

The background of the slide features a series of wind turbines silhouetted against a clear blue sky. The turbines are positioned at various distances, with one large turbine in the center foreground and several smaller ones receding into the distance. The horizon line is visible, separating the dark blue sea from the sky.

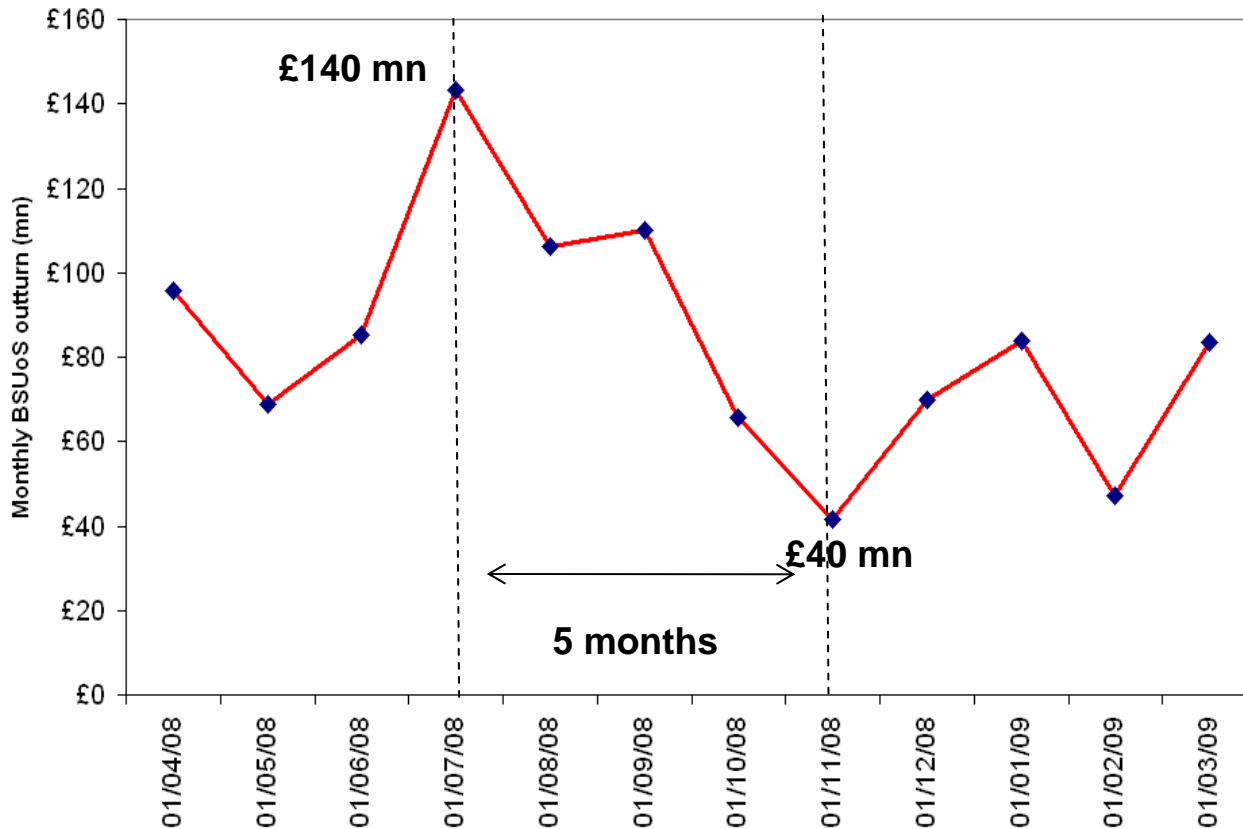
# Smoothing BSUoS payments – a methodology for reducing the volatility of balancing charges

6<sup>th</sup> November 2009

**centrica**  
energy

# The issues – volatility and unpredictability

## Over 2008/09 BSUoS charges were highly volatile



- Balancing costs for the industry was over £1 billion in the 2008/2009 period, which was significantly higher than initial forecasts.

The lowest daily average was - £0.89/MWh and the highest was £4.68 £/MWh.

