

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,

Shlake

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. Robert Meyers, UPPCO Mr. Keith Moyle, UPPCO

Mr. John Zygaj, FERC - CRO Mr. Jarrod Nelson, UPPCO Mr. David Tripp, UPPCO

Appendix 1

Documentation of Consultation



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 <u>Annual Report of Deviations Less Than Sixty Minutes</u>

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,

ame R. Mulchioni

Jim R. Melchiori Supervisor – Regional Generation West

Emily B. Rushford

From:	Fedora, Mark -FS <mfedora@fs.fed.us></mfedora@fs.fed.us>
Sent:	Friday, January 22, 2016 10:50 AM
То:	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@uppco.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@uppco.com

www.uppco.com

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



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,

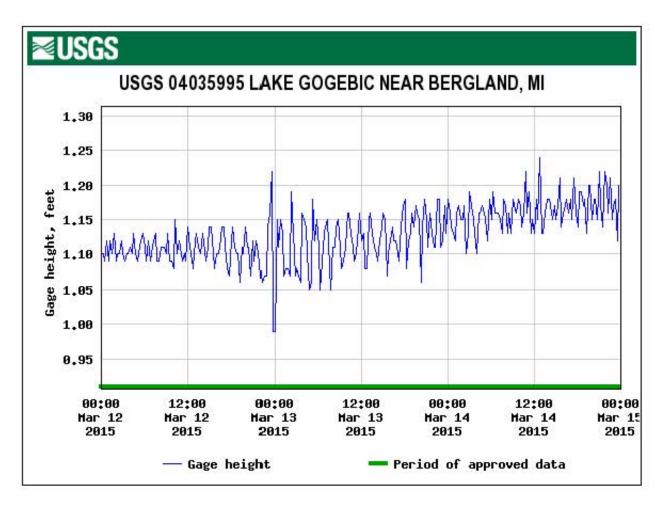
ame R. Melchioni

Jim R. Melchiori Supervisor – Regional Generation West Michigan

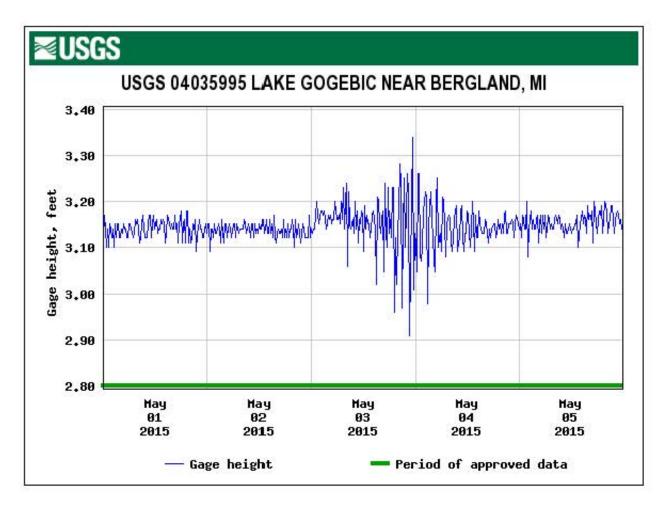
Appendix 2

Annual Report

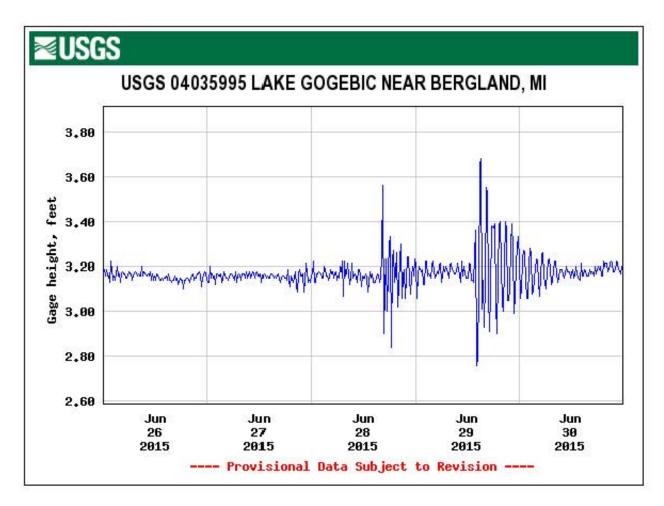
NC Record Numb	er: NCREG7213	Entity:	Regional Generation	
Company - Level		Gogebic		
Event Date:	03/13/2015	Discovery Date/Time	ne: 3/13/15 7:00	
Event Title:	Lake Gogebic Article 401 Deviation	on 3/13/15 Less than 60 N	Minutes	
Event Details: At 2345 hours ET, the Lake Gogebic headwater elevation dropped 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				
Immediate Action:			ulted with BFIT Article 401 Bergland Development representative	
Recommendations: Potential Causes/Contri Entered By Name: Entered By Department:	Continue to closely monitor eleva result in seiche this time of year w butors to incident Wind, I James R Melchiori	tions and flows, to avoid o with ice cover, but wind sti	close to License minimum to benefit Lake residents.	
Reportable to External A		Basis for Reportabil	ility: This event will be reported to Agencies in annual report of	
Additional Followup Red		Busis for Reportable	less than 60 minute deviations in 2016.	
Category: Regulat		Type: FE	RC Deviation	
	ond. (drought, highflows, etc)	Description: Art	ticle 401 Headwater Minimum Elevation Deviation	
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Ba	Isis: 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		Western Hydros	
Evaluation Accepted:	yes	Acceptance Comme	ents Automatically Approved	
Eval Due Date:	3/13/2015	Eval Completion Da		
Approver Name:	Melchiori, James R	Corrective Action A		
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		n 0	
-	ning Committee Approval upon C	ompletion	no	
Evaluation Reviewed/Ap	oproved by Screening Committee			



NC Record Numb	er: NCREG7389	Entity: F	Regional Generation	
Company - Level	1 - Level 2: UPP-Lake Go	ogebic		
Event Date:	05/03/2015	Discovery Date/Time:		
Event Title:	Lake Gogebic Article 401 Deviation	is (3) Less than 60 Minute	es May 3, 2015	
Event Details:	On Sunday May 3, 2015 on three o	ccassions the Lake Goge	ebci headwater elevation dropped slightly below the minimum	
			iations were related to high winds and historical Lake seiche.	
	The headwater was being operated close to Liense midpoint, and very close to the License end of month target. The			
	•	<i>/</i> ·	99' local) and 2230 EST (2.93' local) aa part of the 15 minute	
Immediate Action:	USGS postings for this gauging sta		d end of month target, Lake Gogebic has history of seiche	
inimediate Action.	when high wind conditions are pres		d end of month larget, Lake Gogebic has history of seiche	
Recommendations:	N/A, continue to operate close to m			
Potential Causes/Contri	butors to incident Wind, La	ke seiche, License limts	on headwater limits from April 25 (ice out) to June 10 (3.0' local	
	minmum	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 Reportabilit	y: Will be reported with other Less than 60 minute deviations	
Additional Followup Re	quired: no		for 2015, in 2016. JRM	
Category: Regulat	tory	Type: FER	C Deviation	
Sub Type: River co	ond. (drought, highflows, etc)	Description: Artic	le 401 Lake Gogebic Headwater Elevation	
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Basi	5	
			operating near License midpoint and end of month target	
			elevation.	
Event Start:	5/3/2015 8:45 PM	Event End: 5/3/20	15 9:15 PM Event Duration (HH:MM): 00:30	
Evaluator Name:	Melchiori, James R	Evaluator Dept: W	estern Hydros	
Evaluation Accepted:	yes	Acceptance Commen	ts Automatically Approved	
Eval Due Date:	5/6/2015	Eval Completion Date	2:	
Approver Name:	Melchiori, James R	Corrective Action Ap	prover Name Melchiori, James R	
Analysis Description:	Article 401 Lake Gogebic headwate	er elevation deviations, th	ree occurences, all related to wind and lake seiche while	
	operating very close to License mic		5	
Causes:				
-	Primary Causes: Weather Does Eval Require Sceening Committee Approval upon Completion III			
•	Does Eval Require Sceening Committee Approval upon Completion no Evaluation Reviewed/Approved by Screening Committee No			
Evaluation Reviewed/A	pprovea by Screening Committee			

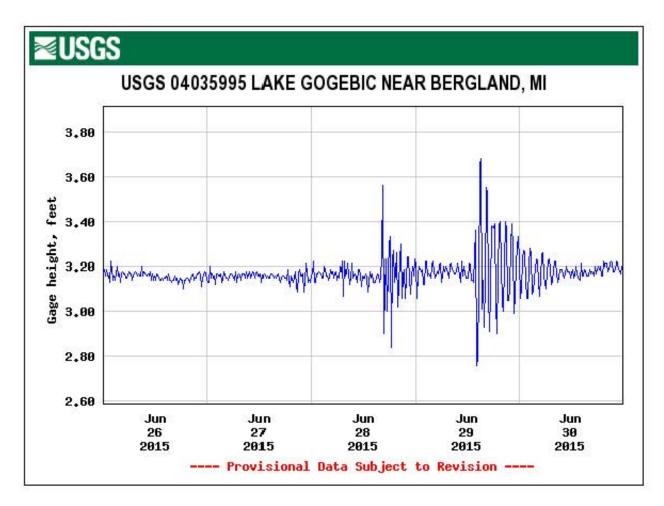


NC Record Numb	er: NCREG7579	Entity: R	egional Generation	
Company - Level	1 - Level 2: UPP-Lake Go	ogebic		
Event Date:	06/29/2015	Discovery Date/Time:	6/29/15 9:39	
Event Title:	June 28, 2015 Lake Gogebic Article	e 401 Deviation (Maximum	Elevation)	
Event Details:	On Sunday June 28, 2015 at appro	eximately 1630 EST, the La	ake Gogebic headwater elevation peaked at 3.56' local (1296.26'	
	msl), slightly above the License ma	ximum 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 inter	rval 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 Poissar	t. The event duration was approximately 15 minutes and will	
	be reported with the annual report	of deviations that were less	s than 60 minutes. The headwater was being operated slightly	
	lower than the License end of mon	th target at the time, and L	ake Gogebic has a history of minor deviations related to seiche.	
	No adverese environmental affects	were observed related to	the deviation.	
Immediate Action:			License end of month target elevation, wind and related storm	
	in area caused sieche and slioght o			
Recommendations:	None, continue to operate headwar	-	Pro Manual and a standard and a factor	
Potential Causes/Contri			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 A	Agency: no	Basis for Reportability		
Additional Followup Re	quired: no		60 minutes for 2015.	
Category: Regulat	tory	Type: FERC	Deviation	
Sub Type: River co	ond. (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: 6/28/20	15 4:37 PM Event Duration (HH:MM): 00:15	
Evaluator Name:	Melchiori, James R		stern Hydros	
Evaluation Accepted:	yes	Acceptance Comment	s Automatically Approved	
Eval Due Date:	6/29/2015	Eval Completion Date:		
Approver Name:	Melchiori, James R	Corrective Action App	rover Name Melchiori, James R	
Analysis Description:	On Sunday June 28, 2015 at appro	ximately 1630 EST, the La	ake Gogebic headwater exceeded the License limit of 3.50' local	
	to 3.56' local for approximately 15 i	minutes. The deviation was	s 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 Scee	Does Eval Require Sceening Committee Approval upon Completion no			
Evaluation Reviewed/A	pproved by Screening Committee			

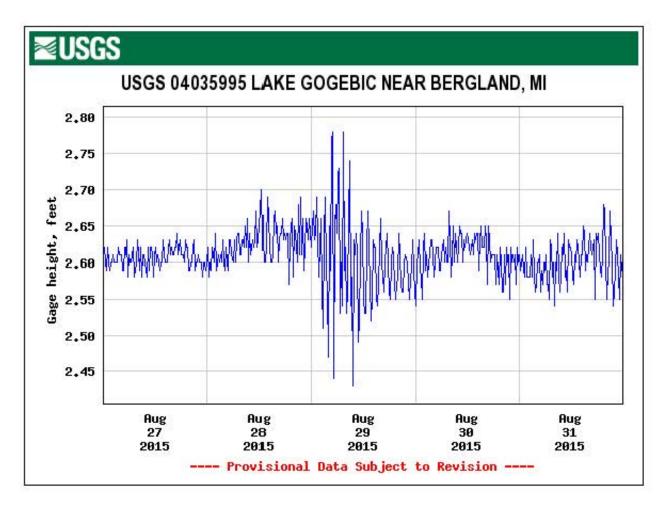


NC Record Numb		Entity:	Regional Generation	
Company - Level		0		
Event Date:	06/29/2015	Discovery Date/Ti		
Event Title:	6/29/15 1730 ET Lake Gogebic Arti	cle 401 Headwater (N	(Max) Deviation	
Event Details:	On Monday June 29, 2015 at appro	ximately 1730 hours	rs ET, the Lake gogebic headwater elevation rose above the Article	
	401 License maximum of 3.5' local	to 3.55' local, and ret	eturned to normal range by 1800 hours ET. The deviation was result of	
	storm, wind, seiche and operations	slightly below Licens	nse end of month target.	
Immediate Action:	None			
Recommendations:	None			
Potential Causes/Contri			storical), operations close to end of month target.	
Entered By Name:	James R Melchiori	Creation Date/Tim		
Entered By Department:	Western Hydros	Status: Approve	ved	
Reportable to External A	Agency: no	Basis for Reporta	-	
Additional Followup Ree	quired: no		annual report.	
Category: Regulat	tory	Type: F	FERC Deviation	
Sub Type: River co	ond. (drought, highflows, etc)	Description: I	Lake Gogebic Article 401 max headwater elevation deviation	
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis E		
			below end of month target resulted in minor maximum headwater deviation.	
Event Start:	6/29/2015 5:30 PM	Event End: 6/2	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 Com	mments Automatically Approved	
Eval Due Date:	6/30/2015	Eval Completion I	n Date:	
Approver Name:	Melchiori, James R	Corrective Action	on Approver Name Melchiori, James R	
Analysis Description:	On Monday June 29, 2015 Lake go	gebic headwater elev	evation 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:	Primary Causes: Weather			
Does Eval Require Sceening Committee Approval upon Completion no				
Evaluation Reviewed/A	pproved by Screening Committee			

