

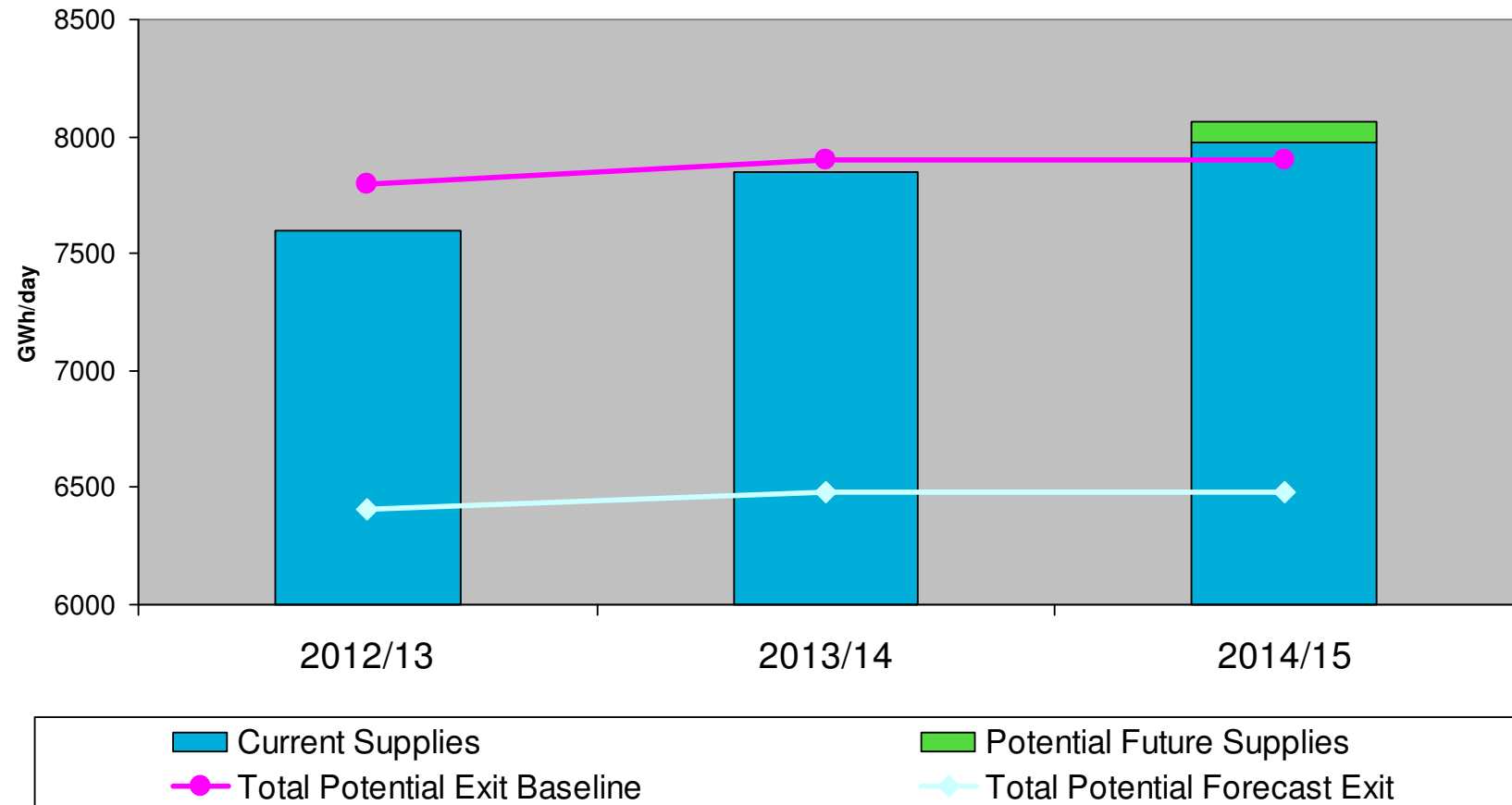
NTS Exit (Flat) Capacity Charging Methodology

NTS Charging Methodology Forum 6th January 2011

Introduction

- Discussion paper GCD09 was issued to seek views on the merits of a number of alternative options for modelling supply and demand flows within National Grid's Transportation Model.
- Through GCD09, we highlighted that the NTS Exit (Flat) Capacity Charging Methodology could become unworkable due to
 - increases in Obligated (baseline plus incremental) NTS Exit (Flat) Capacity ~ the modelled demand flows
 - Reductions in TYS forecast supplies ~ the modelled supply flows
- This has occurred as a result of the capacity application processes and the 2010 TYS data

Issue – Supply & Demand Data



Impact of Capacity Reductions

- **Capacity reductions from 1st October 2012 are normally* only possible for capacity allocated through the initialisation process**
 - Capacity reductions for Users who have booked additional capacity and triggered User commitment will only be possible either
 - after 4 years, or
 - After the User commitment financial quantity has been covered by NTS Exit (Flat) Capacity charges
 - Capacity reductions will reduce the level of booked capacity but will not reduce the obligated capacity level (baseline plus incremental)
- **As the NTS Exit (Flat) Capacity Charging Methodology for capacity from 1st October 2012 is defined as using the obligated (baseline plus incremental) capacity level for the modelled demand flow**
 - **Capacity reductions will have no impact on prices and the application of the exit charging methodology.**

* Ad-hoc reductions are possible to avoid releasing incremental capacity when there is demand for additional capacity at the same exit point.