As well as being volatile, BSUoS costs are also difficult to predict.

# We have developed a methodology to smooth BSUoS payments

- Smooths payments - doesn't reduce overall balancing costs => still cost reflective
- Every month most is paid by the estimate => only the difference between the estimate and the outturn is paid over 12 months
- National Grid recovers some of its outlay at a later date (similarity to TNUoS)
- Interest is incurred on all delayed payments
- Given the delayed recovery there are two financial issues that need to be considered:
  - Security => e.g. credit note from Parties
  - The financing of the shortfall

# The TNUoS charging methodology for demand already involves under / over-recovery

## Demand TNUoS

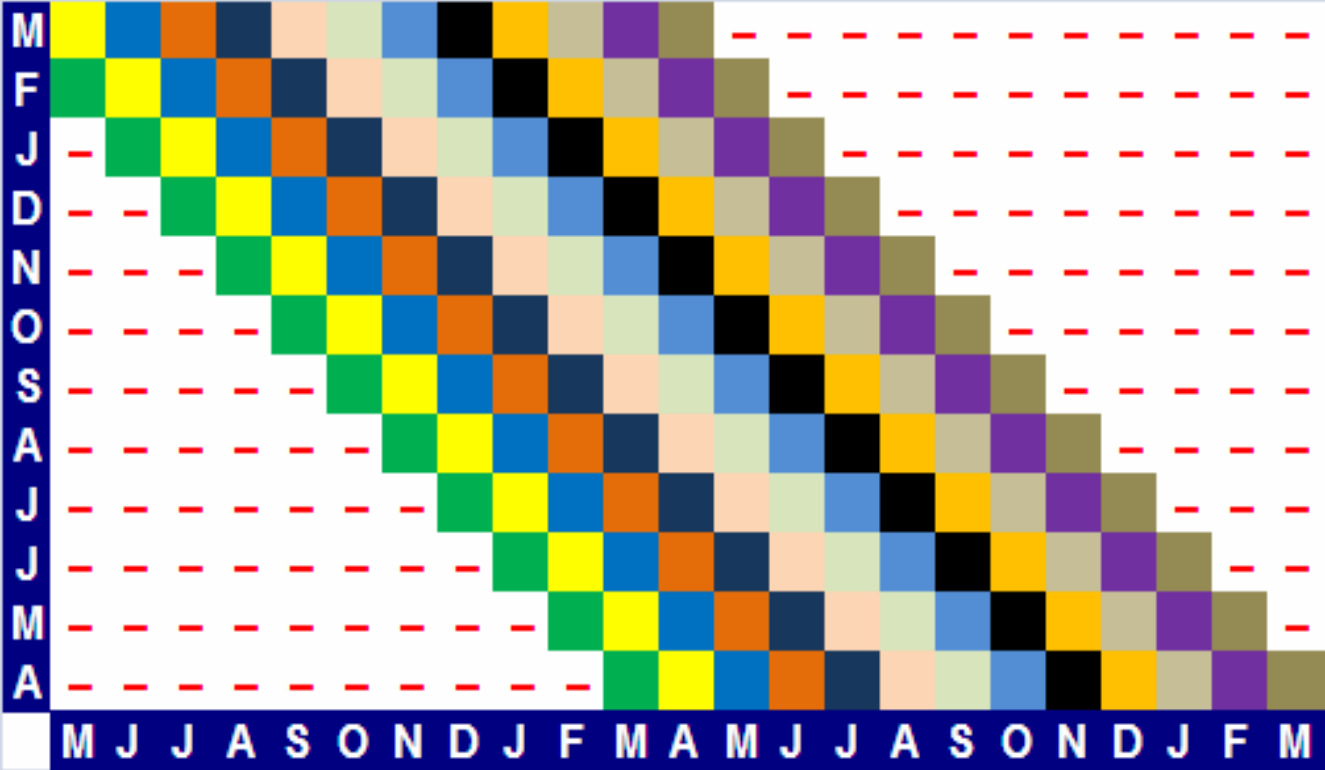
- Monthly charges based on demand forecasts
- Forecast TNUoS charges split over 12 months
- Charges are reconciled taking into account forecasts, amount paid, and actual outturn
- In the event of under / over-recovery, a k factor is applied to the following year's TNUoS tariffs