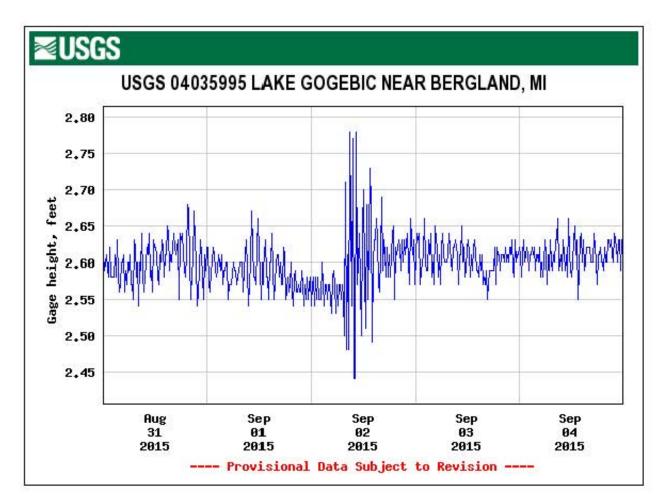
NC Record Numb	er: NCREG7586	Entity:	Regional Generation		
Company - Level	1 - Level 2: UPP-Lake G	ogebic			
Event Date:	06/29/2015	Discovery Date/Ti	me: 6/30/15 7:30		
Event Title:	6/29/15 1600 ET Lake Gogebic Ar	ticle 401 Headwater El	levation Deviation (Maximum)		
Event Details:	On Monday June 29, 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 deviat	ion was 3.68' local, as	measured by USGS gauging station 04035995. The reservoir was		
	being operated slightly below the	License end of month ta	arget at the time of the deviation, and a severe storm in the area		
	with high winds caused a lake seid				
Immediate Action:	•	ense end of month targe	et elevations and wind related lake seiche resulted in deviation.		
Recommendations:	None.				
Potential Causes/Contri	·····		nd of month target, storm and related wind, history of seiche on the		
Entered By Name:	James R Melchiori	Creation Date/Tim	ne: 6/30/15 9:56		
Entered By Department:		Status: Approve			
Reportable to External A		Basis for Reportal			
Additional Followup Red		Dasis for Reportal	deviations for year as part of annual report.		
	•	Turner F	ERC Deviation		
Category: Regulat		1300.			
Sub Type: River co	ond. (drought, highflows, etc)	Description: A	Article 401 Headwater Elevation (max) Deviation		
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis B			
			month target, storm, wind and Lake seiche.		
Event Start:	6/29/2015 4:00 PM	Event End: 6/2	29/2015 4:30 PM Event Duration (HH:MM): 00:30		
Evaluator Name:	Melchiori, James R	Evaluator Dept:	Western Hydros		
Evaluation Accepted:	yes	Acceptance Comm	ments 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 app	roximately 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	T. 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 Sceening Committee Approval upon Completion no					
Evaluation Reviewed/Ap	pproved by Screening Committee				



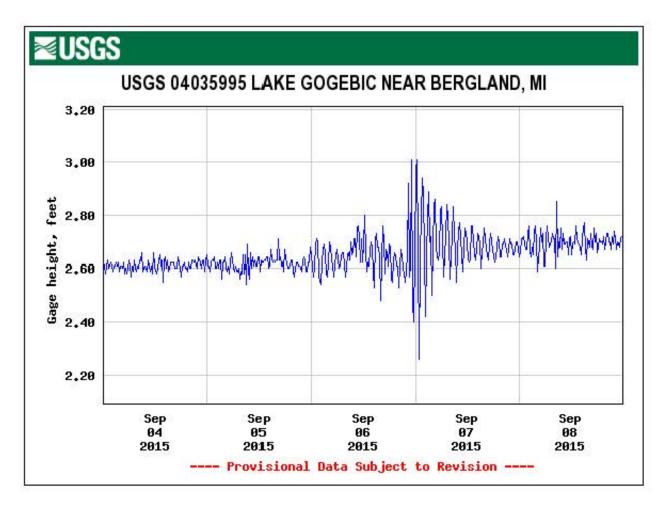
NC Record Number: NCREG7898	Entity: R	egional Generation		
Company - Level 1 - Level 2: UPP-Lake G	ogebic			
Event Date: 08/31/2015	Discovery Date/Time:	8/31/15 10:13		
Event Title: August 29, 2015 Lake Gogebic Art	icle 401 Headwater Minim	um Deviations		
Event Details: ON August 29, 2015 at 0345, 0445	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	or short durations of time	(under 30 minutes for each instance. The lowest elevation		
reached was 2.43' local which occ	urred at the 0930 EST star	np. The deviations were result of wind and related seiche		
		perating very close to the License minimum outflow. The entire		
Bond Falls watershed has been op	• • • •			
	minimums due to dry yea	r conditions, deviation the result of wind and lake related seiche.		
Recommendations: None				
		nums, wind, seiche and dry year conditions. 8/31/15 10:21		
	Creation Date/Time:	0/31/13 10.21		
Entered By Department: Western Hydros	Status: Approved			
Reportable to External Agency: no	Basis for Reportabilit			
Additional Followup Required: no		report for 2015.		
Category: Regulatory	Type: FER	C Deviation		
Sub Type: River cond. (drought, highflows, etc)	Description: Artic	le 401 Headwater minimum Deviations		
Causal Analysis Level: Apparent cause evaluation	Causal Analysis Basi	S: Operations close to License minimum due to dry year conditions,		
		wind and Lake seiche.		
Event Start: 8/29/2015 2:30 AM	Event End: 8/29/2	D15 3:00 AM Event Duration (HH:MM): 00:30		
Evaluator Name: Melchiori, James R	Evaluator Dept: We	estern Hydros		
Evaluation Accepted: yes	Acceptance Commen	ts Automatically Approved		
Eval Due Date: 8/31/2015	Eval Completion Date	:		
Approver Name: Melchiori, James R	Corrective Action App	prover Name Melchiori, James R		
Analysis Description: The Lake Gogebic headwater elev	ation dropped below the L	icense 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.	,			
	lose to License minimums due to dry year conditions, wind. Lake seiche.			
Primary Causes: Weather				
Does Eval Require Sceening Committee Approval upon Co	mpletion no			
Evaluation Reviewed/Approved by Screening Committee				



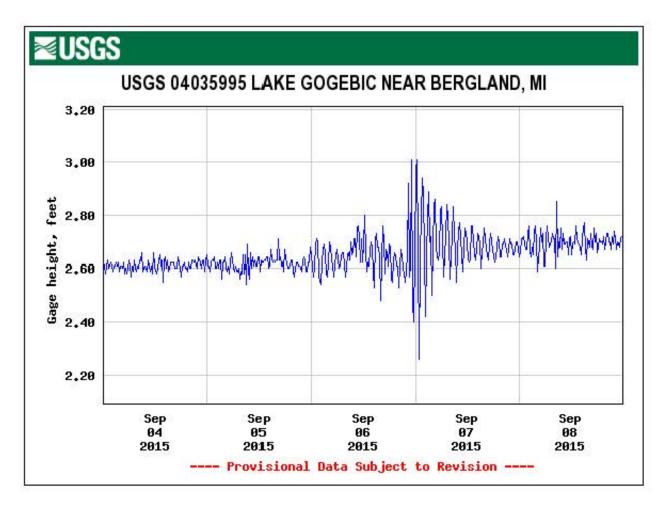
NC Record Numb	er: NCREG7938	Entity:	Regional Generation	
Company - Level	1 - Level 2: UPP-Lake G	ogebic		
Event Date:	09/02/2015	Discovery Date/Time	e: 9/2/15 15:00	
Event Title:	September 2, 2015 Lake Gogebic	Article 401 Headwater M	<i>I</i> inimum Deviations (4)	
Event Details:	On Wednesday September 2, 201	5 at 0800, 0830, 0945 an	nd 1400 hours EST the Lake Gogebic headwater elevation	
	dropped slightly below the License	e minimum of 2.5' local for	or 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			
			f wind and related Lake seiche while operating slightly below the	
	•		e to the License minimum outflows. The entire Bond Falls License	
Immediate Action:	watershed has been operating un		ar conditions, deviation result of wind and related Lake seiche,	
inimediate Action.	which is historical for this facility/d		ar conditions, deviation result of wind and related Lake Seiche,	
Recommendations:	None	evelopment.		
Potential Causes/Contri	butors to incident Operati	ons close to License mini	nimum 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 Reportabil	lity: Will be reported as part of Deviations under 60 minutes in	
Additional Followup Re	quired: no		annual report for 2015.	
Category: Regula	ory	Type: FER	RC Deviation	
Sub Type: River co	ond. (drought, highflows, etc)	Description: Arti	ticle 401 License minimum deviations (4)	
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis Bas	sis: Historical event for this development. Operations close to License	
			minimum due to dry year condtions, wind and Lake seiche.	
Event Start:	9/2/2015 9:30 AM	Event End: 9/2/20	2015 10:15 AM Event Duration (HH:MM): 00:45	
Evaluator Name:	Melchiori, James R	Evaluator Dept: W	Nestern Hydros	
Evaluation Accepted:	yes	Acceptance Comme	ents Automatically Approved	
Eval Due Date:	9/8/2015	Eval Completion Dat	ite:	
Approver Name:	Melchiori, James R	Corrective Action Ap	pprover Name Melchiori, James R	
Analysis Description:	On Wednesday September 2, 201	5 the Lake Gogebic head	dwater 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:				
Primary Causes:	ning Committee Approval upon Co	moletion	no	
•	pproved by Screening Committee			
Evaluation Reviewed/A	proved by Screening Committee			



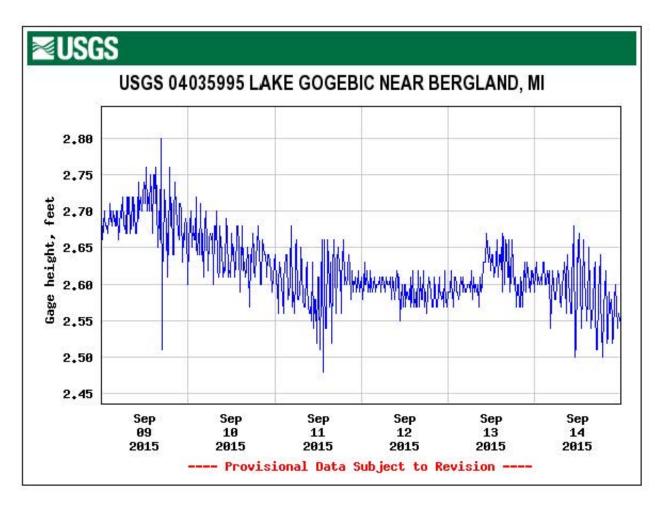
NC Record Numb	er: NCREG7940	Entity:	Regional Generatio	n
Company - Level		0		
Event Date:	09/06/2015	Discovery Date/Tir		
Event Title:	September 6, 2015 Lake Gogebic	Article 401 Headwater	Minimum Deviations (2)	
Event Details:	On Sunday September 6, 2015 at	1600 and 2315 hours E	ST, the Lake Gogebic he	adwater elevation dropped slightly below
	the License minimum of 2.5' local f	or one half hour, and 4	5 minutes respectively. Th	e deviations were the result of
	operations close to License minim	ums due to dry year co	nditions, wind and Lake se	iche, which is a historical condition for
	this development.			
Immediate Action:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	to License minimum d	ue to dry conditions, , dev	ation result of wind and related Lake
	seiche.			
Recommendations:	none			al la la castala a
Potential Causes/Contri			inimum, dry condtions, wir	a Lake seiche.
Entered By Name:	James R Melchiori	Creation Date/Time		
Entered By Department:	Western Hydros	Status: Approve	3	
Reportable to External A	igency: no	Basis for Reportat	•	with Under 60 minute deviations in annual
Additional Followup Red	quired: no		report for 2015.	
Category: Regulat	ory	Type: F	ERC Deviation	
Sub Type: River co	nd. (drought, highflows, etc)	Description: A	rticle 401 License minimu	n deviations (2)
Causal Analysis Level:	Apparent cause evaluation	Causal Analysis B	asis: Facility being op condtions, wind	erated very close to License minimum due to dry 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 Comm	ents Automatically	Approved
Eval Due Date:	9/8/2015	Eval Completion D	ate:	
Approver Name:	Melchiori, James R	Corrective Action	Approver Name	lelchiori, James R
Analysis Description:	On Sunday September 6, 2015 at	1600 and 2315 hours E	EST, the Lake Gogebic he	adwater 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 mini			historical for this Lake.
Causes:	Operations close to License minim	um due to dry year cor	ndtions, wind, seiche.	
Primary Causes:	mary Causes: Weather			
Does Eval Require Sceening Committee Approval upon Completion no				
Evaluation Reviewed/Ap	proved by Screening Committee			



NC Record Numb	er: NCREG7941	Entity: Reg	egional Generation		
Company - Level		0			
Event Date:	09/07/2015	Discovery Date/Time:	9/7/15 7:30		
Event Title:	September 7, 2015 Lake Gogebic	Article 401 Headwater Minim	mum Deviations (2)		
Event Details:	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 miuntes each). The lowest elevation reached during the				
			is close to License minimum due to dry year conditions, wind		
	and Lake seiche, which is historica	I for this development.			
Immediate Action:	None.				
Recommendations:	None.				
Potential Causes/Contri	James R Melchiori	ons close to License minimur	9/8/15 9:33		
Entered By Name:		Creation Date/Time:	9/0/15 9.55		
Entered By Department:		Status: Approved			
Reportable to External A		Basis for Reportability:			
Additional Followup Rec	quired: no		under 60 minutes.		
Category: Regulat	ory	Type: FERC I	Deviation		
Sub Type: River co	ond. (drought, highflows, etc)	Description: Article	e 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	5 1:00 AM Event Duration (HH:MM): 00:30		
Evaluator Name:	Melchiori, James R	Evaluator Dept: West	stern Hydros		
Evaluation Accepted:	yes	Acceptance Comments	s Automatically Approved		
Eval Due Date:	9/8/2015	Eval Completion Date:			
Approver Name:	Melchiori, James R	Corrective Action Appro	rover Name Melchiori, James R		
Analysis Description:	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 minutres or less each event. The deviations were result of operations close to License				
	minimum due to dry year condition	s, wind and related lake seic	iche, which is historical for this development.		
Causes:	Operations close to License minim	um due to dry year condition	ons, wind seiche.		
Primary Causes:	Weather				
Does Eval Require Sceening Committee Approval upon Completion no					
Evaluation Reviewed/Ap	pproved by Screening Committee				

