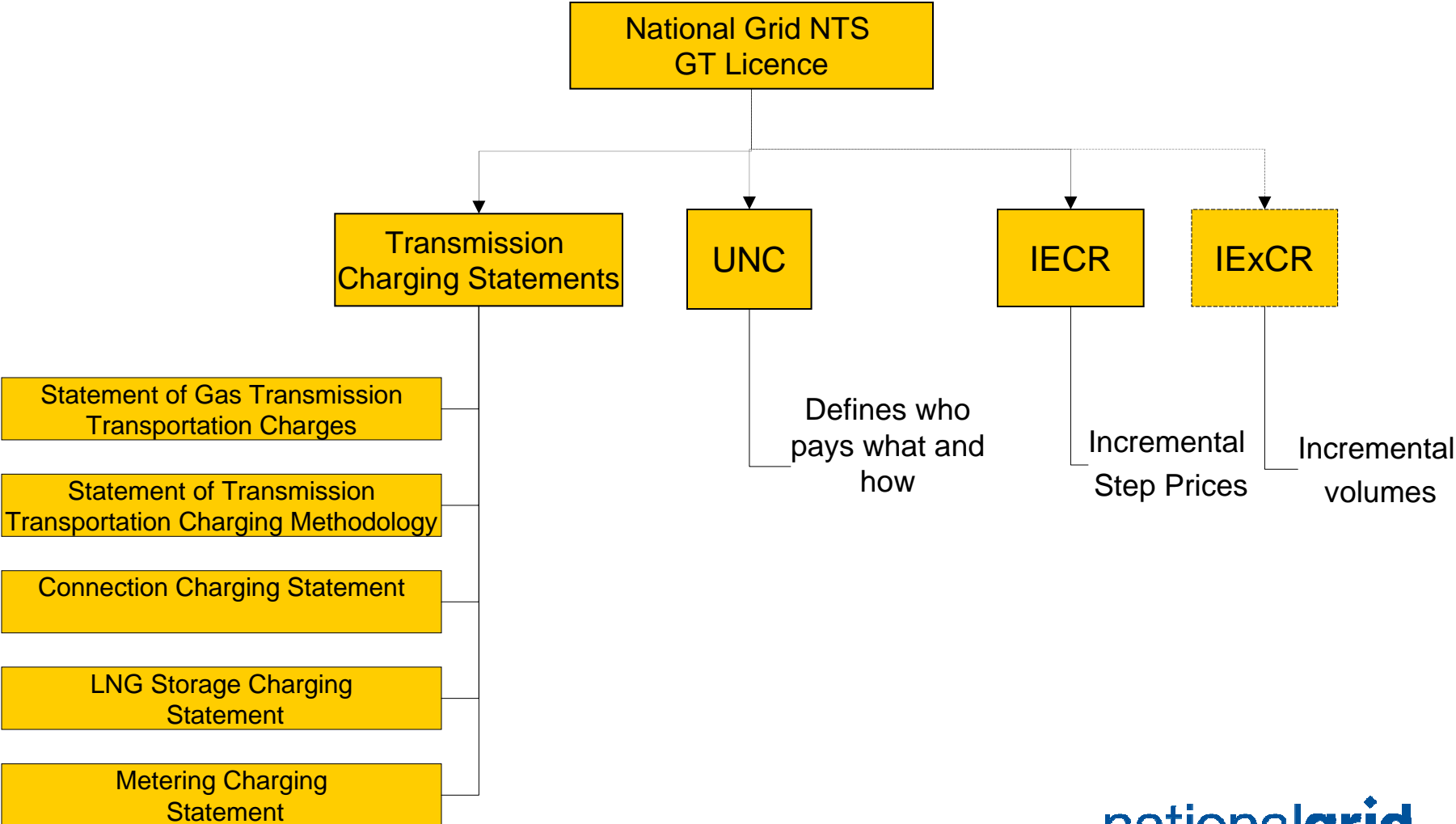


Overview of Charging Arrangements

- Contents

- ◆ Regulatory & Commercial Framework
 - ◆ Licence Obligations
 - ◆ Contractual Obligations
 - ◆ Further Objectives
 - ◆ Price Control
- ◆ Transportation Charging Methodologies
 - ◆ Types of charges
 - ◆ Principles of charging methodologies :
 - ◆ TO Exit
 - ◆ TO Entry
 - ◆ TO/SO Commodity

