FCC Baseline Analysis
Obligated vs Peak vs Enduring Scenario



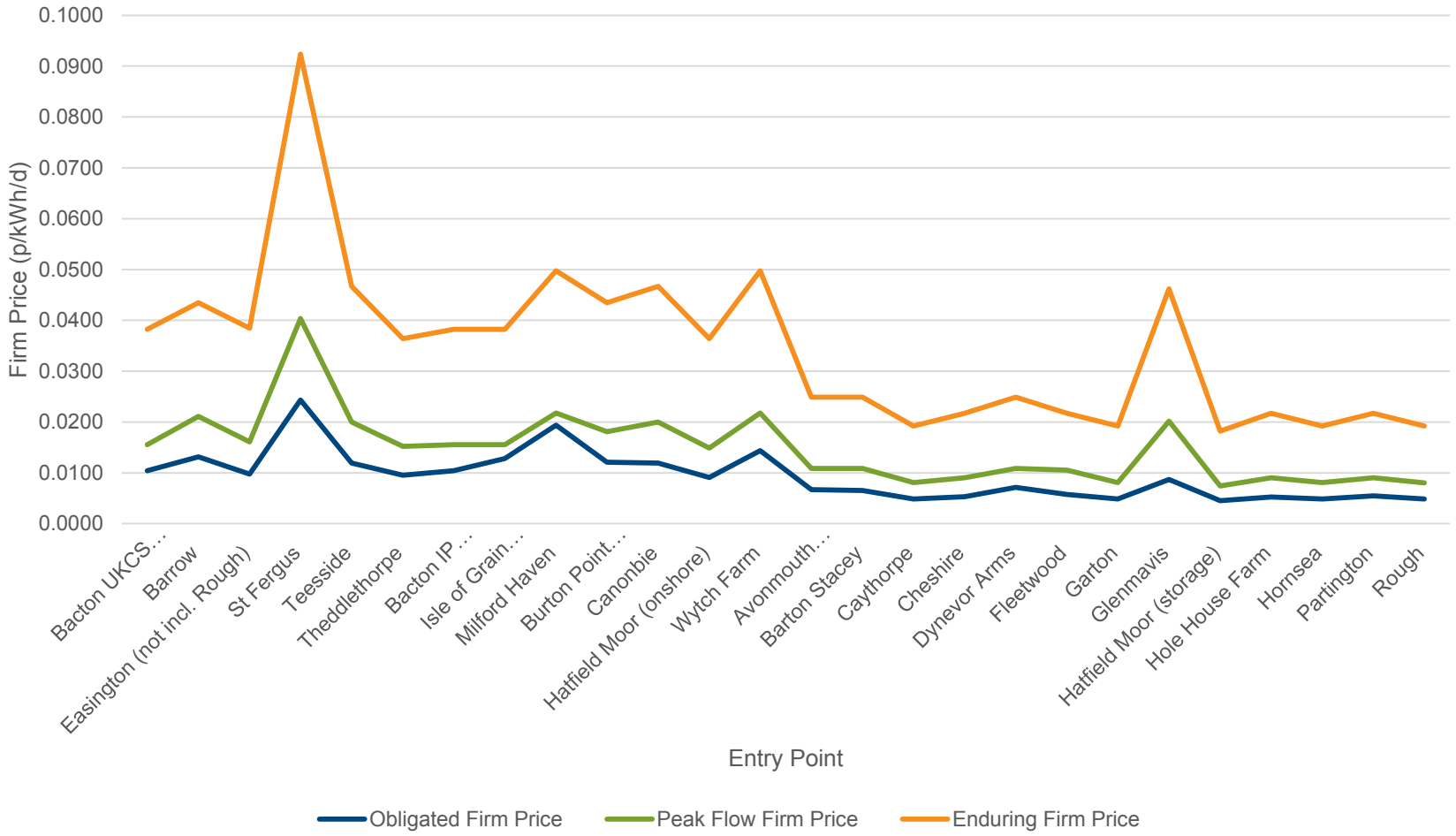
UNC Mod 0621 Analysis
12/04/2018

FCC Baseline Analysis – Background / Assumptions

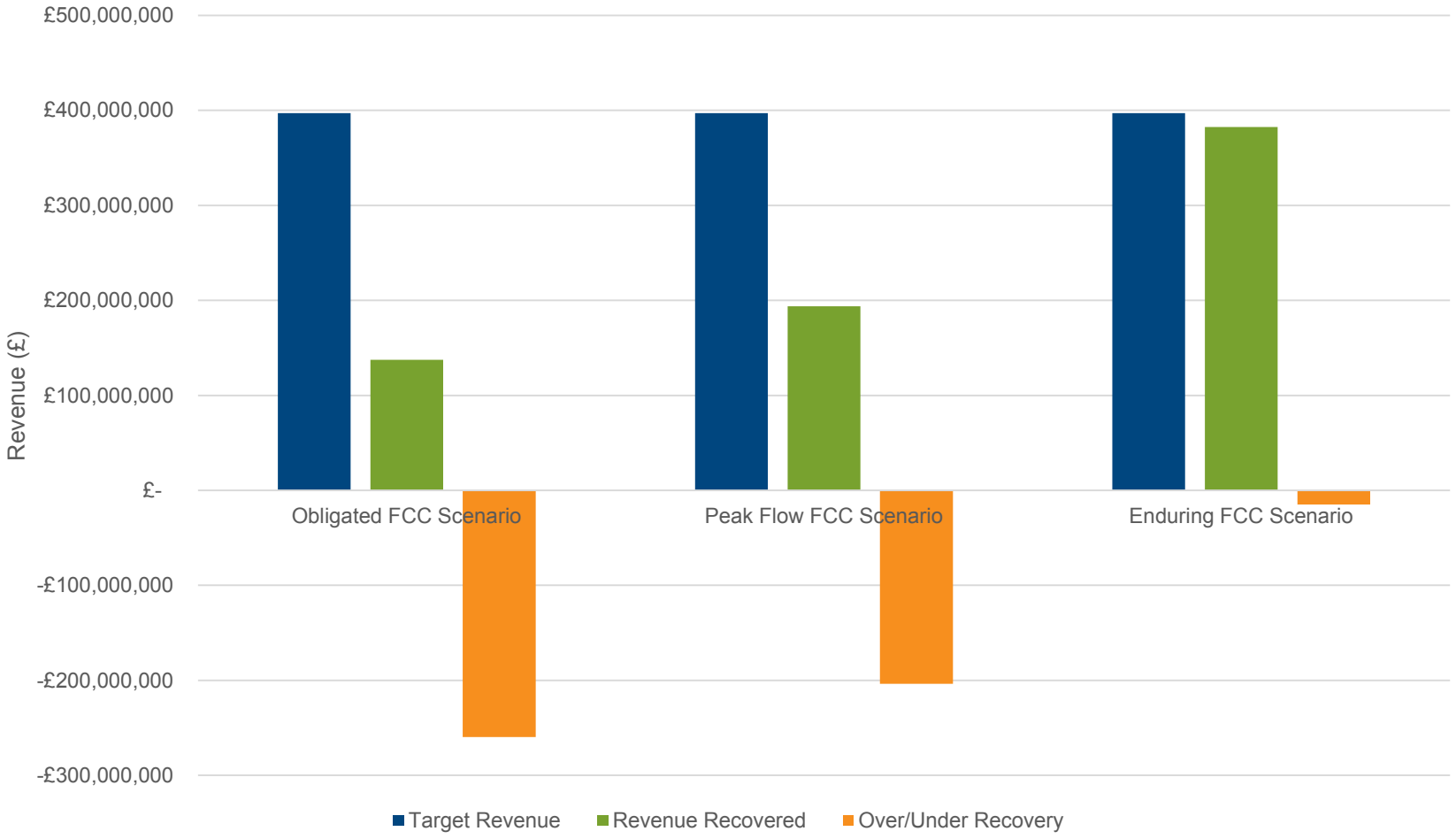
- Analysis List #1
- To look at whether using Historic Peak Flow FCC scenario is a better alternative to our previously suggested “Enduring Baseline Scenario” (where FCC is flows for all entry and exit points, except DN offtakes where FCC is equal to the previous years bookings)
- “Historic Peak Flow” refers to the peak day flows from the previous gas year

- Assumptions
  - Used the 2019/20 Transitional parameters from CWD model (i.e. Model reset to transitional period) for each scenario
  - Historic Flows and Historic bookings are from 2019/20 FCC sheet
  - Peak Flows from 2016/17 Gas Year have been used