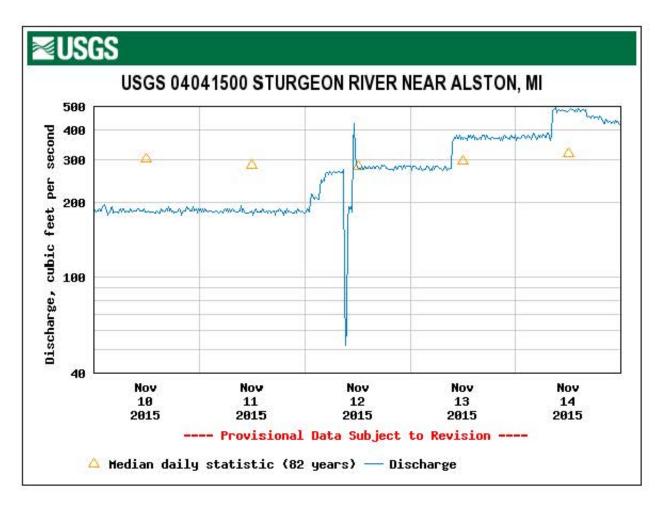


NC Record Numb	er: NCREG7970	Entity: Reg	ional Generation	
Company - Level	1 - Level 2: UPP-Lake Go	gebic		
Event Date:	09/11/2015	Discovery Date/Time:	9/12/15 6:30	
Event Title:	September 11, 2015 Lake Gogebic	Article 401 Headwater Minim	num Deviation	
Event Details:	On Friday September 11, 2015 at a	pproximately 1315 hours ED	T, 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 operatio	ns close to Licesne minimun	n due to dry year conditions, wind and seiche, which is	
	historical for this development.			
Immediate Action:	None			
Recommendations:	None			
Potential Causes/Contri		ns close to License minimum	s, 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 A	Agency: no	Basis for Reportability:	Event will be included with 2015 Annual report for	
Additional Followup Re	quired: no		deviations under 60 minutes	
Category: Regulat	tory	Type: FERC D	eviation	
Sub Type: River co	ond. (drought, highflows, etc)	Description: Article 4	01 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: Weste	rn Hydros	
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved	
Eval Due Date:	9/14/2015	Eval Completion Date:		
Approver Name:	Melchiori, James R	Corrective Action Approv	ver Name Melchiori, James R	
Analysis Description:	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 minimu	,		
Causes:	Dry year conditions, operations close	e to License minimums, wind	i, seiche.	
Primary Causes:	Weather			
Does Eval Require Sceening Committee Approval upon Completion no				
Evaluation Reviewed/A	pproved by Screening Committee			

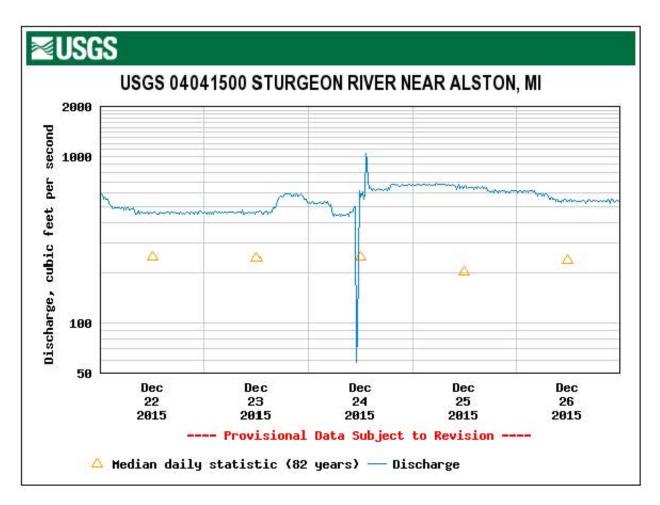


NC Record Number: NCREG8206 Entity: Regional Generation					
Company - Level 1 - Level 2: UPP-Prickett Hydro					
Event Date: 11/12/2015 Discovery Date/Time: 11/12/15 7:52					
Event Title: Prickett Hydro plant trip					
Event Details: At 0752, the on line unit at Prickett (# 2) tripped with many accompanying 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					
Additional Followup Required: no deviations under 60 minutes					
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	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.					
rry Causes: Weather					
Does Eval Require Sceening Committee Approval upon Completion no no					
Evaluation Reviewed/Approved by Screening Committee					

Print Date: 01/12/2016



NC Record Numb	er: NCREG8396	Entity: Regi	onal Generation		
Company - Level		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	w. DOC indicated the Substa	tion 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 Luckeroth	Creation Date/Time:	12/24/15 11:49		
Entered By Department:	Energy Supply and Control	Status: Approved			
Reportable to External A	Agency: no	Basis for Reportability:	Deviation will be reported with annual report with other		
Additional Followup Red	quired: no		under 60 minute deviations.		
Category: Regulat	ory	Type: FERC De	eviation		
Sub Type: Trans. S	Sys. (storm related)	Description: Article 40	01 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	5 10:30 AM Event Duration (HH:MM): 00:45		
Evaluator Name:	Melchiori, James R	Evaluator Dept: Wester	n Hydros		
Evaluation Accepted:	yes	Acceptance Comments	Automatically Approved		
Eval Due Date:	12/28/2015	Eval Completion Date:			
Approver Name:	Melchiori, James R	Corrective Action Approv	er Name Melchiori, James R		
Analysis Description:	High winds caused tree to hit transm	nission 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 Sceening Committee Approval upon Completion no					
Evaluation Reviewed/Ap	proved by Screening Committee				



Emily B. Rushford

From:	Fedora, Mark -FS <mfedora@fs.fed.us></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 <u>mfedora@fs.fed.us</u>

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

Caring for the land and serving people

From: Emily B. Rushford [mailto:EBRushford@uppco.com]
Sent: Friday, January 22, 2016 9:52 AM
To: krugerk@michigan.gov; burr_fisher@fws.gov; Fedora, Mark -FS; gmensch@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@uppco.com

www.uppco.com

Follow UPPCOstorm on Twitter for timely outage updates.



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,

Robert Alleria

Bob Meyers Project Manager - Regional Generation MI



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,

ugh

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

Enc. Operational data

RJM/wmp

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

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		1		
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

7/13,7/14,7/20,7/21,7/22,7/23,7/25,7/28,7/29,7/30,7/31,8/1,8/2,8/6,8/7,8/10,8/11,8/12,3/13,8/14,8/16, 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

Print Date: 01/12/2016

NC Record Num Company - Leve		Entity: Regi aba Hydro-Escanaba #3	onal Generation	
Event Date:	04/09/2015	Discovery Date/Time:	4/9/15 23:57	
Event Title:	ROR interrupted			
Event Details:		dditional operator. Unit 1 place	opened to restore flow, When opera I back on line at 02:07 CDT and gat paired.	
Recommendations:	none			
Potential Causes/Con		'n		
Entered By Name:	Kenneth C Luckeroth	Creation Date/Time:	4/10/15 2:28	
Entered By Departmen	nt: Energy Supply and Control	Status: Closed		
Reportable to Externa	Agency: no	Basis for Reportability:	< 60 minute trip that needs to go	to End of Year report
Additional Followup R	equired: yes			
Category: Regul	atory	Type: FERC D	viation	
	equip. failure	Description:		
Causal Analysis Level	: Closed - No further action required	Causal Analysis Basis:	Units tripped when Unit 2 had a g generator. When the operators g on. Have to repair lead that failed	ot to plant, got other unit back
Event Start:	4/9/2015 11:58 PM	Event End: 4/10/2015	2:16 AM Event D	Duration (HH:MM); 00:18
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name: Analysis Description:		Corrective Action Approv	er Name	
Causes:				
Primary Causes:				
Does Eval Require Sce	eening Committee Approval upon Co	ompletion no		
Evaluation Reviewed/	Approved by Screening Committee			

Point Info - UPPCO-EHD3: Total Plant Flow

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Print Date: 01/12/2016

NC Record Numb	er: NCREG7313	Entity: Reg	ional Generatio	n	
Company - Level	1 - Level 2: UPP-Escana #4 Hydro)	iba Hydro-Boney Falls (I	Escanaba		
Event Date:	04/12/2015	Discovery Date/Time:	4/12/15 12:39		
Event Title:	Plant trip				
Event Details:	Battery Charger Failure and Batte functionality was also restored so	y Charger Loss of AC alarms. I was able to raise the gate an alched a lineperson. As of 124	At 0908 the power d prevent any head	it was cycling on and off. We received was restored to the plant and gate devel violations. Jerry Pirkola was calle still offline and New Page is checking	d
Immediate Action:	Called out operator and opened m	Consider and the second s			
Recommendations:	None.				
Potential Causes/Contri	butors to incident Power	oss at plant, may have been c	aused by somethin	g at New Page.	
Entered By Name:	Stephen M Beime	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 Re	quired: yes				
Category: Regula	tory	Type: FERC D	eviation		
Sub Type: Plant e	quip. failure	Description: Problem	at Mead Sub		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Plant trippped a cable in the Me	it 08:51 because of a fault in the underg ad Sub station	pround
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 Approv	er Name		
Analysis Description:					
Causes:					
Primary Causes:					
The second se	ening Committee Approval upon Co	mpletion no			
Evaluation Reviewed/A	pproved by Screening Committee				

Point Info - UPPCO-BNYH: Total Plant Flow

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Print Date: 01/12/2016

NC Record Number: Company - Level 1 - Leve	NCREG7565	Entity: Regional Generation aba Hydro-Escanaba #3 Hydro	
Event Date: 06/24/2		Discovery Date/Time: 6/24/15 13:24	
Event Title: Unit #2	Trip		
emerge pressur	ncy high. By 1320 Jerry h e lockout.	e gate was opened and the Jerry was called out. The headlevel never got above the ad both units 1 and 2 back online. Jerry said unit #2 tripped due to an oil flow or oil	
Immediate Action: Gate op	ened and operator called		
Recommendations: None.			
Potential Causes/Contributors to		v or oil pressure lockout.	
Entered By Name: Stepher	n M Beime	Creation Date/Time: 6/24/15 13:37	
Entered By Department: Ener	gy 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		Type: FERC Deviation	
Sub Type: Plant equip. failu	e	Description: <60 minutes	
	sed - No further action uired	Causal Analysis Basis: Unit at plant tripped, high oil temp, gate opened flow returned	
Event Start: 6/24/20	15 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:		and a construction of the set of the Product of the	
Causes:			
Primary Causes:		No. of States and States	
Does Eval Require Sceening Con	mittee Approval upon C	ompletion no	
Evaluation Reviewed/Approved b			- T

Point Info - UPPCO-EHD3: Total Plant Flow

History		Log	Values	Alarm Config	Recent Event	s Calculat	ion SCADA	Document	ts Schem	a Point F	Rationalizati	on
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Print Date: 01/12/2016

NC Record Number: NCREG7664 Company - Level 1 - Level 2: UPP-Es	Entity: Regional Generation scanaba Hydro-Escanaba #1 Hydro
Event Date: 07/19/2015	Discovery Date/Time: 7/19/15 2:49
Event Title: Unit #1 unloaded and did no	ot trip offline
Event Details: Unit #1 unexpectedly unload	ded but did not trip offline. This temporarily resulted in no flow.
Immediate Action: Opened gate and dispatche	
Recommendations: Investigate and place unit o	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 Conti	trol 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 act	
required	away to estiblish 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:	and a second
Causes:	
Primary Causes:	
Does Eval Require Sceening Committee Approval up	pon Completion no
Evaluation Reviewed/Approved by Screening Comm	



Live Values Alarm Config Recent Events Calculation SC S Filter Site Site Site Site Site Site Site Site	ADA Documents Schema Point Rationalization
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Print Date: 01/12/2016

Event Date:	1 - Level 2: UPP-Escana 08/11/2015	aba Hydro-Escanaba #3 Discovery Date/Time:	8/11/15 22:44		
Event Title:	369 ACB [Open]	Disservery Date (mile)	40 5 7 5 7 F 17 17 18 4 A		
Event Details:	Unit #2 tripped off line while gener	rating at .65 MWs (390 cfs)			
Immediate Action:	Immediately opened Gate #3 to a	pproximately 390 cfs.			
Recommendations:	Paged out local operator (Mike Mo	cintosh) via ARCOS.			
Potential Causes/Contr	ibutors to incident Unknow	vn 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 b	e end of year report	
Additional Followup Re	quired: yes				
Category: Regula	tory	Type: FERC De	eviation		
Sub Type: Plant e	quip. failure	Description:			
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	site, only alarm he	Governor Oil pressure, when oper could fine, started up unit and thing C operator had gate open within 5 r	s have
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: Analysis Description:		Corrective Action Approv	er Name		
Causes:					
Primary Causes:					
Does Eval Require Sce	ening Committee Approval upon Co	ompletion no			

Point Info - UPPCO-EHD3: Total Plant Flow

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#### Print Date: 01/12/2016

Company - Level 1	I - Level 2: UPP-Escana #4 Hydro)	aba Hydro-Boney Falls (Escanaba
Event Date:	08/28/2015	Discovery Date/Time: 8/28/15 1:13
Event Title:	Boney Falls unit # 1 trip	
Event Details: Immediate Action: Recommendations:	Unit # 1 tripped off line and unit # Attempted to start # 3 and opened none	3 would not start (# 2 out of service). Local operator placed # 1 back online. gate.
Potential Causes/Contrib	utors to incident n/a	
Entered By Name: Entered By Department:	Jonathon J Jenkins Energy Supply and Control	Creation Date/Time; 8/28/15 2:55 Status: Closed
Reportable to External A Additional Followup Req	gency: no	Basis for Reportability: End of year report < 60 minute event
Category: Regulato	лу	Type: FERC Deviation
	uip. 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 Sceen	ing Committee Approval upon Co	ompletion no