Regulatory and Commercial Framework - Overview



Licence Obligations (1)

- ◆ In setting and developing its transportation charges, National Grid NTS complies with the following relevant obligations :
 - ◆ **Standard Special Condition A4 – Notification of Charges**
 - ◆ National Grid NTS required to publish statement of charges
 - ◆ Places restrictions on timings of changes to charges (I.e. Apr & Oct only)
 - ◆ Requires 150 day notice period of changes “reasonable endeavours basis”
 - ◆ One month’s notice of final prices
 - ◆ **Standard Special Condition A5 – Changes to Charging Methodology**

National Grid NTS to keep charging methodology at all times under review, for the purpose of achieving the following relevant objectives :

 - ◆ To reflect costs incurred
 - ◆ To take account of developments in the business
 - ◆ To facilitate effective competition between shippers/suppliers
 - ◆ Where auctions apply, that the reserve price is set at a level to promote efficiency, avoid undue preference, and to promote competition

..contd.

Licence Obligations (2)

...but must also comply with further special conditions :

- ◆ Special Condition C15 – Methodology for determining incremental entry capacity volumes
 - ◆ includes the setting of step prices
 - ◆ requirement on National Grid NTS to review annually
 - ◆ Includes consultation process where revision to be made
- ◆ Special Condition C3 – LNG Storage Services
 - ◆ National Grid NTS to ensure charges for LNG storage services are those contained in the licence for each formula year

Contd...

Licence Obligations (3)

..and the following licence conditions for non-transportation charges :

- ◆ Standard Special Condition A43 – Metering Charges
 - ◆ contains requirements for the charging methodology and statement for metering and meter reading services
- ◆ Standard Condition 4b – Connection Charges
 - ◆ contains requirement on National Grid NTS to maintain and publish connection charging statement

Contractual Obligations

- ◆ Uniform Network Code
 - ◆ Defines each transportation charge type (as described in the charging statement) for contractual purposes
 - ◆ Describes how the final charges for invoicing purposes are generated (e.g transportation charge rate x chargeable quantity)
 - ◆ Sets out who is responsible for payment
 - ◆ Invoicing process
 - ◆ Includes requirement to provide two months notice for implementation of revised prices

Setting Transportation Transmission Charges – Further Objectives

- ◆ When considering changes to charges, in addition to satisfying licence objectives, we endeavour to meet a number of our own objectives :
 - ◆ Promote efficient use of the transportation system
 - ◆ Generate stable charges
 - ◆ Be easy to understand and implement