FCC Baseline Analysis – Entry Firm Prices



FCC Baseline Analysis – Entry Revenue Recovery



nationalgrid

FCC Baseline Analysis – Exit Firm Prices

FCC Baseline Analysis – Exit Revenue Recovery

Future Impact of Existing Contracts on Enduring Firm Price

UNC Mod 0621 Analysis
10/04/2018

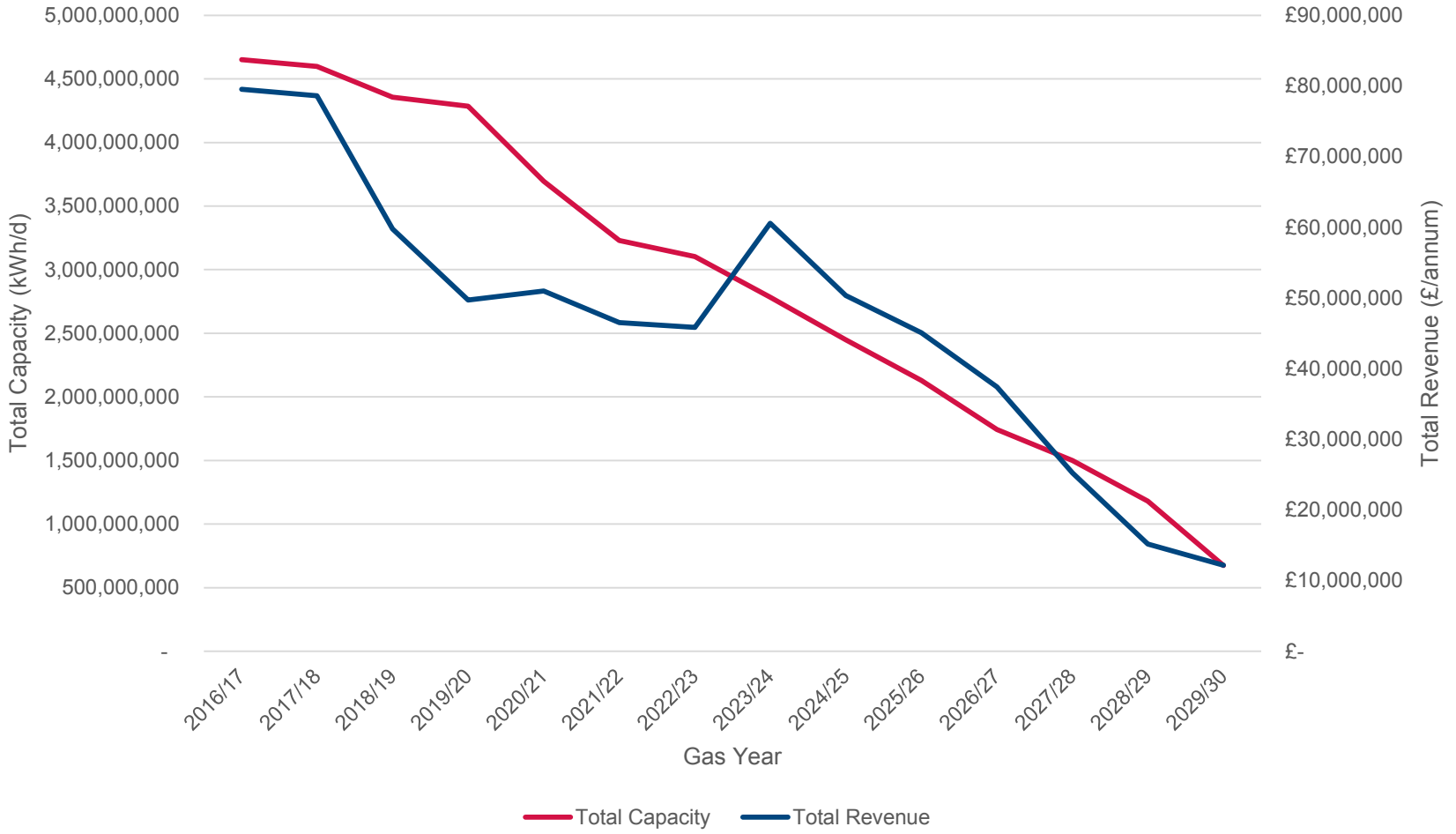
nationalgrid

Existing Contracts – Background / Assumptions

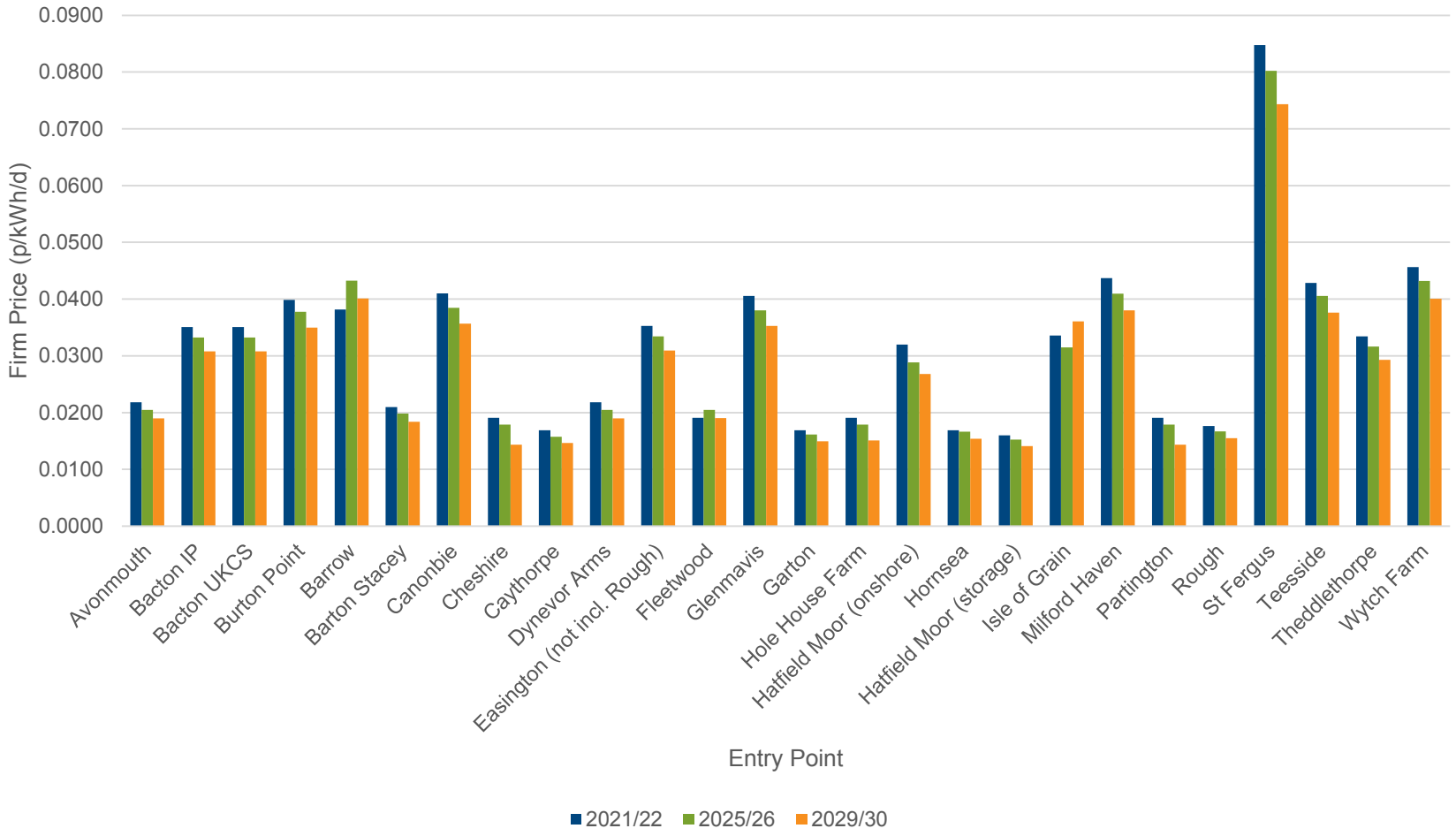
- Analysis List #5
- Look at the existing contracts values past the 2021/22 period and determine the impact this has on entry firm prices during the enduring period

- Assumptions
  - Used the 2021/22 Enduring parameters from the CWD models (i.e. reset model to the enduring period)
  - For each scenario the model has been reset (to the above), existing contracts for 2021/22 have been replaced by the 2025/26 and 2029/30 (for respective scenarios) existing contract amounts, which includes;
    - Individual entry point bookings
    - Total capacity bookings
    - Total revenue values

Existing Contracts – Total Capacity and Revenue through from 2016/17 to 2029/30



Existing Contracts – Impact on Firm Prices



nationalgrid

Impact of the Optional Charge on Revenue Recovery Rates



UNC Mod 0621 Analysis
10/04/2018

Optional Charge Impacts – Background / Assumptions

- Analysis List #8
- Assess the impact of the Optional Charge on revenue recovery rates for both Entry and Exit