Point Info - UPPCO-BNYH: Total Plant Flow

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#### Print Date: 01/12/2016

NC Record Numb Company - Level		Entity: Reg ba Hydro-Boney Falls (I	ional Generation Escanaba		
Event Date:	11/18/2015	Discovery Date/Time:	11/18/15 11:30		
Event Title:	Boney Falls Plant Trip				
Event Details: Immediate Action: Recommendations:	Opened gate. Called local operate None	or to investigate	itio mode, I was able	to open gate to control head level.	
Potential Causes/Contril		CONTRACTOR OF A CONTRACTOR	A STATES TO A STATES		
Entered By Name:	Brian K Ellison	Creation Date/Time:	11/18/15 14:33		
Entered By Department:		Status: Closed			
Reportable to External A	gency: no	Basis for Reportability:	< 60 minute ever	nt, part of end of year report	
Additional Followup Rec	juired: yes				
Category: Regulat	pry	Type: Other			
Sub Type:		Description: tree on I	ine		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:		heavy Wind, unit went into isolation i gate was opened to maintain flow an	d head
Event Start:	11/18/2015 11:27 AM	Event End: 11/18/201	5 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 Approv	ver Name		
Analysis Description:					
Causes:					
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no			
Evaluation Reviewed/Ap	proved by Screening Committee				

Point Info - UPPCO-BNYH: Total Plant Flow

tegration: 1 Minute Start Time: 11/18/2015 00:01	↓         Line: Slope ↓         □         Show Limits         (i)           ↓         ↓         ↓         ↓         ↓         ↓           ↓         ↓         ↓         ↓         ↓         ↓
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#### Print Date: 01/12/2016

NC Record Number Company - Level		Entity: Regional Generati	on
Event Date:	12/29/2015	aba Hydro-Escanaba #3 Hydro Discovery Date/Time: 12/29/15 16:03	
Event Title:	Potential License Limit Violation E	and a start of a start	
Event Details:	by 1603 it was at 665.97. I immed	y Falls earlier today, the head level went straigh diately started opening gate 3 at Dam 3 and beg epted, he went to Dam 1 to pull boards while I c	an opening gate at Dam 1 then paged
Immediate Action: Recommendations:	The head level peaked at 666.76 Opened gate at Dam 3 and Dam None	at 16:11. By 1653 the head level was back belo 1. Paged local hydro operator	w 666.0.
Potential Causes/Contril	outors to incident Ice		
Entered By Name:	Brian K Ellison	Creation Date/Time: 12/29/15 17:2	(
Entered By Department:	Energy Supply and Control	Status: Closed	
Reportable to External A Additional Followup Reg		Basis for Reportability: FERC letter re	equided draft sent to JN 1/11
Category: Regulate	1997 C 1997	Type: FERC Deviation	
	nd. (drought, highflows, etc)	Description:	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: ice dam releas limit	e, water from Boney caused dam #3 to go over
Event Start:	12/29/2015 4:02 PM	Event End: 12/29/2015 4:57 PM	Event Duration (HH:MM): 00:
Evaluator Name:		Evaluator Dept:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Evaluation Accepted:		Acceptance Comments	
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name	
Analysis Description:		A second class of a second s	
Causes:	-		
Primary Causes:			
Does Eval Require Sceer	ning Committee Approval upon Co	ompletion no	
Evaluation Reviewed/An	proved by Screening Committee		

### Point Info - UPPCO-EHD3: Headwater Elevation

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: 12/29/2015 00:01 = End Time: 12/29/2015	5 23:59 🕄 🗸
Filters: Last Hr Last 4 Hrs Last 8 Hrs Last 24 Hrs Cur Day Cur Gas Day Last 7 Days La	ast 14 Days Last 🧿 Prev Next 🥥
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#### Print Date: 01/15/2016

NC Record Number: NCREG7599 Company - Level 1 - Level 2: UPP-Esca	Entity: Regional Generation Inaba Hydro-Escanaba #3 Hydro
Event Date: 07/05/2015	Discovery Date/Time: 7/5/15 17:23
Event Title: Pole arrestor problem power cu	it to plant
Event Details: pole arrestor problem.	
Immediate Action: DOC had mead open up breake	er 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 arrestor failed
Causal Analysis Level: Closed - No further action required	Causal Analysis Basis: Lighting arrestor 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:	
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#### Print Date: 01/15/2016

Company - Level 1	the second se	ba Hydro-Escanaba #1 Hydro	_
	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 po	ble near Dam 3 this line to Dam one needed to be opened up	
Immediate Action:	operator paged out.		
Recommendations:	none.		
Potential Causes/Contrib	maple of inventions	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 Ag	gency: no	Basis for Reportability: FERC deviation >60 minutes	
Additional Followup Requ	uired: yes		
Category: Regulato	ry	Type: FERC Deviation	
Sub Type: Trans. Sy	vs. (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 Sceen	ing Committee Approval upon Co	mpletion no	2



Upper Península 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 arrestor 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 arrestor 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

Print Date: 01/15/2016

NC Record Numb	er: NCREG8408	Entity: Regional Generation		
<b>Company - Level</b>	1 - Level 2: UPP-Escana	ba 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 Lim	it Violation		
Event Details:	그렇게 가지 않는 것이 같은 것을 알았는 것을 것을 가지 않았다. 것을 것을 하는 것을 가지 않았다. 것을 가지 않는 것을 가지 않는 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 가지 않는 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 수 있다. 것을 하는 것을 수 있는 것을 것을 것을 수 있는 것을 것을 수 있는 것을 것을 것을 것을 수 있는 것을 수 있는 것을 수 있는 것을 것 같이 않는 것을 것을 것 같이 않는 것 않는 것 같이 않는 것 않는 것 같이 않는 것 같이 않는 것 같이 없다. 것 같이 않는 것 같이 않는 것 같이 않는 것 같이 않는 것 않는 것 같이 않는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 같이 않는 것 같이 않는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 않는	rom 906.2 to 907.05 within a few minutes. The local operator		
	an ice dam broke loose and it is n brought on to help bring the head	ow causing large waves. We agreed to max out available gene	eration and Unit #1 was also	
Immediate Action:	Called local operator and increase			
Recommendations:	None			
Potential Causes/Contri	butors 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 A	Agency: no	Basis for Reportability: Letter to FERC required draf	t sent to JN 1/11	
Additional Followup Rea	quired: yes			
Category: Regulat	ory	Type: FERC Deviation		
Sub Type: River co	ond. (drought, highflows, etc)	Description:		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: pond exceeded limit, all gene	ration put on, pond came back down	
Event Start:	12/29/2015 9:10 AM	Event End: 12/29/2015 11:41 AM Eve	ent Duration (HH:MM): 02:31	1.1
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Approver Name		
Analysis Description:		- we		
Causes:				
Primary Causes:				
	ning Committee Approval upon Co	mpletion no		
Evaluation Reviewed/Ap	proved by Screening Committee	And and a second s		

Print Date: 01/15/2016

Integrys Energy Group

NC Record Numbe Company - Level		Entity: Regional ( ba Hydro-Boney Falls (Escan	Generation aba	
Event Date:	07/13/2015	Discovery Date/Time: 7/13/	15 11:00	
Event Title:	Boney Falls Augmentation			
Event Details: Immediate Action: Recommendations: Potential Causes/Contril	Augmentation criteria met, Increased flow to 635cfs None			
Entered By Name:	Brian K Ellison	Creation Date/Time: 7/13	/15 17:54	
Entered By Department:	Energy Supply and Control	Status: Closed	and summer	
Reportable to External A Additional Followup Reg	gency: no		n requirement - End of Year	
Category: Regulate		Type: FERC Deviation	2 · · · · · · · · · · · · · · · · · · ·	
Sub Type: Other		Description: License Require	ement	
Causal Analysis Level:	Closed - No further action required		mentation - License requirement	
Event Start:	8/13/2015 10:00 AM	Event End: 8/14/2015 12:58 /	M Event Duration (HH:MM):	14:58
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name: Analysis Description:		Corrective Action Approver Nam	10	
Causes:				
Primary Causes:		X 2	1.44 C	1.1
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valuation Reviewed/Ap	proved by Screening Committee			

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Print Date: 01/12/2016

NC Record Numbe			gional Generation	
Company - Level		P-Escanaba Hydro-Boney Falls	(Escanaba	
		Hydro)		
Event Date:	07/14/2015	Discovery Date/Time:	7/14/15 10:00	
Event Title:	Augmentation Event			
Event Details:	All Criteria satisfied for	Augmentation today.		
	Flow at Cornell Gauge			
	Tailrace temp at BNY 2	2,8		
	Pond elevation 905.63			
	Previous day max temp	at Cornell 24.1		
In a state ball of	Augmented flow target			
Immediate Action:	n/a	close to augmentation target		
Recommendations:		n/a		
Potential Causes/Contrib Entered By Name:	David C Paananen	Creation Date/Time:	7/14/15 10:13	
	Energy Supply and C		114/13 10.13	
Entered By Department:				
Reportable to External A		Basis for Reportability:		
Additional Followup Req	uired:			
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	1.4	
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Appro	over Name	
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Sceer	ning Committee Approv	al upon Completion		
Evaluation Reviewed/Ap	proved by Screening Co	ommittee		

#### Print Date: 01/15/2016

NC Record Numbe	er: NCREG7670	Entity: Regional Generation	
Company - Level 1	- Level 2: UPP-Escar	naba 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	nt	
Event Details:	Flow at Cornell Gauge 379		
	Tailrace temp at BNY 22.0		
	Headwater elevation 906.19		
	Previous day max temp at Corne Increased flow to approx 150% of		
Immediate Action: Recommendations:	none	01 Mase 110W (330 0F 0)	
Potential Causes/Contrib			
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 A	and the second state of th	Basis for Reportability: License requirement - end of year report	
Additional Followup Reg		Basis for Reportability.	
		Type: FERC Deviation	
Category: Regulate	nry	() Part	
Sub Type: Other		Description: License requirement	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: License requirement	
Event Start:	7/20/2015 10:00 AM	Event End: 7/20/2015 5:00 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:		Te.	
Primary Causes:			
	ing Committee Approval upon C		
<b>Evaluation Reviewed/Ap</b>	proved by Screening Committee	e	

#### Print Date: 01/15/2016

and thousand and a	#4 Hydro)				
Event Date:	07/21/2015	Discovery Date/Time:	7/21/15 11:00		1.1.1
Event Title:	Boney Falls Augmentation				
Event Details:	Criteria for augmentation met				
Immediate Action:	Started augmentation				
in a commentation of the	None				
Potential Causes/Contrib					
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 Ag	gency: no	Basis for Reportability:	License requirement	<ul> <li>end of year report</li> </ul>	
Additional Followup Req	uired: yes				
Category: Regulato	iry	Type: FERC D	eviation		
Sub Type: Other		Description: License	condition		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License requirement -		
Event Start:	7/21/2015 11:00 AM	Event End: 7/21/2015	6:00 PM	Event Duration (HH:MM):	07:00
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:	+d.	Eval Completion Date:			
Approver Name:		Corrective Action Approv	ver Name		
Analysis Description:		Care to the second state			
Causes:					
Primary Causes:					
Does Eval Require Sceen	ing Committee Approval upon Co	mpletion no			

#### Print Date: 01/15/2016

other trade to	#4 Hydro)		
Event Date:	07/22/2015	Discovery Date/Time: 7/22/15 17:40	
Event Title:	Augmenation		
Event Details:	Conditions for augmentation met. I	Performed augmentation.	
Immediate Action:	Initiated augmentation		
Recommendations:	None		
Potential Causes/Contril	1 + + + + + + + + + + + + + + + + + + +		
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 A		Basis for Reportability: End of Year report	
Additional Followup Rec	uired: yes		
Category: Regulate	ory	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 Event Duration (HH:MM): 13	3:44
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:		Acceptance Comments	
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name	
Analysis Description:		Coll - Harry Collection Collection	
Causes:			
Primary Causes:			
Does Eval Require Scee	ning Committee Approval upon Co	ompletion no	

#### Print Date: 01/15/2016

Company - Level	1 - Level 2: UPP-Escana #4 Hydro)	aba Hydro-Boney Falls (Escanaba
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 - rem	loved plant from isolation mode and set target flow
Recommendations:	Augmentation started	
Potential Causes/Contr		****
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 Re	quired: yes	
Category: Regula	tory	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 Event Duration (HH:MM): 13:43
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:		10
Does Eval Require Scee	ening Committee Approval upon Co	empletion no -
Evaluation Reviewed/A	pproved by Screening Committee	

#### Print Date: 01/15/2016

Company - Level	1 - Level 2: OPP-Escana #4 Hydro)	aba Hydro-Boney Falls (Escanaba
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 iso	olation and increased gate flow to achieve target.
Recommendations:		
Potential Causes/Contri	이번 가지 않는 것은 것이 있는 것은 것이 같이 많이 많이 많이 많다.	The state of the s
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 A	Agency: no	Basis for Reportability: License Requirement, end of year Reporting
Additional Followup Red	quired: yes	
Category: Regulat	ory	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:		A CALL AND A
Does Eval Require Scee	ning Committee Approval upon Co	ompletion no
Evaluation Reviewed/Ar	proved by Screening Committee	

#### Print Date: 01/15/2016

Integrys Energy Group

Company - Level	er: NCREG7713 1 - Level 2: UPP-Escana #4 Hydro)	Entity: Regi ba Hydro-Boney Falls (E	Escanaba		
Event Date: Event Title:	07/28/2015 Augmentation	Discovery Date/Time:	7/28/15 10:00		
Event Details: Immediate Action: Recommendations:	Criteria for augmentation at Boney Flow was increased to 279 CFS al CCAT submitted.		n corrective action was	terminaled, as per procedure.	
Potential Causes/Contri	butors 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 A	gency: no	Basis for Reportability:	License Requiremen	t - End of Year Reporting	
Additional Followup Red	quired: yes				
Category: Regulat	ory	Type: FERC De	eviation		
Sub Type: Other		Description: License I	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:	100	Eval Completion Date:		1.00	
Approver Name:		Corrective Action Approve	er Name		
Analysis Description:					
Causes:		1.		19 (cm)	
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co	ompletion no			

