



Bloom Project Update

January 8, 2013

Background

- The Commission approved Delmarva's electric and gas tariffs for a new Qualified Fuel Cell Provider Project ("Bloom") in October 2011. Delmarva serves as a collection agent for the Bloom charge.
- Delmarva submitted the first monthly filing on April 2, 2012. To date Staff has reviewed ten monthly filings.
- Bloom monthly applications, staff memos and orders are posted on the PSC website.

Delmarva Power Bloom Energy Fuel Cell

In compliance with the Qualified Fuel Cell Project (QFCP) tariff and legislation, Delmarva will be providing monthly filings to account for the varying QFCP monthly charge. Monthly changes to the QFCP charge become effective thirty (30) days after the filing, absent a determination of manifest error by the Public Service Commission. Delmarva will update the **Qualified Fuel Cell Provider Project Renewable Capable Power Production Table** monthly to enable customers to view the varying monthly QFCP charge. Please see the link to [Delmarva's website](#) for the revised tariff.

To calculate the monthly impact to your bill; multiply the kwh usage X the respective Rate Class QFCP charge. For example, for May 2012 billing, if you are a Residential Customer with a monthly electricity usage of 1000 kwh your calculation would be 1000 kwh X \$0.000143/kwh (May 2012 rate)= \$0.143

Monthly Compliance Filings

[April 2012 12-173-04](#)

[May 2012 12-173-05](#)

[June 2012 12-173-06](#)

[July 2012 12-173-07](#)

[August 2012 12-173-08](#)

[September 2012 12-173-09](#)

[October 2012 12-173-10](#)

[November 2012 12-173-11](#)

[December 2012 12-173-12](#)

[January 2013 12-173-13](#)

Background for Docket No. 11-362

- FAQs
- Employment
- Related Links
- Contact Information
- Office Location
- Agency Site Map
- SERVICES
- Consumer Assistance
 - File a Complaint
 - Public Notices
 - RFPs
 - Speakers Bureau
- INFORMATION
- Cable
 - Digital TV Transition
- Electric
 - Smart Meters and AMI
 - Electric Choice
 - Revenue Decoupling
 - Delaware RPS
 - Delmarva Power IRP
 - IRP Regulations
 - Delmarva Power SOS
- Natural Gas
- Telecommunications
- Water
- Wastewater
- Legal Matters
 - Orders
 - Filings

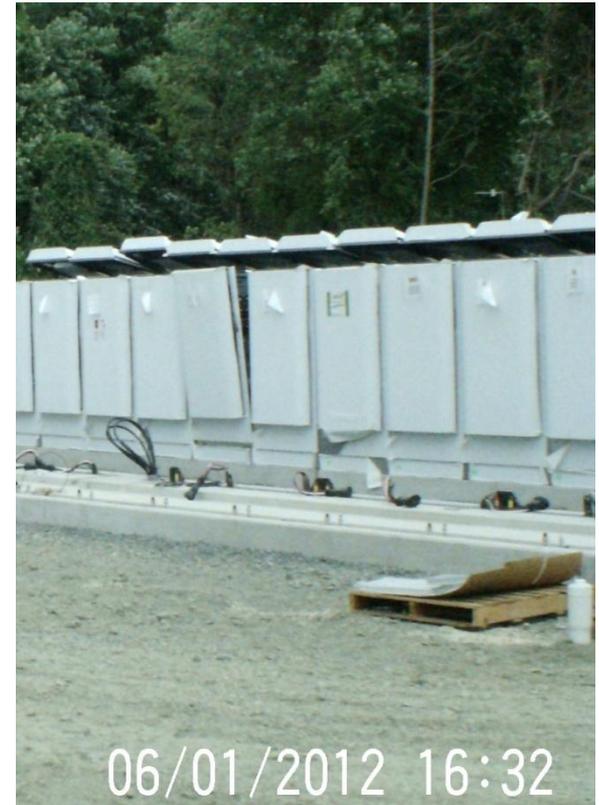


Overall Schedule*

- **June 18, 2012:** The Brookside facility began testing & operations; 3 MW
- **December 13, 2012:** The Red Lion facility began testing & operations; 5.8MW**
- **3rd Quarter 2013:** Projected start of Red Lion; 6MW
- **4th Quarter 2013:** Projected start of Red Lion; 11MW
- **1st Quarter 2014:** Projected start of Red Lion; 4MW
- **Total : 30 MW**