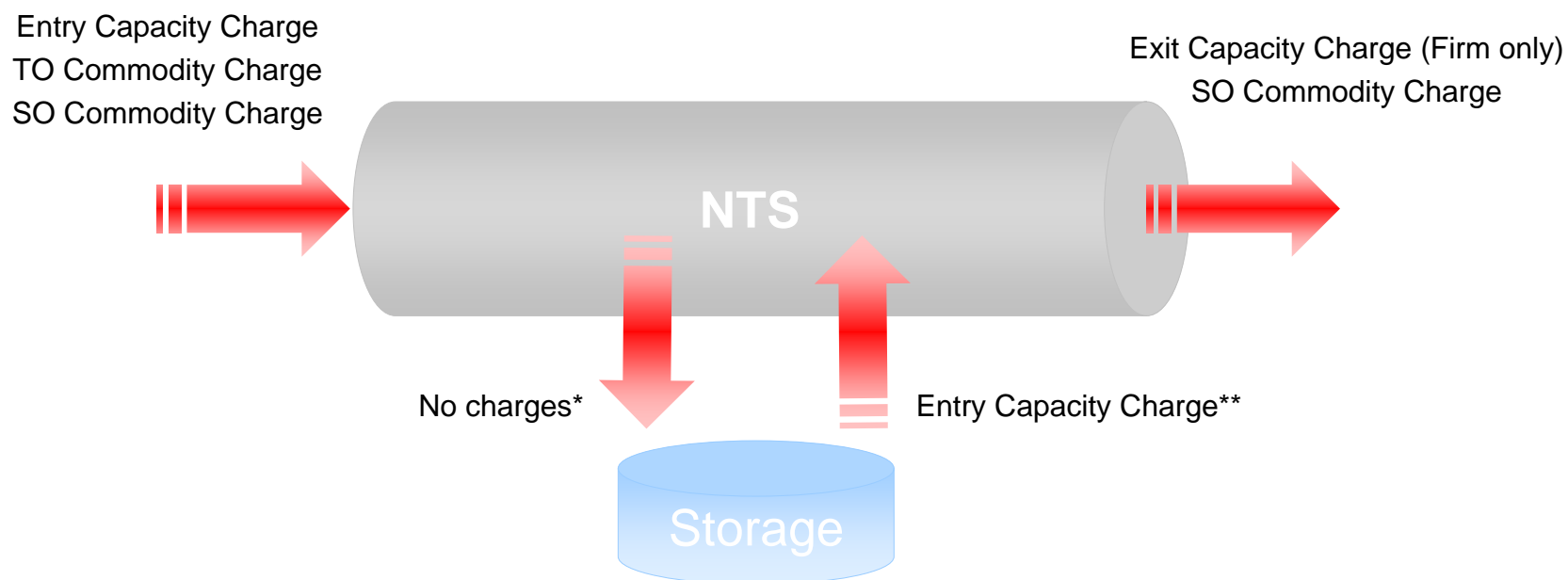
Price Controls

- ◆ Maximum Allowable Revenue (MAR) that National Grid NTS is allowed to earn in each formula year (1 Apr – 31 Mar) determined by TO and SO price controls and incentives
- ◆ Transportation Charges are set to recover the Maximum Allowed Revenues (MAR)
 - ◆ Pricing differentiates between whether the activity is TO or SO

Transportation Charging Methodologies

NTS Entry and Exit Charges

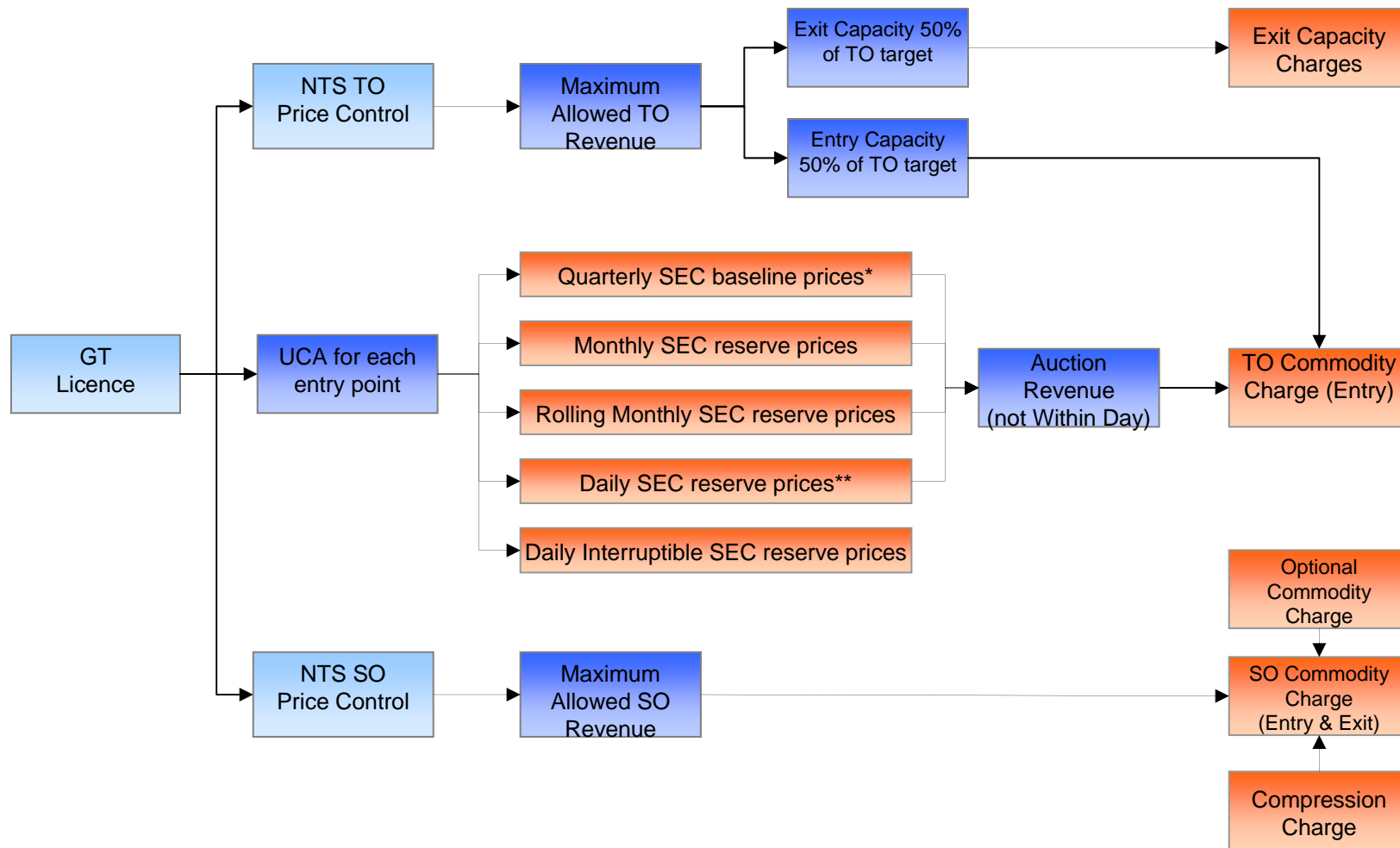
- ◆ **Capacity** (*p/peak day kWh/day*)
- ◆ **Commodity** (*p/kWh*)



