

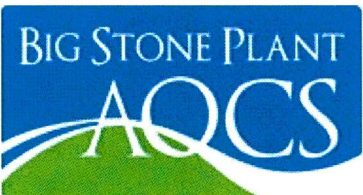
EXHIBIT

OTP-4

www.bigstone.com No. 7113

# Big Stone Plant AQCS Project Update

September 16, 2013



25 PU-13-85 Filed 09/17/2013 Pages: 14

Exhibit OTP-4 from Sept. 16 formal hearing  
Otter Tail Power Company

27 PU-13-84 Filed 09/17/2013 Pages: 14

Exhibit OTP-4 from Sept. 16 formal hearing  
Otter Tail Power Company

27 PU-13-83 Filed 09/17/2013 Pages: 14

Exhibit OTP-4 from Sept. 16 formal hearing  
Otter Tail Power Company

26 PU-13-79 Filed 09/17/2013 Pages: 14

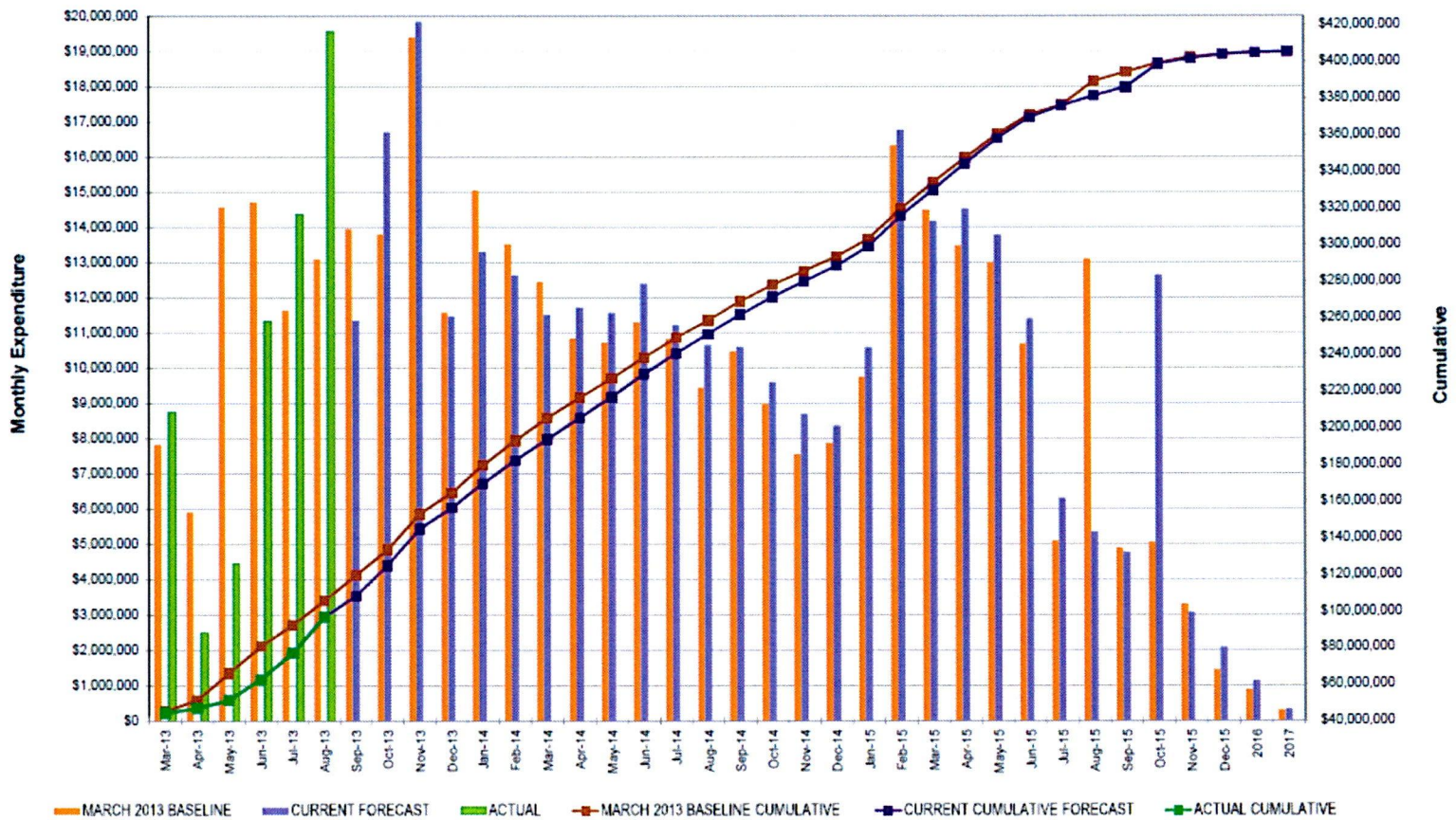
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# Budget (total project)

- Original \$491M
- Current \$405M
- Reduction:
  - Engineered savings
  - Market timing
  - Construction management, project execution methodology
  - Contingency

# Current cash flow

Big Stone Plant AQCS  
Cash Flow & Spending Analysis  
(Including Contingency & Escalation)  
(Excluding Retention until it is paid)



# Construction

- Auger cast piles completed July 2.
- Underground piping – approximately 20,000 ft. completed.
- Baghouse/scrubber and waste ash foundations completed.
- Steel erection on scrubber and baghouse started.
- SCR foundations nearly completed.
- Approximately 225 people.
- 5-10 semi-loads of steel per day.