* Per Jim Jacoby's email dated 11/5/2012

** Per Jim Jacoby's email dated 1/8/2013



Brookside

Rate Calculation

- Bloom charge is calculated based on three components:
 - Forecasted operational costs and PJM revenues
 - Power & gas forward prices
 - Fuel cell performance parameters: MW output, gas consumption
 - True-ups for previous months based on actuals
 - Billing revenues
 - PJM energy and capacity revenues
 - Operational costs
 - Forecasted electric sales (KWH) for the month being billed

Rate Calculation

- Bloom charge calculation :

- For example:

- January Bloom charge =

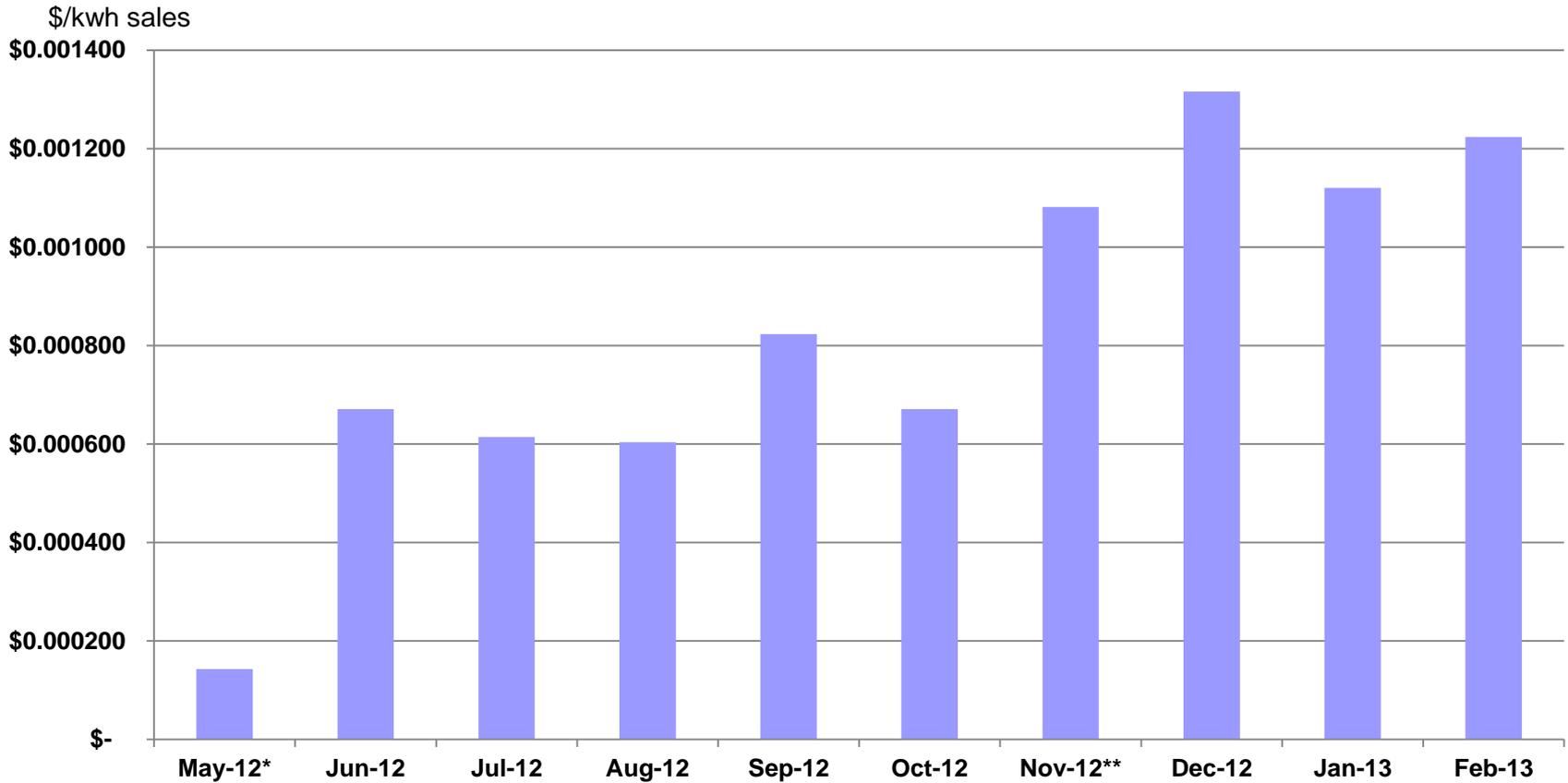
$$\frac{(\text{Forecasted Feb. Operational Costs} - \text{PJM revenues}) \quad \text{Oct. true-ups}}{\text{Forecasted January Electric Sales (KWH)}}$$