*Treated as Interruptible. Historically, SO Commodity not applied.

** SO Commodity not applied, TO Commodity levied on SO Commodity charge base, therefore not applied

NTS Charges, Reserve Prices and Revenues

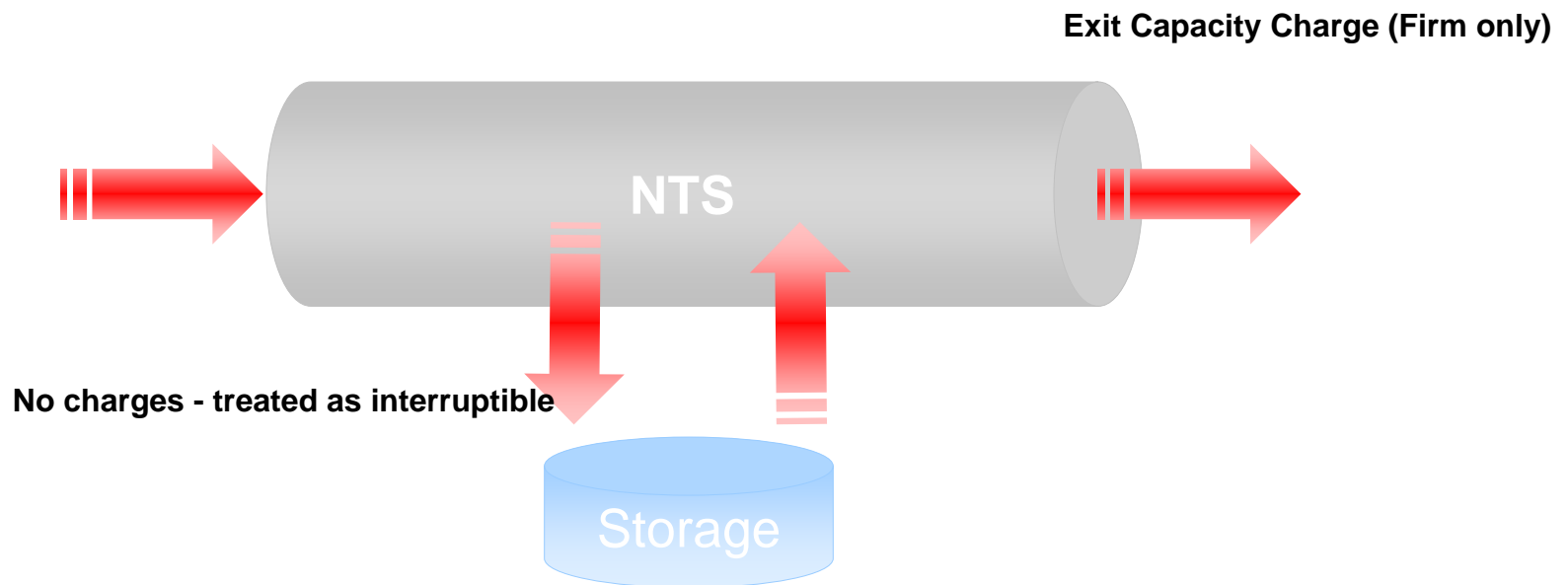


*Quarterly Incremental Prices are set in accordance with IECR methodology

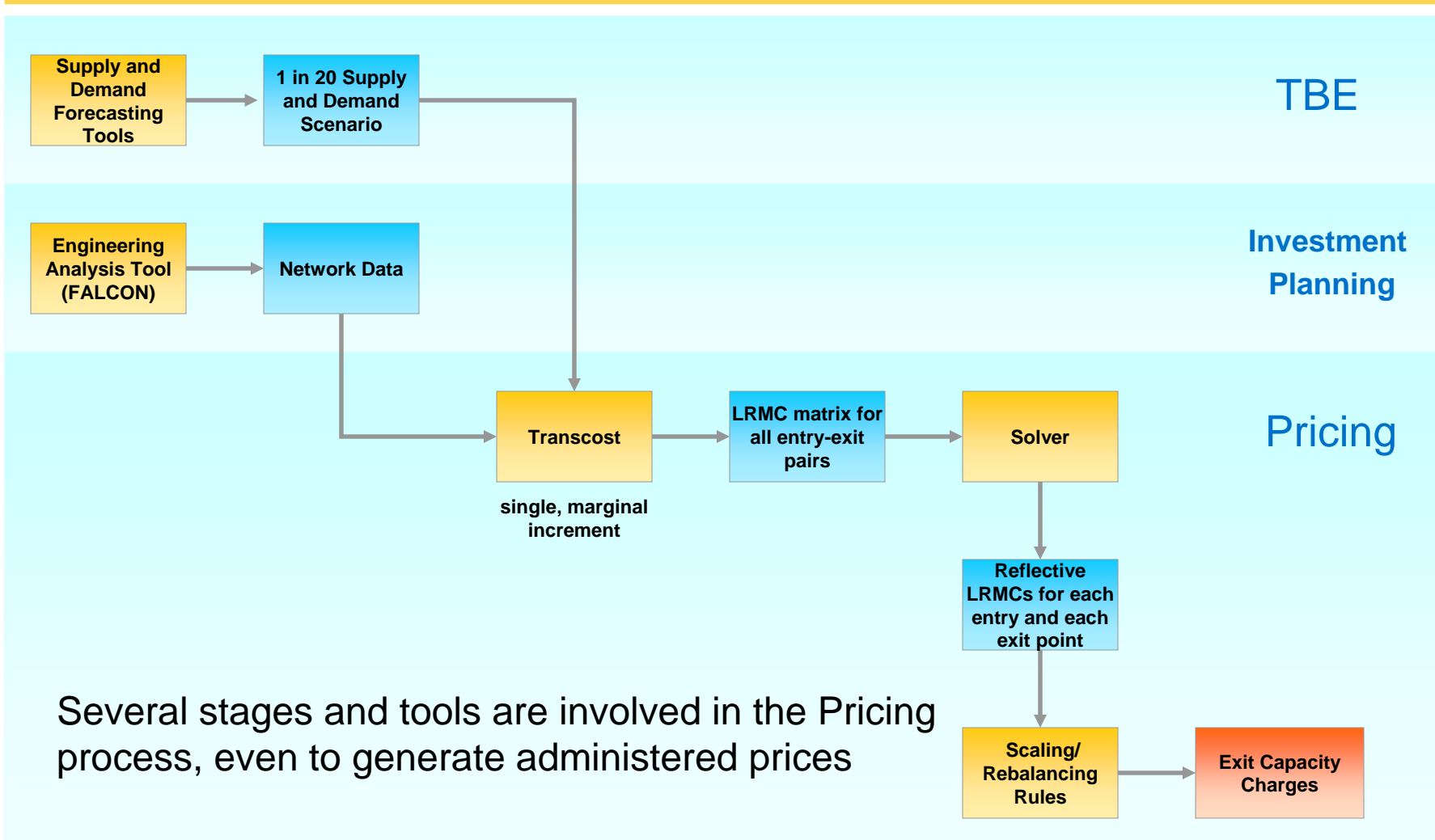
** Only revenue from Ahead of Day auctions feeds into Commodity Charge

NTS Exit Charges (TO Control)

- ◆ Capacity (*p/peak day kWh/day*)



NTS Exit Capacity Charge Process



NTS Exit Capacity Charging Zones

33 standard NTS Exit Charging Zones for Distribution Network offtakes

Each Direct Connect is treated as an individual zone



NTS Exit Capacity Charges

- ◆ Set to recover 50% of TO Maximum Allowed Revenue
- ◆ Charges are locational
 - ◆ Vary by each LDZ exit zone and directly connected load
 - ◆ Determined from Long Run Marginal Costs (LRMCs)
 - ◆ LRMCs are scaled to generate target exit revenue
 - ◆ Rebalancing rules may be applied to aid price stability