Impact of Exit Substitution

- Substitution is the movement of un-sold capacity from one system point to another system point where incremental capacity has been signaled, thereby avoiding investment,
 - therefore the Exit Capacity Substitution can only occur when incremental capacity is applied for
- If substitution occurs at a 1:1 ratio (one unit of incremental demand is met through substituting one unit of baseline capacity), Exit Capacity Substitution;
 - **will have no impact on the aggregate level of NTS Exit (Flat) Capacity, and therefore**
 - **will only have a locational impact on prices and no impact on the application of the exit charging methodology.**

Draft UNC Modification Proposal

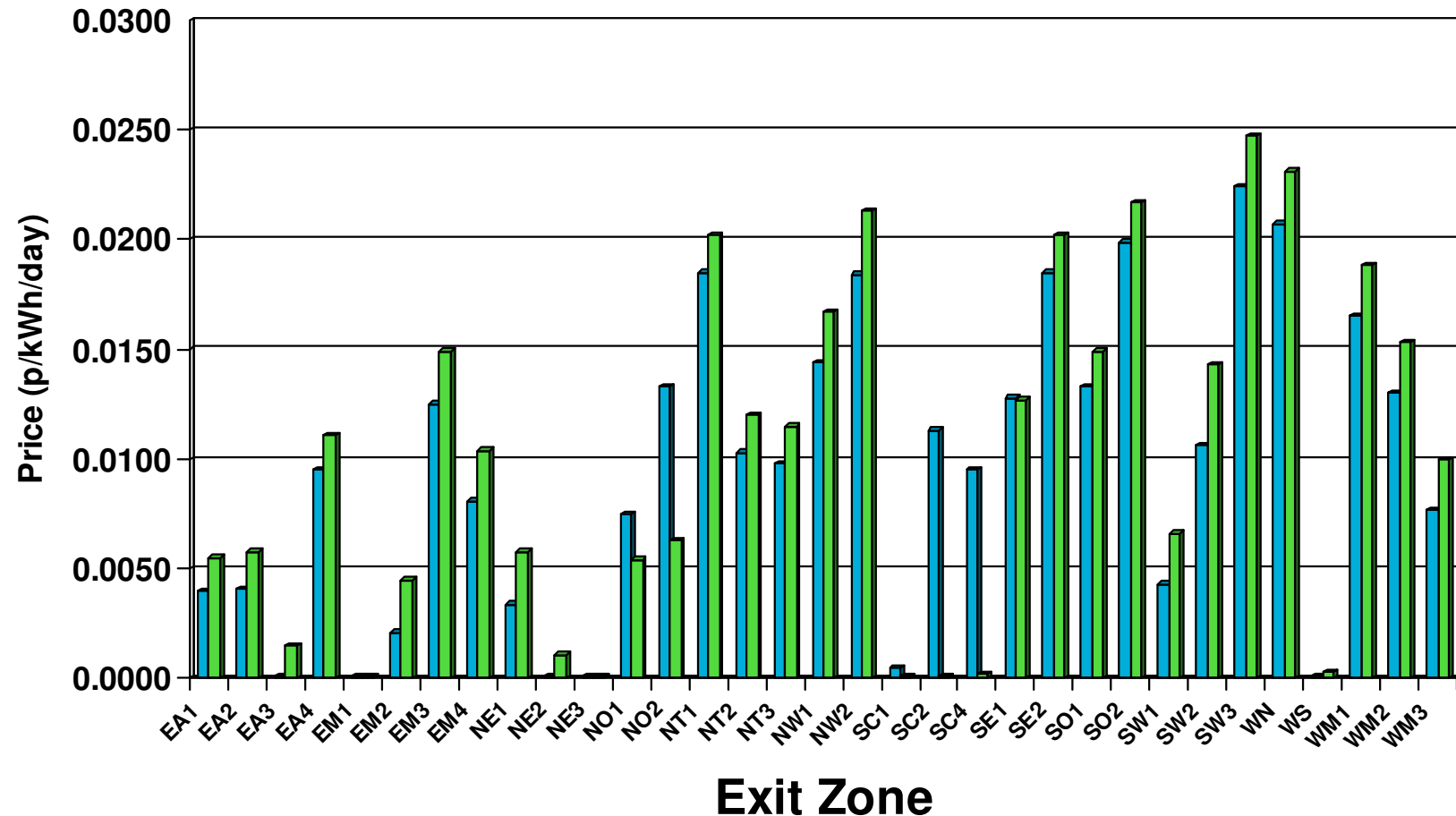
- National Grid has produced a draft UNC Modification proposing the following change to the Enduring NTS Exit (Flat) Capacity Charging Methodology
 - It is proposed that;
 - For bi-directional sites the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand.
 - For bi-directional sites with physical entry capability (storage, IUK, and BBL) the forecast is zero.
 - For bi-directional sites with no physical entry capability (Moffat) the forecast is the undiversified NTS forecast 1-in-20 peak day demand.
 - For DN offtakes, the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand for the DN, and will be prorated to the relevant DN offtakes based on the booked NTS Exit (Flat) Capacity.
 - For other directly connected (DC) offtakes (NTS Power Generation & Industrials) the forecast will be the obligated (baseline plus incremental) capacity level other than where DC sites have not been commissioned or have been decommissioned.
- Indicative exit capacity prices could then be set based on a workable approved or proposed methodology

Impact of Proposal ~ 2012/13

(Exit zone prices are only produced for presentation purposes to give an indication of the geographic impact)

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THE POWER OF ACTION



■ As-Is 2012/13 (1st May 2010)

