year conditions, deviation the result of wind and lake related seiche.			
Recommendations: None			
Potential Causes/Contributors to incident		Operations close to License minimums, wind, seiche and dry year conditions.	
Entered By Name:	James R Melchiori	Creation Date/Time:	8/31/15 10:21
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Events will be reported in Less than 60 minutes annual report for 2015.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Headwater minimum Deviations
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Operations close to License minimum due to dry year conditions, wind and Lake seiche.
Event Start:	8/29/2015 2:30 AM	Event End:	8/29/2015 3:00 AM
		Event Duration (HH:MM):	00:30
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	8/31/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description: The Lake Gogebic headwater elevation dropped below the License Article 401 minimum four times on Saturday August 29, 2015. The deviations were all under 30 minutes in duration, and occurred at 0345, 0445, 0930 and 1045 EST. The deviations were the result of operations close to License minimums due to dry year conditions, wind and Lake seiche, which is a historical event at this facility.			
Causes: Lake elevbations (Operations) close to License minimums due to dry year conditions, wind. Lake seiche.			
Primary Causes: Weather			
Does Eval Require Seecing Committee Approval upon Completion		no	
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



Aug 27 2015 Aug 28 2015 Aug 29 2015 Aug 30 2015 Aug 31 2015

----- Provisional Data Subject to Revision -----

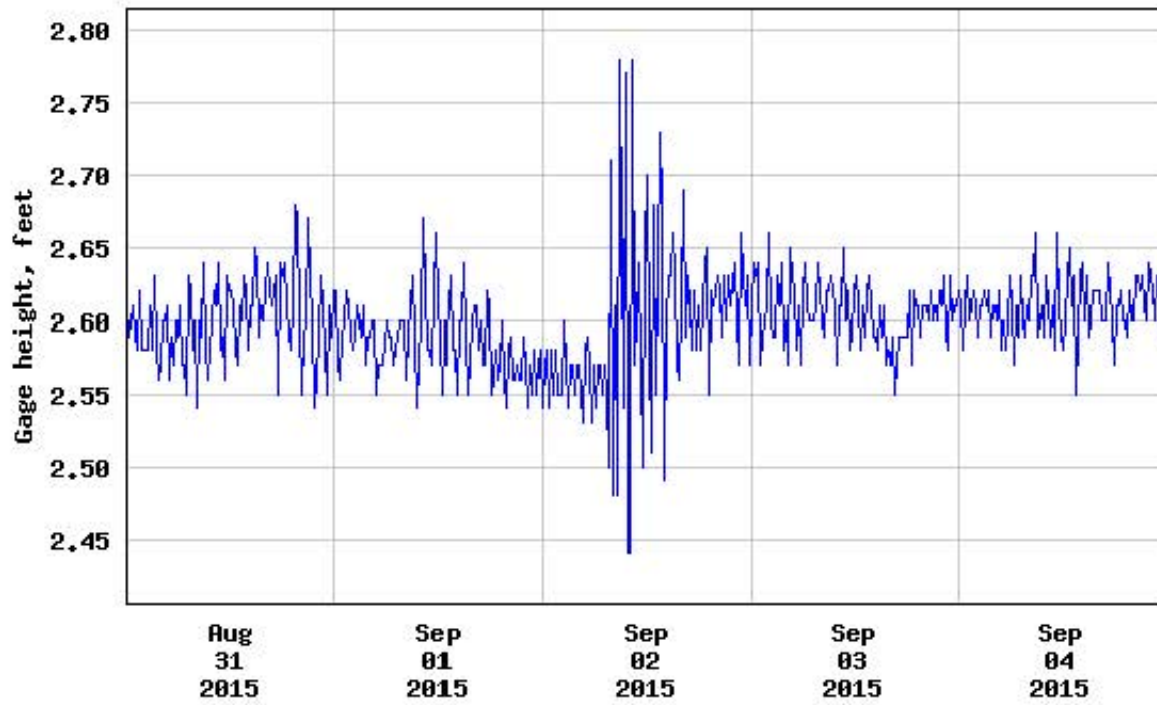
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7938		Entity:	Regional Generation	
Company - Level 1 - Level 2:	UPP-Lake Gogebic				
Event Date:	09/02/2015	Discovery Date/Time:	9/2/15 15:00		
Event Title:	September 2, 2015 Lake Gogebic Article 401 Headwater Minimum Deviations (4)				
Event Details:	On Wednesday September 2, 2015 at 0800, 0830, 0945 and 1400 hours EST the Lake Gogebic headwater elevation dropped slightly below the License minimum of 2.5' local for short durations of time. All were under 30 minutes, except for 0945 event, which was for under 45 minutes. The lowest elevation reached 2.44' local which occurred at the 0945 and 1000 15 minute time stamps. The deviations were result of wind and related Lake seiche while operating slightly below the License end of month target and while operating very close to the License minimum outflows. The entire Bond Falls License watershed has been operating under dry year consultation for several months.				
Immediate Action:	None. Facility operating at License minimum due to dry year conditions, deviation result of wind and related Lake seiche, which is historical for this facility/development.				
Recommendations:	None				
Potential Causes/Contributors to incident	Operations close to License minimum due to dry year conditions, wind, lake seiche				
Entered By Name:	James R Melchiori	Creation Date/Time:	9/8/15 9:00		
Entered By Department:	Western Hydros	Status:	Approved		
Reportable to External Agency:	no	Basis for Reportability:	Will be reported as part of Deviations under 60 minutes in annual report for 2015.		
Additional Followup Required:	no	Category:	Regulatory		
Sub Type:	River cond. (drought, highflows, etc)	Type:	FERC Deviation		
Causal Analysis Level:	Apparent cause evaluation	Description:	Article 401 License minimum deviations (4)		
Causal Analysis Basis:	Historical event for this development. Operations close to License minimum due to dry year conditions, wind and Lake seiche.				
Event Start:	9/2/2015 9:30 AM	Event End:	9/2/2015 10:15 AM	Event Duration (HH:MM):	00:45
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros		
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved		
Eval Due Date:	9/8/2015	Eval Completion Date:			
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R		
Analysis Description:	On Wednesday September 2, 2015 the Lake Gogebic headwater elevation dropped slightly below the License minimum of 2.5' local four times, at 0800, 0830, 0945 and 1400 hours EST. All events, except for 0945 event were under 30 minutes in duration, it was 45 minutes. The deviations were result of operations close to License minimums due to dry year conditions, wind and Lake seiche, which is historical for this development.				
Causes:	Operations close to License minimum, wind, lake seiche.				
Primary Causes:	Weather				
Does Eval Require Scening Committee Approval upon Completion	no				
Evaluation Reviewed/Approved by Screening Committee					



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

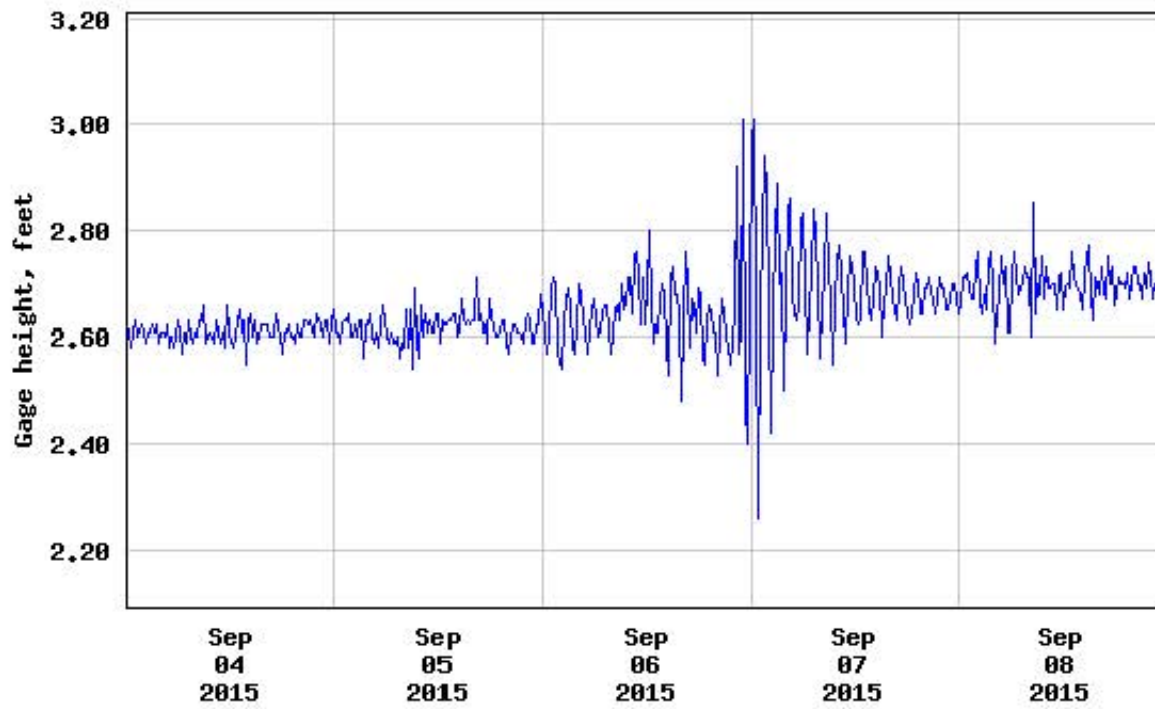
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7940		Entity:	Regional Generation	
Company - Level 1 - Level 2:	UPP-Lake Gogebic				
Event Date:	09/06/2015	Discovery Date/Time:	9/7/15 8:00		
Event Title:	September 6, 2015 Lake Gogebic Article 401 Headwater Minimum Deviations (2)				
Event Details:	On Sunday September 6, 2015 at 1600 and 2315 hours EST, the Lake Gogebic headwater elevation dropped slightly below the License minimum of 2.5' local for one half hour, and 45 minutes respectively. The deviations were the result of operations close to License minimums due to dry year conditions, wind and Lake seiche, which is a historical condition for this development.				
Immediate Action:	None. Facility operating very close to License minimum due to dry conditions, , deviation result of wind and related Lake seiche.				
Recommendations:	none				
Potential Causes/Contributors to incident	Operations close to License minimum, dry condtions, wind Lake seiche.				
Entered By Name:	James R Melchiori	Creation Date/Time:	9/8/15 9:15		
Entered By Department:	Western Hydros	Status:	Approved		
Reportable to External Agency:	no	Basis for Reportability:	Will be reported with Under 60 minute deviations in annual report for 2015.		
Additional Followup Required:	no				
Category:	Regulatory	Type:	FERC Deviation		
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 License minimum deviations (2)		
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Facility being operated very close to License minimum due to dry conditions, wind, lake seiche.		
Event Start:	9/6/2015 10:00 PM	Event End:	9/6/2015 10:45 PM	Event Duration (HH:MM):	00:45
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros		
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved		
Eval Due Date:	9/8/2015	Eval Completion Date:			
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R		
Analysis Description:	On Sunday September 6, 2015 at 1600 and 2315 hours EST, the Lake Gogebic headwater elevation dropped slightly below the License minimum of 2.5' local for up to 30 and 45 minutes, but both events under 60 minutes, The deviations were result of operations close to License minimum, dry year conditions, wind and Lake seiche, historical for this Lake.				
Causes:	Operations close to License minimum due to dry year condtions, wind, seiche.				
Primary Causes:	Weather				
Does Eval Require Seecing Committee Approval upon Completion	no				
Evaluation Reviewed/Approved by Screening Committee					



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

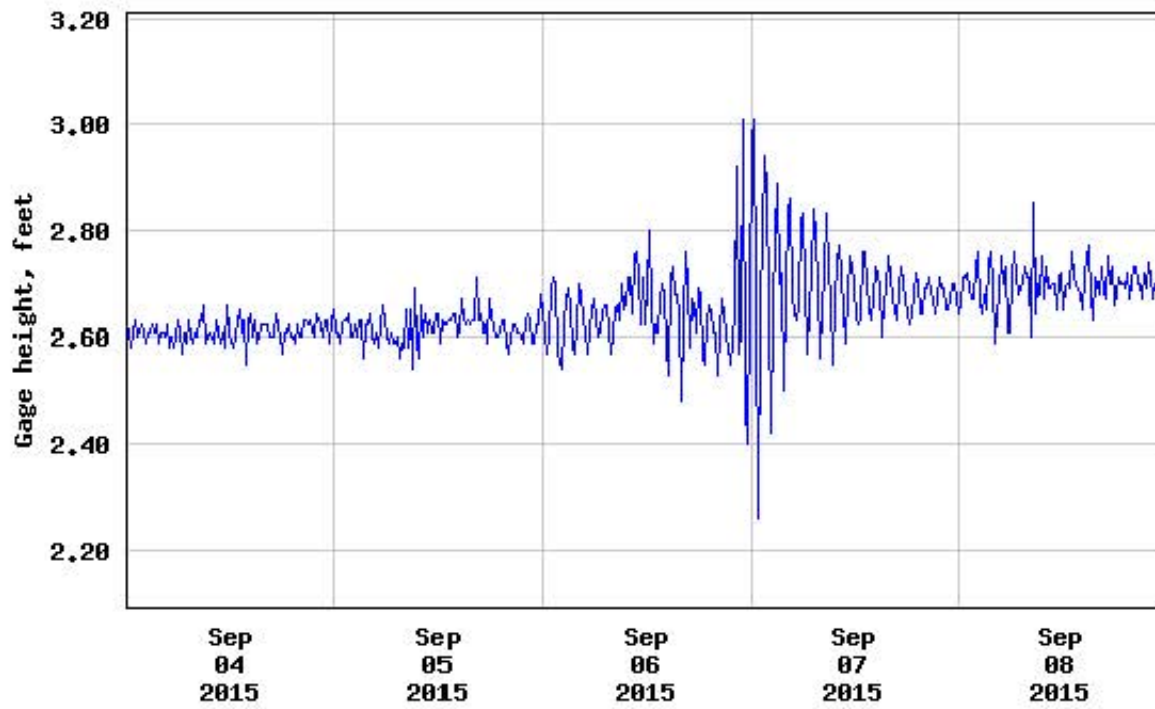
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7941		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	09/07/2015	Discovery Date/Time:	9/7/15 7:30
Event Title:	September 7, 2015 Lake Gogebic Article 401 Headwater Minimum Deviations (2)		
Event Details:	On Monday September 7, 2015 at 0045 and 0215 hours EST, the Lake Gogebic headwater elevation dropped below the License minimum of 2.5' local for short durations of time (under 30 minutes each). The lowest elevation reached during the events was 2.26' local. The deviations were result of operations close to License minimum due to dry year conditions, wind and Lake seiche, which is historical for this development.		
Immediate Action:	None.		
Recommendations:	None.		
Potential Causes/Contributors to incident	Operations close to License minimums, wind Lake seiche.		
Entered By Name:	James R Melchiori	Creation Date/Time:	9/8/15 9:33
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Events will be reported in 2015 annual report for deviations under 60 minutes.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Minimum Headwater Elevation Deviations (2)
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Development operating very close to License minimums due to dry year conditions, wind and seiche resulted in slight deviations which were less than 60 minutes each.
Event Start:	9/7/2015 12:30 AM	Event End:	9/7/2015 1:00 AM
Event Duration (HH:MM):	00:30		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	9/8/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	On Monday September 7, 2015 the Lake Gogebic headwater elevation dropped below the License Article 401 Minimum two times, at 0045 and 0215 for 30 minutes or less each event. The deviations were result of operations close to License minimum due to dry year conditions, wind and related lake seiche, which is historical for this development.		
Causes:	Operations close to License minimum due to dry year conditions, wind seiche.		
Primary Causes:	Weather		
Does Eval Require Seening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