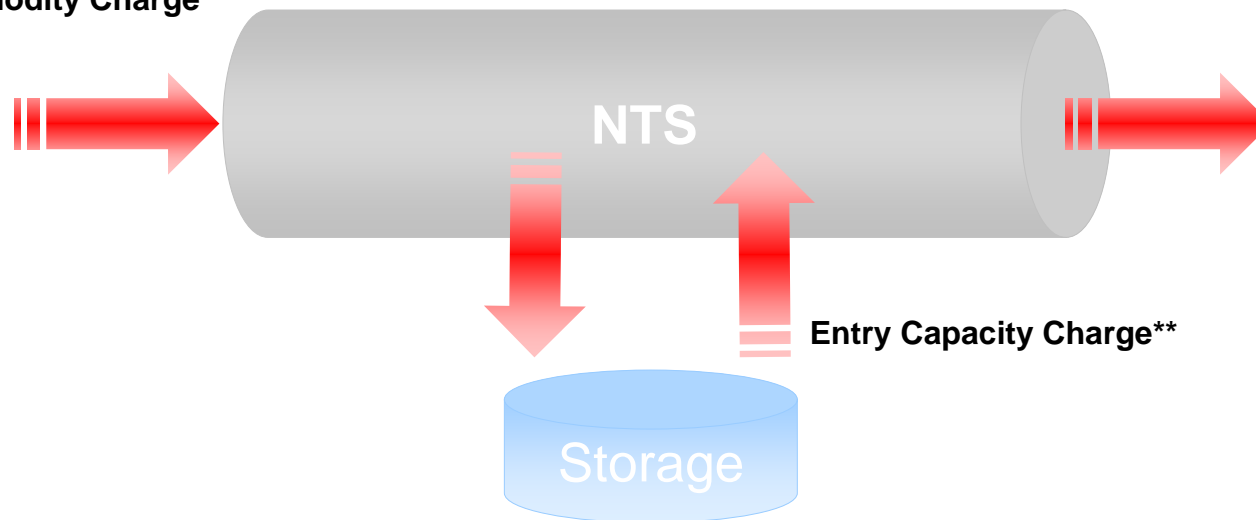
NTS Exit Capacity Charges

- ◆ **PC76** (December 2002) noted significant variation between prices and LRMCs but concluded that prices should not be re-balanced using updated LRMCs prior to exit reform
- ◆ **PD18** (March 2005) considered various options for moving from administered prices to UCAs for setting exit reserve prices, and included comparisons between unscaled LRMCs with current administered prices. Exit capacity charges left unchanged following postponement of Enduring Offtake Arrangements
- ◆ Any under/over-recovery dealt with through adjusting exit capacity charges only as part of “K” correction mechanism for actual TO revenues

NTS Entry Charges (TO Control)

- ◆ **Capacity** (*p/peak day kWh/day*)
- ◆ **Commodity** (*p/kWh*)