- Electric sales & Seasonal pattern

Monthly Filing

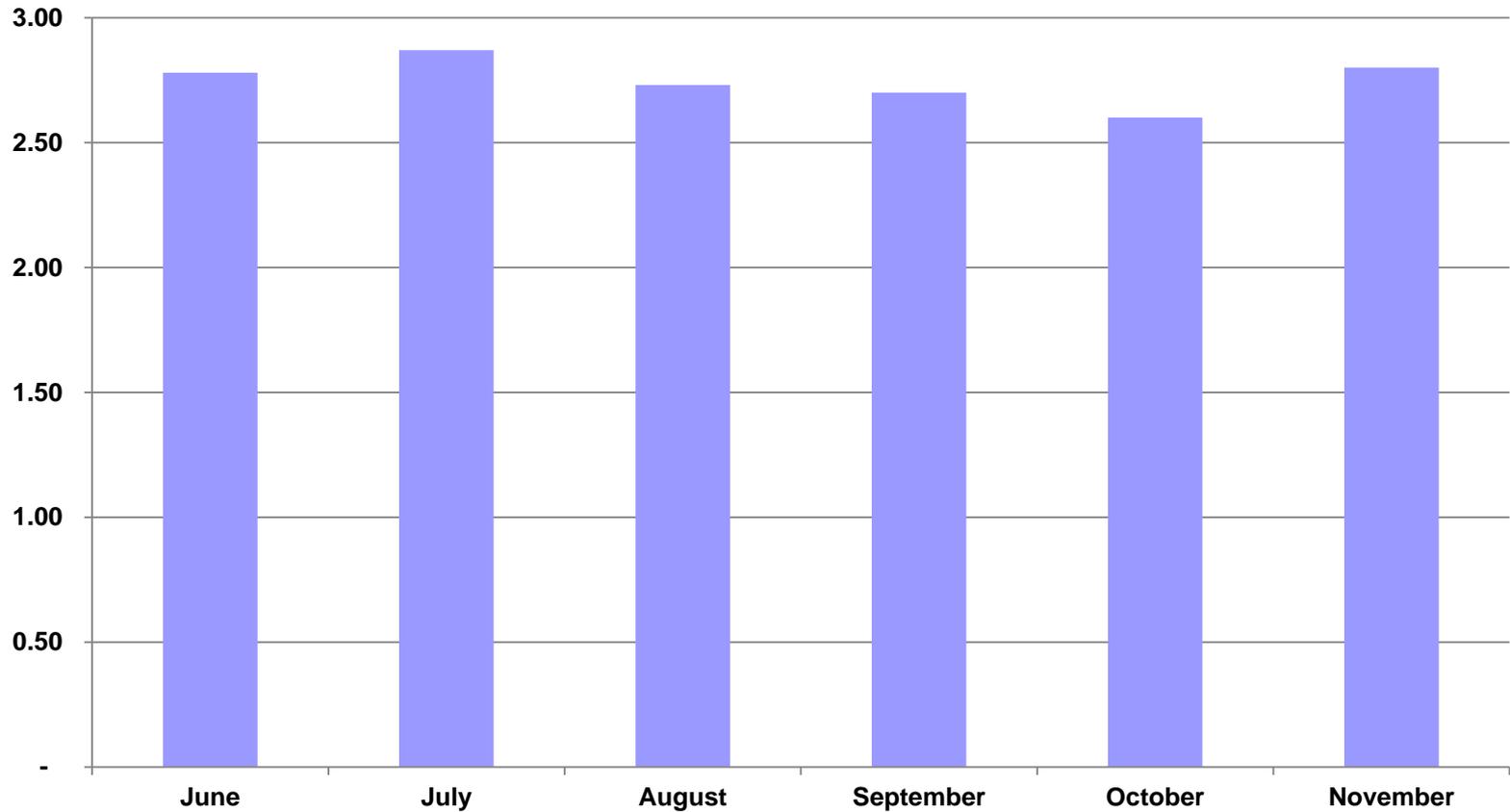
- In December's filing (for February's billing), the QFCP Rate for Residential Rate Classes is \$0.001224 per kWh sales
- The February billing rate is slightly higher than the previous month
- Delmarva supplied Staff with Bloom's Monthly Operating Report which detailed all outages, heat rates, and output produced