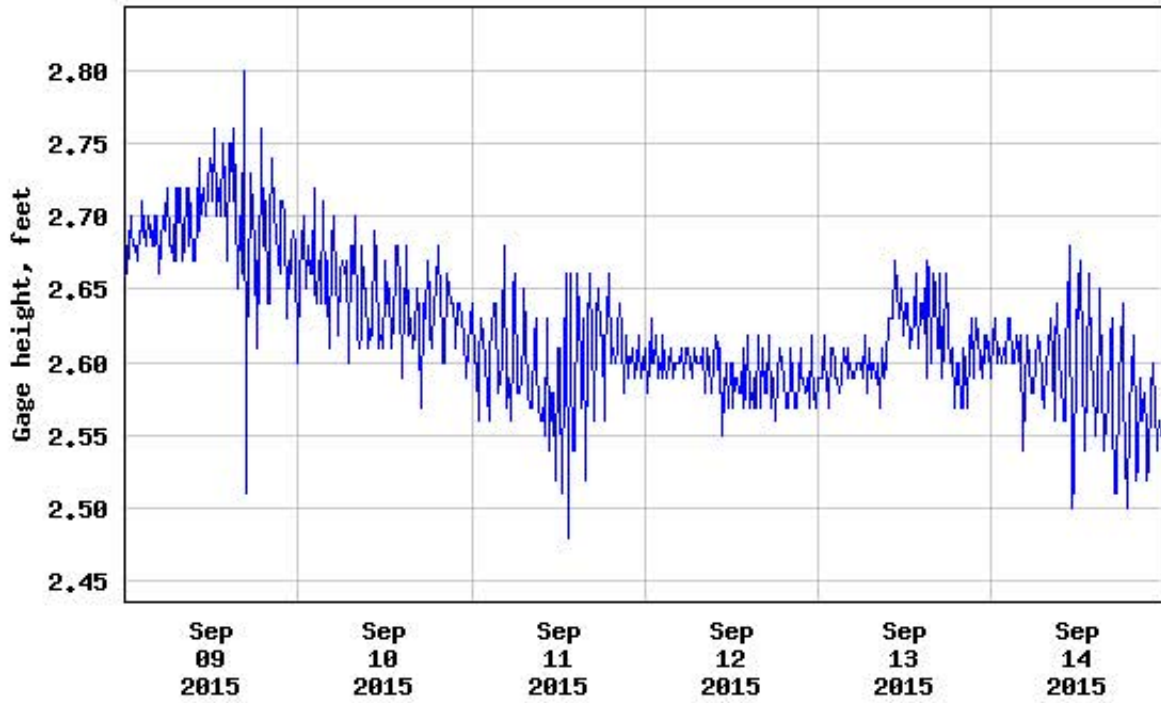
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7970		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Lake Gogebic			
Event Date:	09/11/2015	Discovery Date/Time:	9/12/15 6:30
Event Title:	September 11, 2015 Lake Gogebic Article 401 Headwater Minimum Deviation		
Event Details:	On Friday September 11, 2015 at approximately 1315 hours EDT, the Lake Gogebic headwater elevation dropped below the License minimum of 2.5' local for a short duration of time (under 30 minutes). The lowest elevation reached was 2.48' local. The deviation was result of operations close to Licesne minimum due to dry year conditions, wind and seiche, which is historical for this development.		
Immediate Action:	None		
Recommendations:	None		
Potential Causes/Contributors to incident	Operations close to License minimums, dry year conditions, wind and related seiche.		
Entered By Name:	James R Melchiori	Creation Date/Time:	9/14/15 7:14
Entered By Department:	Western Hydros	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Event will be included with 2015 Annual report for deviations under 60 minutes
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	River cond. (drought, highflows, etc)	Description:	Article 401 Minimum Headwater deviation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Dry year conditions, operations close to License minimum, wind and related seiche.
Event Start:	9/11/2015 1:10 PM	Event End:	9/11/2015 1:20 PM
Event Duration (HH:MM):	00:10		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	9/14/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	On Friday September 11, 2015 at approximately 1315 hours EDT, the Lake Gogebic headwater elevation dropped slightly below the License minimum for a short period of time (under 30 minutes). The deviation was result of dry year conditions, operations close to License minimum, wind and related seiche.		
Causes:	Dry year conditions, operations close to License minimums, wind, seiche.		
Primary Causes:	Weather		
Does Eval Require Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04035995 LAKE GOGEBIC NEAR BERGLAND, MI



----- Provisional Data Subject to Revision -----

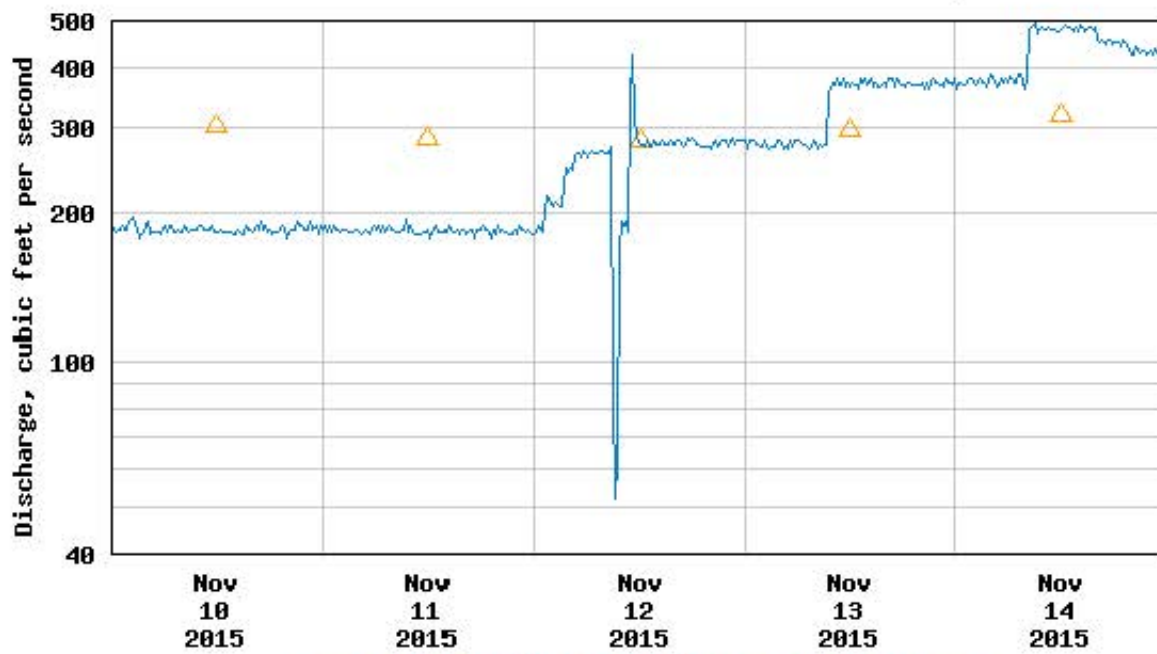
Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG8206	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Prickett Hydro		
Event Date:	11/12/2015	Discovery Date/Time:	11/12/15 7:52
Event Title:	Prickett Hydro plant trip		
Event Details:	At 0752, the on line unit at Prickett (# 2) tripped with many accompanying alarms. The distribution line that supplies the plant had tripped.		
Immediate Action:	Called local operator to open gate.		
Recommendations:	none		
Potential Causes/Contributors to incident	The distribution line that supplies the plant had tripped.		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	11/12/15 17:27
Entered By Department:	Energy Supply and Control	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Deviation will be reported with Annual Report in 2016 for deviations under 60 minutes
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	Article 401 Run of River Deviation
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	Tree on line resulted in fault and Line trip.
Event Start:	11/12/2015 8:52 AM	Event End:	11/12/2015 9:45 AM
Event Duration (HH:MM):	00:53		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	11/13/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	On Thursday November 12, 2015 at approximately 0852 hours ET, the Prickett Plant tripped of line, resulting in a Run of River deviation. An operator at the site opened up a spillway gate and re-established near run of river flow by 0945 ET, and Unit was put back on line at 1052 hours ET and returned operating conditions to normal.		
Causes:	Tree on transmission line, high winds in area earlier in day.		
Primary Causes:	Weather		
Does Eval Require Scening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04041500 STURGEON RIVER NEAR ALSTON, MI



----- Provisional Data Subject to Revision -----

△ Median daily statistic (82 years) — Discharge

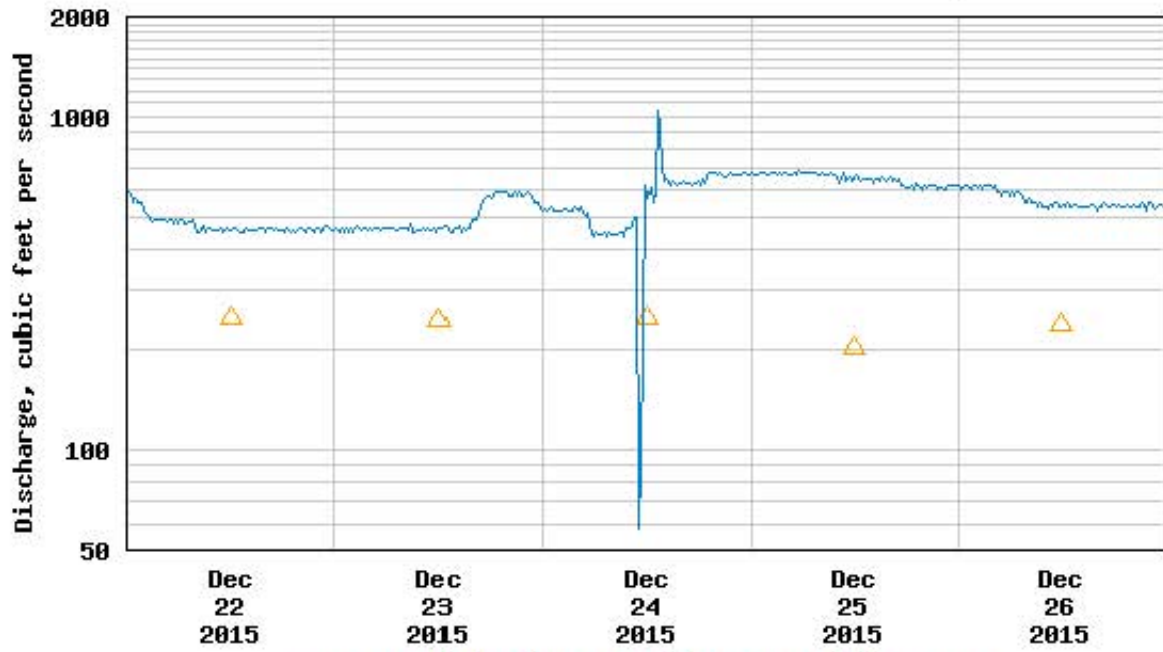
Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG8396		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Prickett Hydro			
Event Date:	12/24/2015	Discovery Date/Time:	12/24/15 9:43
Event Title:	interruption of Run of River		
Event Details:	both units tripped off line, contacted operator working at Victoria, he requested addition operator to meet him at the plant, opened auto gate to re-establish flow. DOC indicated the Substation Breaker opened		
Immediate Action:	called operator and opened gate		
Recommendations:	none		
Potential Causes/Contributors to incident	very high winds, multiple outages in the area		
Entered By Name:	Kenneth C Luckeröth	Creation Date/Time:	12/24/15 11:49
Entered By Department:	Energy Supply and Control	Status:	Approved
Reportable to External Agency:	no	Basis for Reportability:	Deviation will be reported with annual report with other under 60 minute deviations.
Additional Followup Required:	no		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (storm related)	Description:	Article 401 Run of River Deviation Under 60 minutes.
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basis:	High winds resulted in tree hitting line and tripped off the Units and Plant Substation, Main line from Sub stayed in allowing for quick gate operation.
Event Start:	12/24/2015 9:45 AM	Event End:	12/24/2015 10:30 AM
Event Duration (HH:MM):	00:45		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved
Eval Due Date:	12/28/2015	Eval Completion Date:	
Approver Name:	Melchiori, James R	Corrective Action Approver Name	Melchiori, James R
Analysis Description:	High winds caused tree to hit transmission line and trip off units, ES&C was able to open gates within a short time and reestablish normal run of river flows within one hour.		
Causes:	High winds, tree contacted transmission line resulting in Unit trips.		
Primary Causes:	Weather		
Does Eval Require Seening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



USGS 04041500 STURGEON RIVER NEAR ALSTON, MI



△ Median daily statistic (82 years) — Discharge

Emily B. Rushford

From: Fedora, Mark -FS <mfedora@fs.fed.us>
Sent: Friday, January 22, 2016 2:08 PM
To: Emily B. Rushford
Cc: James R. Melchiori
Subject: RE: Annual Deviation Report for Prickett License

Thank you for the opportunity to comment on the Annual Deviation Report for the Prickett project. Both incidents appear to have been caused by trees or branches hitting power lines in high wind events. My only comment is a question. Are the clearing limits adequate and properly maintained to standard? Thank you.

/s/ Mark A. Fedora



Mark A. Fedora
Supervisory Hydrologist
Forest Service
Ottawa National Forest

p: 906-932-1330 x318
c: 906-285-2323
f: 906-932-0122
mfedora@fs.fed.us

E6248 US Highway 2
Ironwood, MI 49938
www.fs.fed.us



Caring for the land and serving people

From: Emily B. Rushford [<mailto:EBRushford@uppc.com>]
Sent: Friday, January 22, 2016 9:52 AM
To: krugerk@michigan.gov; burr_fisher@fws.gov; Fedora, Mark -FS; gensch@kbic-nsn.gov
Cc: James R. Melchiori; Jarrod F. Nelson; Virgil E. Schlorke; Wendy M. Perry
Subject: Annual Deviation Report for Prickett License
Importance: High

Good Morning,

Please provide your comments on the annual deviation report no later than February 22, 2016. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 28, 2016. Should you have any questions, please contact Jim Melchiori at (906) 553-2186.

Thank you,

Emily B. Rushford
Office Manager

Upper Peninsula Power Company

Office: 906-232-1401

Cell: 906-251-1862

ebrushford@uppc.com

www.uppc.com



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



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

February 4, 2016

FERC Project No. 02506

Mr. Burr Fisher - FWS
Mr. Kyle Kruger - MDNR

Dear Agency Representative:

Escanaba River Hydroelectric Project
Annual Report of Deviations Less Than Sixty Minutes

According to the Order dated September 1, 2011, Upper Peninsula Power Company (UPPCO) is submitting a report containing all 2015 deviations less than 60 minutes, that did not result in the observation or reporting of any negative environmental effects. UPPCO is to provide the annual report for agency comment by January 31 of each year.

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

The report also includes: 1) operational data necessary to determine compliance with the operating range requirement; 2) 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; and 3) comments or correspondence, if any, received from the resource agencies or other interested parties regarding the incident.

A summary of each deviation and the required information for each deviation has been enclosed. All deviations included in this report did not result in the observation or reporting of any negative environmental effects.

Please provide your comments on the annual report no later than February 22, 2016. UPPCO is required to forward the annual report with stakeholder comments to the Commission no later than February 26, 2016. Should you have any questions, please do not hesitate to contact me at (906) 485-2419.

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Meyers", is written over a light blue horizontal line.

Bob Meyers
Project Manager - Regional Generation MI



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

January 27, 2016

FERC Project No. 02506
NATDAM No. MI00166 & MI00167

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

Dear Secretary Bose:

Escanaba Hydro Electric Project - Dam #4 (Boney Falls) & Dam #3 Developments
Article 402 Reservoir Surface Elevation Deviation

In accordance with Article 402 of the License dated July 13, 1995, and the Orders Amending Article 402 dated November 12, 1996, October 1, 1997, and August 16, 2011, for the Escanaba Hydroelectric Project (FERC Project No. 2506), Upper Peninsula Power Company (UPPCO) is required to file a deviation report with the Federal Energy Regulatory Commission (FERC), the Michigan Department of Natural Resources (MDNR) and United States Fish and Wildlife Service (USFWS) when the operation deviates from the conditions of Article 402.