Entry Capacity Charge
TO Commodity Charge



** SO Commodity not applied, TO Commodity levied on SO Commodity charge base, therefore not applied

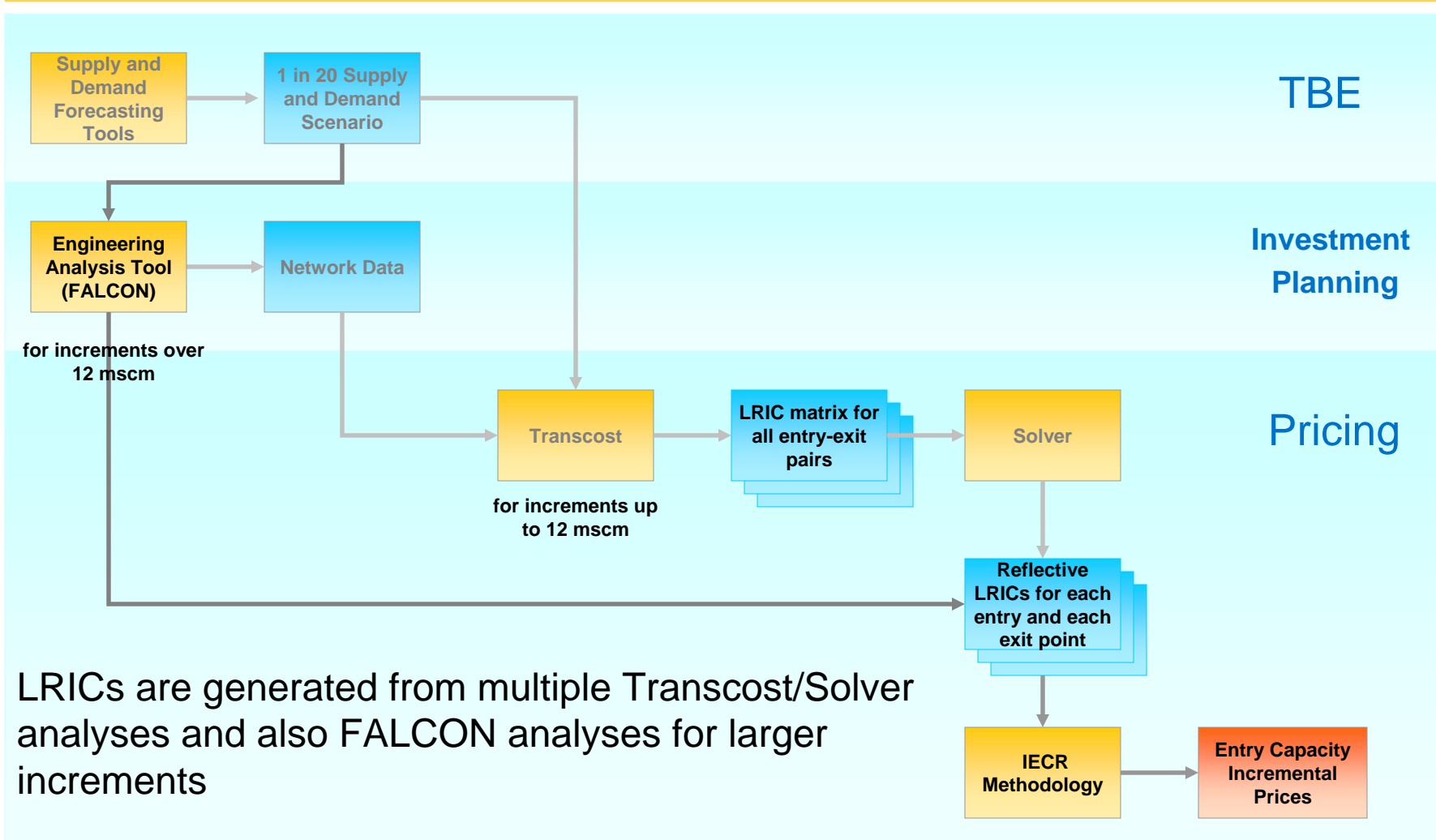
NTS Entry Capacity Charges (TO Control)

- ◆ Aim to recover 50% of TO Maximum Allowed Revenue
- ◆ Entry capacity sold through different auctions:
 - ◆ Annual long term (15 years) auction - quarterly bundle (QSEC)
 - ◆ Annual monthly auction (AMSEC)
 - ◆ Rolling Monthly auction of remaining monthly capacity (RMSEC)
 - ◆ Daily firm capacity auction (DSEC)
 - ◆ Daily interruptible capacity auction (DISEC)
- ◆ All auctions are based on the same baseline reserve price, though some currently have discounts applied
 - ◆ DSEC (Ahead of day): 33.3% discount
 - ◆ DSEC (Within day) and DISEC: 100% discount

NTS Entry Capacity Charges (TO Control)

- ◆ Currently, baseline capacity reserve prices are set from Unit Cost Allowances (UCAs)
 - ◆ UCAs were originally set to reflect LRMCs at entry points (using 6 mscm increment)
 - ◆ UCAs currently set for entire price control period - only adjusted for inflation (RPI)
- ◆ Incremental capacity prices set using IECR methodology
 - ◆ Usually twenty price steps (each step 2.5% baseline) for large terminals
 - ◆ Long Run Incremental Costs (LRICs) calculated by Transcost for increments up to 12 mscm
 - ◆ More sophisticated engineering model (FALCON) used for larger increments