Monthly Residential Billing Rate Trends



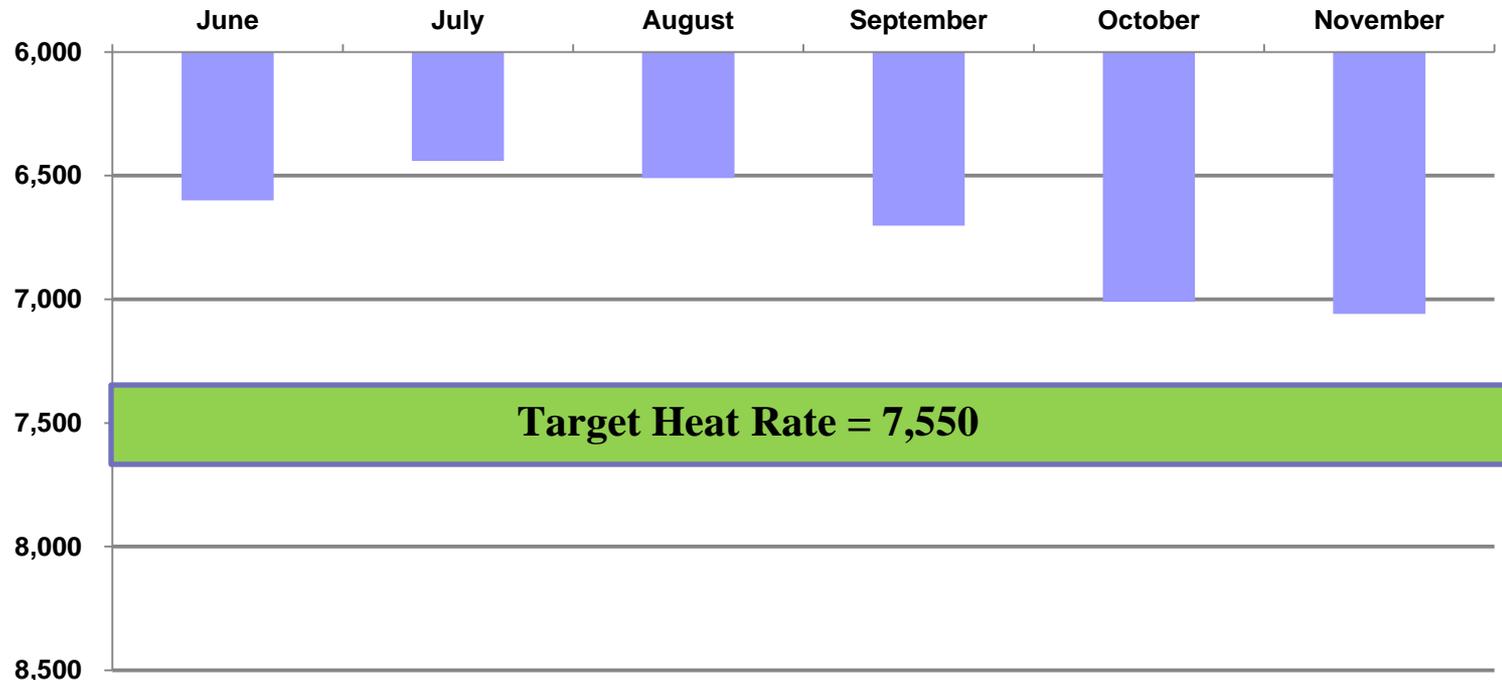
Trends - Production

Average Actual Output, MW (Brookside Site Only)