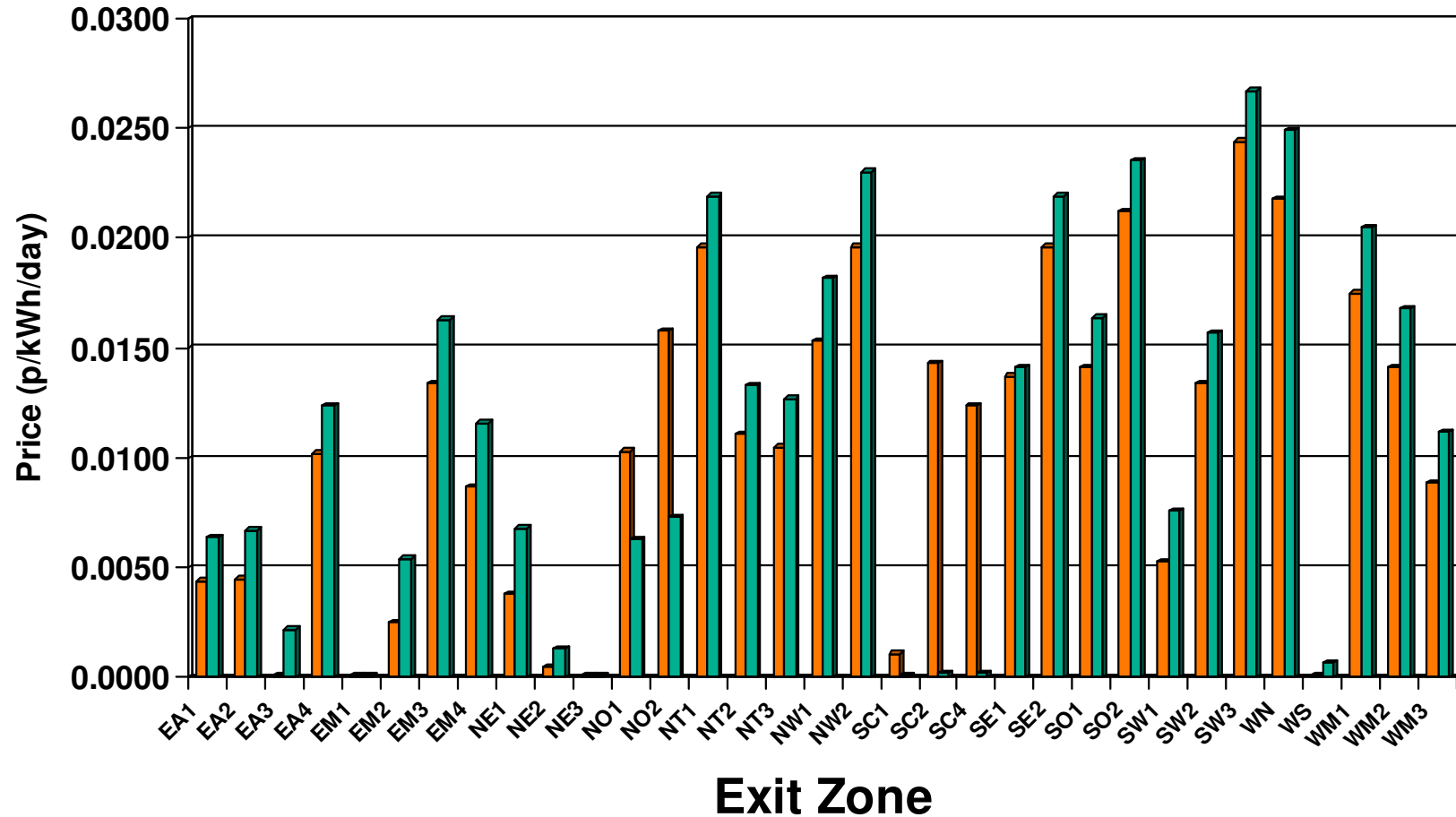
■ Proposed 2012/13

Impact of Proposal ~ 2013/14

(Exit zone prices are only produced for presentation purposes to give an indication of the geographic impact)