On December 29, 2015 the pond levels at both Boney Falls and Dam #3 exceeded the License limits for headwater elevation, 906.17±0.34 feet USGS Datum, and 665.08±0.34 feet USGS Datum, respectively.

At the Boney Falls Development the License headwater exceedance occurred at 09:10 CST, with the peak elevation of 907.09 feet NGVD occurring at 9:13 CST. The Boney Falls headwater elevation returned below the License limit of 906.17±0.34 feet USGS Datum at 11:41 CST. The Dam #3 headwater level exceedance occurred at 16:02 CST with a peak of 666.76 feet USGS Datum at 16:11 CST. The Dam #3 headwater elevation returned to below the License limit of 665.08±0.34 feet USGS Datum at 16:57 CST.

The License headwater limit exceedances at Boney Falls and Dam#3 were caused by the release of upstream ice jams on the Escanaba River. This event has happened in the past, and was primarily caused by a heavy snow fall, followed by low temperatures. In each instance, Operators were called to Boney Falls and Dam #3, to manage the outflows of both Developments. There were no adverse environmental impacts observed as a result of these headwater deviations. Additionally, UPPCO did not receive any agency comment on the deviations.

Ms. Kimberly D. Bose
January 27, 2016
Page 2 of 2

If you have any questions regarding this letter, please do not hesitate to contact Bob Meyers at (906) 485-2419, or Jarrod Nelson at (906) 232-1433.

Sincerely,



Virgil Schlorke
Director - Energy Supply & Resource Planning
Upper Peninsula Power Company

Enc. Operational data

RJM/wmp

cc:	Ms. Koren Carpenter, MDEQ	Mr. Kyle Kruger, MDNR
	Mr. Kenneth Carruthers, UPPCO	Mr. Robert Meyers, UPPCO
	Mr. Burr Fisher, USFWS	Mr. Keith Moyle, UPPCO
	Mr. Gary Kohlhepp, MDEQ	Mr. Jarrod Nelson, UPPCO
	Ms. Diana Klemans, MDEQ	Mr. David Tripp, UPPCO
	Mr. John Zygaj, CRO FERC	

Escanaba River Hydroelectric Project #2506 Annual Report - 2015

Exhibit 402 - Incident Report of Deviation from Article 401 and 402

Article 401 - Run of River Article 402 - Reservoir Target Elevations -

Deviations Less than 60 Minutes				
Project	Date	Type of Deviation	Duration	Reason
Dam #3	4/9/2015	Run - of - River	18 mins	Generator Ground Fault - plant trip
Boney Falls	4/12/2015	Run - of - River	17 mins	Paper Mill Sub Station Fault - plant trip
Dam #3	6/24/2015	Run - of - River	4 mins	Unit high Oil Temp trip - plant trip
Dam #1	7/19/2015	Run - of - River	13 mins	Governor Oil Pump - Unit reduced flow
Dam #3	8/11/2015	Run - of - River	5 mins	Governor Oil Pump Trip - plant trip
Boney Falls	8/28/2015	Run - of - River	24 mins	Storm/High Wind Cause Plant Trip
Boney Falls	11/18/2015	Run - of - River	20 mins	Storm/High Wind Cause Plant Trip
Dam #3	12/29/2015	Head Water	55 Mins	Ice Jam River caused high water

Deviations greater than 60 minutes				
Dam #3	7/5/2015	Run - of - River	73 mins	Storm Mead Sub Lighting Arresstor - Plant Trip
Dam #1	7/5/2015	Run - of - River	74 mins	Storm Mead Sub Lighting Arresstor - Plant Trip
Boney Falls	12/29/2015	Head Water	151 mins	Ice Jam River caused high water

Augmentaiton Events that meet criteria for 2015

7/13,7/14,7/20,7/21,7/22,7/23,7/25,7/28,7/29,7/30,7/31,8/1,8/2,8/6,8/7,8/10,8/11,8/12,8/13,8/14,8/16,
8/17,8/18,9/1,9/2,9/5,9/6,9/7,9/8

Divergence Events for 2015 at Dam #1

7/24 - 7/26, 7/30 - 8/4, 8/6 - 8/10, 8/12 - 8/17, 8/30 - 9/3, 9/19 - 10/1

CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7308	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #3 Hydro		
Event Date:	04/09/2015	Discovery Date/Time:	4/9/15 23:57
Event Title:	ROR interrupted		
Event Details:	both units 1 & 2 tripped off line, operators paged and gates 1 & 2 opened to restore flow, When operator arrived at plant had no control power and requested additional operator. Unit 1 placed back on line at 02:07 CDT and gate 2 closed. Unit 2 shorted lead when attempt to put it on line, will remain off until repaired.		
Immediate Action:	opened gate and paged operator		
Recommendations:	none		
Potential Causes/Contributors to incident	unknown		
Entered By Name:	Kenneth C Luckeroth	Creation Date/Time:	4/10/15 2:28
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 minute trip that needs to go to End of Year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Units tripped when Unit 2 had a ground fault from a lead to the generator. When the operators got to plant, got other unit back on. Have to repair lead that failed.
Event Start:	4/9/2015 11:58 PM	Event End:	4/10/2015 12:16 AM
Event Duration (HH:MM):	00:18		
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-EHD3: Total Plant Flow



CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7313	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	04/12/2015	Discovery Date/Time:	4/12/15 12:39
Event Title:	Plant trip		
Event Details:	At 0851 Central Time all the Boney Falls units tripped offline. The power to the plant was cycling on and off. We received Battery Charger Failure and Battery Charger Loss of AC alarms. At 0908 the power was restored to the plant and gate functionality was also restored so I was able to raise the gate and prevent any headlevel violations. Jerry Pirkola was called out to the plant and the DOC dispatched a lineperson. As of 1248 the generation is still offline and New Page is checking their system because it looks like that is where the problem is.		
Immediate Action:	Called out operator and opened more gate.		
Recommendations:	None.		
Potential Causes/Contributors to incident	Power loss at plant, may have been caused by something at New Page.		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	4/12/15 12:52
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of the < 60 minute deviation reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	Problem at Mead Sub
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Plant tripped at 08:51 because of a fault in the underground cable in the Mead Sub station
Event Start:	4/12/2015 8:51 AM	Event End:	4/12/2015 9:08 AM
		Event Duration (HH:MM):	00:17
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 Screening Committee Approval upon Completion			no
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-BNYH: Total Plant Flow

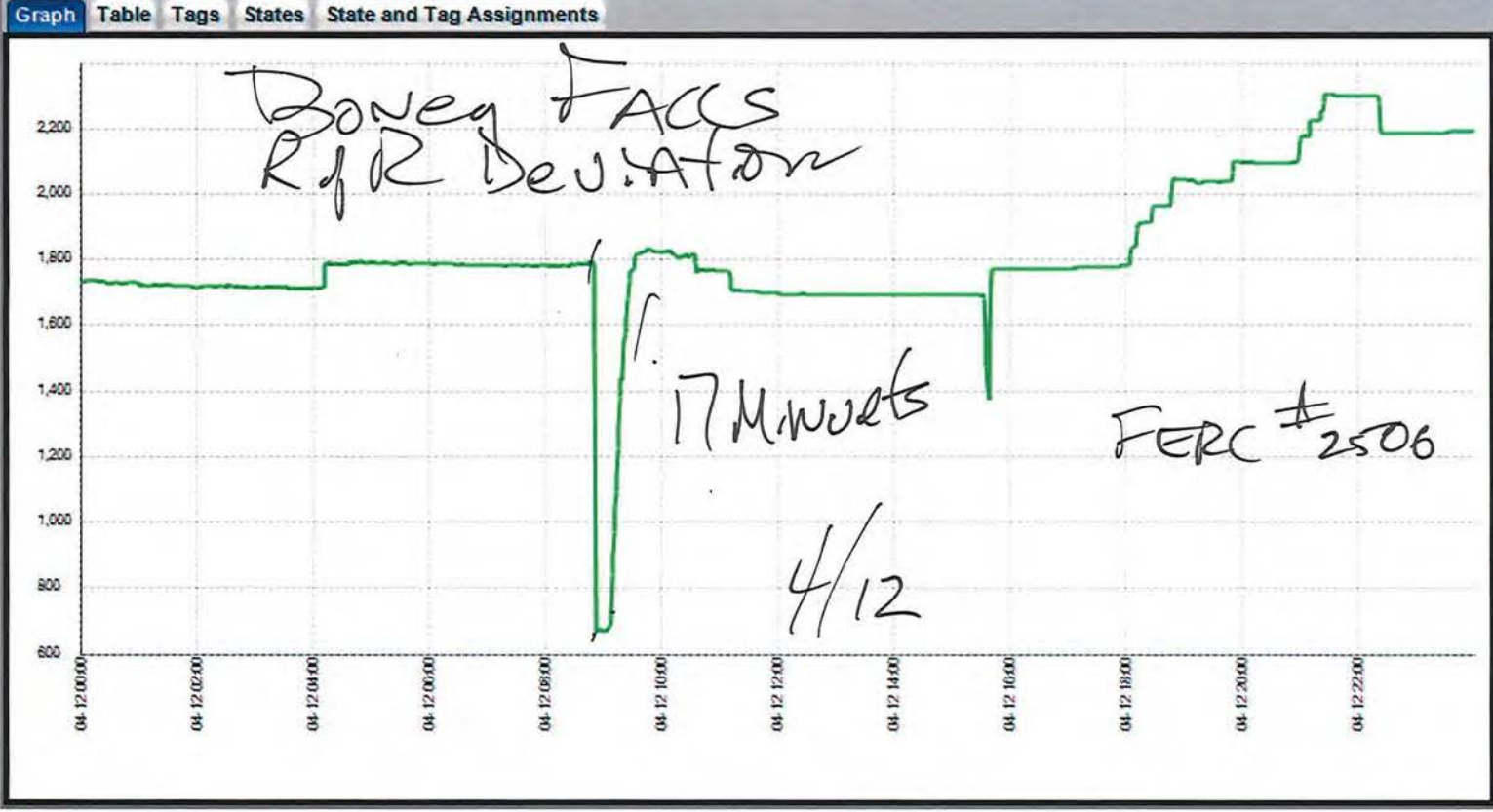
History Energy Log Live Values Alarm Config Recent Events Calculation SCADA Documents Schema Point Rationalization

Filter

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

Integration: 1 Minute Start Time: 04/12/2015 00:01 End Time: 04/12/2015 23:59

Filters: Last Hr Last 4 Hrs Last 8 Hrs Last 24 Hrs Cur Day Cur Gas Day Last 7 Days Last 14 Days Last Prev Next



CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7565	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #3 Hydro		
Event Date:	06/24/2015	Discovery Date/Time:	6/24/15 13:24
Event Title:	Unit #2 Trip		
Event Details:	At 1221 unit #2 tripped offline. The gate was opened and the Jerry was called out. The headlevel never got above the emergency high. By 1320 Jerry had both units 1 and 2 back online. Jerry said unit #2 tripped due to an oil flow or oil pressure lockout.		
Immediate Action:	Gate opened and operator called.		
Recommendations:	None.		
Potential Causes/Contributors to incident	Oil flow or oil pressure lockout.		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	6/24/15 13:37
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 minutes to be reported end of year
Additional Followup Required:	yes	Category:	Regulatory
Sub Type:	Plant equip. failure	Type:	FERC Deviation
Causal Analysis Level:	Closed - No further action required	Description:	<60 minutes
		Causal Analysis Basis:	Unit at plant tripped, high oil temp, gate opened flow returned
Event Start:	6/24/2015 12:22 PM	Event End:	6/24/2015 12:26 PM
		Event Duration (HH:MM):	00:04
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-EHD3: Total Plant Flow



CCAT125

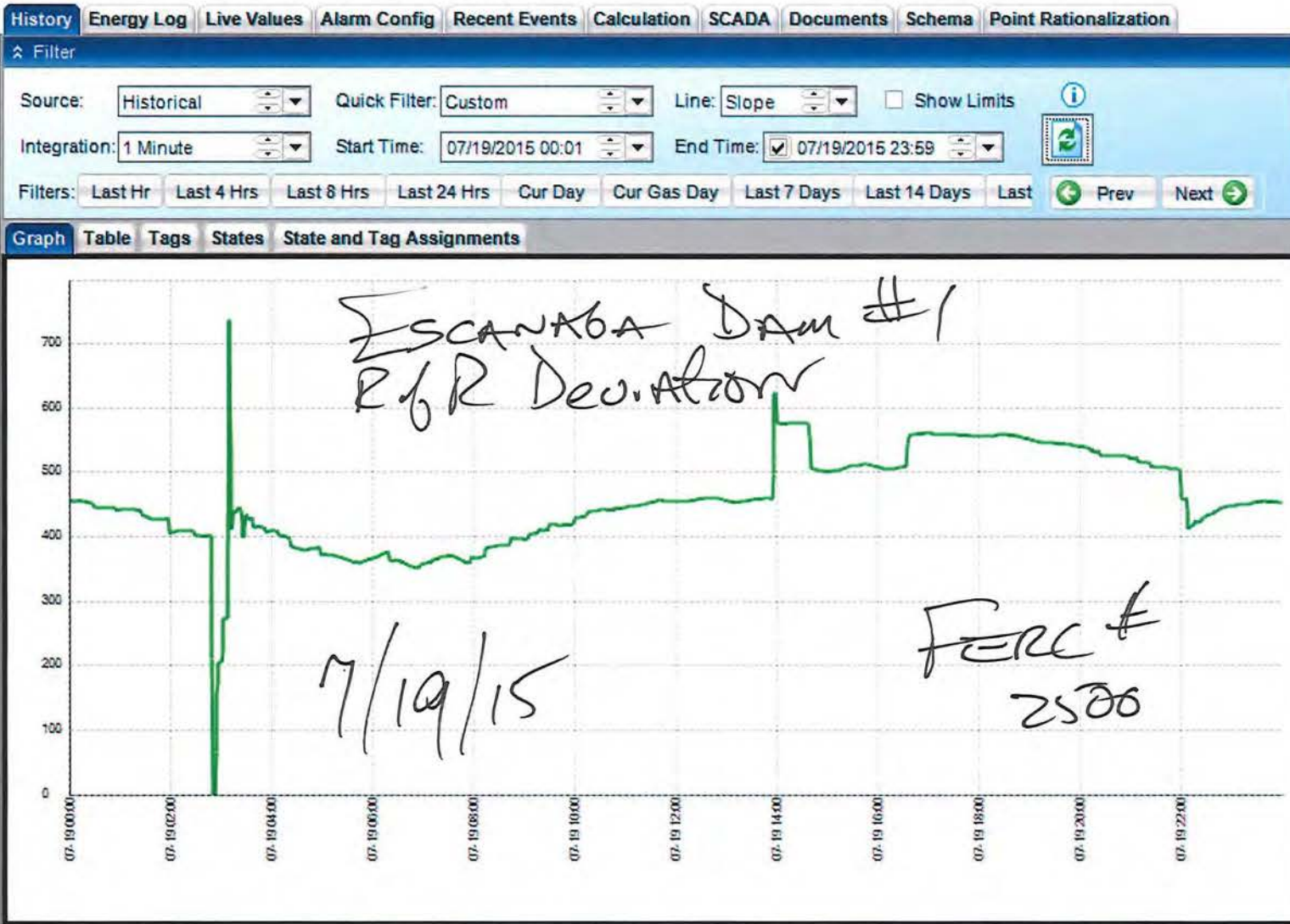
Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7664	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	07/19/2015	Discovery Date/Time:	7/19/15 2:49
Event Title:	Unit #1 unloaded and did not trip offline		
Event Details:	Unit #1 unexpectedly unloaded but did not trip offline. This temporarily resulted in no flow.		
Immediate Action:	Opened gate and dispatched operator to site.		
Recommendations:	Investigate and place unit online		
Potential Causes/Contributors to incident			
Entered By Name:	Bruce L Christensen	Creation Date/Time:	7/19/15 3:01
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	end of year reporting < 60 minute event
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	< 60 minute event - end of year reporting, gate opened right away to establish river flow, unit backed off from controller problem
Event Start:	7/19/2015 2:48 AM	Event End:	7/19/2015 3:01 AM
		Event Duration (HH:MM):	00:13
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-EHD1: Total Plant Flow



CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7790	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #3 Hydro		
Event Date:	08/11/2015	Discovery Date/Time:	8/11/15 22:44
Event Title:	369 ACB [Open]		
Event Details:	Unit #2 tripped off line while generating at .65 MWs (390 cfs)		
Immediate Action:	Immediately opened Gate #3 to approximately 390 cfs.		
	Paged out local operator (Mike McIntosh) via ARCOS.		
Recommendations:	na		
Potential Causes/Contributors to incident	Unknown at this time.		
Entered By Name:	Mark A Nemetz	Creation Date/Time:	8/11/15 23:00
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 minutes will be end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Plant equip. failure	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Unit tripped on Low Governor Oil pressure, when operator got on site, only alarm he could fine, started up unit and things have remained OK, ES&C operator had gate open within 5 minutes
Event Start:	8/11/2015 10:41 PM	Event End:	8/11/2015 10:46 PM
		Event Duration (HH:MM):	00:05
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

Point Info - UPPCO-EHD3: Total Plant Flow



CCAT125

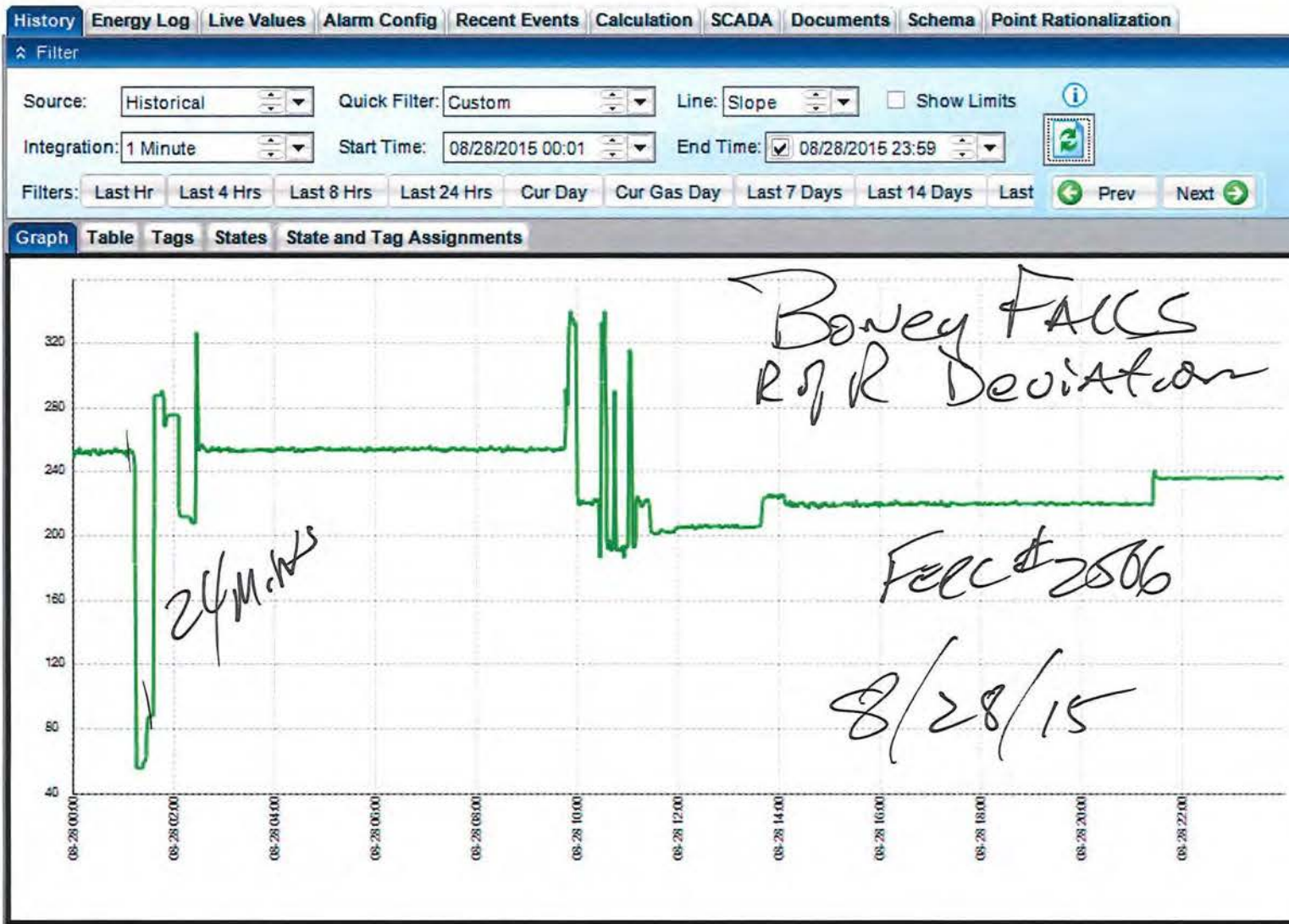
Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number: NCREG7882		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)			
Event Date:	08/28/2015	Discovery Date/Time:	8/28/15 1:13
Event Title:	Boney Falls unit # 1 trip		
Event Details:	Unit # 1 tripped off line and unit # 3 would not start (# 2 out of service). Local operator placed # 1 back online.		
Immediate Action:	Attempted to start # 3 and opened gate.		
Recommendations:	none		
Potential Causes/Contributors to incident	n/a		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	8/28/15 2:55
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	End of year report < 60 minute event
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:	Unit tripped, var issue, gate opened to establish < 60 miute event end of year reporting
Event Start:	8/28/2015 1:13 AM	Event End:	8/28/2015 1:37 AM
		Event Duration (HH:MM):	00:24
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-BNYH: Total Plant Flow



CCAT125

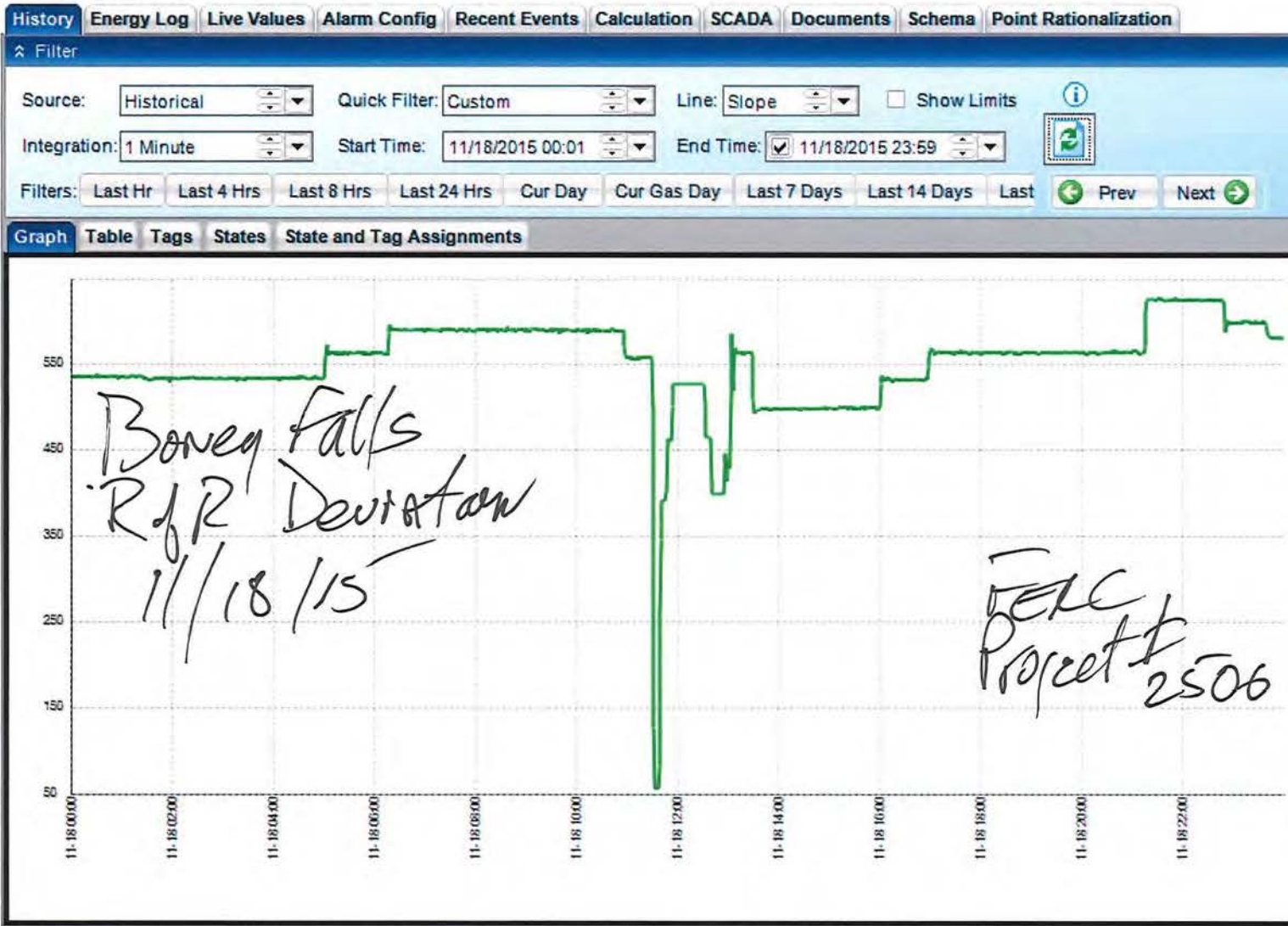
Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG8236	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	11/18/2015	Discovery Date/Time:	11/18/15 11:30
Event Title:	Boney Falls Plant Trip		
Event Details:	Plant Tripped at 1130CST. Loss of power. Plant went into isolatio mode. I was able to open gate to control head level.		
Immediate Action:	Opened gate. Called local operator to investigate.		
Recommendations:	None		
Potential Causes/Contributors to incident	Weather		
Entered By Name:	Brian K Ellison	Creation Date/Time:	11/18/15 14:33
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	< 60 minute event, part of end of year report
Additional Followup Required:	yes	Category:	Regulatory
Sub Type:		Type:	Other
Causal Analysis Level:	Closed - No further action required	Description:	tree on line
		Causal Analysis Basis:	Tree on line from heavy Wind, unit went into isolation automatically, and gate was opened to maintain flow and head level
Event Start:	11/18/2015 11:27 AM	Event End:	11/18/2015 11:47 AM
Event Duration (HH:MM):	00:20		
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-BNYH: Total Plant Flow



CCAT125

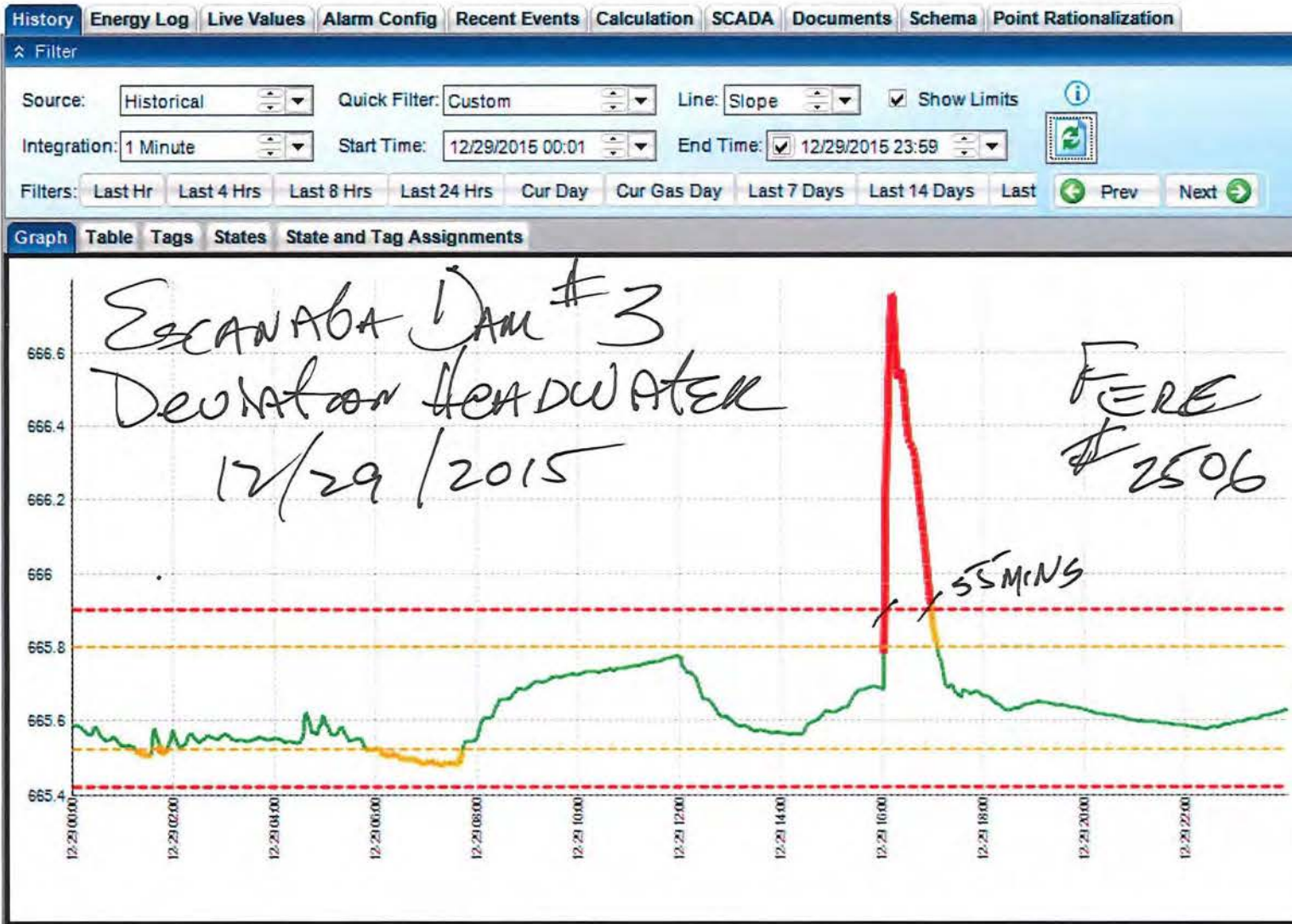
Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG8412		Entity:	Regional Generation	
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #3 Hydro				
Event Date:	12/29/2015	Discovery Date/Time:	12/29/15 16:03		
Event Title:	Potential License Limit Violation Escanaba Dam 3				
Event Details:	<p>Similar to what happened at Boney Falls earlier today, the head level went straight up. Head level was 665.68 at 1601 and by 1603 it was at 665.97. I immediately started opening gate 3 at Dam 3 and began opening gate at Dam 1 then paged operator via ARCOS. Mike M accepted, he went to Dam 1 to pull boards while I continued to open Gate 3 and Gate 2 at Dam 3.</p> <p>The head level peaked at 666.76 at 16:11. By 1653 the head level was back below 666.0.</p>				
Immediate Action:	Opened gate at Dam 3 and Dam 1. Paged local hydro operator				
Recommendations:	None				
Potential Causes/Contributors to incident	Ice				
Entered By Name:	Brian K Ellison	Creation Date/Time:	12/29/15 17:27		
Entered By Department:	Energy Supply and Control	Status:	Closed		
Reportable to External Agency:	no	Basis for Reportability:	FERC letter required draft sent to JN 1/11		
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:	ice dam release, water from Boney caused dam #3 to go over limit	
Event Start:	12/29/2015 4:02 PM	Event End:	12/29/2015 4:57 PM	Event Duration (HH:MM):	00:55
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 Screening Committee Approval upon Completion	no				
Evaluation Reviewed/Approved by Screening Committee					