## Smoothed BSUoS

- Charges based on forecast (the previous year used as proxy)
- A factor is added to the estimates to recover previous divergences between the estimate and outturn
- Total amount ultimately recovered
- Interest applied to under and over-recovery

Our methodology uses the previous year's BSUoS outturn as a proxy to estimate the current month's charge

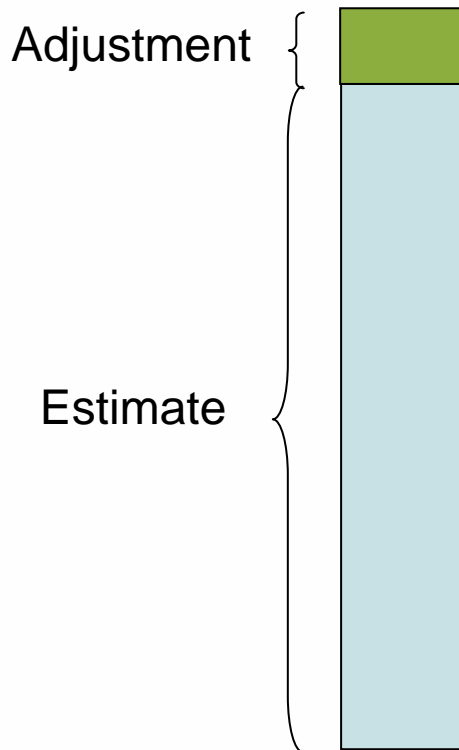
The coloured squares represent the months used in the calculation of the estimate



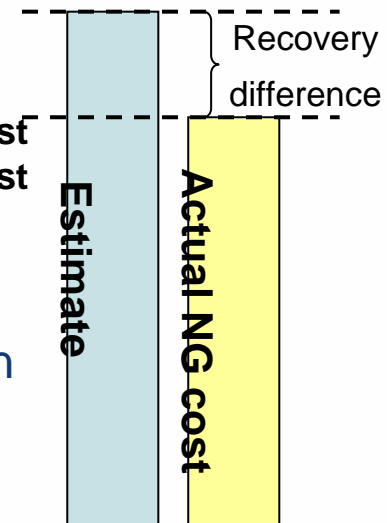
Our methodology uses the previous 12 months' BSUoS outturn as a proxy to estimate the current month's charge