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THE POWER OF ACTION

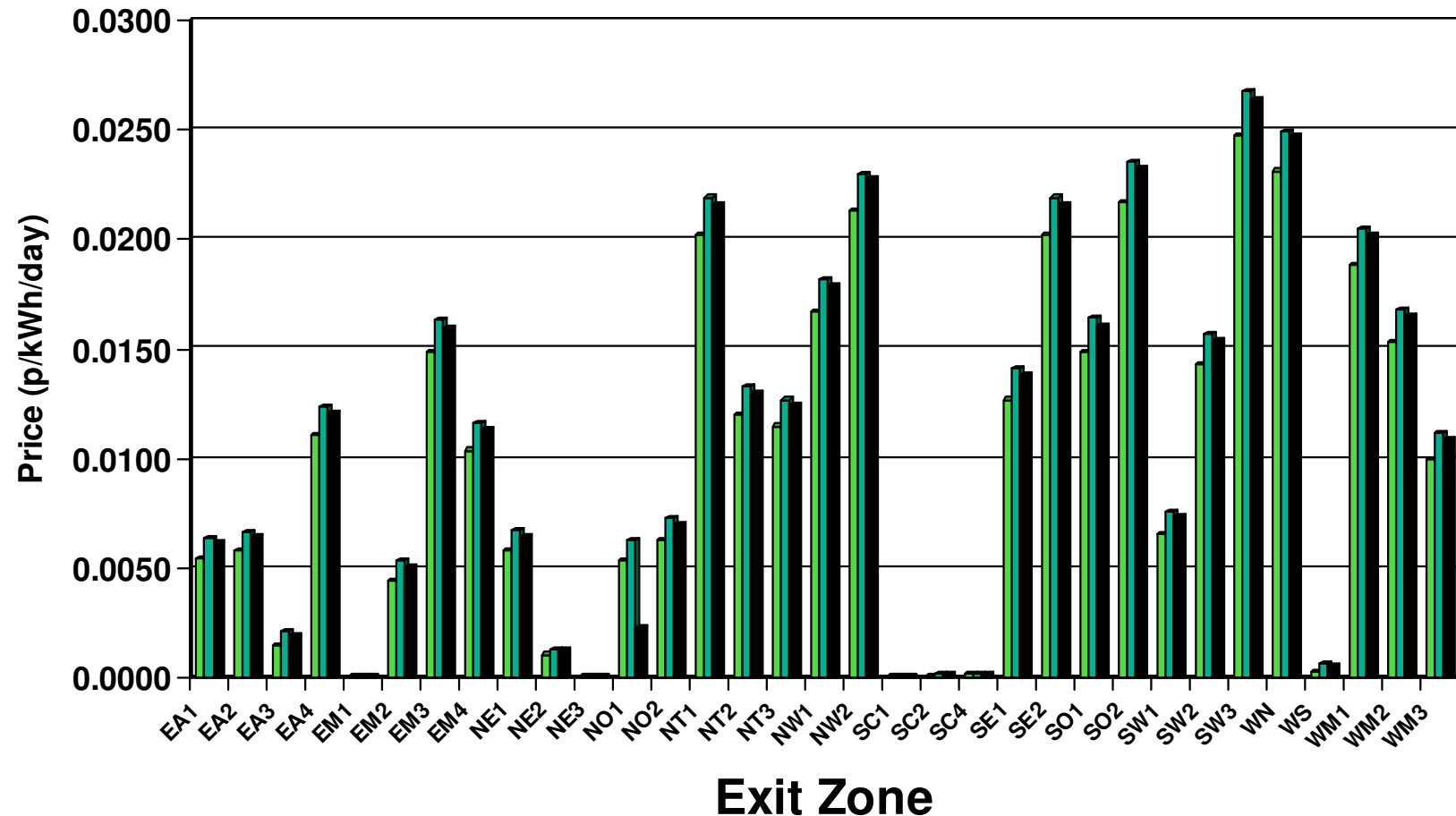


As-Is 2013/14 (1st May 2010)

Proposed 2013/14

Indicative Prices

(Exit zone prices are only produced for presentation purposes to give an indication of the geographic impact)