Trends – Heat Rate

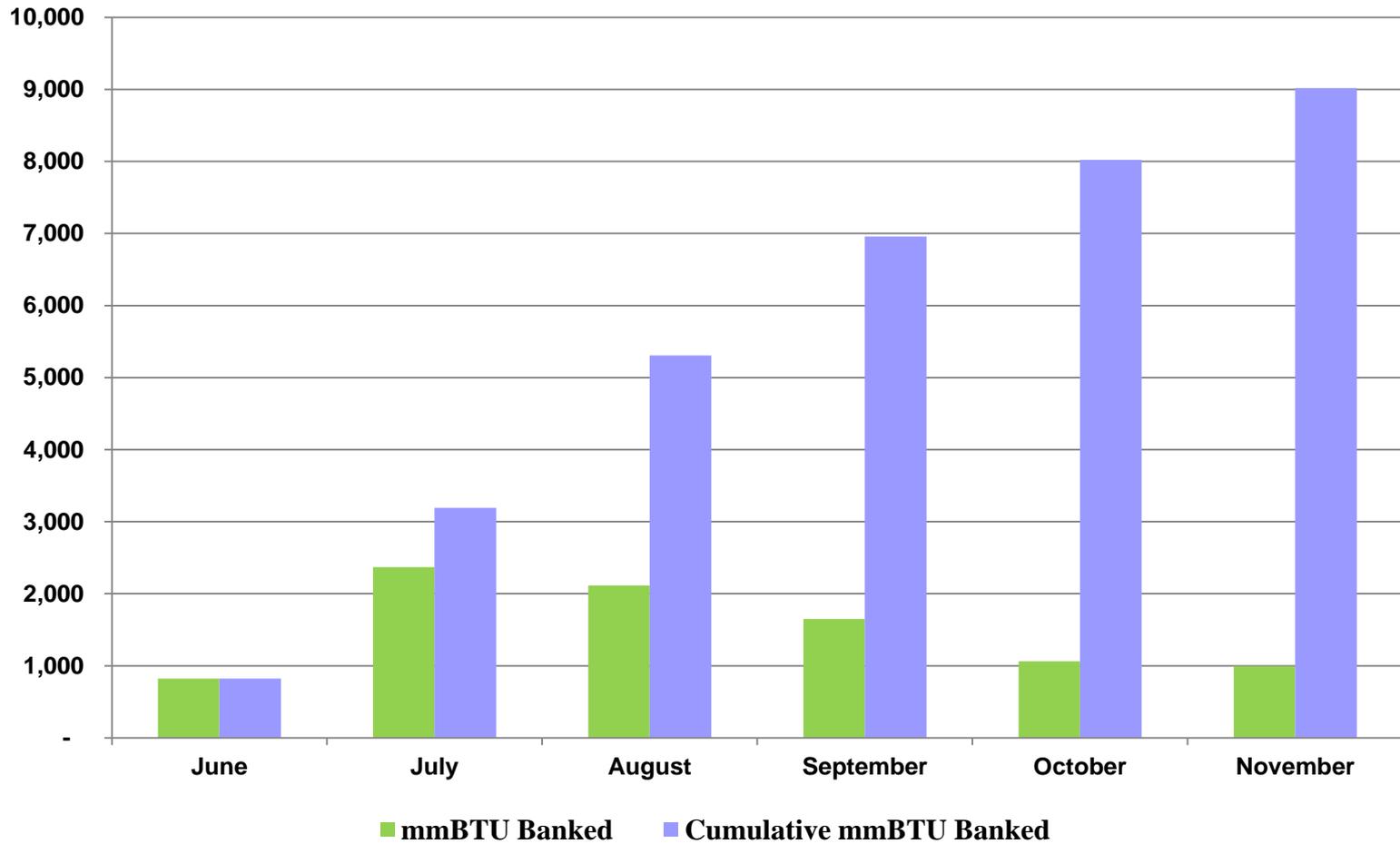
Heat Rate (Brookside Site Only)



- The target heat rate is **7,550**
- When the **actual** heat rate is below the **target** heat rate, the difference is banked. This banking will be credited against any future penalties incurred.

Trends - Heat Rate Banking

(Brookside Site Only)



Future PJM Capacity Revenues

- 8 MW were successfully bid into the 2nd Incremental Auction for Delivery Year 2013/14
 - These revenues should be seen in the monthly filings beginning in June, 2013
- 3 MW for the Brookside site and 27 MW for the Red Lion site were successfully bid into the 1st Incremental Auction for Delivery Year 2014/15
- The full 30 MW was successfully bid into the Base Residual Auction for Delivery Year 2015-16

Future PJM Capacity Revenues

- All 30 MW have been exempted, through PJM, from the Minimum Offer Price Rule (MOPR) for all Incremental Auctions (IAs) and the Base Residual Auction (BRA) they've participated in
- Bloom will appeal to PJM for a continued exemption for the next Base Residual Auction (BRA)

