Electricity SO Incentives Overview

RIIO|T1

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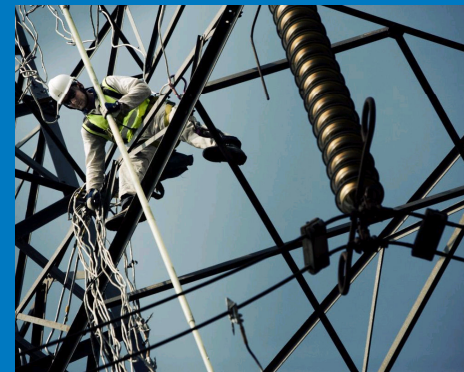
June 2012

Framework Overview (1)

- Our System Operator (SO) incentives proposals for the RIIO-T1 period were submitted to Ofgem on 31 May 2012

- We propose an 8 year incentive framework

  - Proposals focused on outputs that are:

    Understandable   **Forecastable**   **Controllable**

  - Stakeholder views have been considered

  - Underpinned by the current scheme (ex ante / ex post) methodology

  - Combination of cost and financial incentives

  - Aligning SO and all Transmission Owner (TO) incentives

  - Incentives operate annually

Framework Overview (2)

- Retains Caps, Collars and Income Adjusting Events (IAE)

- Specified Uncertainty Mechanisms for game changers

- Flexibility to accommodate new incentives in the future

Cost incentives	Financial incentives
Balancing Services Incentive Scheme: Energy Components, Constraints and Black Start	Transmission Losses
	Renewable Generation Forecasting
	Customer & Stakeholder Satisfaction

Incentive Principles

- Based on the principles set out in Ofgem's principles consultation document published in January 2012. These fall within three main areas:

Value
- Promote innovation and delivery of consumer benefit
- Focus incentives on those areas that we can forecast and control as NETSO

Scheme Design
- Parameters proposed to balance risk and reward to consumers and us
- Length of schemes according to level of uncertainty and confidence in target models and data

Risk and Uncertainty
- Uncertainty mechanisms to account for significant changes to operating environment and reduce scope for windfall gains and losses
- Managing risk on behalf of consumers

Challenges in the RIIO-T1 Period

- Decarbonisation of the UK

  - Overarching challenge for the whole industry

  - Plant closure due to the European Large Combustion Plant Directive

- Constrained network

  - Significant construction and reinforcement works

- Changeability

  - Increasing volumes of embedded and micro generation

  - Greater demand volatility e.g. adoption of electric cars and use of Demand Side Response (DSR)

- Regulatory change

  - Electricity Market Reform (EMR)

  - Increasing EU harmonisation and interconnection

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Innovation

- Innovation is a key challenge for the whole industry

- We will need to adapt and innovate during RIIO-T1 period to facilitate:

  - UK Government carbon targets; and

  - To meet our stakeholders requirements.

Funding

- Innovation fund is as stated in our RIIO-T1 TO Business plan - Innovation Strategy, March 2012

  - maximum 1% of revenue under the Network Innovation Allowance (NIA)

Incentive Scheme Proposals (1) Balancing Services Incentive Scheme (BSIS)

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Incentive	Scheme Parameters			
Balancing Services Incentive Scheme (BSIS)	**Length (years)**	**Scheme Phase Dates**	**Annual cap / collar**	**Annual Sharing Factor**
	2	Apr '13 – Mar '15	± £30m	30%
	2	Apr '15 – Mar '17	± £40m	40%
	4	Apr '17 – Mar '21	± £50m	50%

- Comprises Energy, Constraints, Black Start and Transmission Losses components

- Annual parameters reflect growing confidence in models and data

- Alignment with TO achieved in second half of RIIO-T1 period

- Mid-phase processes to review models and parameters

Incentive Scheme Proposals (2)
BSIS: Energy and Constraints

➢ Operational experience of the current scheme (2011-13) coupled with the transition to longer term schemes has led to the review of:

Ex ante / Ex post methodology	*Cost target models*	*Constraint cost components*
1) **Re-examined cost drivers and reviewed methodology** 2) **A small proportion of inputs reassessed as ex post to reflect our ability to control or forecast the driver**	1) **Models reviewed and subject to ongoing development** 2) **Known modelling issues rectified** 3) **Review of frequency of inputs** 4) **Proposed annual model 'health check'**	1) **Constraint discount factor (41%) amended to an uplift factor of 1.33** 2) **Proposal to contractually incentivise relevant non-NGET TOs to reduce constraints**

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Incentive Scheme Proposals (3)
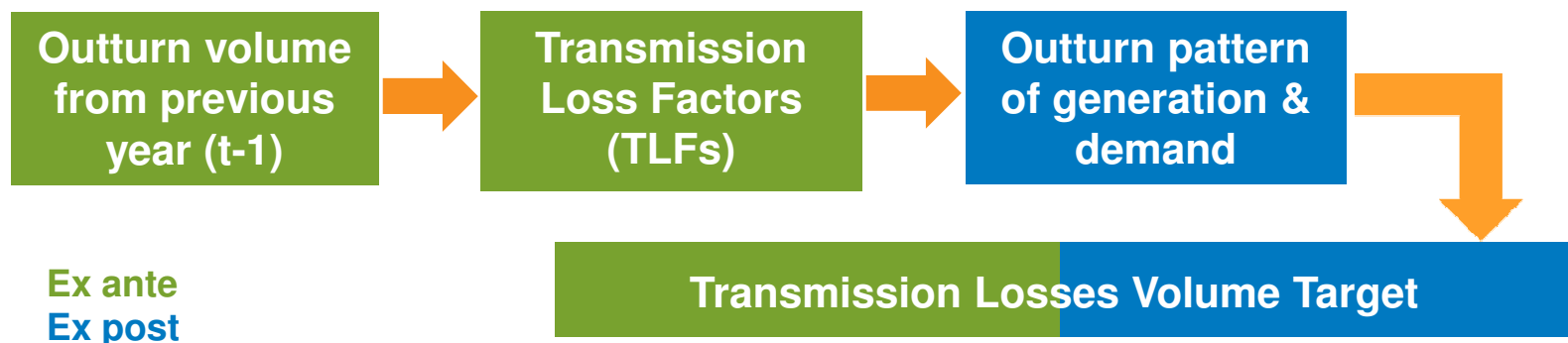# BSIS: Black Start

- Annualised cost target comprising both ex ante and ex post elements to reflect our ability to control and / or forecast costs

- Cost target derived from a number of assumptions for both existing and new Black Start station costs, including:

    - New and existing provider availability fees / capital costs

    - Feasibility studies for new providers

    - Warming

    - Testing

- Subject to overarching BSIS parameters

Incentive Scheme Proposals (4)
BSIS: Transmission Losses
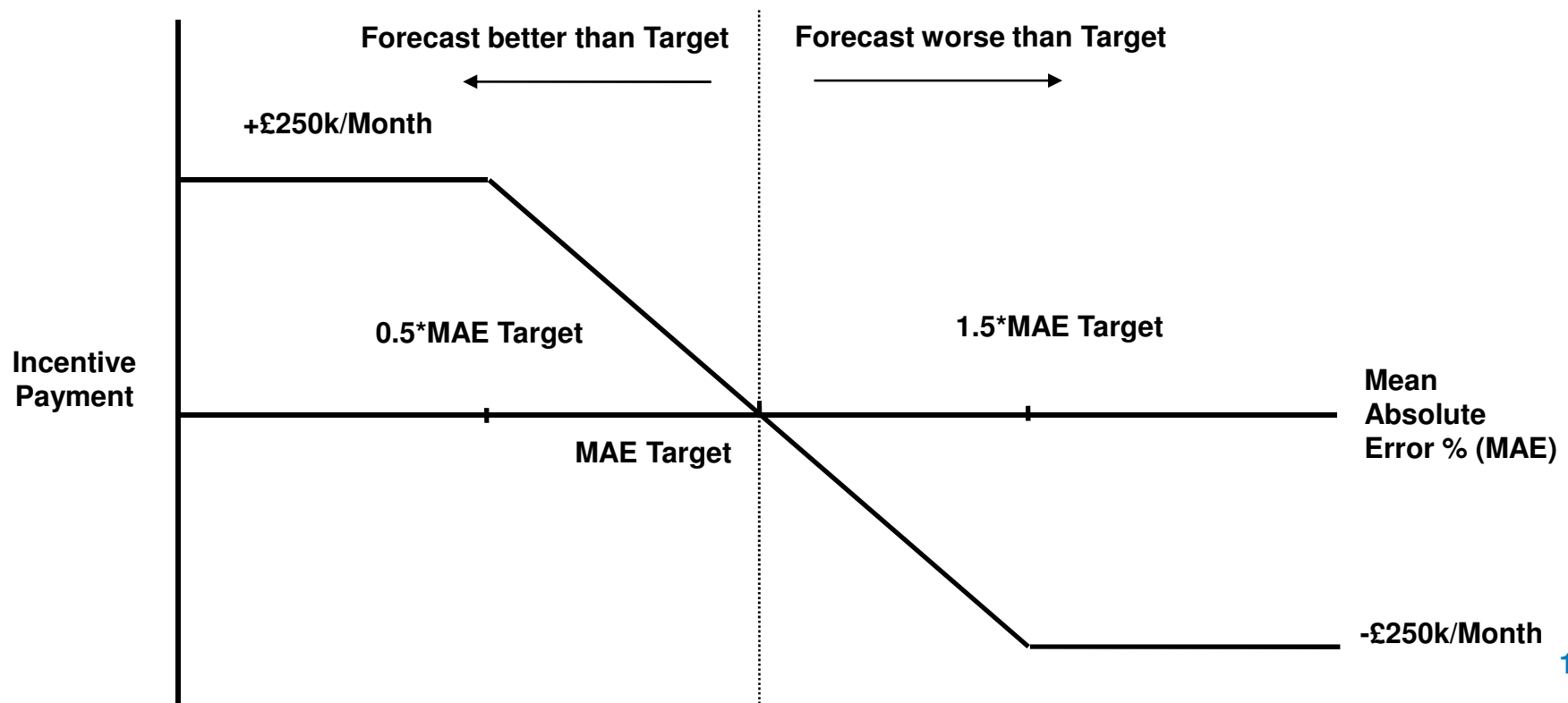
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- Volume target comprises both ex ante and ex post elements to reflect our ability to control and / or forecast losses

- Ex ante target based on previous year outturn which is adjusted using:

  - Transmission Loss Factors; and

  - Outturn generation and demand patterns

- Subject to 20% sharing factor in addition to overarching BSIS parameters

Outturn volume from previous year (t-1)	→	Transmission Loss Factors (TLFs)	→	Outturn pattern of generation & demand

Ex ante
Ex post

Transmission Losses Volume Target

Incentive Scheme Proposals (5) Renewable Generation Forecasting

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- A new financial incentive to reduce day ahead wind forecasting error

- Cap / collar ± £250k per month, 4+4 year incentive with review after the first 4 year period

Forecast better than Target   Forecast worse than Target

+£250k/Month

0.5*MAE Target   1.5*MAE Target

Incentive Payment   Mean Absolute Error % (MAE)

MAE Target

-£250k/Month

Incentive Scheme Proposals (6)
Customer & Stakeholder Satisfaction

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- RIIO-T1 TO incentive proposal to include:

  - Customer satisfaction survey to drive incentive worth +/- 1% revenue
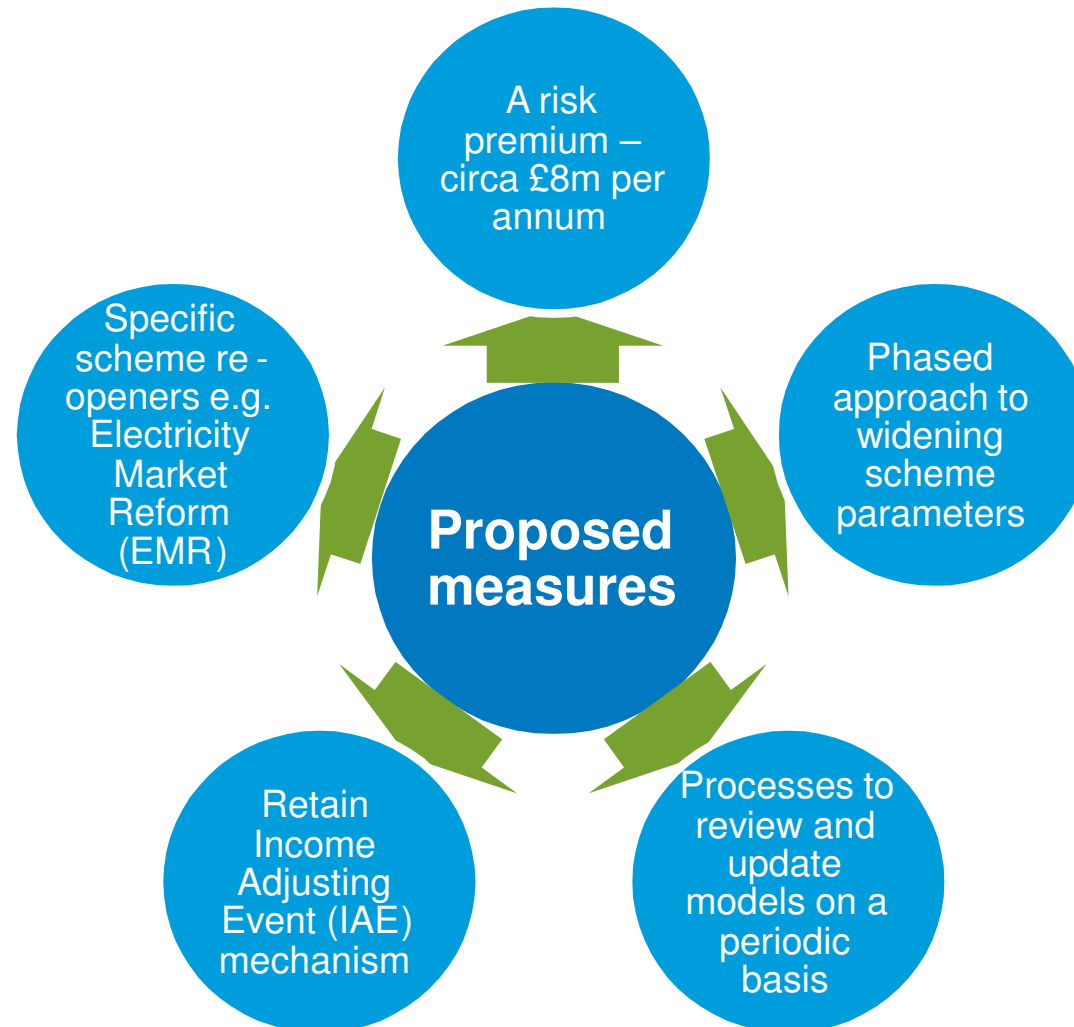
  - Maximum 0.5% revenue as a discretionary reward

Possible outcomes under the incentive scheme

	Max Gain		Max Loss	
	Survey score	Max gain	Survey score	Max loss
Uncapped performance	9.00	+1.0%	4.80	-1.0%
Capped performance	7.95	+0.5%	5.85	-0.5%

- TO proposal to include both the SO and TO roles

Managing Risk & Uncertainty

Summary & Next Steps

- Our SO Incentives proposals are available at:
  www.nationalgrid.com/uk/Electricity/soincentives/docs/

- Ofgem will be publishing its Initial Proposals in the summer

- Further questions or queries please contact:
  soincentives@nationalgrid.com or katharine.clench@nationalgrid.com

21st September
Response to consultation on Initial Proposals

1st April
RIIO-T1 control period begins

2012

2013

| May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr |

31st May
SO incentives business plan submitted

27th July
RIIO-T1 Initial Proposals published

17th December
RIIO-T1 Final Proposals published