■ Proposed 2012/13

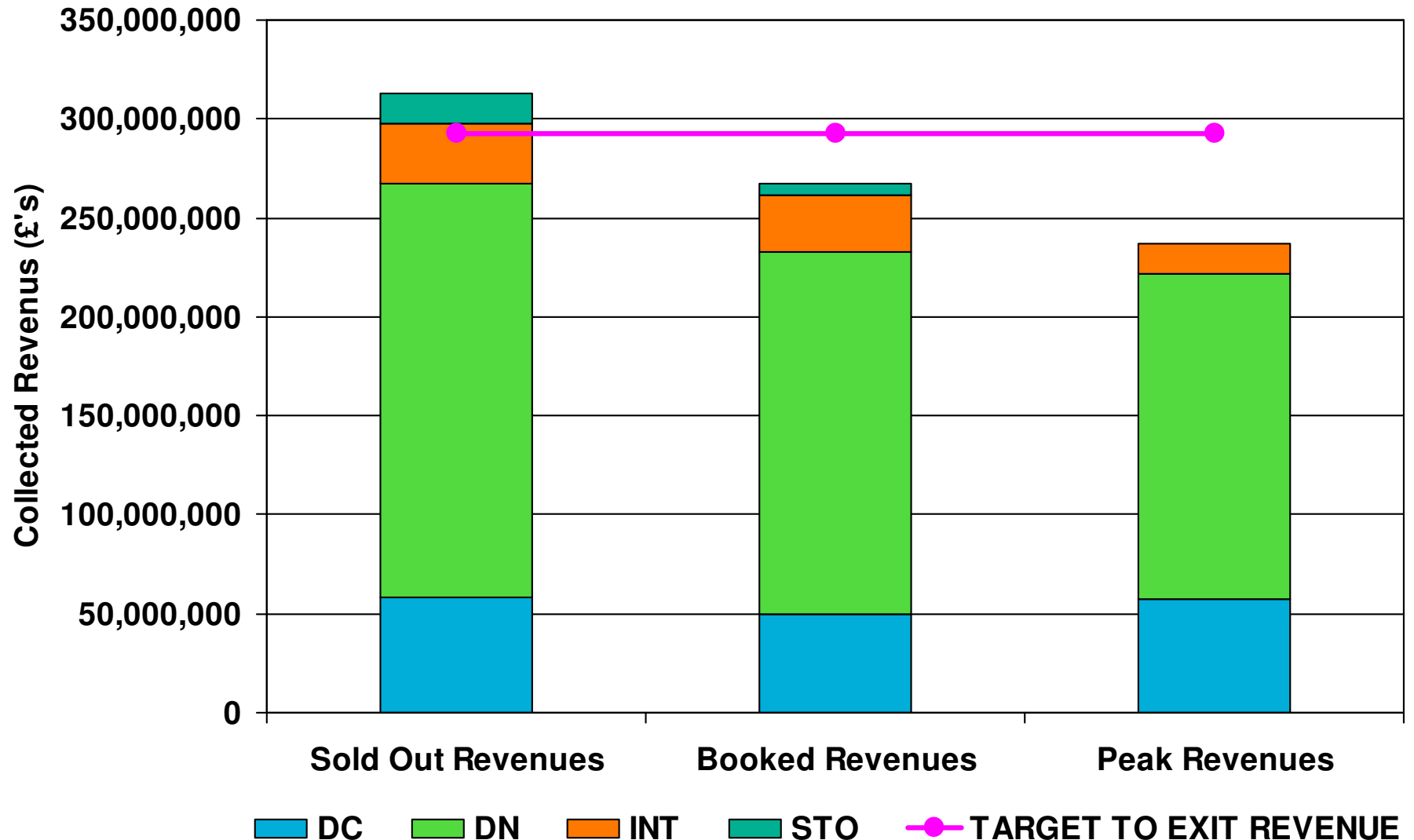
■ Proposed 2013/14

■ Proposed 2014/15

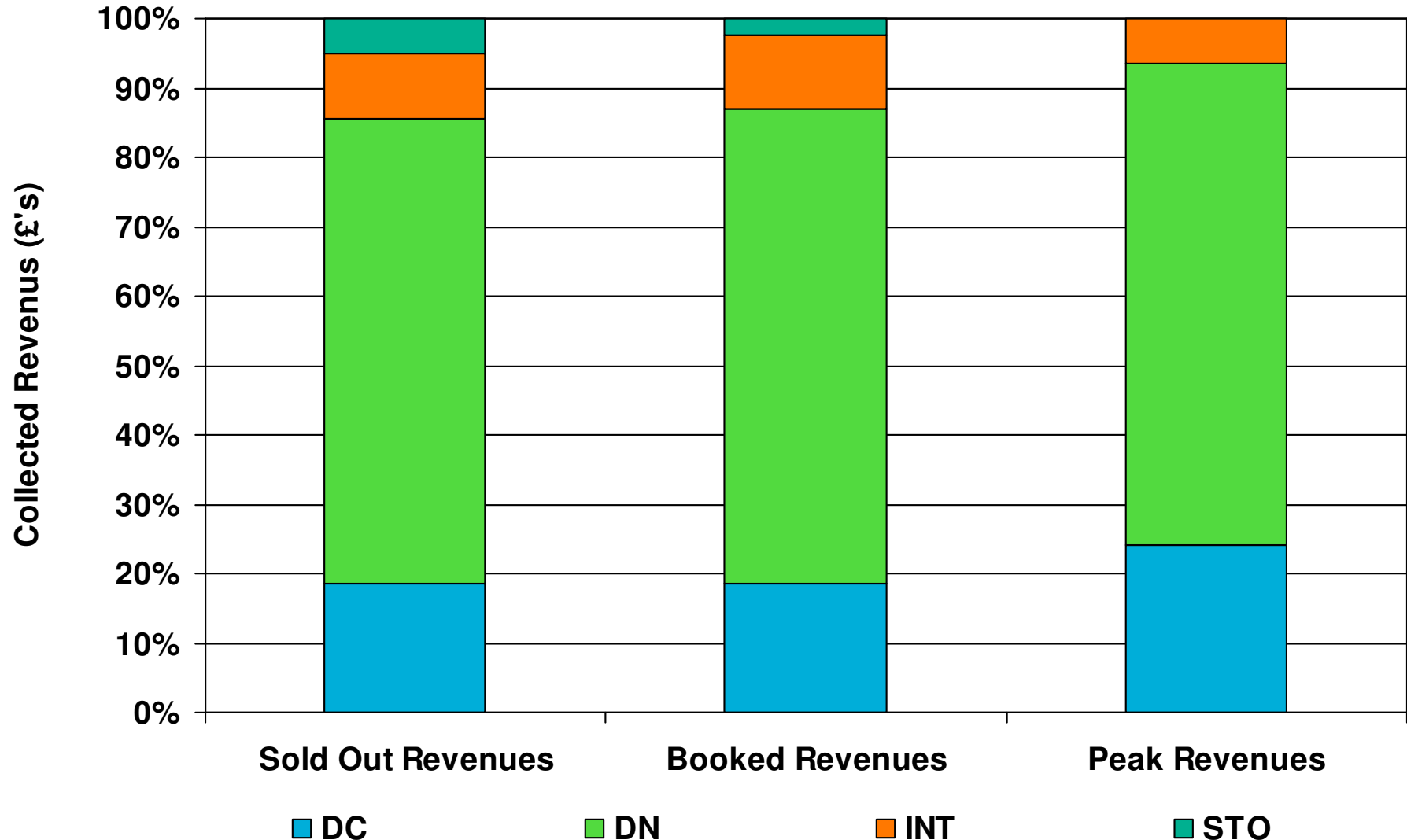
Impact on Classes of NTS Exit Point

- The following graphs show the potential impact by class of NTS Exit Point
 - “Sold Out” data assumes all baseline and incremental capacity is booked
 - “Booked” data represents the prevailing NTS Exit (Flat) Capacity bookings but is subject to change due to the capacity reduction windows
 - “Peak” data represents bookings being more consistent with peak forecast data

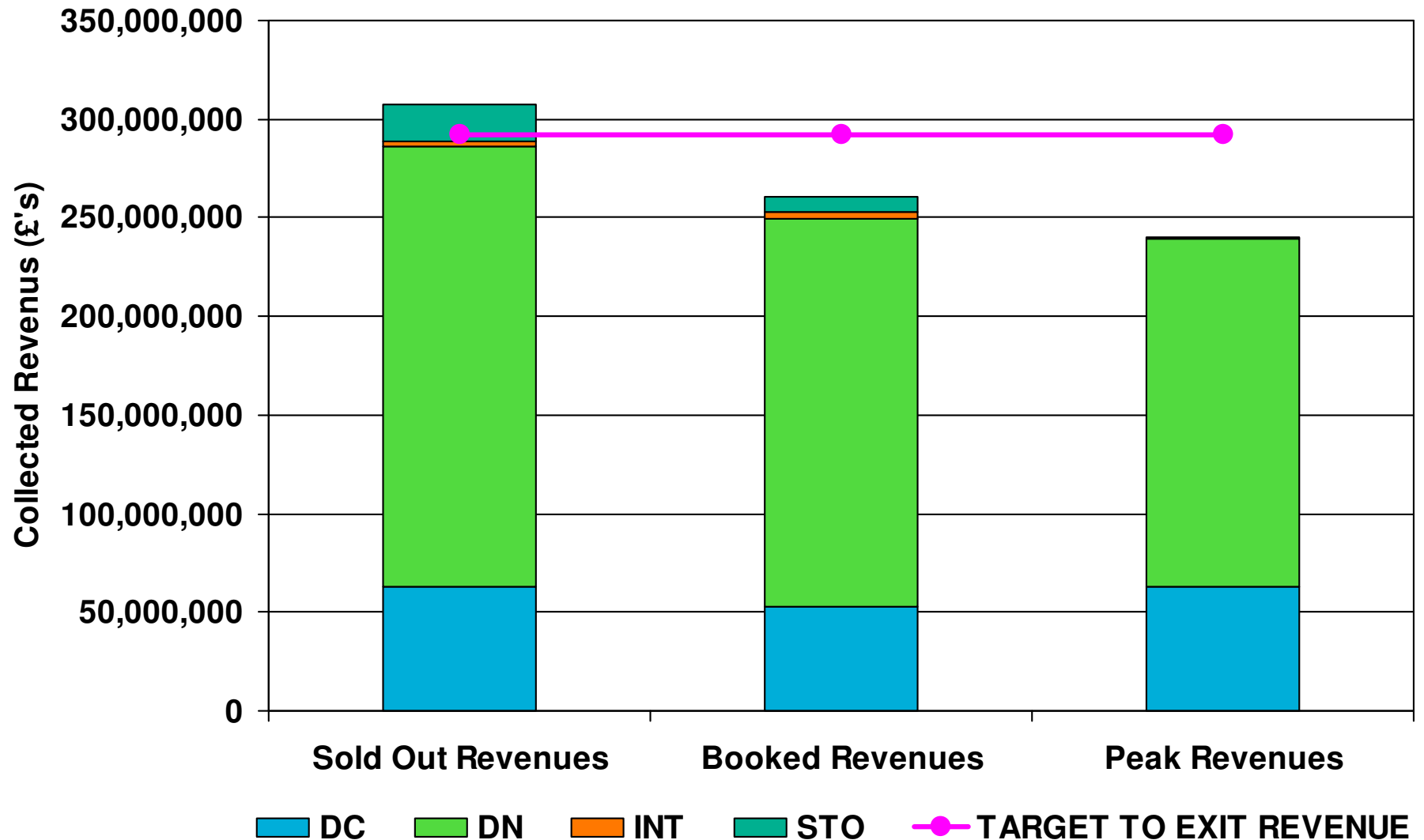
TYS 2009: Prevailing Methodology (Baseline + Incremental Prices) 2012/13