X

NC Record Numbe Company - Level		Entity: Regional Generation aba 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	y Falls was met.	
Immediate Action:	Flow was increased to approximal procedure for augmentation. CCA	tely 206 cfs at 11:00 EDT. Dissolved Oxygen corrective actio was terminated per	
Recommendations:	none	a summer.	
Potential Causes/Contrit			
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 A	gency: no	Basis for Reportability: License requirement - end of year report	
Additional Followup Req	A CONTRACT OF	Provide Providence Contraction Control Cont	
Category: Regulate	ory	Type: FERC Deviation	
Sub Type: Other		Description: License Requirement	
Causal Analysis Level:	Closed - No further action	Causal Analysis Basis: License Requirement - End of Year Report	
	required		
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:	1.5		
Causes:	1.8		
Primary Causes:			
Does Eval Require Sceer	ning Committee Approval upon Co	ompletion no	
Evaluation Reviewed/Ap	proved by Screening Committee		

#### Print Date: 01/15/2016

Company - Level	#4 Hydro)	ba Hydro-Boney Falls (	Lacanava			
Event Date:	07/30/2015	Discovery Date/Time:	7/30/15 17:06			
Event Title:	Initiated augmentation					
Event Details:	Conditions were met for augmenta	tion on 07/30/15				
Immediate Action:	Performed augmentation					
Recommendations:	None					
Potential Causes/Contril				11111111111		
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 A	gency: no	Basis for Reportability:	License condition	n requirement - end of year report		
Additional Followup Rec	quired: yes					
Category: Regulat	ory	Type: FERC D	Deviation			
Sub Type: Other		Description: License	Requirement			
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Require	ment - end of year report		
Event Start:	7/30/2015 10:00 AM	Event End: 7/31/2015	5 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 Appro	ver Name			
Analysis Description:						
Causes:		1				
Primary Causes:	-					
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no				

#### Print Date: 01/15/2016

NC Record Numb Company - Level		Entity: Regional Generation ba Hydro-Boney Falls (Escanaba	
Event Date:	07/31/2015	Discovery Date/Time: 7/31/15 11:00	
Event Title:	Augmentation		
Event Details: Immediate Action:	Criteria for augmentation met on 0 Performed augmentation	7/31/15	
Recommendations:	None		
Potential Causes/Contri	and the second se		
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 A		Basis for Reportability: License requirement - edn of year re	port
Additional Followup Red		Charles and a state of the second	
Category: Regulat		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 re	port
Event Start:	7/31/2015 11:00 AM	Event End: 8/1/2015 11:00 AM Event Dura	ation (HH:MM): 24:00
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:	the Ar	Acceptance Comments	
Eval Due Date:		Eval Completion Date:	
Approver Name:	- 200	Corrective Action Approver Name	
Analysis Description:			
Causes:			
Primary Causes:			
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no	
Evaluation Reviewed/Ap	proved by Screening Committee		

#### Print Date: 01/15/2016

NC Record Numb Company - Level		Entity: Reg aba Hydro-Boney Falls (	jional Generatior Escanaba		
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/				
Immediate Action:	Performed augmentation per proc	edure.			
Recommendations:	none				
Potential Causes/Contril					
Entered By Name:	Jonathon J Jenkins	Creation Date/Time:	8/1/15 17:08		
Entered By Department:		Status: Closed	· · · · · · · · · · · · · · · · · · ·		
Reportable to External A		Basis for Reportability:	License Require	ment - end of year report	
Additional Followup Rec	uired: yes				
Category: Regulat	yıç	Type: FERC D	leviation		
Sub Type: Other		Description: License	Requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Require	ment - End of Year REport	
Event Start:	8/1/2015 10:00 AM	Event End: 8/2/2015		Event Duration (HH:MM):	24:00
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:		Corrective Action Approv	ver Name		
Analysis Description:					
Causes:					
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no			
Evaluation Reviewed/An	proved by Screening Committee				

#### Print Date: 01/15/2016

NC Record Number Company - Level	I - Level 2: UPP-Escana	Entity: Regional Gene ba Hydro-Boney Falls (Escanaba	eration	
Event Date:	#4 Hydro) 08/02/2015	Discovery Date/Time: 8/2/15 10	:00	
Event Title:	Boney Falls Augmentation	Discovery Daternine. 61210 10		
Event Details: Immediate Action: Recommendations: Potential Causes/Contril	Conditions met for augmentation of Perfomed augmentation None None None	n 08/02/15		
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 A		Basis for Reportability: License I	Requirement - End of Year Report	
Additional Followup Rec	uired: yes			
Category: Regulate	ory	Type: FERC Deviation		
Sub Type: Other		Description: License requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: License n	equirement - end of year report	
Event Start:	8/2/2015 10:00 AM	Event End: 8/3/2015 7:35 AM	Event Duration (HH:MM):	21:35
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:				
	ning Committee Approval upon Co	npletion no	· · · · · · · · · · · · · · · · · · ·	
Evaluation Reviewed/Ap	proved by Screening Committee			

#### Print Date: 01/15/2016

	#4 Hydro)	
Event Date: Event Title:	08/06/2015 Augmentation	Discovery Date/Time: 8/6/15 9:52
Event Details:	Criteria for augmentation at Boney	Falls was met.
Immediate Action:	Flow was increased to approximat procedure for augmentation. CCA	ely 206 cfs at 11:00 EDT. Dissolved Oxygen corrective actio was terminated per T submitted.
Recommendations:	None	
Potential Causes/Contril		
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 A	gency: no	Basis for Reportability: License Requirement - end of year report
Additional Followup Rec	uired: yes	
Category: Regulat	ory	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:		Al and a second se
Causes:		
Primary Causes:		
C. I.D. I. C.	ning Committee Approval upon Co	mpletion no

#### Print Date: 01/15/2016

NC Record Number: NCREG7768 Company - Level 1 - Level 2: UPP-E #4 Hyc	Entity: Regional Generation Escanaba Hydro-Boney Falls (Escanaba dro)
Event Date: 08/07/2015	Discovery Date/Time: 8/7/15 10:00
Event Title: Augmentation	
Event Details: Criteria for augmentation a	
	3 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 Con	
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 ac required	ction 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 Sceening Committee Approval u	upon Completion no
Evaluation Reviewed/Approved by Screening Com	mittee

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Integrys Energy Group

NC Record Numb Company - Level		Entity: Regi ba Hydro-Boney Falls (E	onal Generation Escanaba		
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/Contril					
Entered By Name:	Bruce L Christensen	Creation Date/Time:	8/10/15 10:03		
Entered By Department:		Status: Closed	No. 10 10 10 10 10		
Reportable to External A		Basis for Reportability:	License Requireme	nt - End of Year report	
Additional Followup Rec	luired: yes				
Category: Regulat	ory	Type: FERC De	eviation		
Sub Type: Other		Description: License F	Requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requiremen	nt - end of year report	
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:		a second a second	
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:	ac 10	Corrective Action Approv	er Name		
Analysis Description:					
Causes:					
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no		1-	
Evaluation Reviewed/Ar	proved by Screening Committee	Sector Se			1000

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#### Print Date: 01/15/2016

NC Record Numbe Company - Level 1		Entity: Region ba Hydro-Boney Falls (Es	nal Generation canaba		
Event Date:	08/11/2015	Discovery Date/Time:	8/11/15 10:20		
Event Title:	Augmentation				
Event Details: Immediate Action: Recommendations: Potential Causes/Contrit	Augmentation began at 1100 EDT Increased generation to 288 cfs none nutors to incident none				
Entered By Name: Entered By Department:	Garry D Gentry Energy Supply and Control	Creation Date/Time: Status: Closed	8/11/15 10:21		
Reportable to External A Additional Followup Reg	gency: no	Basis for Reportability:	License Requirement	<ul> <li>end of year report.</li> </ul>	
Category: Regulate	ary	Type: FERC Dev	iation		
Sub Type: Other		Description: License Re	quirement		
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	Event Duration (HH:MM):	14:55
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:	14-	Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:		<b>Corrective Action Approver</b>	Name		
Analysis Description:					
Causes:					
Primary Causes:		and the second second			
Does Eval Require Sceen	ing Committee Approval upon Cor	npletion no	-		

#### Print Date: 01/15/2016

NC Record Numb Company - Level		Entity: Regional ( ba Hydro-Boney Falls (Escan	Generation aba	
Event Date:	08/12/2015	Discovery Date/Time: 8/12/	15 10:00	
Event Title:	8-12-15 Augmentation			
Event Details: Immediate Action: Recommendations:	Criteria ment to Augment increased flow to 261cfs none			
Potential Causes/Contri				
Entered By Name:	Kenneth C Luckeroth		/15 10:00	
Entered By Department	Energy Supply and Control	Status: Closed		
Reportable to External /	Agency: no	Basis for Reportability: Lice	ense Requirement - End of year report	
Additional Followup Re	quired: yes			
Category: Regula	lory	Type: FERC Deviation	1	
Sub Type: Other		Description: License Require	ement	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: licer	nse requirement - end of year report	
Event Start:	8/12/2015 10:00 AM	Event End: 8/13/2015 5:07 A	M Event Duration (HH:MM):	19:07
Evaluator Name:		Evaluator Dept:		-
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Approver Nan	10	
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Scee	ning Committee Approval upon Co	ompletion no		
Evaluation Reviewed/A	proved by Screening Committee			

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NC Record Numb Company - Level		Entity: Regional Generatio ba Hydro-Boney Falls (Escanaba	n	
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	t.		
Recommendations:	none,			
Potential Causes/Contri	butors to incident condition	Verification and the second second second second		
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	on - end of year report	
Additional Followup Re	quired: yes			
Category: Regula	lory	Type: FERC Deviation		
Sub Type: Other		Description: License condition		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: License conditio	n requirement - end of year reporting	
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: Analysis Description:		Corrective Action Approver Name	10	
Causes:				
Primary Causes:				
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no		
Evaluation Reviewed/A	proved by Screening Committee			

#### Print Date: 01/15/2016

Event Date:	#4 Hydro) 08/14/2015	Discovery Date/Time: 8/14/15 10:43	_
		Discovery Date/Time: 8/14/15 10:43	
Event Title:	8-14-2015 Augmentation		
Event Details:	Augmentation was performed on t	3-14-2015.	
Immediate Action:	Increased flow through generator		
Recommendations:	None		
Potential Causes/Contrib			
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 Ag	ency: no	Basis for Reportability: License condition end of year reporting	
Additional Followup Requ	lired: yes		
Category: Regulator	Y	Type: FERC Deviation	
Sub Type: Other		Description: License requirement	
Causal Analysis Level:	Closed - No further action	Causal Analysis Basis: License requirement - end of year reporting	
	required		
Event Start:	8/14/2015 10:00 AM	Event End: 8/14/2015 8:15 PM Event Duration (HH:MM):	10:15
Evaluator Name:		Evaluator Dept:	
Evaluation Accepted:		Acceptance Comments	
Eval Due Date:		Eval Completion Date:	
Approver Name:		Corrective Action Approver Name	
Analysis Description:			
Causes:			
Primary Causes:			
Does Eval Require Sceeni	ng Committee Approval upon Co	ompletion no	

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Company - Level 1	- Level 2: UPP-Escana #4 Hydro)	ba Hydro-Boney Falls (Escanaba		
Event Date:	08/16/2015	Discovery Date/Time: 8/16/15 10:00		
Event Title:	Augmentation for Sunday 8-16-20	15		
Immediate Action:	ncreased flow through generator None	t for 8-16-2015. The base flow was 148 cfs which gave #1. ws, high temps.	us a larget of 222 cfs.	
	Stephen M Beime	Creation Date/Time: 8/16/15 10:30		
Entered By Department:	Energy Supply and Control	Status: Closed		
Reportable to External Ag Additional Followup Requ		Basis for Reportability: License requirement	- end of year report	
Category: Regulator	у	Type: FERC Deviation		
Sub Type: Other		Description: License requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: License requirement	l.	
Event Start:	8/16/2015 10:00 AM	Event End: 8/17/2015 4:00 AM	Event Duration (HH:MM):	18:00
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Approver Name		
Analysis Description:		And the Street of the second		
Causes:				
Primary Causes:				
	ng Committee Approval upon Co roved by Screening Committee	ompletion no	12 (0)	

#### Print Date: 01/15/2016

Company - Level	#4 Hydro)	ba Hydro-Boney Falls (Esc	aliaba	
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 o	n 8/17/15.		
Immediate Action:	Started Augmentation			
Recommendations:	None			
Potential Causes/Contril			*******	
Entered By Name:	Todd L Strodthoff		17/15 10:15	
Entered By Department:	Energy Supply and Control	Status: Closed		
Reportable to External A	gency: no	Basis for Reportability:	icense requirement - end of year reporting	
Additional Followup Rec	uired: yes			
Category: Regulate	огу	Type: FERC Deviat	ion	
Sub Type: Other		Description: License Requ	uirement	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: L	icense requirement - end of year report	
Event Start:	8/17/2015 10:00 AM	Event End: 8/18/2015 5:40	AM Event Duration (HH:MM):	19:40
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		1
Approver Name:		Corrective Action Approver N	ame	
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no		

#### Print Date: 01/15/2016

NC Record Numb Company - Level		Entity: Regio ba Hydro-Boney Falls (E	onal Generation scanaba		
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/Contri	TT 0 T 0 T T T T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T T 0 T		+1111000121210		
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 A	gency: no	Basis for Reportability:	End of year reporting	for Augmentation plan	
Additional Followup Ree	quired: yes				
Category: Regulat	ory	Type: FERC De	viation		
Sub Type: Other		Description: license co	ndition		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License required oper	ration, Augmentation plan	
Event Start:	8/18/2015 10:00 AM	Event End: 8/18/2015 5	:00 PM	Event Duration (HH:MM):	07:00
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:		<b>Corrective Action Approve</b>	r Name		
Analysis Description:					
Causes:					
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no			
Evaluation Reviewed/Ar	proved by Screening Committee				

#### Print Date: 01/15/2016

	#4 Hydro)				
Event Date: 0	9/01/2015	Discovery Date/Time:	9/1/15 10:00		
Event Title: B	oney Falls Augmentation				
Event Details: N	let the conditions to perform aug	mentation.			
Immediate Action: In	creased flow to 150% of base.				
Recommendations:	one				
Potential Causes/Contribut			*****		
Entered By Name: Jo	onathon J Jenkins	Creation Date/Time:	9/1/15 14:49		
Entered By Department:	Energy Supply and Control	Status: Closed			
Reportable to External Age	ncy: no	<b>Basis for Reportability:</b>	Part of Annual Repor	t	
Additional Followup Requir	red: yes				
Category: Regulatory		Type: Other			
Sub Type:		Description: License R	tequirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Part of the License re	quirement to Augment flow	
Event Start: 9/	1/2015 11:00 AM	Event End: 9/1/2015 6:0	DO PM	Event Duration (HH:MM):	07:00
Evaluator Name:	25	Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:		Corrective Action Approve	r Name		
Analysis Description:					
Causes:					
Primary Causes:			A - STAF		