Entry Incremental Pricing Process

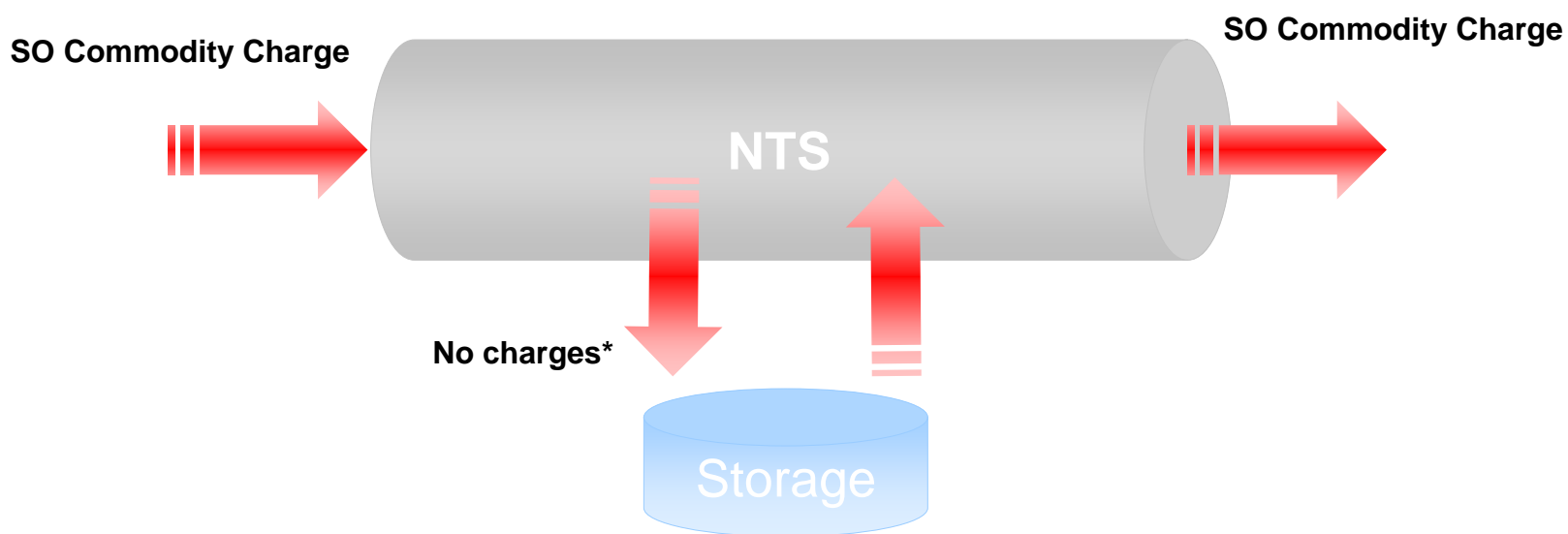


NTS TO Commodity Charge

- ◆ TO Commodity Charge part of the TO Revenue correction mechanism (under-recovery only)
- ◆ QSEC, AMSEC actual revenues and forecast revenues for RMSEC and DSEC (Ahead of Day) used for charge setting
 - ◆ Within Day capacity sales feed into Buy Back incentive
- ◆ Charge is levied over period October-March inclusive (due to timing of AMSEC auctions and notice period required for changes to charges). Charge is zero at other times.

NTS Entry and Exit Charges

- ◆ Commodity (p/kWh)



*Historically, SO Commodity not applied.

SO Commodity Charges

- ◆ SO Maximum Allowed Revenue covers:
 - ◆ Revenues and cost elements of all 7 incentive schemes except for costs of Entry Capacity Buyback and Residual Balancing (which have separate neutrality mechanisms)
 - ◆ Deemed interruptible TO payments
- ◆ Recovered through the SO Commodity Charge, split 50/50 over entry and exit
 - ◆ Currently, SO and TO Commodity Charges combined for Entry (for practicality)
- ◆ Optional Commodity Charge (“Shorthaul”)
 - ◆ For large loads close to entry points
 - ◆ Elected entry and exit points
 - ◆ If paying this, will avoid standard SO commodity charge and also TO commodity charge

Other Transportation Charges

- ◆ Interruptible Supply Points
 - ◆ Avoid exit capacity charges
 - ◆ Where exceed 15 days interruption per year, receive 1/15th of (avoided) exit capacity annual charge as rebate
- ◆ Constrained LNG
- ◆ Compression Charge
- ◆ CSEP Administration Charge
- ◆ Specific Services at Interconnectors