3-20 Pre mobilization



8-21 Main laydown area, contractor parking lot, office complex



4-11 South view - working in early spring snow!



8-21 Plant south view

# Waste ash and pebble lime silo progress



4-29 Foundation excavation



5-07 Foundation rebar placement



5-24 First major concrete pour



6-26 Steel erection



8-9 WA/PL silo erection



8-30 WA/PL silos



5-01 North production piles



8-15 North SCR concrete pour

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## Baghouse and CFB progress



5-29 Baghouse and CFB excavation



7-08 Baghouse/CFB bldg. concrete pour



8-29 CFB & start of baghouse steel erection



9-05 Waste ash bin lowered



8-05 Low quality water pipeline



5-07 Boiler modifications



8-09 Excavating ID fan area



ID Fan B foundation placing concrete

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# Safety

	Hours	Recordable	Lost Time	Near Miss	First Aid
Graycor	174,726	0	0	2	6
Project Team & Cont.	43,670	0	0	0	0
Engineering	<u>129,717</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	348,113	0	0	2	6

- Stronger effort on safety than any previous project.

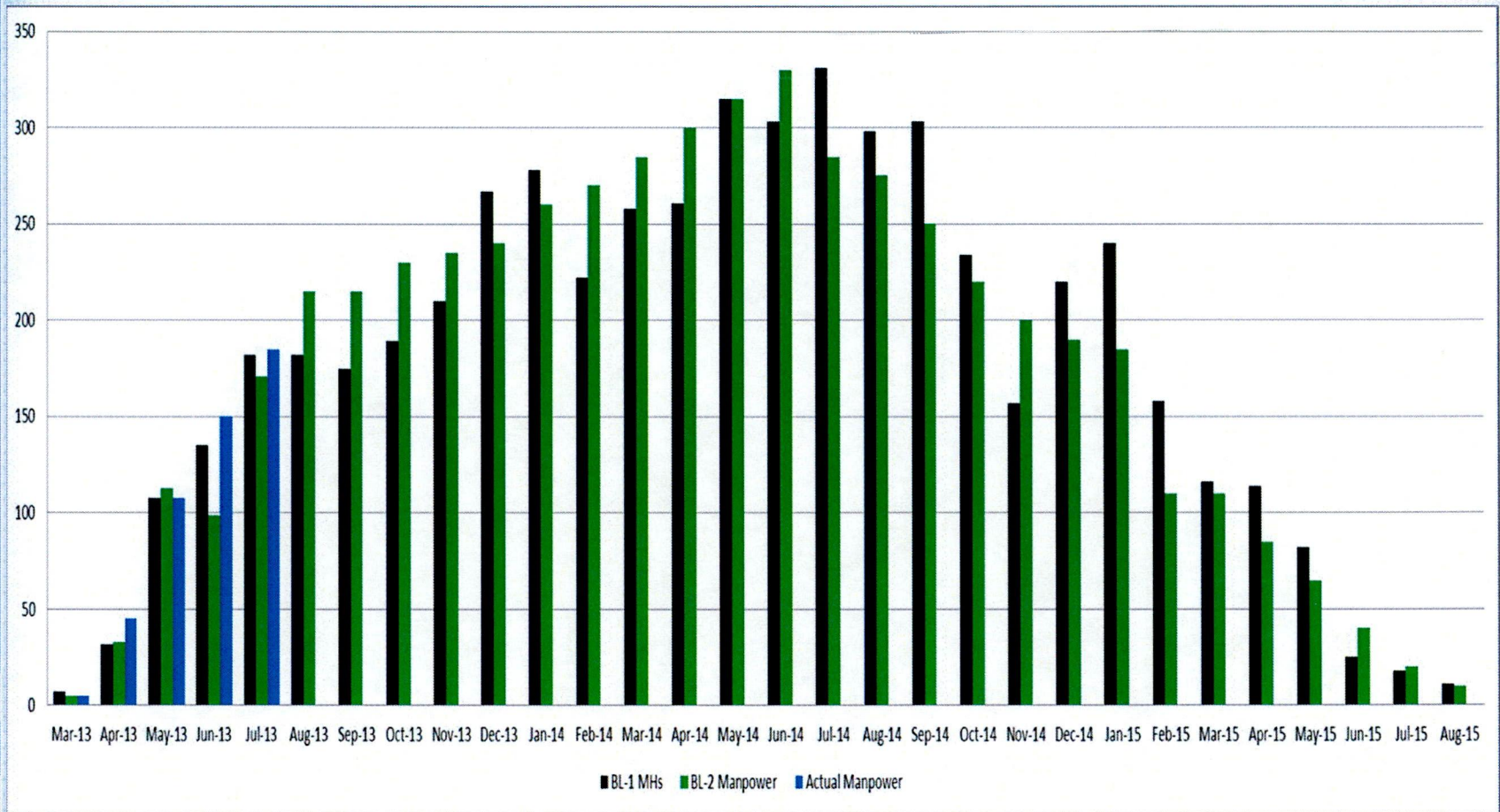
# Risk

- Risk matrix compiled for the project.
- Reviewed monthly.
- Risk management/mitigation
  - Builders risk insurance
  - Escalation – vendor/contractor responsibility
  - Labor productivity – contractor responsibility
  - Target pricing – align interest/capped risk
  - Retention on most contracts
  - Currency exchange rate – limited cases vendor responsibility
  - Meeting with unions on labor

# Risk – items being monitored

- Labor availability for commissioning
- Weather
- Labor availability

# Manpower projection





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