Point Info - UPPCO-EHD3: Headwater Elevation



CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7599	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #3 Hydro		
Event Date:	07/05/2015	Discovery Date/Time:	7/5/15 17:23
Event Title:	Pole arrester problem power cut to plant		
Event Details:	pole arrester problem.		
Immediate Action:	DOC had mead open up breaker to the plant taking it offline.		
Recommendations:	none		
Potential Causes/Contributors to incident	pole arrester insulator problem		
Entered By Name:	Jeffrey S Greaves	Creation Date/Time:	7/5/15 17:39
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	FERC 30 day reportable
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (non-storm related)	Description:	lighting arrester failed
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Lighting arrester on structure to Mead failed, opening line, and not power to plant, not able to open gate until operator on site.
Event Start:	7/5/2015 5:22 PM	Event End:	7/5/2015 6:35 PM
		Event Duration (HH:MM):	01:13
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			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7600	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	07/05/2015	Discovery Date/Time:	7/5/15 17:35
Event Title:	Arrestor pole problem		
Event Details:	due to an arrestor problem on a pole near Dam 3 this line to Dam one needed to be opened up		
Immediate Action:	operator paged out.		
Recommendations:	none.		
Potential Causes/Contributors to incident	arrestor problem		
Entered By Name:	Jeffrey S Greaves	Creation Date/Time:	7/5/15 17:46
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	FERC deviation >60 minutes
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Trans. Sys. (non-storm related)	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Same as one to Dam #3
Event Start:	7/5/2015 5:21 PM	Event End:	7/5/2015 6:35 PM
		Event Duration (HH:MM):	01:14
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			



Upper Peninsula Power Company
1002 Harbor Hills Drive
Marquette, MI 49855
www.UPPCO.com

July 30, 2015

FERC Project No. 02506
NATDAM No. MI00164
and MI00166

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

Dear Secretary Bose:

Escanaba Hydroelectric Project – Dam #1 & Dam #3 Developments
Article 401 Minimum Flows

In accordance with Article 401 of the Order Issuing New License dated July 13, 1995, and the Orders Amending Article 401 dated November 12, 1996, October 1, 1997 and August 16, 2011, for the Escanaba Hydroelectric Project (FERC Project No. 2506); Upper Peninsula Power Company (UPPCO) is required to file a deviation report with the Federal Energy Regulatory Commission and the Michigan Department of Natural Resources (MDNR) when the operation deviates from the conditions of Article 401.

On Sunday, July 5, 2015, at 17:22 CDT, run-of-river operations were interrupted when generation tripped off-line. The trip was caused by a transmission line fault from the failure of a lightning arrester on the transmission line support structure that contains both transmission lines from Dam #1 and Dam #3. Operators were dispatched at 17:25 CDT, in order to check the facilities plants and to re-establish run-of-river operations. The operators were able to open gates by 18:35 CDT, re-establishing run-of-river operations.

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. The lightning arrester has been replaced and UPPCO is not proposing any other corrective actions at this time.

Ms. Kimberly D. Bose
July 30, 2015
Page 2 of 2

If you have any questions regarding this letter, please contact Mr. Robert Meyers at (906) 485-2419 or Mr. Jarrod Nelson at (906) 232-1433.

Sincerely,



Virgil Schlorke
Director - Energy Supply & Resource Planning
Upper Peninsula Power Company

Enc. Operational data

cc: Mr. Robert Meyers, UPPCO
Mr. Burr Fisher, USFWS
Mr. Kyle Kruger, MDNR
Mr. John Zygaj, FERC

Mr. Keith Moyle, UPPCO
Mr. Jarrod Nelson, UPPCO
Mr. David Tripp, UPPCO

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG8408	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	12/29/2015	Discovery Date/Time:	12/29/15 9:09
Event Title:	Boney Falls Potential License Limit Violation		
Event Details:	Icing caused the head level to go from 906.2 to 907.05 within a few minutes. The local operator on site said that he thinks an ice dam broke loose and it is now causing large waves. We agreed to max out available generation and Unit #1 was also brought on to help bring the head level down.		
Immediate Action:	Called local operator and increased generation		
Recommendations:	None		
Potential Causes/Contributors to incident	Ice		
Entered By Name:	Brian K Ellison	Creation Date/Time:	12/29/15 10:49
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Letter to FERC required draft sent to JN 1/11
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:	pond exceeded limit, all generation put on, pond came back down
Event Start:	12/29/2015 9:10 AM	Event End:	12/29/2015 11:41 AM
		Event Duration (HH:MM):	02:31
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 Screening Committee Approval upon Completion		no	
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7636	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/13/2015	Discovery Date/Time:	7/13/15 11:00
Event Title:	Boney Falls Augmentation		
Event Details:	Augmentation criteria met.		
Immediate Action:	Increased flow to 635cfs		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Brian K Ellison	Creation Date/Time:	7/13/15 17:54
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Plan requirement - End of Year
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Augmentation - License requirement
Event Start:	8/13/2015 10:00 AM	Event End:	8/14/2015 12:58 AM
		Event Duration (HH:MM):	14:58
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 Screening Committee Approval upon Completion			no
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7640	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/14/2015	Discovery Date/Time:	7/14/15 10:00
Event Title:	Augmentation Event		
Event Details:	<p>All Criteria satisfied for Augmentation today. Flow at Cornell Gauge 397 Tailrace temp at BNY 22.8 Pond elevation 905.63 Previous day max temp at Cornell 24.1</p> <p>Augmented flow target is 354 cfs ramped units up to get close to augmentation target</p>		
Immediate Action:	ramped units up to get close to augmentation target		
Recommendations:	n/a		
Potential Causes/Contributors to incident	n/a		
Entered By Name:	David C Paananen	Creation Date/Time:	7/14/15 10:13
Entered By Department:	Energy Supply and Control	Status:	
Reportable to External Agency:		Basis for Reportability:	
Additional Followup Required:			
Category:		Type:	
Sub Type:		Description:	
Causal Analysis Level:		Causal Analysis Basis:	
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 Screening Committee Approval upon Completion			
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7670	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/20/2015	Discovery Date/Time:	7/20/15 10:00
Event Title:	Boney Falls Augmentation Event		
Event Details:	Flow at Cornell Gauge 379 Tailrace temp at BNY 22.0 Headwater elevation 906.19 Previous day max temp at Cornell 28.3		
Immediate Action:	Increased flow to approx 150% of base flow (398 CFS)		
Recommendations:	none		
Potential Causes/Contributors to incident	n/a		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	7/20/15 17:14
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement - end of year report
Additional Followup Required:	yes	Type:	FERC Deviation
Category:	Regulatory	Description:	License requirement
Sub Type:	Other	Causal Analysis Basis:	License requirement
Causal Analysis Level:	Closed - No further action required		
Event Start:	7/20/2015 10:00 AM	Event End:	7/20/2015 5:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integritys Energy Group

NC Record Number:	NCREG7672	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/21/2015	Discovery Date/Time:	7/21/15 11:00
Event Title:	Boney Falls Augmentation		
Event Details:	Criteria for augmentation met		
Immediate Action:	Started augmentation		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Thomas R Grow	Creation Date/Time:	7/21/15 16:51
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	7/21/2015 11:00 AM	Event End:	7/21/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7678	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/22/2015	Discovery Date/Time:	7/22/15 17:40
Event Title:	Augmenation		
Event Details:	Conditions for augmentation met. Performed augmentation.		
Immediate Action:	Initiated augmentation		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	7/22/15 17:41
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	End of Year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Condition, reported end of Year
Event Start:	7/22/2015 10:00 AM	Event End:	7/22/2015 11:44 PM
Evaluator Name:		Event Duration (HH:MM):	13:44
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name	
Causes:			
Primary Causes:			
Does Eval Require Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integritys Energy Group

NC Record Number:	NCREG7680	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/23/2015	Discovery Date/Time:	7/23/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria met for augmentation		
Immediate Action:	Ended DO correction period - removed plant from isolation mode and set target flow		
Recommendations:	Augmentation started		
Potential Causes/Contributors to incident			
Entered By Name:	Bruce L Christensen	Creation Date/Time:	7/23/15 10:01
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	End of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License requirrement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	7/23/2015 10:00 AM	Event End:	7/23/2015 11:43 PM
Evaluator Name:		Event Duration (HH:MM):	13:43
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7702	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/25/2015	Discovery Date/Time:	7/25/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria met for augmentation.		
Immediate Action:	Due to low flows, left unit #2 in isolation and increased gate flow to achieve target.		
Recommendations:	.		
Potential Causes/Contributors to incident	Low flows		
Entered By Name:	Bruce L. Christensen	Creation Date/Time:	7/25/15 10:00
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement, end of year Reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement, end of year report
Event Start:	7/25/2015 10:00 AM	Event End:	7/25/2015 8:28 PM
Event Duration (HH:MM):	10:28		
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7713	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/28/2015	Discovery Date/Time:	7/28/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria for augmentation at Boney Falls was met.		
Immediate Action:	Flow was increased to 279 CFS at 11:00 EDT. Dissolved Oxygen corrective action was terminated, as per procedure. CCAT submitted.		
Recommendations:	-		
Potential Causes/Contributors to incident		
Entered By Name:	Kevin S Willey	Creation Date/Time:	7/28/15 10:00
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - End of Year Reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - End of Year reporting
		
Event Start:	7/28/2015 11:00 AM	Event End:	7/28/2015 9:35 PM
		Event Duration (HH:MM):	10:35
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 Screening Committee Approval upon Completion		no	
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7724		Entity:	Regional Generation	
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)				
Event Date:	07/29/2015	Discovery Date/Time:	7/29/15 10:00		
Event Title:	Augmentation				
Event Details:	Criteria for augmentation at Boney Falls was met.				
Immediate Action:	Flow was increased to approximately 206 cfs at 11:00 EDT. Dissolved Oxygen corrective actio was terminated per procedure for augmentation. CCAT submitted.				
Recommendations:	none				
Potential Causes/Contributors to incident	none				
Entered By Name:	Terrie S Taylor	Creation Date/Time:	7/29/15 10:22		
Entered By Department:	Energy Supply and Control	Status:	Closed		
Reportable to External Agency:	no	Basis for Reportability:	License requirement - end of year report		
Additional Followup Required:	yes				
Category:	Regulatory	Type:	FERC Deviation		
Sub Type:	Other	Description:	License Requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - End of Year Report		
Event Start:	7/29/2015 10:00 AM	Event End:	7/29/2015 8:48 PM	Event Duration (HH:MM):	10:48
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					

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7733	Entity:	Regional Generation
Company - Level 1 - Level 2:	Upp-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/30/2015	Discovery Date/Time:	7/30/15 17:06
Event Title:	Initiated augmentation		
Event Details:	Conditions were met for augmentation on 07/30/15		
Immediate Action:	Performed augmentation		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	7/30/15 17:08
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License condition requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - end of year report
Event Start:	7/30/2015 10:00 AM	Event End:	7/31/2015 10:00 AM
Evaluator Name:		Event Duration (HH:MM):	24:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion:	no		
Evaluation Reviewed/Approved by Screening Committee:			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7742	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	07/31/2015	Discovery Date/Time:	7/31/15 11:00
Event Title:	Augmentation		
Event Details:	Criteria for augmentation met on 07/31/15		
Immediate Action:	Performed augmentation		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Thomas R Grow	Creation Date/Time:	7/31/15 17:04
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement - edn of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	7/31/2015 11:00 AM	Event End:	8/1/2015 11:00 AM
Evaluator Name:		Event Duration (HH:MM):	24:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Sceening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7745	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/01/2015	Discovery Date/Time:	8/1/15 17:05
Event Title:	Boney Falls Augmentation 8/1/15		
Event Details:	Criteria met for augmentation 8/1/15		
Immediate Action:	Performed augmentation per procedure.		
Recommendations:	none		
Potential Causes/Contributors to incident	n/a		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	8/1/15 17:08
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - End of Year REport
Event Start:	8/1/2015 10:00 AM	Event End:	8/2/2015 10:00 AM
		Event Duration (HH:MM):	24:00
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7746	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/02/2015	Discovery Date/Time:	8/2/15 10:00
Event Title:	Boney Falls Augmentation		
Event Details:	Conditions met for augmentation on 08/02/15		
Immediate Action:	Performed augmentation		
Recommendations:	None		
Potential Causes/Contributors to Incident	None		
Entered By Name:	Thomas R Grow	Creation Date/Time:	8/2/15 10:17
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - End of Year Report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	8/2/2015 10:00 AM	Event End:	8/3/2015 7:35 AM
Evaluator Name:		Event Duration (HH:MM):	21:35
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7763	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/06/2015	Discovery Date/Time:	8/6/15 9:52
Event Title:	Augmentation		
Event Details:	Criteria for augmentation at Boney Falls was met.		
Immediate Action:	Flow was increased to approximately 206 cfs at 11:00 EDT. Dissolved Oxygen corrective actio was terminated per procedure for augmentation. CCAT submitted.		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Terrie S Taylor	Creation Date/Time:	8/6/15 9:52
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	8/6/2015 10:00 AM	Event End:	8/7/2015 10:00 AM
Event Duration (HH:MM):	24:00		
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			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7768	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/07/2015	Discovery Date/Time:	8/7/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria for augmentation at Boney Falls was met.		
Immediate Action:	Flow was increased to 126 CFS at 11:00 EDT. CCAT submitted.		
Recommendations:	-		
Potential Causes/Contributors to incident	-----		
Entered By Name:	Kevin S Willey	Creation Date/Time:	8/7/15 10:36
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	FERC requirement License condition - End of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - End of Year Report

Event Start:	8/7/2015 11:00 AM	Event End:	8/7/2015 6:00 PM
		Event Duration (HH:MM):	07:00
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integritys Energy Group