#### Print Date: 01/15/2016

Company - Level '	#4 Hydro)	aba Hydro-Boney Falls (Escanaba	
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 aug	gmentation.	
Immediate Action:	Increased flow to 150% of base.		
Recommendations:	none		
Potential Causes/Contrit			
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 A	gency: no	Basis for Reportability: Part of Annual Report	
Additional Followup Req	uired: yes		
Category: Regulate	bry	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 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:		80	
Doog Eval Require Scoor	ing Committee Approval upon Co	ompletion no	

#### Print Date: 01/15/2016

NC Record Numb Company - Level		Entity: Reg a Hydro-Boney Falls (	ional Generation Escanaba			
Event Date:	09/05/2015	Discovery Date/Time:	9/5/15 10:00			
Event Title:	Augmentation criteria met for 9/5/15					
Event Details: Immediate Action: Recommendations:	met the criteria for augmentation increased flows at the plant n/a					
Potential Causes/Contri Entered By Name:	butors to incident n/a David C Paananen	Creation Date/Time:	9/5/15 10:16			
Entered By Department		Status: Closed				
Reportable to External		Basis for Reportability:	Part of License requ	irement, reported in annual report		
Additional Followup Re						
Category: Regula		Type: Other				
Sub Type:			Requiement			
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	License Requiremen	t, part of annual reporting		
Event Start:	9/5/2015 11:00 AM	Event End: 9/5/2015 6	5:00 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 Approv	ver Name			
Analysis Description:						
Causes:						
Primary Causes:		in the second				
	ning Committee Approval upon Con	pletion no				
Evaluation Reviewed/A	pproved by Screening Committee					

#### Print Date: 01/15/2016

NC Record Number: NCREG7934 Company - Level 1 - Level 2: UPP-Escar #4 Hydro)	Entity: Regional Generation maba Hydro-Boney Falls (Escanaba
Event Date: 09/06/2015	Discovery Date/Time: 9/6/15 10:00
Event Title: Augmentation	
Event Details: Criteria met to begin new augme	
Immediate Action: Raised flows to 150% of base flo	low
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 Sceening Committee Approval upon (	Completion no
Evaluation Reviewed/Approved by Screening Committee	0

#### Print Date: 01/15/2016

Company - Level	1 - Level 2: UPP-Escana #4 Hydro)	aba Hydro-Boney Falls (E	Escanaba		
Event Date:	09/07/2015	Discovery Date/Time:	9/7/15 10:00		
Event Title:	Augmentation				
Event Details:	Criteria for augmentation at Boney				
Immediate Action:	Flow was increased to 208 CFS a	11:00 EDT. CCAT submitted	÷		
Recommendations:					
Potential Causes/Contril			In a second design of the second	ni tett	
Entered By Name:	Kevin S Willey	Creation Date/Time:	9/7/15 10:25		
Entered By Department:	A CONTRACTOR OF	Status: Closed		adaram at annual an annual an an an an	
Reportable to External A		Basis for Reportability:	License requrement, re	eported on annual report	
Additional Followup Rec	quired: yes				
Category: Regulat	ory	Type: Other			
Sub Type:		Description: License	Requirement		
Causal Analysis Level:	Closed - No further action	Causal Analysis Basis:	License requirement, re	eported on annual report	
	required		6	1984 (14)	
Event Start:	9/7/2015 11:00 AM	Event End: 9/7/2015 6	:00 PM	Event Duration (HH:MM):	07:00
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		<b>Eval Completion Date:</b>			
Approver Name:		<b>Corrective Action Approv</b>	er Name		
Analysis Description:					
Causes:					
Primary Causes:		1 1			
Does Eval Require Scee	ning Committee Approval upon Co	ompletion no			
Evaluation Reviewed/Ap	proved by Screening Committee				

#### Print Date: 01/15/2016

Company - Level 1	I - Level 2: UPP-Escana #4 Hydro)	ba Hydro-Boney Falls (Escana	ba	
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:	And the second	429 cfs at 11:00 EDT. CCAT submitte	d.	
Recommendations:	None			
Potential Causes/Contrib				
Entered By Name:	Terrie S Taylor	stouton puter miler	10:32	
Entered By Department:	Energy Supply and Control	Status: Closed		
Reportable to External A	gency: no	Basis for Reportability: Annu	al reporting requirement	
Additional Followup Req	uired: yes			
Category: Regulato	bry	Type: Other		
Sub Type:		Description: License requirem	ent	
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis: Licens	se requiement, reported in annual report	
Event Start:	9/8/2015 11:00 AM	Event End: 9/8/2015 6:00 PM	Event Duration (HH:MM):	07:00
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments	ž.	
Eval Due Date:		Eval Completion Date:		
Approver Name:		<b>Corrective Action Approver Name</b>		
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Sceen	ing Committee Approval upon Co	mpletion no		

Window Criteria – May 15 th through	h September	r 15 th				
Date:	7/13/15	Time:	11:00 EDT			
Flow at Cornell Gauge:	361	150 cfs	$\leq$ Cornell flow $\leq$ 400	0 cfs		
Water Temperature - Boney Falls Tailrace:	22,2	≥ 16 °C				
Pond Elevation:	906.18	> 905.5	9 ft			
Talamaa Calkada						
Trigger Criteria	chanter -	1			- 010	
Previous Day Max Water Temperature at Cornell:	$27.8$ $\geq 26^{\circ}$ C if no augmentation on previous day if augmentation was done on previous day				2 24	
Previous Day Augmentation:	NO Yes/No					
Augmentation Record			- 19 <u>-</u> 1		-	
Base Flow (Total Plant flow from the Boney Falls Project):	423		Augmented Flow (150% of base):		cfs	
Start Time:	/000 EI	DT	Impoundment Water Level:	1 1 1 1 1 1 1	ft	
End Time:	(700 EI	от	Impoundment Water Level:		ft	
Refill						
Base Flow (Total Plant flow from the Boney Falls Project):	423		Refill Flow (75% of base):		cfs	
Start Time:	1700 EI	DT	Impoundment Water Level:		ft	
End Time:	1000 EI 7/14/15	DT	Impoundment Water Level:		ft	
End Date:	Trul		CCAT No.:	NC Dri 71	21	

Window Criteria – May 15 th throug	h Septembe	r 15 th						
Date:	7-14-15	Time:		11:00 EDT				
Flow at Cornell Gauge:	397	$397$ 150 cfs $\leq$ Cornell flow $\leq$ 400		00 cfs				
Water Temperature - Boney Falls Tailrace:	22.8	≥ 16 '	c					
Pond Elevation:	905.63	> 905	.59 f	59 ft				
Trigger Criteria			_					
		> 200	* 15 -		province day	> 7400		
Previous Day Max Water Temperature at Cornell:	24.1	24.1 ≥ 26°C if no augmentation on previous day, if augmentation was done on previous day						
Previous Day Augmentation:	YES	Yes/N	0					
				N				
Augmentation Record								
Base Flow (Total Plant flow from the Boney Falls Project):	236		236			Augmented Flow (150% of base):	354	cfs
Start Time:	1100 E	от	Ir	npoundment Water Level:	905.64	ft		
End Time:	1800 EI	рт	In	npoundment Water Level:	905.48	ft		
Refill		1						
Base Flow (Total Plant flow from the Boney Falls Project):	2.36			Refill Flow (75% of base):	ררו	cfs		
Start Time:	/800 E	рт	lo	npoundment Water Level:	905.48	ft		
End Time:	1037 E	от 🗍	In	npoundment Water Level:	906.19	ft		
End Date:				CCAT No.:				

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

Date:	7-20-15	Time:	11:00 EDT
Flow at Cornell Gauge:	379	150 cfs ≤	Cornell flow $\leq$ 400
Nater 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

ugmentation Record Base Flow (Total Plant flow from		Augmented Flow		
the Boney Falls Project):	265	(150% of base):	398	cfs
Start Time:	1160 EDT	Impoundment Water Level:	906.19	ft
End Time:	1000 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
		Impoundment Water		

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.:	NCREG	7670

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	t 2506-04
Record of Augmentation Event	

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

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

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 7	67

Window Criteria May 15 th throug	h Septembe	r 15 th					
Date:	7-22-15	Time:	11:00 EDT	T			
Flow at Cornell Gauge:	287	150 cf	$s \leq Cornell flow \leq 40$	0 cfs			
Water Temperature - Boney Falls Tailrace:	22	≥16 °	c				
Pond Elevation:	906.05	> 905,	59 ft	<u> </u>	-		
Trianas Critaria							
Trigger Criteria			The design of the second s				
Previous Day Max Water Temperature at Cornell:	25.9	n previous day, n previous day	≥ 24°				
Previous Day Augmentation:	Yes	Yes/No	/No				
Augmentation Record							
Base Flow (Total Plant flow from the Boney Falls Project):	144		Augmented Flow (150% of base):		cfs		
Start Time:	1100 E	DT	Impoundment Water Level:		ft		
End Time:	1800 EI	т	Impoundment Water Level:	1 7 1 0 0 0	ft		
Refill							
Base Flow (Total Plant flow from the Boney Falls Project):	144		Refill Flow (75% of base):		cfs		
Start Time:	1800 EI	דכ	Impoundment Water Level:		ft		
End Time:	00:44 EI 7/23/15	т	Impoundment Water Level:		ft		
End Date:	7/23/15	-	CCAT No.:	NCREG 76	18		

Boney	Falls -	Escanaba	Dam	#4 F	ERC	Project	2506-04
	R	ecord of A	uame	ntati	ion E	vent	

Date:	7-23-15 1		ie:	11:00 EDT				
Flow at Cornell Gauge:	344 150 0		cfs ≤	$\leq$ Cornell flow $\leq$ 400	) cfs			
Water Temperature - Boney Falls Tailrace:	21.6°	21.6° ≥ 16 °C						
Pond Elevation:		3 > 9	05.59	ft				
Trigger Criteria	_		_					
Previous Day Max Water Temperature at Cornell:				no augmentation on ntation was done on		≥ 24°(		
Previous Day Augmentation:	YES	Yes						
Augmentation Record		-			un gal			
Base Flow (Total Plant flow from the Boney Falls Project):	9.6			Augmented Flow (150% of base):	144	cfs		
Start Time:	1100	EDT	h	mpoundment Water Level:	906,03	ft		
End Time:	1800	EDT	h	npoundment 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	an and a set		00 EDT		npoundment Water Level:	906.09	ft
End Time:	0043	EDT		npoundment Water Level:	906.19	ft		
End Date:	7-24-	-2015	1-	CCAT No.:	NCREG 768	0		

Window Criteria – May 15 th throug	h September	15 th					
Date:	7-25-15	Time:	11:00 EDT				
Flow at Cornell Gauge:	397 150 0		$0 \text{ cfs} \leq \text{Cornell flow} \leq 400 \text{ cfs}$				
Water Temperature - Boney Falls Tailrace:	22.8°	2.8° ≥ 16 °C					
Pond Elevation:	906.23						
Trigger Criteria				energian			
Previous Day Max Water Temperature at Cornell:	$26.6^{\circ}$ $\geq 26^{\circ}$ C if no augmentation on previous day, if augmentation was done on previous day						
Previous Day Augmentation:	No	Yes/No					
Base Flow (Total Plant flow from the Boney Falls Project):	109		Augmented Flow (150% of base):	164	cfs		
	Index of the second		Impoundment Mater	the second second	11.		
Start Time:	1100 ED	т	Impoundment Water Level:	906.23	ft		
Start Time: End Time:	1100 ED			906.23 906.15	ft ft		
			Level: Impoundment Water				
End Time:			Level: Impoundment Water				
End Time: Refill Base Flow (Total Plant flow from	1800 ED	рт	Level: Impoundment Water Level: Refill Flow (75% of	906.15	ft		
End Time: Refill Base Flow (Total Plant flow from the Boney Falls Project):	1800 ED 109	ot I	Level: Impoundment Water Level: Refill Flow (75% of base): Impoundment Water	906.15 82	ft		

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01/25/2012 20:00 020-433-1210

Window Criteria – May 15 th throug	h September	r 15 th				
Date:	7/28	Time:	11:00 EDT			
Flow at Cornell Gauge:	370 150		$\leq$ Cornell flow $\leq$ 400	) cfs		
Water Temperature - Boney Falls Tailrace:	24	24 ≥16°C				
Pond Elevation:	906.17					
Trigger Criteria			te constant age, stands steen			
Previous Day Max Water Temperature at Cornell:	31.6		if no augmentation on ientation was done on		≥ 24°0	
Previous Day Augmentation:	NO Yes/No					
Augmentation Record			nya nya matana ana ana ana ana ana ana ana ana an			
Base Flow (Total Plant flow from the Boney Falls Project):	186		Augmented Flow (150% of base):	279	cfs	
Start Time:	11000	т	Impoundment Water Level:	906.17	ft	
End Time:	1800 ED	т	Impoundment Water Level:	906.10	ft	
Refill						
Base Flow (Total Plant flow from the Boney Falls Project):	186		Refill Flow (75% of base):	1392	cfs	
Start Time:	1800=	т	Impoundment Water Level:	906.10	ft	
End Time:	2135 ED	от	Impoundment Water Level:	906.19	ft	
	7-28-20			NCREG 7		

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

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

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.