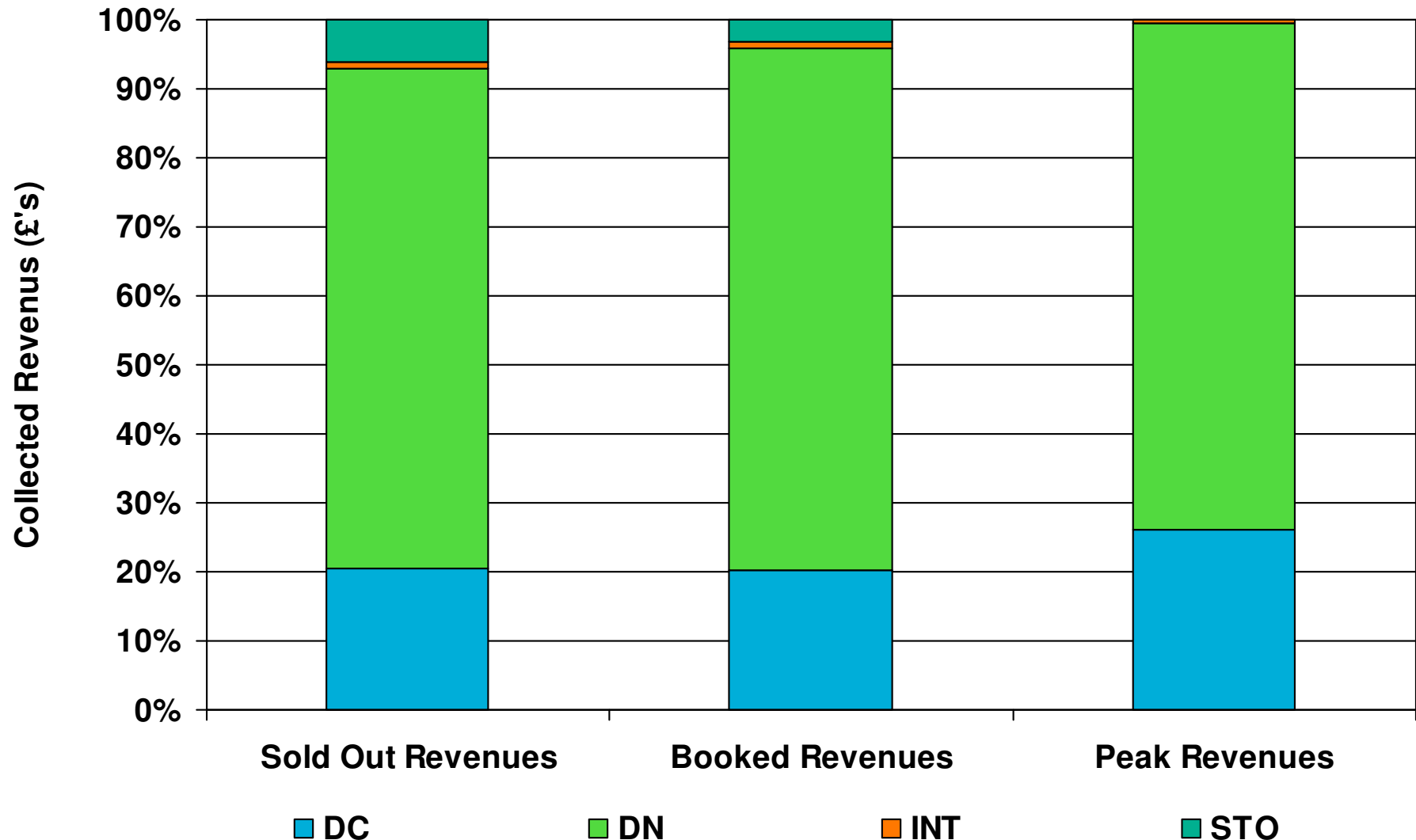
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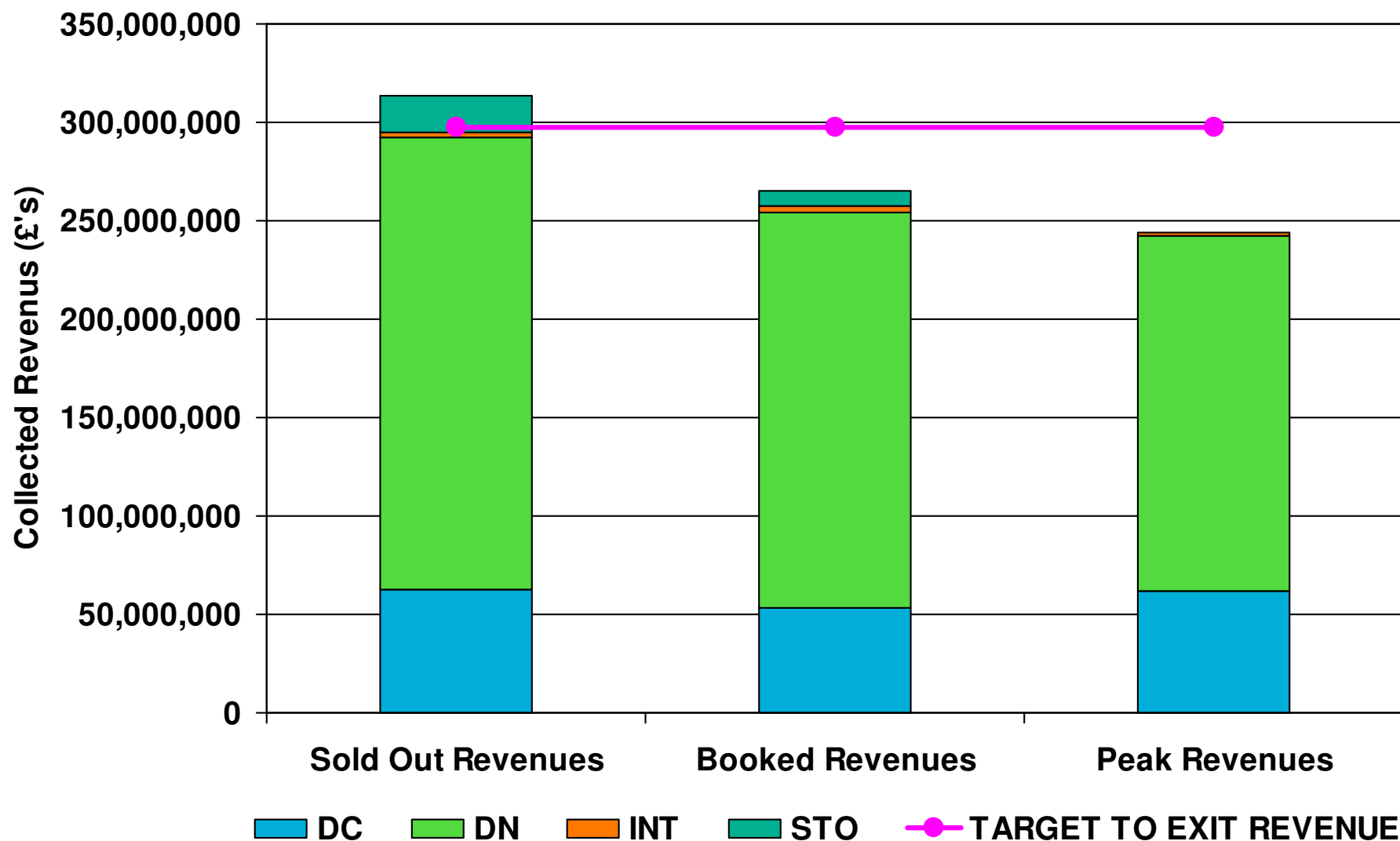
TYS 2009: Proposed Methodology (Peak Prices) 2012/13