**This month's bill = estimate + adjustment for recovery difference**

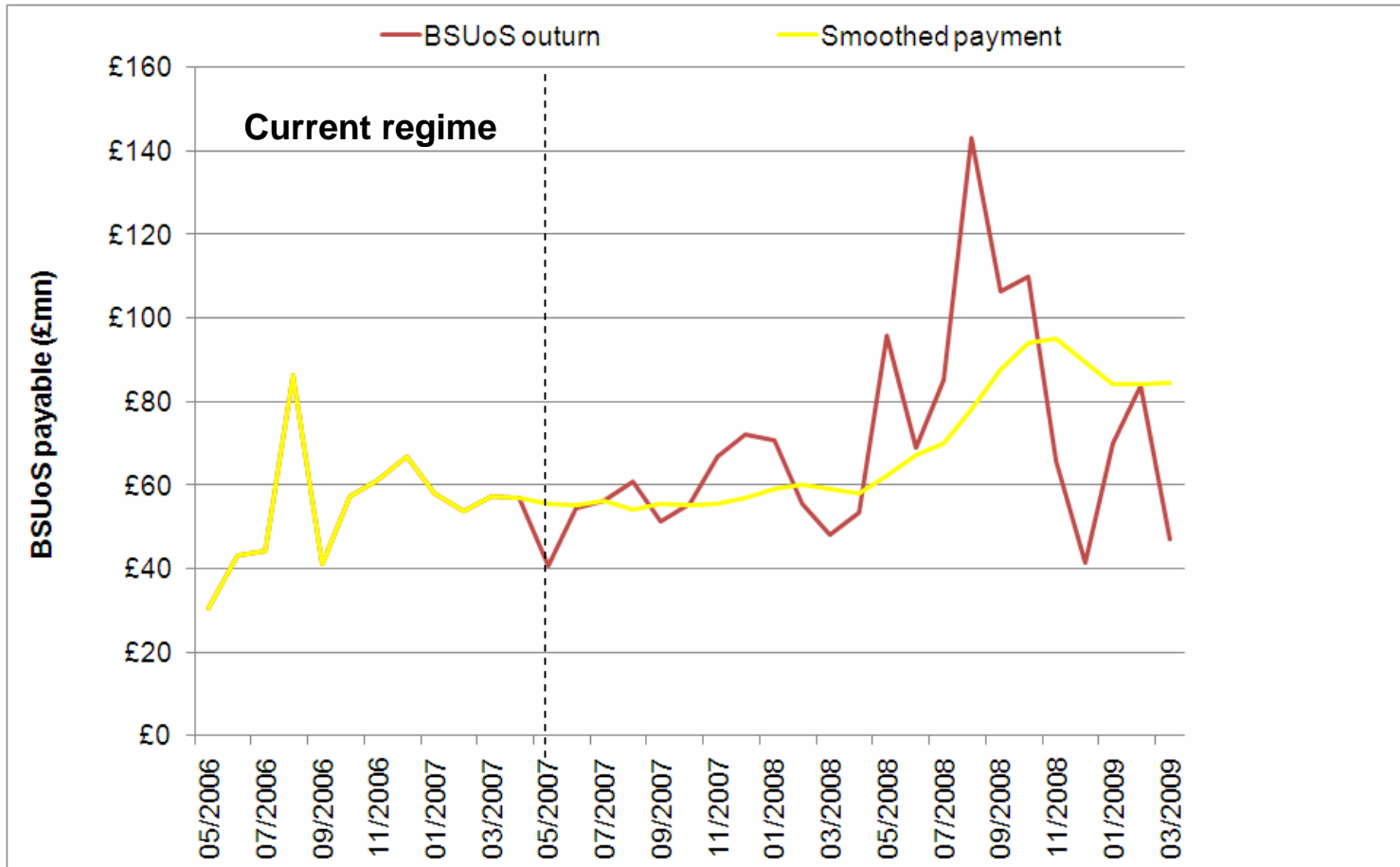
As an example, assume:



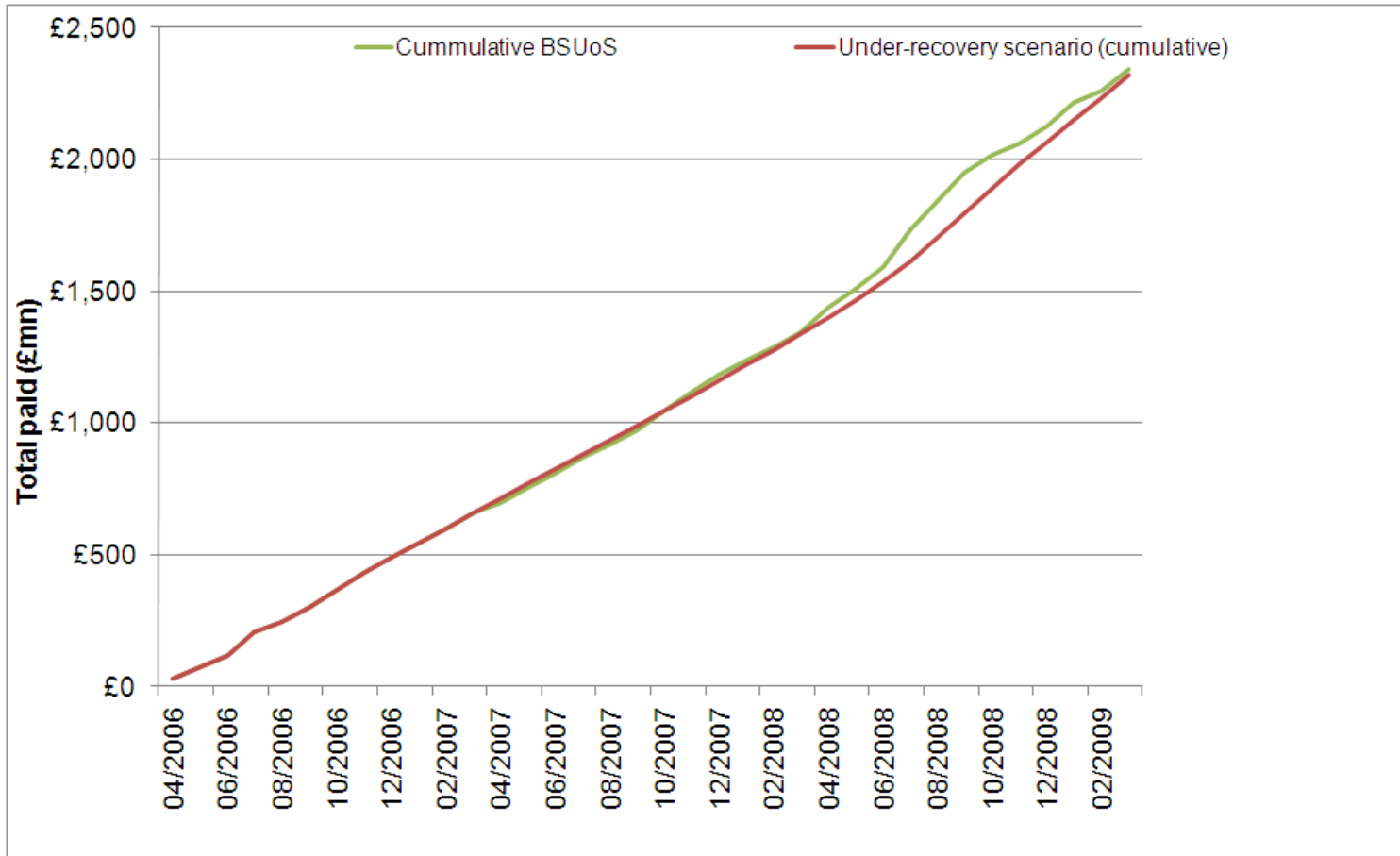
- Estimate is 1/12<sup>th</sup> of each of last 12 months' total BSUoS outturn
- Adjustment is:
  - 1/12<sup>th</sup> of difference 12 months ago + interest
  - 1/12<sup>th</sup> of difference 11 months ago + interest
  - .
  - 1/12<sup>th</sup> of difference this month
- Recovery difference and adjustments can be positive or negative
- Only the recovery difference needs to be financed