Base Flow (Total Plant flow from the Boney Falls Project):	137	Augmented Flow (150% of base);	206	cf	
Start Time:	Impoundment Water Level:	906.12	ft		
End Time:	/8:00 EDT	Impoundment Water Level:	906.09	ft	
Refill	in and a started				
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:	I LAAL ALL	ft ft	
End Time:	oj: (1 EDT	Impoundment Water Level:	906.19		
End Date:	7-79-15	CCAT No.:	NCREG 77	24	

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

Window Criteria – May 15 th throug	h Septembe	er 15 th					
Date:	7-30-15	Time:	T	11:00 EDT			
Flow at Cornell Gauge:	336 150 c		s≤	Cornell flow $\leq$ 400	) cfs		
Water Temperature - Boney Falls Tailrace:	23.8	≥ 16 °C					
Pond Elevation:	906.12 > 905.59 ft			-			
Trigger Criteria	and and a state of the	) transformer					
Previous Day Max Water Temperature at Cornell:	29.8	$29.8$ $\geq 26^{\circ}$ C if no augmentation on previous day, $\geq 24$ 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 El	рт	Im	poundment Water Level:	906.13	ft	
End Time:	18:00 EI	от	Im	poundment Water Level:	905.89	ft	
Refill							
Base Flow (Total Plant flow from the Boney Falls Project):	100		Refill Flow		75	cfs	
Start Time:	18:00 E	DT	Im	poundment Water Level:	905.89	ft	
End Time:	/100 EI	DT	lm	poundment Water Level:	906.02	ft	
End Date:	7.31-15			CCAT No.:	NCREGT	192	

Window Criteria – May 15 th throug	h Septembe	r 15 th				
Date:	7.31.15	Time:	11:00 EDT			
Flow at Cornell Gauge:	258	150 cfs	$\leq$ Cornell flow $\leq$ 40	) 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	Rest≥ 26°C if no augmentation on previous day, ≥ 24Restif augmentation was done on previous dayYesYes/No				
Previous Day Augmentation:	Yes					
Augmentation Record Base Flow (Total Plant flow from the Boney Falls Project):	164		Augmented Flow (150% of base):	252	cfs	
Start Time:	//:00 ED	т	Impoundment Water Level:	906.02	ft	
End Time:	18:00 ED	от	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 ED	т	Impoundment Water Level:	905.74	ft	
End Time:	11:00 ED	т	Impoundment Water Level:	906.13	ft	
		CCAT No.:		NCREG 7742		

Nindow Criteria – May 15 th throug	h Septembe	er 15 th						
Date;	8-1-15	Time:		11:00 EDT				
Flow at Cornell Gauge:	191 150 c		150 cfs $\leq$ Cornell flow $\leq$ 400 cfs					
Water Temperature - Boney Falls Tailrace:	23.2	≥ 16 °(	≥ 16 °C					
Pond Elevation:	906.13 > 905.59 ft		. 10-00					
Trigger Criteria								
Previous Day Max Water Temperature at Cornell:	27.7	7 $\geq 26^{\circ}$ C if no augmentation on previous day, $\geq 24^{\circ}$ 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:	/1:00 EI	DT	Imp	oundment Water Level:	906-13	ft		
End Time:	18:00 E	от	Imp	oundment Water Level:	905.71	ft		
Refill						_		
Base Flow (Total Plant flow from the Boney Falls Project):	-49 1	32	Re	fill Flow (75% of base):	99	cfs		
Start Time:	18:00 E	от	Impo	oundment Water Level:	905.71	ft		
	11100 EDT		11:00 EDT		Impo	oundment Water Level:	905.86	ft
End Time;	11:00 EDT			CCAT No.:		-		

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

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

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	3	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	li se con		den en e		Å
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:	905.4 (	ft
End Time:	0835	EDT	Impoundment Water Level:	906.19	ft
End Date:	8-3-	15	CCAT No.:	NCREG 77	46

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

Date:	8/6/15	Time:	11:00 EDT	
Flow at Cornell Gauge:	280	150 cfs ≤	Cornell flow $\leq$ 400	) cfs
/ater Temperature - Boney Falls Tailrace:	19.7	≥16 °C		
Pond Elevation:	906.16	> 905.59 f	t	

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

ugmentation Record				
Base Flow (Total Plant flow from the Boney Falls Project):	144	Augmented Flow (150% of base):	216	cfs
Start Time:	/1:00 EDT	Impoundment Water Level:	986. ile	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:		ft
End Date:	8/7/15	CCAT No.:	NCREGT	76

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

Window Criteria – May 15 th throug	h September	15th			
Date:	11009	Rine:	11:00 EDT		
Flow at Cornell Gauge:	230	150 cfs	$\leq$ Cornell flow $\leq$ 40	0 cfs	
Water Temperature - Boney Falls Tailrace:	19.7	≥ 16 °C			
Pond Elevation:		> 905.5	9 ft		
Trigger Criteria					
Previous Day Max Water	0.11	> 26°C	if no augmentation on	previous day	> 24%
Temperature at Cornell:	26.4		entation was done on		
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 ED	т	Impoundment Water Level:	906.15	ft
End Time:	1800ed	т	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 ED	т	Impoundment Water Level:	906.22	ft
End Time:	1800 ED	т	Impoundment Water Level:	906.22	ft
End Date:	8/7/1	5	CCAT No :	NCREG7	700

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

Date:	8/10/15	Time:	11:00 EDT
Flow at Cornell Gauge:	336	150 cfs ≤	Cornell flow $\leq 400$
Water Temperature - Boney Falls Tailrace:	20.8	≥ 16 °C	
Pond Elevation:	906.20	> 905.59 1	t

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

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

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:	905,98 905,58	ft
End Time:	0643 EDT	Impoundment Water Level:	906,19	ft
End Date:	8/11/15	CCAT No.:	NCREGT	782

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

08/12/2015 00:30 920-433-1219

D2 ES&C

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

Date:	8/11/15	Time:	11:00 EDT
Flow at Cornell Gauge:	319	150 cfs ≤	Cornell flow ≤ 400 cfs
Nater Temperature - Boney Falls Tailrace:	21.8	≥ 16 °C	
Pond Elevation:	906:22	> 905.59 1	t

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:	YAS	Yes/No

ugmentation Record		and the second		
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		an		<u></u>
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:	01:55edt	Impoundment Water Level:	906.19	ft
End Date:	8/12/15	CCAT No.:	NCREG 7	78

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

Date:	6/12/15	Time:	11:00 EDT
Flow at Cornell Gauge:	303	150 cfs ≤	Cornell flow $\leq 400$
/ater Temperature - Boney Falls Tailrace:	21.3	≥ 16 °C	
Pond Elevation:	174906,22	> 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

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

cfs	131	Refill Flow (75% of base):	174	Base Flow (Total Plant flow from the Boney Falls Project):
ft		Impoundment Water Level:	1800 EDT	Start Time:
ft	906,19	Impoundment Water Level:	0607 EDT	End Time:
92	NCREG 77	CCAT No.;	8/13/15	End Date:

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

Date:	8-13-15	Time:	11:00 EDT
Flow at Cornell Gauge:	287	150 cfs ≤	Gornell flow $\leq 400$
Water Temperature - Boney Falls Tailrace:	21.1	≥ 16 °C	
Pond Elevation:	906.141	> 905.59 1	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):		Augmented Flow (150% of base):		cfs
Start Time:	1000 EDT	Impoundment Water Level:		ft
1800 FP7 End Time:	1700 EDT	Impoundment Water Level:		ft
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:		ft
End Time:	01:58edt	Impoundment Water Level:	906.19	ft
End Date:	8/14/15	CCAT No.:	NCREG 7	30

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

Window Criteria – May 15 th throug	h Septembe	er 15 th					
Date:	8-14-15	Time:		11:00 EDT		Marc.	
Flow at Cornell Gauge:	272 150 0		50 cfs $\leq$ Cornell flow $\leq$ 400 cfs				
Water Temperature - Boney Falls Tailrace:	22.10	≥ 16 °C					
Pond Elevation:	906.17 > 905.59 ft				-		
Trigger Criteria	an an Marina an Anna a				ana ina ina ina ina ina ina ina ina ina		
Previous Day Max Water Temperature at Cornell:	28.3°			ugmentation on on was done on		≥ 24°	
Previous Day Augmentation:	YES Yes/No					-	
Augmentation Record	- <b>M</b>						
Base Flow (Total Plant flow from the Boney Falls Project):	144			ugmented Flow 150% of base):	216	cfs	
Start Time:	1100 0	DT	Impo	undment Water Level:	906.17	ft	
End Time:	1700 E	DT	Impo	undment Water Level:	906.11	ft	
Refill	I	•					
Base Flow (Total Plant flow from the Boney Falls Project):	144		Ref	II Flow (75% of base):	108	cfs	
Start Time:	1701 E	DT	Impo	undment Water Level:	906-11	ft	
End Time:	2/15 6	DT	Impo	undment Water Level:	90B,19	ft	
the second se	1	1.					

Window Criteria – May 15 th throug	gh September	· 15 th		-		
Date:	8-15-15	Time:	11:00 EDT			
Flow at Cornell Gauge:	730	$730$ 150 cfs $\leq$ Cornell flow $\leq$ 400 cfs				
Water Temperature - Boney Falls Tailrace:	226 ≥16°C					
Pond Elevation:	904.75 > 905.59 ft					
Trigger Criteria	alente a		a dan basanan sana	nos uno en en en		
Previous Day Max Water Temperature at Cornell:	28.6		no augmentation on Intation was done on		≥ 24°(	
Previous Day Augmentation:	405 (	Yes/No				
Augmentation Record						
Base Flow (Total Plant flow from the Boney Falls Project):	244		Augmented Flow (150% of base):	366	cfs	
Start Time:	1000 ED	т	Impoundment Water Level:	906.25	ft	
End Time:	1800 ED	т	Impoundment Water Level:	905.74	ft	
Refill			(1-1+319); -314			
Base Flow (Total Plant flow from the Boney Falls Project):	244	ł	Refill Flow (75% of base):	183	cfs	
Start Time:	1800 ED	т	Impoundment Water Level:	905,74	ft	
End Time:	1100 ED	T ·	Impoundment Water Level:	906,01	ft	
and a standard of the standard						

Vindow Criteria – May 15 th throug	h September	15 th			and store		
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		≥ 16 °C				
Pond Elevation:	906,01	> 905.59	ft				
Trigger Criteria			ann 1946 - an Shakedir - ar sin Sicra filire				
Previous Day Max Water Temperature at Cornell:	JOIL Ifau		f no augmentation on entation was done on		≥ 24°		
Previous Day Augmentation:	yes	Yes/No	res/No				
Augmentation Record		antoinneant)					
Base Flow (Total Plant flow from the Boney Falls Project):	148		Augmented Flow (150% of base):	222	cfs		
Start Time:	1100 ED	т	Impoundment Water Level:	905.01	ft		
End Time:	1700 ED	т	Impoundment Water Level:	905,94	ft		
Refill	anna 172, 1 20 1 1						
Base Flow (Total Plant flow from the Boney Falls Project):	148		Refill Flow (75% of base):	111	cfs		
Start Time:	1700 ED	т	Impoundment Water Level:	905,94	ft		
End Time:	0500 ED	r	Impoundment Water Level:	906.19	ft		
End Date:	8/17/15-		CCAT No.:	NCREG 78	200		

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

08/18/2015 05:24 920-433-1219

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Window Criteria – May 15 th throug	gh September	15 th					
Date:	8/17/15	Time:	11	:00 EDT			
Flow at Cornell Gauge:	184 150		150 cfs ≤ Cornell flow ≤ 400 cfs				
Water Temperature - Boney Falls Tailrace:			≥ 16 °C				
Pond Elevation:	906,26 > 90		9 ft				
Trigger Criteria							
Previous Day Max Water Temperature at Cornell:			≥ 26°C if no augmentation on previous day, ≥ 24° if augmentation was done on previous day				
Previous Day Augmentation:	YES Yes/		Yes/No				
Augmentation Record						-1717-1-1-	
Base Flow (Total Plant flow from the Boney Falls Project):	219			nented Flow 0% of base);	328	cfs	
Start Time:	1100 ED	т	Impound	dment Water Level:	906,26	ft	
End Time:	1800 ED	T	Impound	dment Water Level:	905.93	ft	
Refill							
Base Flow (Total Plant flow from the Boney Falls Project):	219		Refill I	Flow (75% of base):	156	cfs	
Start Time:	1800 ED	т	Impound	iment Water Level:	905,93	ft	
End Time:	640 ED	T	Impound	lment Water Level:	906.19	ft	
End Date:	8/18/15			CCAT No .:	NCREG78		

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

	8-18-15			24
Flow at Cornell Gauge:	191	150 cfs ≤	Cornell flow ≤ 40	00 cfs
Water Temperature - Boney Falls Tailrace:	23.2	≥ 16 °C		
Pond Elevation:	906.28	> 905.59 f	t	

remperature at cornen:	01.0	in 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:	//:00 EDT	Impoundment Water Level:	906.28	ft
End Time:	/8:00 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:		ft
End Date:	8-18-15	CCAT No.:	NCREG 7	833

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

Nindow Criteria – May 15 th throug	h Septembe	er 15 th					
Date:	9-1-15	Time:		11:00 EDT		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Flow at Cornell Gauge:	210 150 c		50 cfs $\leq$ Cornell flow $\leq$ 400 cfs				
Water Temperature - Boney Falls Tailrace:	20.2	20.2 ≥ 16 °C		≥ 16 °C			
Pond Elevation:	906.23 > 905		59 ft				
Frigger Criteria	• 1678				21		
Previous Day Max Water Temperature at Cornell:			augmentation on ation was done on		≥ 24°		
Previous Day Augmentation:			s/No				
Base Flow (Total Plant flow from the Boney Falls Project):	221			Augmented Flow (150% of base):	332	cfs	
Start Time:		DT	Imp	oundment Water	906.22	ft	
	1100 E			Level:			
End Time:	1800 EI	DT	Imp	oundment Water Level:	905-84	ft	
Refill							
Base Flow (Total Plant flow from the Boney Falls Project):	221		R	efill Flow (75% of base):	166	cfs	
Start Time:	1800 E	DT	Imp	ooundment Water Level:	905.84	ft	
End Time:	1100 EI	DT	Imp	ooundment Water Level:	906.00	ft	
and the second sec					NCREG 79		

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

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

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

Base Flow (Total Plant flow from the Boney Falls Project):	228	Augmented Flow (150% of base):	342	cf
Start Time:	1100 EDT	Impoundment Water Level:	GO. 00P	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 791	2

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

Date:	9-5-15	Time:	11:00 EDT	
Flow at Cornell Gauge:	295	150 cfs ≤	Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	21.60	≥ 16 °C		
Pond Elevation:	906.13	> 905.59 f	P	