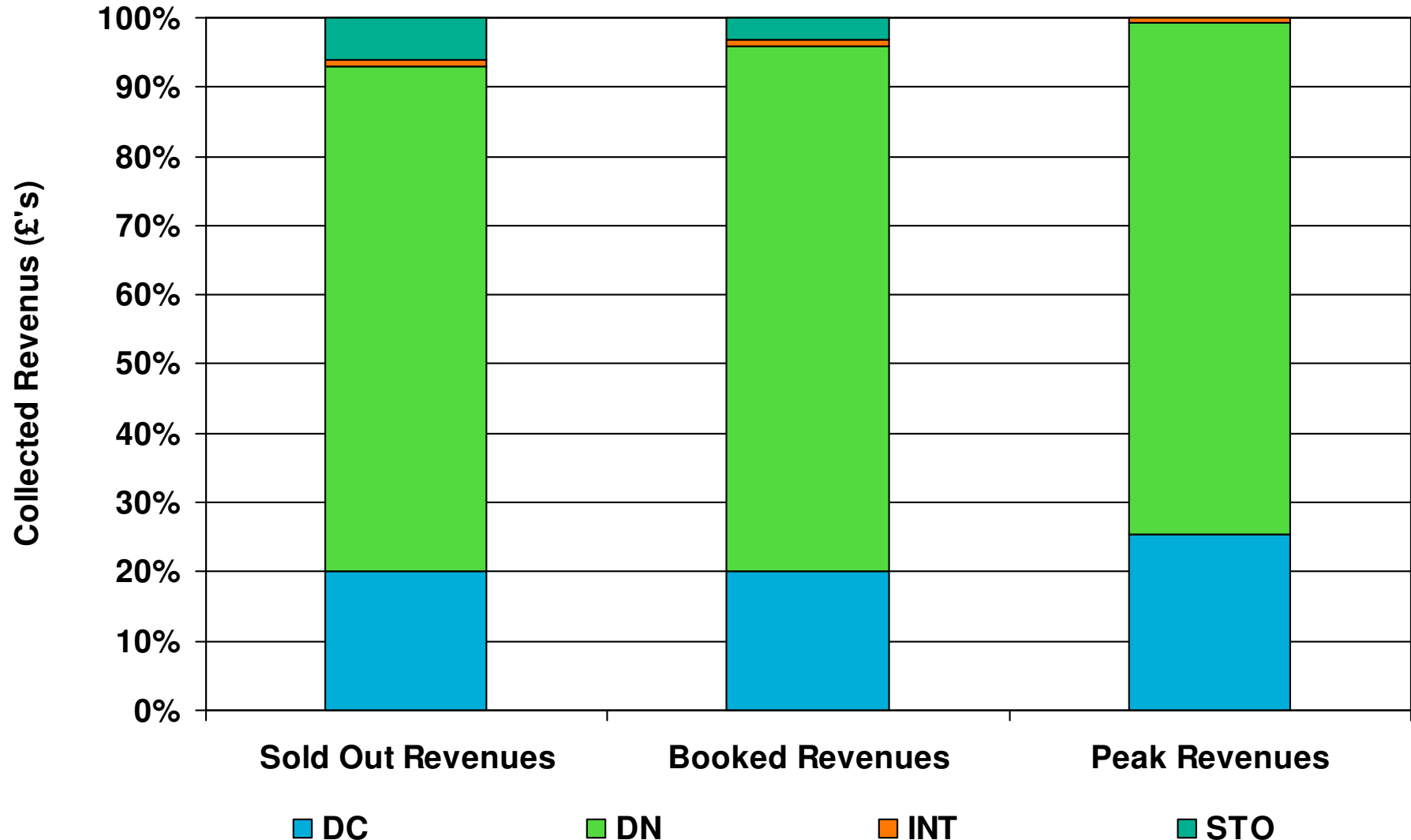
TYS 2009: Proposed Methodology (Peak Prices) 2012/13