NC Record Number: NCREG7782		Entity: Regional Generation	
Company - Level 1 - Level 2: UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)			
Event Date:	08/10/2015	Discovery Date/Time:	8/10/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria was met for augmentation.		
Immediate Action:	Augmentation started at 1100 EDT		
Recommendations:	-		
Potential Causes/Contributors to incident			
Entered By Name:	Bruce L Christensen	Creation Date/Time:	8/10/15 10:03
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - End of Year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - end of year report
<pre> ===== </pre>			
Event Start:	8/10/2015 10:00 AM	Event End:	8/11/2015 5:43 AM
		Event Duration (HH:MM):	19:43
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7787	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/11/2015	Discovery Date/Time:	8/11/15 10:20
Event Title:	Augmentation		
Event Details:	Augmentation began at 1100 EDT		
Immediate Action:	Increased generation to 288 cfs		
Recommendations:	none		
Potential Causes/Contributors to incident	none		
Entered By Name:	Garry D Gentry	Creation Date/Time:	8/11/15 10:21
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement - end of year report
Event Start:	8/11/2015 10:00 AM	Event End:	8/12/2015 12:55 AM
Evaluator Name:		Event Duration (HH:MM):	14:55
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7792	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/12/2015	Discovery Date/Time:	8/12/15 10:00
Event Title:	8-12-15 Augmentation		
Event Details:	Criteria met to Augment		
Immediate Action:	increased flow to 261cfs		
Recommendations:	none		
Potential Causes/Contributors to incident	met criteria		
Entered By Name:	Kenneth C Luckeroth	Creation Date/Time:	8/12/15 10:00
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License Requirement - End of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	license requirement - end of year report
Event Start:	8/12/2015 10:00 AM	Event End:	8/13/2015 5:07 AM
Evaluator Name:		Event Duration (HH:MM):	19:07
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7801	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/13/2015	Discovery Date/Time:	8/13/15 10:01
Event Title:	Augmentation		
Event Details:	All requirements met.		
Immediate Action:	set flow to 150% of total plant flow.		
Recommendations:	none.		
Potential Causes/Contributors to incident	conditions met.		
Entered By Name:	Jeffrey S Greaves	Creation Date/Time:	8/13/15 10:45
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License condition - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License condition requirement - end of year reporting
Event Start:	8/13/2015 10:00 AM	Event End:	8/14/2015 12:58 AM
Evaluator Name:		Event Duration (HH:MM):	14:58
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7810	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/14/2015	Discovery Date/Time:	8/14/15 10:43
Event Title:	8-14-2015 Augmentation		
Event Details:	Augmentation was performed on 8-14-2015.		
Immediate Action:	Increased flow through generator		
Recommendations:	None		
Potential Causes/Contributors to incident	Low Flows		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	8/14/15 10:46
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License condition end of year reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year reporting
Event Start:	8/14/2015 10:00 AM	Event End:	8/14/2015 8:15 PM
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7822	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/16/2015	Discovery Date/Time:	8/16/15 10:00
Event Title:	Augmentation for Sunday 8-16-2015		
Event Details:	The Augmentation criteria was met for 8-16-2015. The base flow was 148 cfs which gave us a target of 222 cfs.		
Immediate Action:	Increased flow through generator #1.		
Recommendations:	None		
Potential Causes/Contributors to incident	Low flows, high temps.		
Entered By Name:	Stephen M Beirne	Creation Date/Time:	8/16/15 10:30
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement - end of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement
Event Start:	8/16/2015 10:00 AM	Event End:	8/17/2015 4:00 AM
Evaluator Name:		Event Duration (HH:MM):	18:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7826	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/17/2015	Discovery Date/Time:	8/17/15 10:13
Event Title:	Augmentation 8/17/15		
Event Details:	All criteria met for augmentation on 8/17/15.		
Immediate Action:	Started Augmentation		
Recommendations:	None		
Potential Causes/Contributors to incident	All criteria met.		
Entered By Name:	Todd L Strodthoff	Creation Date/Time:	8/17/15 10:15
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement - end of year reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement - end of year report
Event Start:	8/17/2015 10:00 AM	Event End:	8/18/2015 5:40 AM
Evaluator Name:		Event Duration (HH:MM):	19:40
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7833	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	08/18/2015	Discovery Date/Time:	8/18/15 10:22
Event Title:	Augmentation performed today		
Event Details:	Augmentation criteria met		
Immediate Action:	Flow increase to 150 % of base = 300 cfs		
Recommendations:	na		
Potential Causes/Contributors to incident	na		
Entered By Name:	Mark A Nemetz	Creation Date/Time:	8/18/15 10:31
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	End of year reporting for Augmentation plan
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	license condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License required operation, Augmentation plan
Event Start:	8/18/2015 10:00 AM	Event End:	8/18/2015 5:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7903	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/01/2015	Discovery Date/Time:	9/1/15 10:00
Event Title:	Boney Falls Augmentation		
Event Details:	Met the conditions to perform augmentation.		
Immediate Action:	Increased flow to 150% of base.		
Recommendations:	none		
Potential Causes/Contributors to Incident	n/a		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	9/1/15 14:49
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of Annual Report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Part of the License requirement to Augment flow
Event Start:	9/1/2015 11:00 AM	Event End:	9/1/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7912	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/02/2015	Discovery Date/Time:	9/2/15 10:00
Event Title:	Boney Falls Augmentation		
Event Details:	Met the conditions to perform augmentation.		
Immediate Action:	Increased flow to 150% of base.		
Recommendations:	none		
Potential Causes/Contributors to incident	N/A		
Entered By Name:	Thomas R Grow	Creation Date/Time:	9/2/15 14:54
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of Annual Report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement
Event Start:	9/2/2015 11:00 AM	Event End:	9/2/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion		no	
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7933	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/05/2015	Discovery Date/Time:	9/5/15 10:00
Event Title:	Augmentation criteria met for 9/5/15		
Event Details:	met the criteria for augmentation....		
Immediate Action:	increased flows at the plant.		
Recommendations:	n/a		
Potential Causes/Contributors to incident	n/a		
Entered By Name:	David C Paananen	Creation Date/Time:	9/5/15 10:16
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of License requirement, reported in annual report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requiement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requirement, part of annual reporting
Event Start:	9/5/2015 11:00 AM	Event End:	9/5/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Scecnng Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrus Energy Group

NC Record Number:	NCREG7934	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/06/2015	Discovery Date/Time:	9/6/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria met to begin new augmentation event		
Immediate Action:	Raised flows to 150% of base flow		
Recommendations:	-		
Potential Causes/Contributors to incident	-----		
Entered By Name:	Bruce L Christensen	Creation Date/Time:	9/6/15 10:01
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of Annual Report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Part of License requirement, reported annually

Event Start:	9/6/2015 11:00 AM	Event End:	9/6/2015 6:00 PM
		Event Duration (HH:MM):	07:00
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7937	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/07/2015	Discovery Date/Time:	9/7/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria for augmentation at Boney Falls was met.		
Immediate Action:	Flow was increased to 208 CFS at 11:00 EDT. CCAT submitted.		
Recommendations:			
Potential Causes/Contributors to Incident			
Entered By Name:	Kevin S Willey	Creation Date/Time:	9/7/15 10:25
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License requirement, reported on annual report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement, reported on annual report
Event Start:	9/7/2015 11:00 AM	Event End:	9/7/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7942	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Boney Falls (Escanaba #4 Hydro)		
Event Date:	09/08/2015	Discovery Date/Time:	9/8/15 10:00
Event Title:	Augmentation		
Event Details:	Criteria for augmentation at Boney Falls was met.		
Immediate Action:	Criteria was met flow increased to 429 cfs at 11:00 EDT. CCAT submitted.		
Recommendations:	None		
Potential Causes/Contributors to Incident	None		
Entered By Name:	Terrie S Taylor	Creation Date/Time:	9/8/15 10:32
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Annual reporting requirement
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement, reported in annual report
Event Start:	9/8/2015 11:00 AM	Event End:	9/8/2015 6:00 PM
Evaluator Name:		Event Duration (HH:MM):	07:00
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7/13/15	Time:	11:00 EDT
Flow at Cornell Gauge:	361	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.2	≥ 16 °C	
Pond Elevation:	906.18	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.8	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	423	Augmented Flow (150% of base):	635	cfs
Start Time:	1000 EDT	Impoundment Water Level:	906.19	ft
End Time:	1700 EDT	Impoundment Water Level:	905.45	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	423	Refill Flow (75% of base):	317	cfs
Start Time:	1700 EDT	Impoundment Water Level:	905.45	ft
End Time:	1000 EDT	Impoundment Water Level:	905.64	ft
End Date:	7/14/15	CCAT No.:	NCREG 7636	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7-14-15	Time:	11:00 EDT
Flow at Cornell Gauge:	397	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.8	≥ 16 °C	
Pond Elevation:	905.63	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	24.1	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	236	Augmented Flow (150% of base):	354	cfs
Start Time:	1100 EDT	Impoundment Water Level:	905.64	ft
End Time:	1800 EDT	Impoundment Water Level:	905.48	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	236	Refill Flow (75% of base):	177	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.48	ft
End Time:	1037 EDT	Impoundment Water Level:	906.19	ft
End Date:	7-15-15	CCAT No.:	NCREG 7640	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7-20-15	Time:	11:00 EDT
Flow at Cornell Gauge:	379	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.0	≥ 16 °C	
Pond Elevation:	906.19	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28.3	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	265	Augmented Flow (150% of base):	398	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.19	ft
End Time:	1800 EDT	Impoundment Water Level:	905.85	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	265	Refill Flow (75% of base):	199	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.85	ft
End Time:	EDT	Impoundment Water Level:	906.01	ft
End Date:	7-21-15	CCAT No.:	NCREG7670	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7/21/15	Time:	11:00 EDT
Flow at Cornell Gauge:	319	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.6	≥ 16 °C	
Pond Elevation:	906.01	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28.7	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	191	Augmented Flow (150% of base):	286.5	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.01	ft
End Time:	1800 EDT	Impoundment Water Level:	905.84	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	191	Refill Flow (75% of base):	143.25	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.84	ft
End Time:	1100 EDT	Impoundment Water Level:	906.05	ft
End Date:	7-22-15	CCAT No.:	NCREG 7672	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7-22-15	Time:	11:00 EDT
Flow at Cornell Gauge:	287	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22	≥ 16 °C	
Pond Elevation:	906.05	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	25.9	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	144	Augmented Flow (150% of base):	216	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.05	ft
End Time:	1800 EDT	Impoundment Water Level:	905.99	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	144	Refill Flow (75% of base):	108	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.99	ft
End Time:	00:44 EDT	Impoundment Water Level:	906.19	ft
End Date:	7/23/15	CCAT No.:	NCREG 7678	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7-23-15	Time:	11:00 EDT	
Flow at Cornell Gauge:	344	150 cfs ≤ Cornell flow ≤ 400 cfs		
Water Temperature - Boney Falls Tailrace:	21.6°	≥ 16 °C		
Pond Elevation:	906.03	> 905.59 ft		

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	29.1°	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	96	Augmented Flow (150% of base):	144	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.03	ft
End Time:	1800 EDT	Impoundment Water Level:	906.09	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	96	Refill Flow (75% of base):	72	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.09	ft
End Time:	0043 EDT	Impoundment Water Level:	906.19	ft
End Date:	7-24-2015	CCAT No.:	NCREG 7680	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1-906-485-2424.

**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	7-25-15	Time:	11:00 EDT
Flow at Cornell Gauge:	397	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.8°	≥ 16 °C	
Pond Elevation:	906.23	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.6°	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	109	Augmented Flow (150% of base):	164	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.23	ft
End Time:	1800 EDT	Impoundment Water Level:	906.15	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	109	Refill Flow (75% of base):	82	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.15	ft
End Time:	2128 EDT	Impoundment Water Level:	906.19	ft
End Date:	7/25/15	CCAT No.:	NCREG 7702	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	7/28	Time:	11:00 EDT
Flow at Cornell Gauge:	370	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	24	≥ 16 °C	
Pond Elevation:	906.17	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	31.6	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	186	Augmented Flow (150% of base):	279	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.17	ft
End Time:	1800 EDT	Impoundment Water Level:	906.10	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	186	Refill Flow (75% of base):	139½	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.10	ft
End Time:	2135 EDT	Impoundment Water Level:	906.19	ft
End Date:	7-28-2015	CCAT No.:	NCREG7713	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	7/29/15	Time:	11:00 EDT
Flow at Cornell Gauge:	353	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	24.1	≥ 16 °C	
Pond Elevation:	906.12	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.5	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No.

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	137	Augmented Flow (150% of base):	206	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.12	ft
End Time:	18:00 EDT	Impoundment Water Level:	906.09	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	137	Refill Flow (75% of base):	103	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	906.09	ft
End Time:	21:46 EDT	Impoundment Water Level:	906.19	ft
End Date:	7-29-15	CCAT No.:	NCREG7724	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	7-30-15	Time:	11:00 EDT
Flow at Cornell Gauge:	336	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23.8	≥ 16 °C	
Pond Elevation:	906.12	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	29.8	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	100	Augmented Flow (150% of base):	150	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.13	ft
End Time:	18:00 EDT	Impoundment Water Level:	905.89	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	100	Refill Flow (75% of base):	75	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	905.89	ft
End Time:	11:00 EDT	Impoundment Water Level:	906.02	ft
End Date:	7-31-15	CCAT No.:	NCREG 7733	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	7.31.15	Time:	11:00 EDT
Flow at Cornell Gauge:	258	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23.7	≥ 16 °C	
Pond Elevation:	906.02	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	29.1	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	164	Augmented Flow (150% of base):	252	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.02	ft
End Time:	18:00 EDT	Impoundment Water Level:	905.74	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	164	Refill Flow (75% of base):	123	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	905.74	ft
End Time:	11:00 EDT	Impoundment Water Level:	906.13	ft
End Date:	8-1-15	CCAT No.:	NC REG 7742	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	8-1-15	Time:	11:00 EDT
Flow at Cornell Gauge:	191	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23.2	≥ 16 °C	
Pond Elevation:	906.13	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.7	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	132	Augmented Flow (150% of base):	198	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.13	ft
End Time:	18:00 EDT	Impoundment Water Level:	905.71	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	49 132	Refill Flow (75% of base):	99	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	905.71	ft
End Time:	11:00 EDT	Impoundment Water Level:	905.86	ft
End Date:	8-2-15	CCAT No.:	NCREG7745	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8-2-15	Time:	11:00 EDT
Flow at Cornell Gauge:	243	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.3	≥ 16 °C	
Pond Elevation:	905.87	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	163	Augmented Flow (150% of base):	244.5	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	905.87	ft
End Time:	18:00 EDT	Impoundment Water Level:	905.41	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	163	Refill Flow (75% of base):	122.25	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	905.41	ft
End Time:	0835 EDT	Impoundment Water Level:	906.19	ft
End Date:	8-3-15	CCAT No.:	NCREG 7746	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8/6/15	Time:	11:00 EDT
Flow at Cornell Gauge:	280	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	19.7	≥ 16 °C	
Pond Elevation:	906.16	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	144	Augmented Flow (150% of base):	216	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.16	ft
End Time:	18:00 EDT	Impoundment Water Level:	906.01	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	144	Refill Flow (75% of base):	108	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	906.01	ft
End Time:	1100 EDT	Impoundment Water Level:	906.15	ft
End Date:	8/7/15	CCAT No.:	NCRE67763	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th 2015

Date:	1100g	Time:	11:00 EDT
Flow at Cornell Gauge:	230	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	19.7	≥ 16 °C	
Pond Elevation:	906.15	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.4	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	84	Augmented Flow (150% of base):	126	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.15	ft
End Time:	1800 EDT	Impoundment Water Level:	906.22	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	84	Refill Flow (75% of base):	63	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.22	ft
End Time:	1800 EDT	Impoundment Water Level:	906.22	ft
End Date:	8/7/15	CCAT No.:	NCREG7768	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1-906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8/10/15	Time:	11:00 EDT
Flow at Cornell Gauge:	336	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	20.8	≥ 16 °C	
Pond Elevation:	906.20	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	NO	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	205	Augmented Flow (150% of base):	307.5	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.20	ft
End Time:	1800 EDT	Impoundment Water Level:	905.98	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	205	Refill Flow (75% of base):	154	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.98 905.59	ft
End Time:	0643 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/11/15	CCAT No.:	NCREG 7702	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8/11/15	Time:	11:00 EDT
Flow at Cornell Gauge:	319	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.8	≥ 16 °C	
Pond Elevation:	906.20	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.5	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Y/N	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	192	Augmented Flow (150% of base):	288	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.20	ft
End Time:	1800 EDT	Impoundment Water Level:	906.05	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	192	Refill Flow (75% of base):	144	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.05	ft
End Time:	01:55 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/12/15	CCAT No.:	NCREG 7787	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8/12/15	Time:	11:00 EDT
Flow at Cornell Gauge:	303	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.3	≥ 16 °C	
Pond Elevation:	906.22	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	25.5	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	174	Augmented Flow (150% of base):	261	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.22	ft
End Time:	1800 EDT	Impoundment Water Level:	906.05	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	174	Refill Flow (75% of base):	131	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.05	ft
End Time:	0607 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/13/15	CCAT No.:	NCREG-7792	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8-13-15	Time:	11:00 EDT
Flow at Cornell Gauge:	287	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.1	≥ 16 °C	
Pond Elevation:	906.14	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	167	Augmented Flow (150% of base):	250	cfs
Start Time:	1000 EDT	Impoundment Water Level:	906.14	ft
End Time:	1700 EDT	Impoundment Water Level:	905.99	ft

