

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

Window Criteria – May 15<sup>th</sup> through September 15<sup>th</sup>

Date:	7/22/11	Time:	1045 EPT
Flow at Cornell Gauge:	258	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	28.8	≥ 16 °C	
Pond Elevation:	901.47	≥ 901.25 ft	

**Trigger Criteria**

Previous Day Max Water Temperature at Cornell:	33.2	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

**Augmentation Record**

Base Flow:	162	Augmented Flow (150% of base):	243	cfs
Start Time:	1100 EPT	Impoundment Water Level:	901.47	ft
End Time:	1800 EPT	Impoundment Water Level:		ft

**Refill**

Base Flow:	162	Refill Flow (75% of base):	122	cfs
Start Time:	1800 EPT	Impoundment Water Level:	901.26	ft
End Time:	1800 EPT	Impoundment Water Level:	901.26	ft 901.25
End Date:	7/22/11	CCAT No.:	NCREG3162	

When completed, fax to Bob Meyers at 9-1-906-485-2424.

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

Window Criteria – May 15<sup>th</sup> through September 15<sup>th</sup>

Date:	7-23	Time:	9:45
Flow at Cornell Gauge:	203	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	28.4	≥ 16 °C	
Pond Elevation:	901.49	≥ 901.25 ft	

### Trigger Criteria

Previous Day Max Water Temperature at Cornell:	30.6	≥ 26°C if no augmentation on previous day, ≥ 24°C if augmentation was done on previous day
Previous Day Augmentation:	Yes	Yes/No

### Augmentation Record

*Attempted to start @ 1000. Plant control problems. Jimk called out, 1135 - Jim brought plant online established cfs @ 1700*

Base Flow:	115	Augmented Flow (150% of base):	270	cfs
Start Time:	<del>10:00 cft</del>	Impoundment Water Level:	901.49	ft
End Time:	1700 cft	Impoundment Water Level:	901.50	ft

### Refill

Base Flow:	<del>X</del>	Refill Flow (75% of base):	<del>X</del>	cfs
Start Time:	<del>X</del>	Impoundment Water Level:	<del>X</del>	ft
End Time:	1700 cft	Impoundment Water Level:	901.50	ft
End Date:	7-23-11	CCAT No.:	NCREG 3165	

When completed, fax to Bob Meyers at 9-1-906-485-2424.

906-280-0933 personal Cell Jimk

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

### Window Criteria – May 15<sup>th</sup> through September 15<sup>th</sup>

Date:	7-24-11	Time:	1100 EPT
Flow at Cornell Gauge:	216	150 cfs ≤ Cornell flow ≤ 400 cfs	
Water Temperature - Boney Falls Tailrace:	25.9°C	≥ 16°C	
Pond Elevation:	901.47	≥ 901.25 ft	

### Trigger Criteria

Previous Day Max Water Temperature at Cornell:	27.8°C	≥ 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:	180	Augmented Flow (150% of base):	270	cfs
Start Time:	1100 EPT	Impoundment Water Level:	901.47	ft
End Time:	1800 EPT	Impoundment Water Level:	901.10	ft

### Refill

Base Flow:	180	Refill Flow (75% of base):	135	cfs
Start Time:	1800 EPT	Impoundment Water Level:	901.10	ft
End Time:	2134	Impoundment Water Level:	901.25	ft
End Date:	7/24/11	CCAT No.:	NCREG 3166	

When completed, fax to Bob Meyers at 9-1-906-485-2424.

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

**Window Criteria – May 15<sup>th</sup> through September 15<sup>th</sup>**

<b>Date:</b>	7-25-11	<b>Time:</b>	1100 EPT
<b>Flow at Cornell Gauge:</b>	200	150 cfs ≤ Cornell flow ≤ 400 cfs	
<b>Water Temperature - Boney Falls Tailrace:</b>	25.14	≥ 16 °C	
<b>Pond Elevation:</b>	901.55	≥ 901.25 ft	

**Trigger Criteria**

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

**Augmentation Record**

<b>Base Flow:</b>	200	<b>Augmented Flow (150% of base):</b>	280	cfs
<b>Start Time:</b>	1100 EPT	<b>Impoundment Water Level:</b>	901.55	ft
<b>End Time:</b>	1800 EPT	<b>Impoundment Water Level:</b>	901.21	ft

**Refill**

<b>Base Flow:</b>	200	<b>Refill Flow (75% of base):</b>	150	cfs
<b>Start Time:</b>	1800 EPT	<b>Impoundment Water Level:</b>	901.21	ft
<b>End Time:</b>	0330 EPT	<b>Impoundment Water Level:</b>	901.25	ft

<b>End Date:</b>	7/26/11	<b>CCAT No.:</b>	NOREG-3169
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**When completed, fax to Bob Meyers at 9-1-906-485-2424.**