TYS 2010: Proposed Methodology (Peak Prices) 2012/13



TYS 2010: Proposed Methodology (Peak Prices) 2012/13

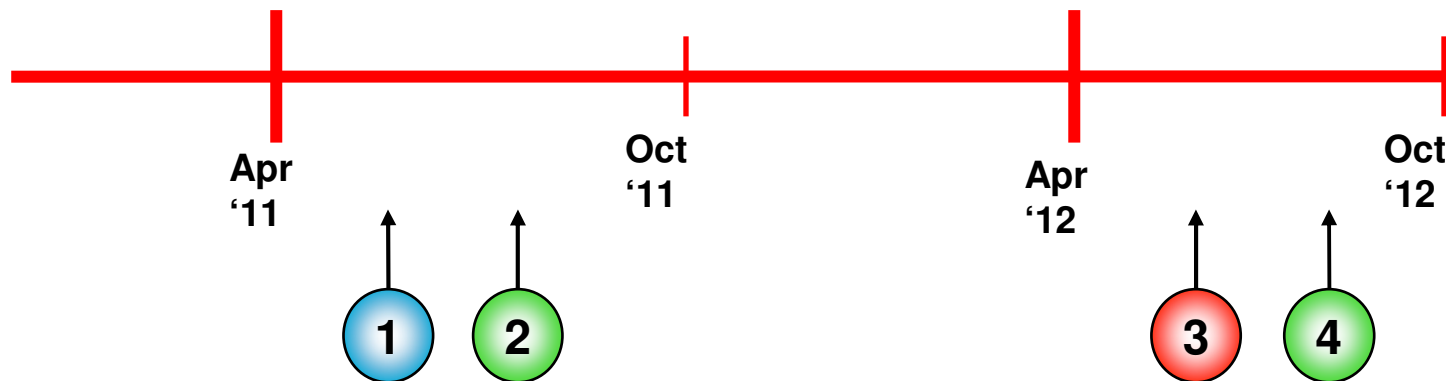


Indicative Impact on TO Exit (Flat) Commodity

	“Sold Out”	“Booked”	“Peak”
TYS 2009 Supply Data: Prevailing Charging Methodology (Baseline + Incremental Prices) 2012/13	0.0000	0.0027	0.0061
TYS 2009 S&D* Data: Proposed Charging Methodology (Peak Prices) 2012/13	0.0000	0.0035	0.0057
TYS 2010 S&D* Data: Proposed Charging Methodology (Peak Prices) 2012/13	0.0000	0.0035	0.0058

* DC demands at obligated (baseline plus incremental) capacity level.

Timeline



- | | |
|--|---------|
| 1. Update Indicative prices for 12/13, 13/14. Set Indicatives for 14/15 | May 11 |
| 2. Annual Application Window for Enduring and Annual Exit Capacity | July 11 |
| 3. Set Actual prices for 12/13. Update Indicatives for 13/14, 14/15. Set indicatives for 15/16 | May 12 |
| 4. Annual Application Window for Enduring and Annual Exit Capacity | July 12 |

Following normal UNC timescales would leave the following decision times:

- 1 week prior to 1st May 2011 when indicative prices would be published.
- 5 weeks prior to 1st June application window invitation
- 10 weeks prior to July 2011 application window

Indicative prices could be calculated based on the proposed methodology prior to a decision and could be published 1st May, June or July.

Further Analysis – Treatment of TYS Supply Data

- Intend to bring forward further analysis covering the treatment of supply data
 - ‘Freezing’ TYS Supply Data at Y+4
 - 38 month lead time implies that investment decisions are finalised at Y+4
 - ‘Freezing’ data at Y+4 would mean that only demand forecast and allowed revenue would change between enduring application for exit capacity and actual; price setting
 - Averaging of TYS Data
 - TYS supply forecast represents a source of variability which might be mitigated by averaging
- Need to consider consistency of NTS Entry & Exit charge setting

Further Analysis

- Is there any further NTS Exit analysis which might be required to either;
 - Better understand the impact of the draft UNC Proposal?
 - Develop an alternative?