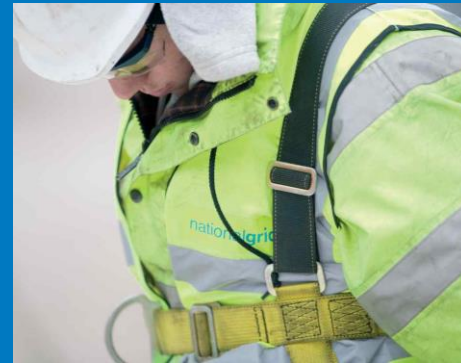


## Charging Update



MOD500 Workgroup  
16<sup>th</sup> September 2014

# Agenda

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- Introduction
- Auction Premium
- Price Steps
  - Example
- Small Price Steps
- Large Price Steps
  - Options
  - Examples
- Summary

# Introduction

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- There are a number of charging changes required in order to implement CAM into the GB charging regime
  - Auction pricing steps
  - Use of reserve prices in the specific auctions
- Some charging aspects of CAM need to be agreed by the adjacent TSO's
  - National Grid has started conversations with the adjacent TSO's regarding
    - Auction Premium split
    - Number of Small Price Steps that make up a Large Price Step
- MOD 500 contains the current proposals relating to these topics

# Ascending Clock Auctions

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- Price Steps apply to all auctions that are ascending clock:-
  - Annual Yearly
  - Annual Quarterly
  - Rolling Monthly
- The Ascending clock auctions use both the large and small price steps

# Auction Premium

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- Auction Premium is the proportion of price above the reserve price allocated to TSOs
  - CAM provides the option to have an agreement between adjacent TSOs as to what the split of the auction premium should be
- CAM has a default of the split of Auction Premium with adjacent TSO is 50:50 split

# Price Steps and Ascending Clock

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- In the Ascending Clock Auction, which uses the Large and Small Price Steps (Day One)
  - Bidding rounds start at 08:00 (UK time) until 17:00 (UK time)
  - 3 hours for 1<sup>st</sup> Bidding Round which uses the Reserve Price (08:00 – 11:00)
  - 1 hour gap between bidding round (11:00 – 12:00)
  - 1 hour for next bidding rounds (12:00 – 13:00, 14:00 – 15:00 and 16:00 – 17:00) with one hour gaps between each bidding round
- In the Ascending Clock Auction, which uses the Large and Small Price Steps (Day Two onwards)
  - Bidding rounds start at 08:00 (UK time) until 17:00 (UK time)
  - Bidding rounds (08:00 – 09:00, 10:00 – 11:00, 12:00 – 13:00, 14:00 – 15:00 and 16:00 – 17:00) with one hour gaps between each bidding round

## Small Price Steps

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- Small price steps are a multiple of the large step
- Number of small price steps that make up a large price step needs to be agreed with adjacent TSO's
- NGG proposal to adjacent TSO's is five small price steps equals one large price step
  - Usual number within PRISMA

## Large Price Steps

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- Large Price Steps are calculated based on a defined methodology which is applicable to each TSO
- The Large Price Step methodology for National Grid will be defined within Section Y of UNC



# Large Price Steps potential options

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- Percentage in relation to the reserve price:
  - The higher of
    - 5% increase in the reserve price
    - OR
    - 0.0001 p/kWh\*
      - Small steps would therefore vary (minimum would be 0.00002 p/kWh)
- A fixed value on top of the reserve price
  - 0.0005 p/kWh
    - Small steps would therefore all be 0.0001 p/kWh

\* A minimum large price step differential of 0.0001 p/kWh is applied

# Prices Examples (Entry) – percent increases nationalgrid

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- Examples of the entry prices for Bacton and Moffat first five large price steps based on the QSEC 2014 prices for capacity from 2016/2017

	Reserve Price (p/kWh)	Large Price Step 1 (p/kWh)	Large Price Step 2 (p/kWh)	Large Price Step 3 (p/kWh)	Large Price Step 4 (p/kWh)	Large Price Step 5 (p/kWh)
Bacton	0.0096	0.0101	0.0106	0.0111	0.0117	0.0123
Moffat	0.0067	0.0070	0.0074	0.0078	0.0081	0.0086

- A minimum price of the difference between large price steps of 0.0001 p/kWh is applied

## Prices Examples (Entry) – fixed amount

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- Examples of the entry prices for Bacton and Moffat first five large price steps based on the QSEC 2014 prices for capacity from 2016/2017

	Reserve Price (p/kWh)	Large Price Step 1 (p/kWh)	Large Price Step 2 (p/kWh)	Large Price Step 3 (p/kWh)	Large Price Step 4 (p/kWh)	Large Price Step 5 (p/kWh)
Bacton	0.0096	0.0101	0.0106	0.0111	0.0116	0.0121
Moffat	0.0067	0.0072	0.0077	0.0082	0.0087	0.0092

# Prices Examples (Exit) – percent increases

- Examples of the exit prices for Bacton and Moffat first five large price steps based on the Exit Capacity 2014 prices for capacity from 2016/2017

	Reserve Price (p/kWh)	Large Price Step 1 (p/kWh)	Large Price Step 2 (p/kWh)	Large Price Step 3 (p/kWh)	Large Price Step 4 (p/kWh)	Large Price Step 5 (p/kWh)
Bacton IUK	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008
Bacton BBL	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008
Moffat	0.0054	0.0057	0.0060	0.0063	0.0066	0.0069

- A minimum price of the difference between large price steps of 0.0001 p/kWh is applied

## Prices Examples (Exit) – fixed amount

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- Examples of the exit prices for Bacton and Moffat first five large price steps based on the Exit Capacity 2014 prices for capacity from 2016/2017

	Reserve Price (p/kWh)	Large Price Step 1 (p/kWh)	Large Price Step 2 (p/kWh)	Large Price Step 3 (p/kWh)	Large Price Step 4 (p/kWh)	Large Price Step 5 (p/kWh)
Bacton IUK	0.0003	0.0008	0.0013	0.0018	0.0023	0.0028
Bacton BBL	0.0003	0.0008	0.0013	0.0018	0.0023	0.0028
Moffat	0.0054	0.0059	0.0064	0.0069	0.0074	0.0079

## Summary

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- Auction Premium split to be decided between adjacent TSO's
  - Default is 50/50 sharing
- Number of small price steps to make up a large price step National Grid propose to be 5 as this aligns to PRISMA currently
- Large price step methodology to be agreed
- We welcome your views on the options presented