1800 EPT

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	167	Refill Flow (75% of base):	125	cfs
Start Time:	1720 EDT	Impoundment Water Level:	905.99	ft
End Time:	01:58 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/14/15	CCAT No.:	NC Reg 7801	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	8-14-15	Time:	11:00 EDT
Flow at Cornell Gauge:	272	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.1°	≥ 16 °C	
Pond Elevation:	906.17	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28.3°	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	144	Augmented Flow (150% of base):	216	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.17	ft
End Time:	1700 EDT	Impoundment Water Level:	906.11	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	144	Refill Flow (75% of base):	108	cfs
Start Time:	1701 EDT	Impoundment Water Level:	906.11	ft
End Time:	2115 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/14/15	CCAT No.:	NCREG7810	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	8-15-15	Time:	11:00 EDT
Flow at Cornell Gauge:	730	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.6	≥ 16 °C	
Pond Elevation:	906.75	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28.6	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	<input checked="" type="radio"/> Yes <input type="radio"/> No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	244	Augmented Flow (150% of base):	366	cfs
Start Time:	1000 EDT	Impoundment Water Level:	906.75	ft
End Time:	1800 EDT	Impoundment Water Level:	905.74	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	244	Refill Flow (75% of base):	183	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.74	ft
End Time:	1100 EDT	Impoundment Water Level:	906.01	ft
End Date:	8-16-15	CCAT No.:	NCR2667817	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	8-16-15	Time:	11:00 EDT
Flow at Cornell Gauge:	184	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.7	≥ 16 °C	
Pond Elevation:	906.01	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	30.2	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	148	Augmented Flow (150% of base):	222	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.01	ft
End Time:	1700 EDT	Impoundment Water Level:	905.94	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	148	Refill Flow (75% of base):	111	cfs
Start Time:	1700 EDT	Impoundment Water Level:	905.94	ft
End Time:	0500 EDT	Impoundment Water Level:	906.19	ft

End Date:	8/17/15	CCAT No.:	NCREG7822
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When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8/17/15	Time:	11:00 EDT
Flow at Cornell Gauge:	184	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23.6	≥ 16 °C	
Pond Elevation:	906.26	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	30.4	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	219	Augmented Flow (150% of base):	328	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.26	ft
End Time:	1800 EDT	Impoundment Water Level:	905.93	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	219	Refill Flow (75% of base):	156	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.93	ft
End Time:	640 EDT	Impoundment Water Level:	906.19	ft
End Date:	8/18/15	CCAT No.:	NCREG7826	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	8-18-15	Time:	11:00 EDT
Flow at Cornell Gauge:	191	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23.2	≥ 16 °C	
Pond Elevation:	906.28	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	24.6	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	199	Augmented Flow (150% of base):	300	cfs
Start Time:	11:00 EDT	Impoundment Water Level:	906.28	ft
End Time:	18:00 EDT	Impoundment Water Level:		ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	199	Refill Flow (75% of base):	149	cfs
Start Time:	18:00 EDT	Impoundment Water Level:	906.13	ft
End Time:	2000 EDT	Impoundment Water Level:	906.19	ft
End Date:	8-18-15	CCAT No.:	NCREG 7833	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	9-1-15	Time:	11:00 EDT
Flow at Cornell Gauge:	210	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	20.2	≥ 16 °C	
Pond Elevation:	906.23	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.7	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	221	Augmented Flow (150% of base):	332	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.22	ft
End Time:	1800 EDT	Impoundment Water Level:	905.84	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	221	Refill Flow (75% of base):	166	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.84	ft
End Time:	1100 EDT	Impoundment Water Level:	906.00	ft
End Date:	9-2-15	CCAT No.:	NCREG 7903	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	9-2-15	Time:	11:00 EDT
Flow at Cornell Gauge:	197	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.5	≥ 16 °C	
Pond Elevation:	906.00	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.2	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	228	Augmented Flow (150% of base):	342	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.00	ft
End Time:	1800 EDT	Impoundment Water Level:	905.56	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	228	Refill Flow (75% of base):	171	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.56	ft
End Time:	1603 EDT	Impoundment Water Level:	906.19	ft
End Date:	9/3/15	CCAT No.:	NCREG 7912	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1-906-485-2424.

Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	9-5-15	Time:	11:00 EDT
Flow at Cornell Gauge:	295	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.6°	≥ 16 °C	
Pond Elevation:	906.13	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.7°	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	255	Augmented Flow (150% of base):	383	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.13	ft
End Time:	1800 EDT	Impoundment Water Level:	905.73	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	255	Refill Flow (75% of base):	191	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.73	ft
End Time:	1100 EDT	Impoundment Water Level:	905.97	ft
End Date:	9-6-15	CCAT No.:	NCREG 7933	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	9-6-15	Time:	11:00 EDT
Flow at Cornell Gauge:	250	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.8°	≥ 16 °C	
Pond Elevation:	905.97	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.7°	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	180	Augmented Flow (150% of base):	270	cfs
Start Time:	1100 EDT	Impoundment Water Level:	905.97	ft
End Time:	1800 EDT	Impoundment Water Level:	905.78	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	180	Refill Flow (75% of base):	135	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.78	ft
End Time:	1100 EDT	Impoundment Water Level:	906.06	ft
End Date:	9-7-15	CCAT No.:	NCREG 7934	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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**Boney Falls – Escanaba Dam #4 FERC Project 2506-04
Record of Augmentation Event**

Window Criteria – May 15th through September 15th

Date:	9/7/15	Time:	11:00 EDT
Flow at Cornell Gauge:	272	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	22.6	≥ 16 °C	
Pond Elevation:	906.06	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	26.3	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	YES	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	139	Augmented Flow (150% of base):	208	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.06	ft
End Time:	1800 EDT	Impoundment Water Level:	906.05	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	139	Refill Flow (75% of base):	104	cfs
Start Time:	1800 EDT	Impoundment Water Level:	906.05	ft
End Time:	2216 EDT	Impoundment Water Level:	906.19	ft
End Date:	9/07/15	CCAT No.:	NCREG 7937	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

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Boney Falls – Escanaba Dam #4 FERC Project 2506-04 Record of Augmentation Event

Window Criteria – May 15th through September 15th

Date:	9/8/15	Time:	11:00 EDT
Flow at Cornell Gauge:	311	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	23	≥ 16 °C	
Pond Elevation:	906.22	> 905.59 ft	

Trigger Criteria

Previous Day Max Water Temperature at Cornell:	28.5	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

Augmentation Record

Base Flow (Total Plant flow from the Boney Falls Project):	286	Augmented Flow (150% of base):	429	cfs
Start Time:	1100 EDT	Impoundment Water Level:	906.22	ft
End Time:	1800 EDT	Impoundment Water Level:	905.82	ft

Refill

Base Flow (Total Plant flow from the Boney Falls Project):	286	Refill Flow (75% of base):	215	cfs
Start Time:	1800 EDT	Impoundment Water Level:	905.82	ft
End Time:	0902 EDT	Impoundment Water Level:	906.19	ft
End Date:	9-9-15	CCAT No.:	NCREG 7942	

When completed, fax this document to the UPPCo Regional Generation Project Manager at: 9-1- 906-485-2424.

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7694	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	07/24/2015	Discovery Date/Time:	7/24/15 10:50
Event Title:	Divergence has begun		
Event Details:	Got a call from the Versa Plant indicating that the gauge reading in below 2.02.		
Immediate Action:	operator took the unit offline		
Recommendations:	n/a		
Potential Causes/Contributors to incident	low flows		
Entered By Name:	David C Paananen	Creation Date/Time:	7/24/15 10:53
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Deviation - End of year report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Deviation of Flow for New Page/Verso - License requirement end of year reporting
Event Start:	7/24/2015 10:00 AM	Event End:	7/26/2015 11:53 AM
Event Duration (HH:MM):	49:53		
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			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7732	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	07/30/2015	Discovery Date/Time:	7/30/15 10:15
Event Title:	Started divergence at Escanaba Unit #1		
Event Details:	Versa reported river gauge at 1.98. Started divergence at Escanaba Unit #1		
Immediate Action:	Stopped all generation		
Recommendations:	None		
Potential Causes/Contributors to incident	None		
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	7/30/15 10:18
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	End of year reporting FERC required action - license condition
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License condition, required operation
Event Start:	7/30/2015 9:52 AM	Event End:	8/4/2015 9:39 AM
Evaluator Name:		Event Duration (HH:MM):	119:47
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7762	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	08/06/2015	Discovery Date/Time:	8/6/15 9:37
Event Title:	Divergence has begun		
Event Details:	Received a call from the Versa Plant indicating that the gauge reading is below 2.02' and that generation should be taken offline to go into divergence.		
Immediate Action:	operator took the unit offline		
Recommendations:	none		
Potential Causes/Contributors to incident	low flows		
Entered By Name:	Terrie S Taylor	Creation Date/Time:	8/6/15 9:43
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	License condition, end of year reporting
Additional Followup Required:	yes		
Category:	Regulatory	Type:	FERC Deviation
Sub Type:	Other	Description:	License condition
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement, end of year reporting
Event Start:	8/6/2015 9:37 AM	Event End:	8/10/2015 12:20 PM
Evaluator Name:		Event Duration (HH:MM):	98:43
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments:	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name:	
Causes:			
Primary Causes:			
Does Eval Require Scening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/12/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7796	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	08/12/2015	Discovery Date/Time:	8/12/15 14:19
Event Title:	EHD1 Divergence		
Event Details:	were notified by Verso Paper that gauge height was below 2.2ft and to take generation off line at Dam 1		
Immediate Action:	contacted operator to take generation off line		
Recommendations:	none		
Potential Causes/Contributors to incident	low flows		
Entered By Name:	Kenneth C Luckeroth	Creation Date/Time:	8/12/15 14:34
Entered By Department:	Energy Supply and Control	Status:	
Reportable to External Agency:		Basis for Reportability:	<i>Retlow 8/17/15 11:34</i>
Additional Followup Required:			
Category:		Type:	
Sub Type:		Description:	
Causal Analysis Level:		Causal Analysis Basis:	
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 Sceening Committee Approval upon Completion			
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

Integrys Energy Group

NC Record Number:	NCREG7891	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	08/30/2015	Discovery Date/Time:	8/30/15 10:59
Event Title:	Divergence		
Event Details:	Received a call requesting that EHD1 Diverge because the level was 2.02		
Immediate Action:	Paged out local operator, via ARCOS, to shut-down unit #1.		
Recommendations:	na		
Potential Causes/Contributors to incident	na		
Entered By Name:	Mark A Nemetz	Creation Date/Time:	8/30/15 11:05
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	Part of annual report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Divergence is done for VERSO - New Page License conditions of DO requirements in the river
Event Start:	8/30/2015 11:05 AM	Event End:	9/3/2015 9:30 AM
Evaluator Name:		Event Duration (HH:MM):	94:25
Evaluation Accepted:		Evaluator Dept:	
Eval Due Date:		Acceptance Comments	
Approver Name:		Eval Completion Date:	
Analysis Description:		Corrective Action Approver Name	
Causes:			
Primary Causes:			
Does Eval Require Sceening Committee Approval upon Completion	-no		
Evaluation Reviewed/Approved by Screening Committee			

CCAT125

Print Date: 01/15/2016

Non-Conformance Event Record Detail

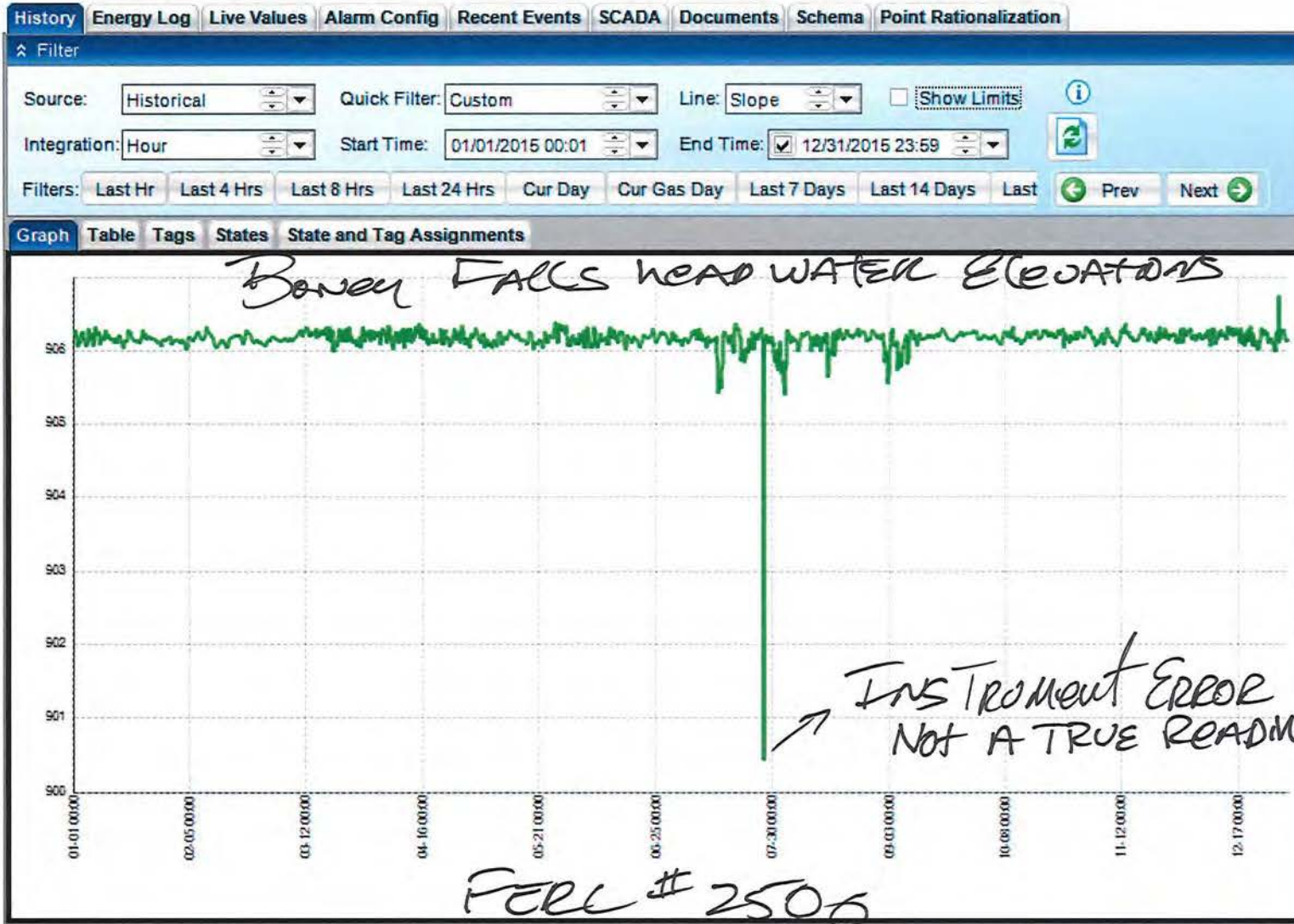
Integrys Energy Group

NC Record Number:	NCREG7998	Entity:	Regional Generation
Company - Level 1 - Level 2:	UPP-Escanaba Hydro-Escanaba #1 Hydro		
Event Date:	09/19/2015	Discovery Date/Time:	9/19/15 9:34
Event Title:	Divergence		
Event Details:	Received a call from Mike Pearson at Verso requesting that, based on current river conditions, we stop all generation at Escanaba dam #1.		
Immediate Action:	Local operator was called out to take generation offline.		
Recommendations:	-		
Potential Causes/Contributors to Incident	Project requirement.		
Entered By Name:	Kevin S Willey	Creation Date/Time:	9/19/15 10:34
Entered By Department:	Energy Supply and Control	Status:	Closed
Reportable to External Agency:	no	Basis for Reportability:	part of annual report
Additional Followup Required:	yes		
Category:	Regulatory	Type:	Other
Sub Type:		Description:	License Requirement
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Required by License conditions and Verso to stop generation and spill water
Event Start:	9/19/2015 10:30 AM	Event End:	10/1/2015 10:30 AM
		Event Duration (HH:MM):	288:00
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 Screening Committee Approval upon Completion	no		
Evaluation Reviewed/Approved by Screening Committee			