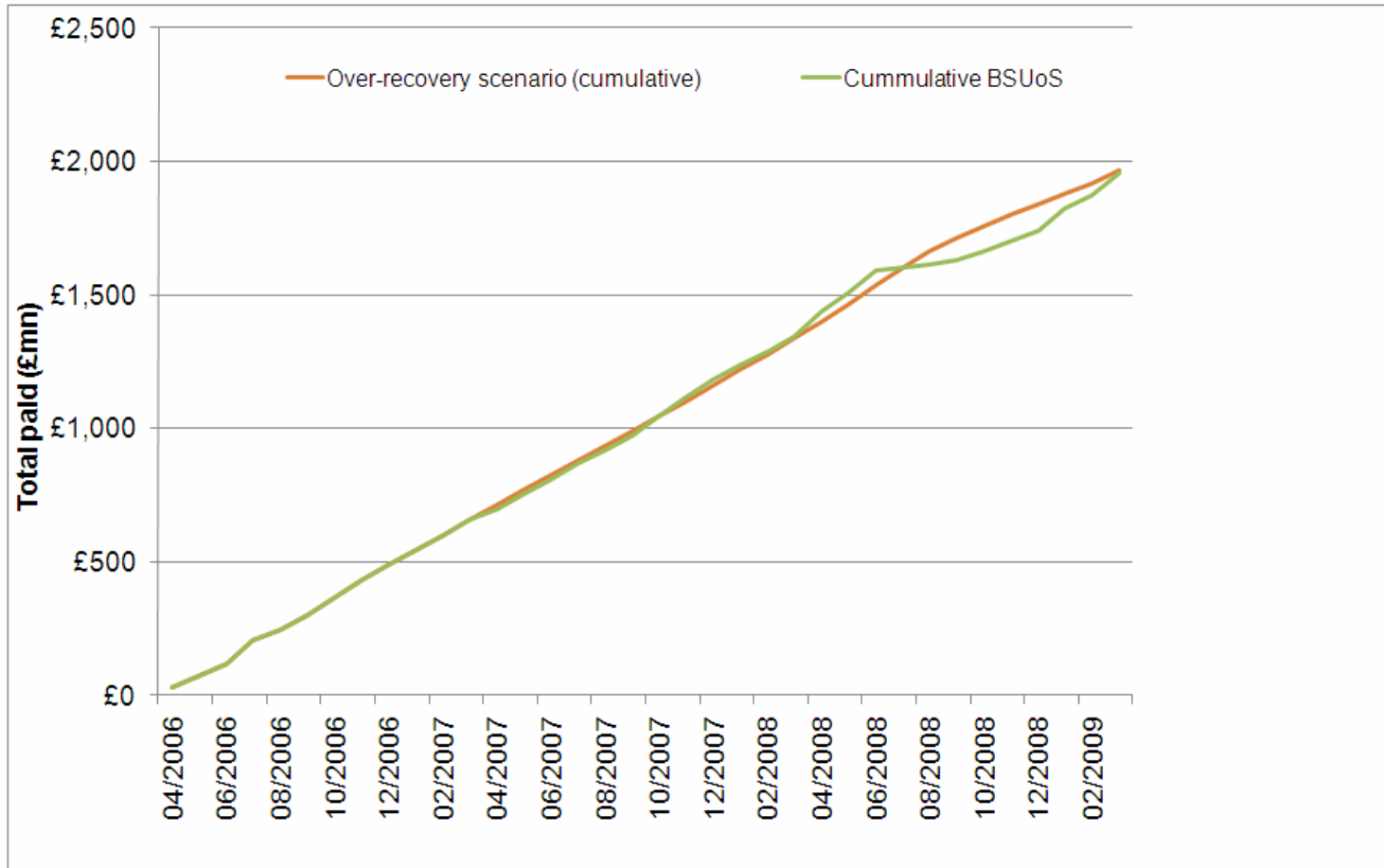
# Parties' BSUoS bills are smoothed significantly



# Under this methodology the amount that National Grid recovers is very close to its outlay



# Under this methodology National Grid can over-recover as well as under-recover



# Issues for discussion

- **How does this methodology help National Grid better meet its objectives?**
  - By reducing the volatility of BSUoS, the environment for competition is enhanced (objective a)
  - Charges still reflect costs incurred by transmission businesses (objective b)
- **Who is exposed to what?**
  - Parties still exposed to full BSUoS costs
  - National Grid only exposed to recovering the recovery difference
- **Should industry make their own financial arrangements for smoothing charges?**
  - Arguably more efficient to centralise within National Grid
  - As a regulated company National Grid may have a lower cost of capital than industry (cheaper financing of debt)
  - Acts as a natural incentive on National Grid to keep BSUoS costs low
  - National Grid already imperfectly recovers TNUoS

- **Why is this better for the customer?**

- Suppliers would have a better understanding of what their balancing costs will be => easier to provide customers with fixed contracts
- Although BSUoS is a small element of total costs, it is volatile and difficult to predict => suppliers would be able to factor less risk into their billing
- Certainty – the estimate is easy to work out (11/12<sup>th</sup> of adjustment is known)

- **What would the unintended consequences be?**

- We have not identified any potentially negative consequences or that the price signal will change
- Currently limited price signal as BSUoS is difficult to forecast, even in real time
- BSUoS price will still be published on a settlement period basis
- Generators still pay all charges they incur, they are just smoothed out to be more predictable