Trigger Criteria	-	-
Previous Day Max Water Temperature at Cornell:	26.70	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	No	Yes/No

Base Flow (Total Plant flow from the Boney Falls Project):	255	Augmented Flow (150% of base):	383	cfs
Start Time:	//00 EDT	Impoundment Water Level:	906.13	ft
End Time:	1800 EDT	Impoundment Water Level:	905.73	ft

Base Flow (Total Plant flow from the Boney Falls Project):	255	Refill Flow (75% of base):	191	cfs
Start Time:	/800 EDT	Impoundment Water Level:	905.73	ft
End Time:	//00 EDT	Impoundment Water Level:	905.97	ft
End Date:	9-6-15	CCAT No.:	NICREG 79	33

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

Nindow Criteria – May 15 th throug	h September	r 15 th			
Date:	9-6-15	Time:	11:00 EDT	1	
Flow at Cornell Gauge:	250	150 cfs	$\leq$ Cornell flow $\leq$ 40	0 cfs	
Water Temperature - Boney Falls Tailrace:			≥ 16 °C		
Pond Elevation:	905.97	> 905.5	9 ft		
Trigger Criteria				a.	
Previous Day Max Water Temperature at Cornell:	26.7°		f no augmentation on entation was done on		≥ 24°(
Previous Day Augmentation:	YES Yes/No				
Base Flow (Total Plant flow from the Boney Falls Project):	180		Augmented Flow (150% of base):		cfs
		-	(150% of base): Impoundment Water		ft
Start Time:	1100 ED		Level:	905.97	
End Time:	1800 ED	т	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 ED	т	Impoundment Water Level:	905.78	ft
End Time:	1100 ED	т	Impoundment Water Level:	906.06	ft
the second se					

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

Window Criteria – May 15 th throug	gh September	15 th			- i da	
Date:	9/7/15	Time:	11:00 EDT		000	
Flow at Cornell Gauge:	272	150 cfs	≤ Cornell flow ≤ 40	0 cfs		
Water Temperature - Boney Falls Tailrace:	22.6	≥ 16 °C				
Pond Elevation:	906.06	> 905.5	9 ft			
	g Colour . Sharp - out			WW OUT CAMPAGE		
Trigger Criteria	1					
Previous Day Max Water Temperature at Cornell:	26.3		if no augmentation on entation was done on		≥ 24°(	
Previous Day Augmentation:	YES Yes/No			_		
•			and an an an and a strend of the second of t	an	-	
Augmentation Record	and the state of t			anna a Andrea anna an an	- Dame	
Base Flow (Total Plant flow from the Boney Falls Project):	139		Augmented Flow (150% of base):	208	cfs	
Start Time:	1100 ED	т	Impoundment Water Level:	906.06	ft	
End Time:	1800 ED	г	Impoundment Water Level:	906.06 906.05	'n	
Refill						
Base Flow (Total Plant flow from the Boney Falls Project):	139		Refill Flow (75% of base):	104	cfs	
Start Time:	1800ed	τ	Impoundment Water Level:	906.05	-ft	
End Time:	22/6 EDT	r	Impoundment Water Level:	906.19	Ħ	
End Date:	9/07/15		CCAT No 1	NCREG 79	27	

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

Date:	9/8/15	Time:	11:00 EDT
Flow at Cornell Gauge:	311	150 cfs ≤	Cornell flow ≤ 400 cfs
/ater Temperature - Boney Falls Tailrace:	23	≥16 °C	
Pond Elevation:	906.22	> 905.59 1	it

rigger Criteria				
Previous Day Max Water Temperature at Cornell:	28.5	$\ge 26^{\circ}$ C if no augmentation on previous day, $\ge 24^{\circ}$ C if augmentation was done on previous day		
Previous Day Augmentation:	Yes	Yes/No		

ugmentation 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
				4

	the boney rans riojecty.		base).	0.10	1.1
	ah(a) Start Time:	1860 EDT	Impoundment Water Level:	905.82	ft
_	End Time:	0902edt	Impoundment Water Level:	906.19	ft
	End Date:	9-9-15	CCAT No.:	NCREG 79	742

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

Print Date: 01/15/2016

Integrys Energy Group

Company - Level	07/24/2015	aba Hydro-Escanaba #1 Hydro Discovery Date/Time: 7/24/15 10:5	50
Event Date:		Discovery Date/Time: 7/24/15 10:	50
Event Title:	Divergence has begun		
Event Details:	Got a call from the Versa Plant inc	licating that the gauge reading in below 2.02.	20
Immediate Action:	operator took the unit offline		
Recommendations:	n/a		
Potential Causes/Contril		/5	
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 A	gency: no	Basis for Reportability: Deviation -	End of year report
Additional Followup Req	uired: yes		
Category: Regulate	ory	Type: FERC Deviation	
Sub Type: Other		Description: License requirement	
Causal Analysis Level:	Closed - No further action	Causal Analysis Basis: Deviation of	f Flow for New Page/Verso - License requiement end
	required	of year repo	orting
	7/24/2015 10:00 AM		
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:			
Dues Eval Require Sceer	ning Committee Approval upon Co	ompletion no	

#### Print Date: 01/15/2016

Integrys Energy Group

NC Record Number Company - Level		Entity: Regi ba Hydro-Escanaba #1	ional Generation	
Event Date:	07/30/2015	Discovery Date/Time:	7/30/15 10:15	
Event Title:	Started divergence at Escanaba L	init #1		
Event Details:	Versa reported river gauge at 1.98	. Started divergence at Escan	aba Unit #1	
Immediate Action:	Stopped all generation			
Recommendations:	None			
Potential Causes/Contril	outors 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 A	gency: no	Basis for Reportability:	End of year reporting FERC required action	- license
Additional Followup Rec	uired: yes		condition	
Category: Regulat	ory.	Type: FERC D	eviation	
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	9:39 AM Event Duration (H	H:MM): 119:47
Evaluator Name:		Evaluator Dept:		
Evaluation Accepted:		Acceptance Comments		
Eval Due Date:		Eval Completion Date:		
Approver Name:		Corrective Action Approv	ver Name	
Analysis Description:				
Causes:				
Primary Causes:				
Does Eval Require Scee	ning Committee Approval upon Co	mpletion no		
Evaluation Reviewed/Ap	proved by Screening Committee			

#### Print Date: 01/15/2016

Integrys Energy Group

NC Record Numb		Entity: Regional Generation
Company - Level		ba 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 Plar offline to go into divergence. operator took the unit offline	t indicating that the gauge reading is below 2.02' and that generation should be taken
Immediate Action:	A MANY SERVICE OF A RESIDENCE AND A LOCAL SERVICES.	
Recommendations:	none butors to incident low flows	
Potential Causes/Contri	Terrie S Taylor	Creation Date/Time: 8/6/15 9:43
Entered By Name:	Contract and Decision of the state of the state	
Entered By Department:		curus.
Reportable to External A		Basis for Reportability: License condition, end of year reporting
Additional Followup Rec	luired: yes	
Category: Regulat	ory	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 Event Duration (HH:MM): 98:43
Evaluator Name:		Evaluator Dept:
Evaluation Accepted:		Acceptance Comments
Eval Due Date:		Eval Completion Date:
Approver Name: Analysis Description:		Corrective Action Approver Name
Causes:		
Primary Causes:		
	ning Committee Approval upon Con	noletion no
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Print Date: 01/12/2016

Integrys Energy Group

NC Record Numb	er: NCREG7796	Entity: Regional Generation	
Company - Level		naba Hydro-Escanaba #1 Hydro	
Event Date:	08/12/2015	Discovery Date/Time: 8/12/15 14:19	
Event Title:	EHD1 Divergence		
Event Details: Immediate Action: Recommendations:	were notified by Verso Paper the contacted operator to take gene none	at gauge height was below 2.2ft and to take generation off line at Dam 1 ration off line	
Potential Causes/Contri		ows	
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:	1 A A
Additional Followup Re	quired:	Basis for Reportability: Return 8/17/15 11-34	
Category:		Туре:	
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 Scee	ning Committee Approval upon	Completion	
Evaluation Reviewed/A	pproved by Screening Committee		

Print Date: 01/15/2016

Integrys Energy Group

Event Date:	08/30/2015	Discovery Date/Time:	8/30/15 10:59		
Event Title:	Divergence				
Event Details:	Received a call requesting that EH	ID1 Diverge because the leve	l was 2 02		
Immediate Action:	Paged out local operator, via ARC	and the second se			
Recommendations:	na	2 1 - S C. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19			
Potential Causes/Contri	butors 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 A	gency: no	Basis for Reportability:	Part of annual report		
Additional Followup Rec					
Category: Regulat	ory	Type: Other			
Sub Type:		Description: License	requirement		
Causal Analysis Level:	Closed - No further action required	Causal Analysis Basis:	Divergence is done for DO requirements in the	VERSO - New Page License co river	onditions of
1	8/30/2015 11:05 AM	Event End: 9/3/2015	20.44		94:25
Event Start:	8/30/2013 11:05 AM		9.30 AM	Event Duration (HH:MM):	54.20
Evaluator Name:		Evaluator Dept:			
Evaluation Accepted:		Acceptance Comments			
Eval Due Date:		Eval Completion Date:			
Approver Name:		Corrective Action Appro-	ver Name		
Analysis Description:					
Causes;					
Primary Causes:					
Does Eval Require Scee	ning Committee Approval upon Co proved by Screening Committee	mpletion no			

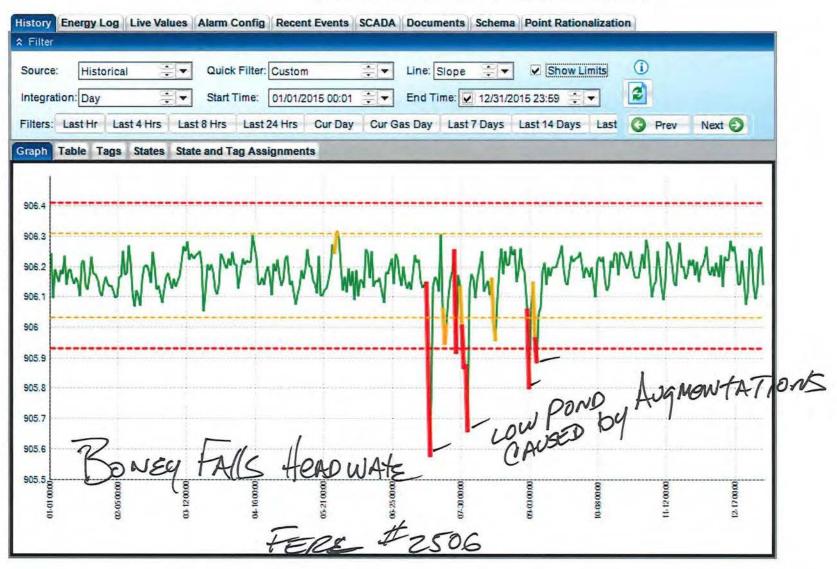
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#### Print Date: 01/15/2016

Integrys Energy Group

Company - Level ' Event Date:	09/19/2015	ba Hydro-Escanaba #1 H Discovery Date/Time:	9/19/15 9:34		-	_
Event Title:	Divergence	Discovery Dater Time.				
Event Details:	Received a call from Mike Pearso Escanaba dam #1.	n at Verso requesting that, based	l on current river conditi	ons, we stop all generation at		
Immediate Action:	Local operator was called out to ta	ke generation offline.				
Recommendations:						
Potential Causes/Contrit	outors to incident Project	requirement.	and Associations			
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 A	gency: no	Basis for Reportability:	part of annual report			
Additional Followup Req	uired: yes					
Category: Regulate	эгу	Type: Other				
Sub Type:		Description: License Re	quirement			
Causal Analysis Level:	Closed - No further action required		Required by License co spill water	onditions and Verso to stop gene	eration and	
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			111
Analysis Description:						
Causes:						
Primary Causes:						
Does Eval Require Sceen	ning Committee Approval upon Co	empletion no				
Evaluation Reviewed/An	proved by Screening Committee					

Point Info - UPPCO-BNYH: Headwater Elevation



## Point Info - UPPCO-BNYH: Headwater Elevation

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Point Info - UPPCO-BNYH: Total Plant Flow

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Point Info - UPPCO-EHD3: Headwater Elevation

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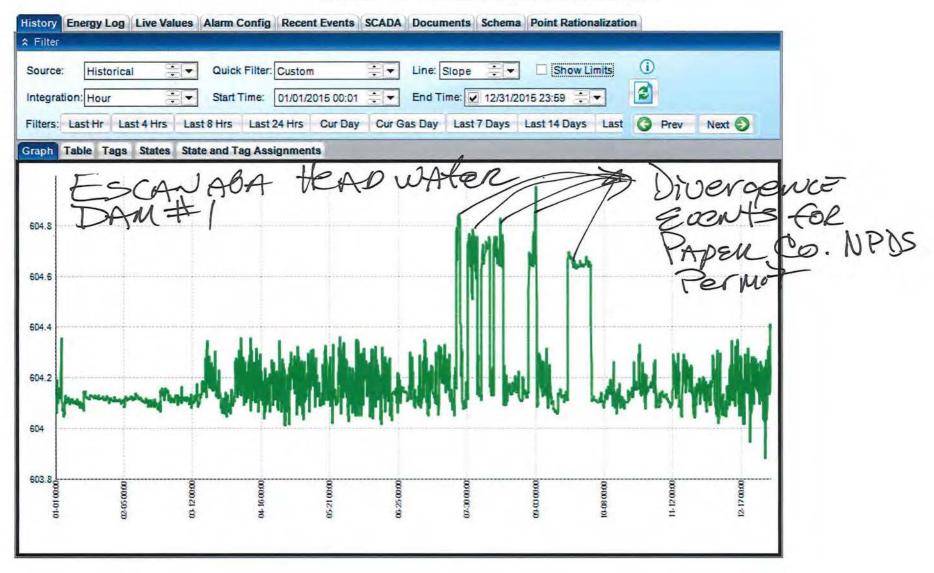
Point Info - UPPCO-EHD3: Headwater Elevation



Point Info - UPPCO-EHD3: Total Plant Flow

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#### Point Info - UPPCO-EHD1: Headwater Elevation



Point Info - UPPCO-EHD1: Total Plant Flow

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