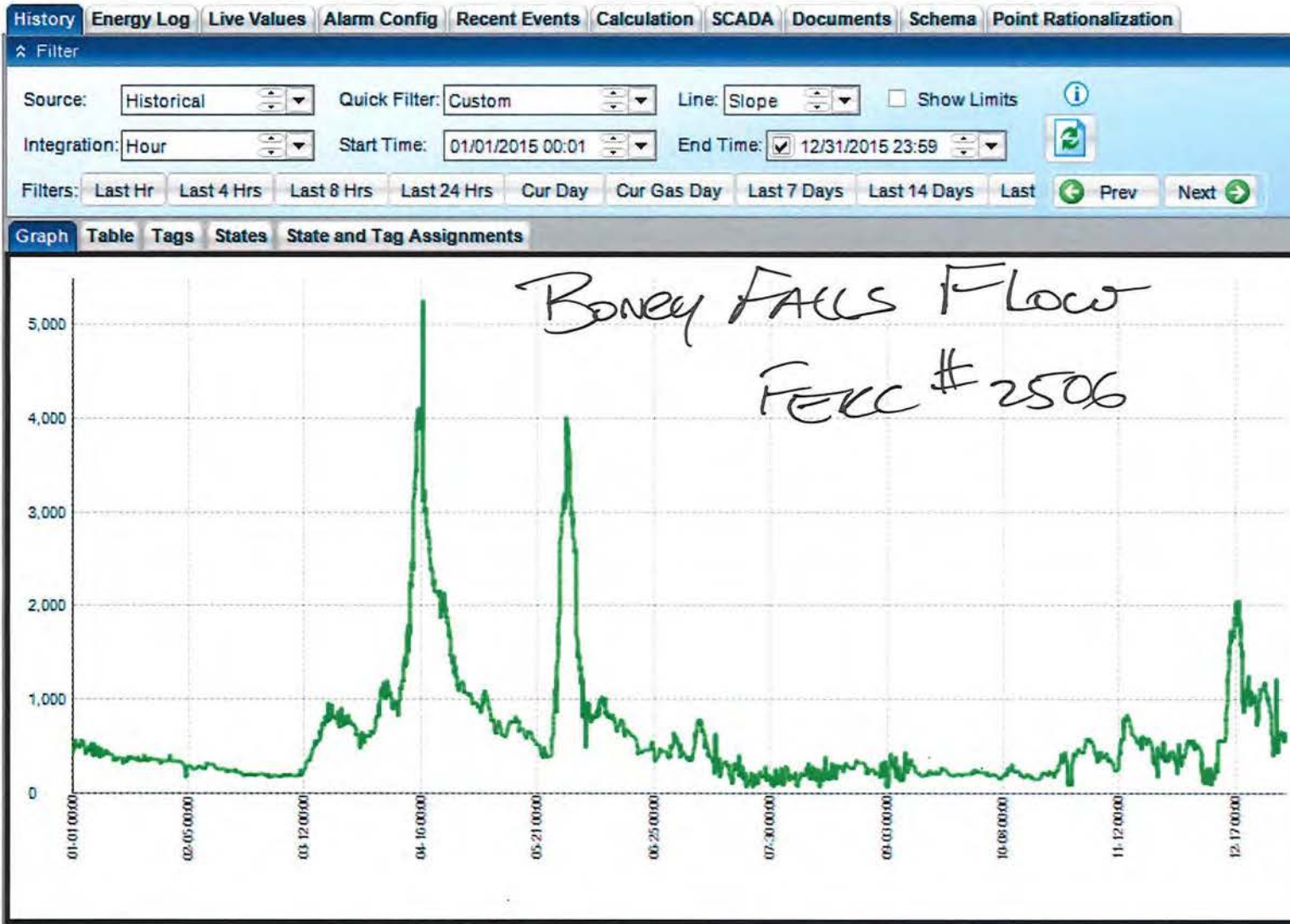
Point Info - UPPCO-BNYH: Headwater Elevation



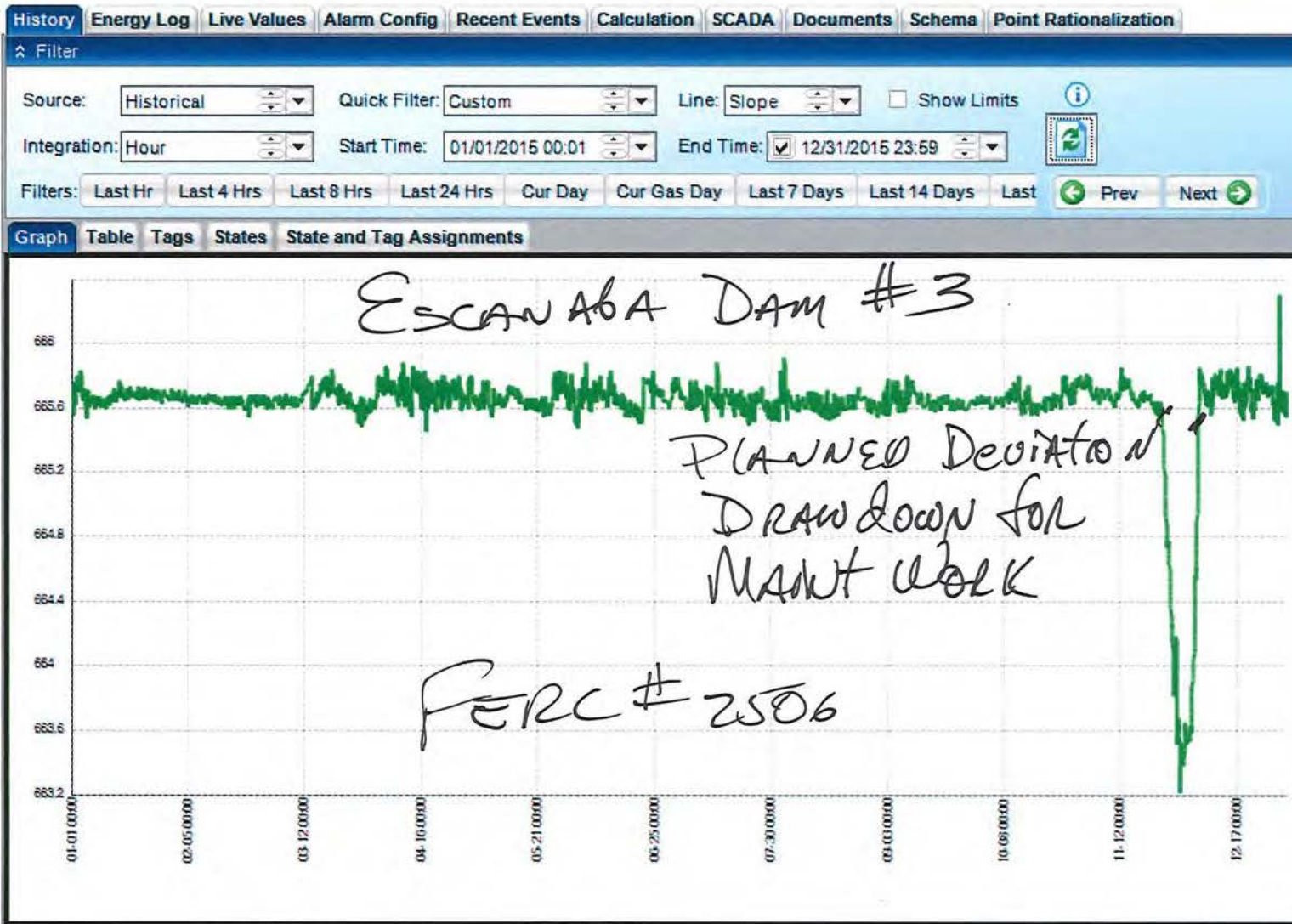
Point Info - UPPCO-BNYH: Headwater Elevation



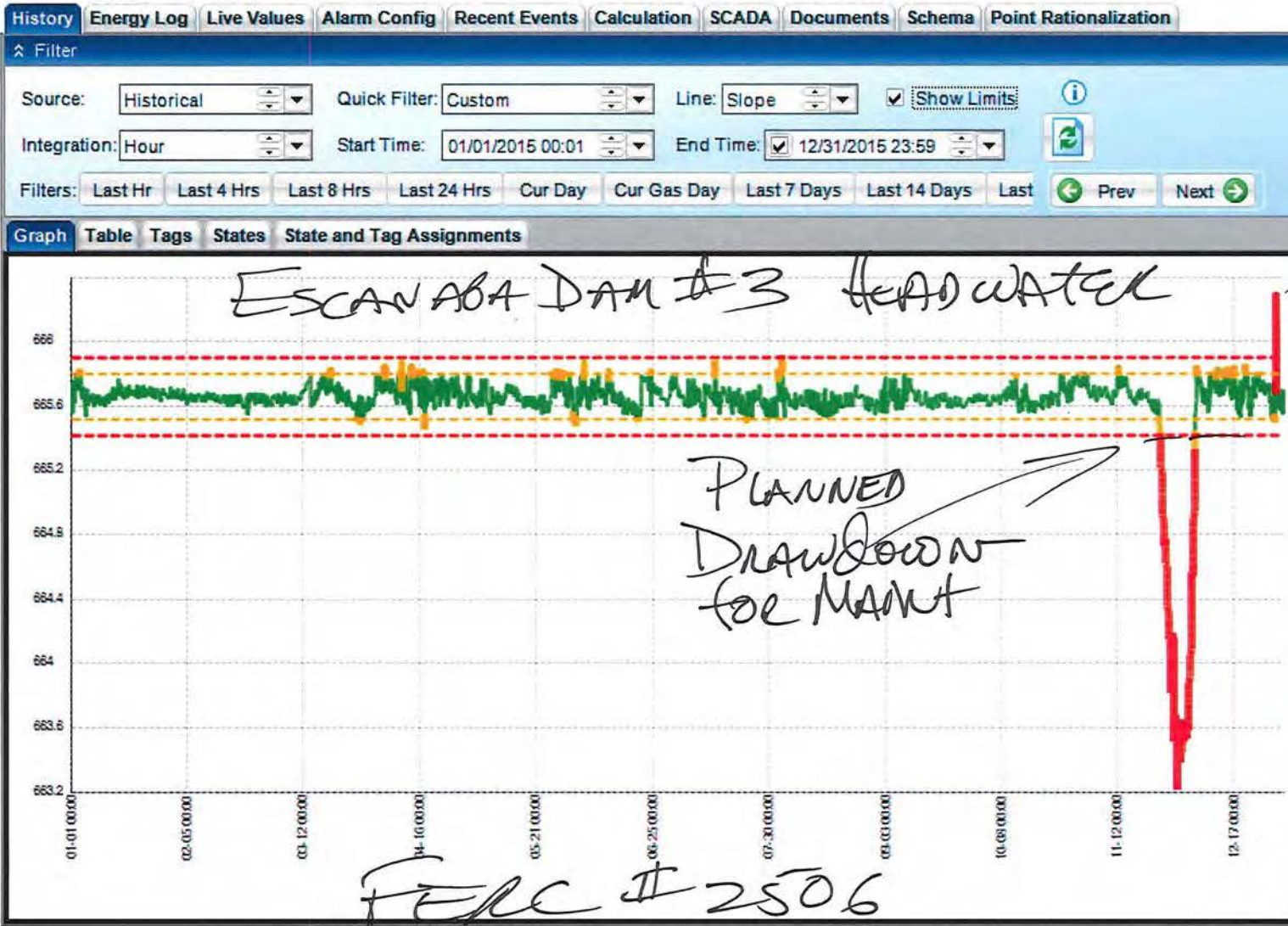
Point Info - UPPCO-BNYH: Total Plant Flow



Point Info - UPPCO-EHD3: Headwater Elevation



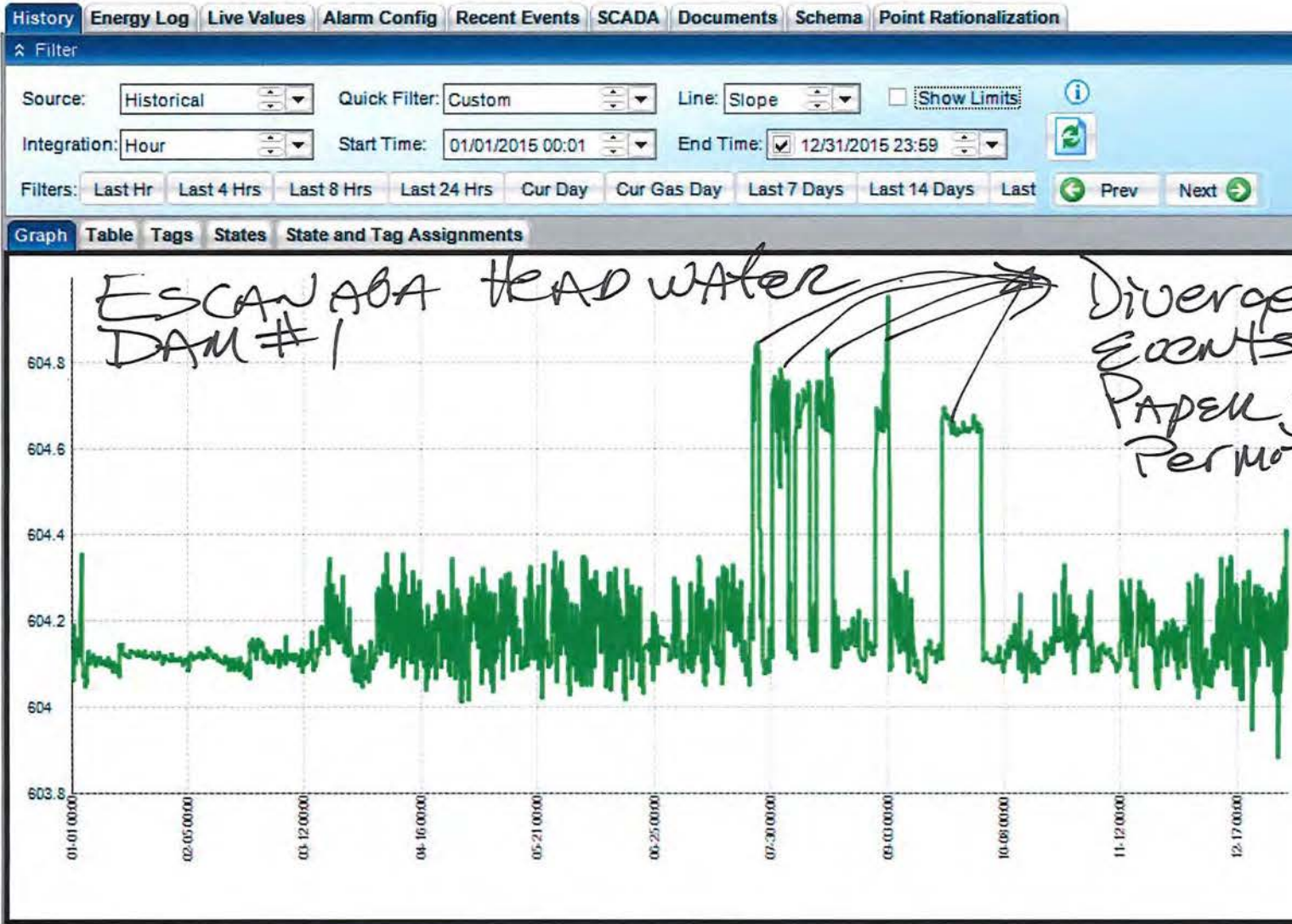
Point Info - UPPCO-EHD3: Headwater Elevation



Point Info - UPPCO-EHD3: Total Plant Flow



Point Info - UPPCO-EHD1: Headwater Elevation



Point Info - UPPCO-EHD1: Total Plant Flow



Document Content(s)

20160225 RGU Annual Dev Rpt.PDF.....1-2

20160225 RGU Annual Dev Ops Rpt attach.PDF.....3-131