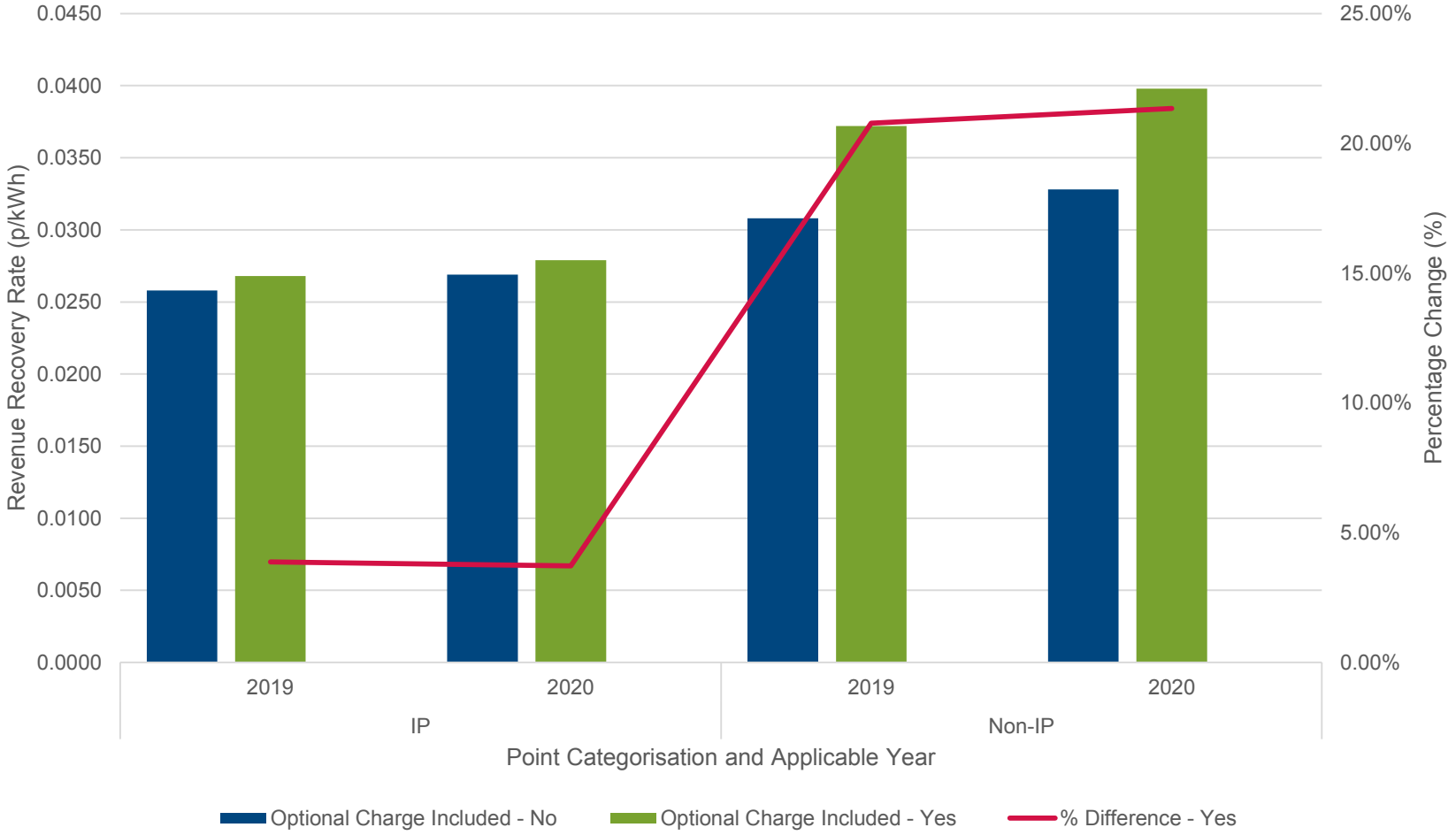
- Assumptions
  - Used the revenue recovery rates out of the CWD model to identify which current OCC rates would be valid for the new OC rate
  - We have combined the Entry and Exit Non-IP commodity charge to generate a combined rate in the Optional Charge comparison
  - The OCC forecast flows and revenues have been used from the October 2017 charging process
  - RPI has been applied to the Optional Charge Formula, and it is only applicable to routes under 60km distance, in line with the 0621 proposal

Optional Charge Impacts – Optional Charge Inputs

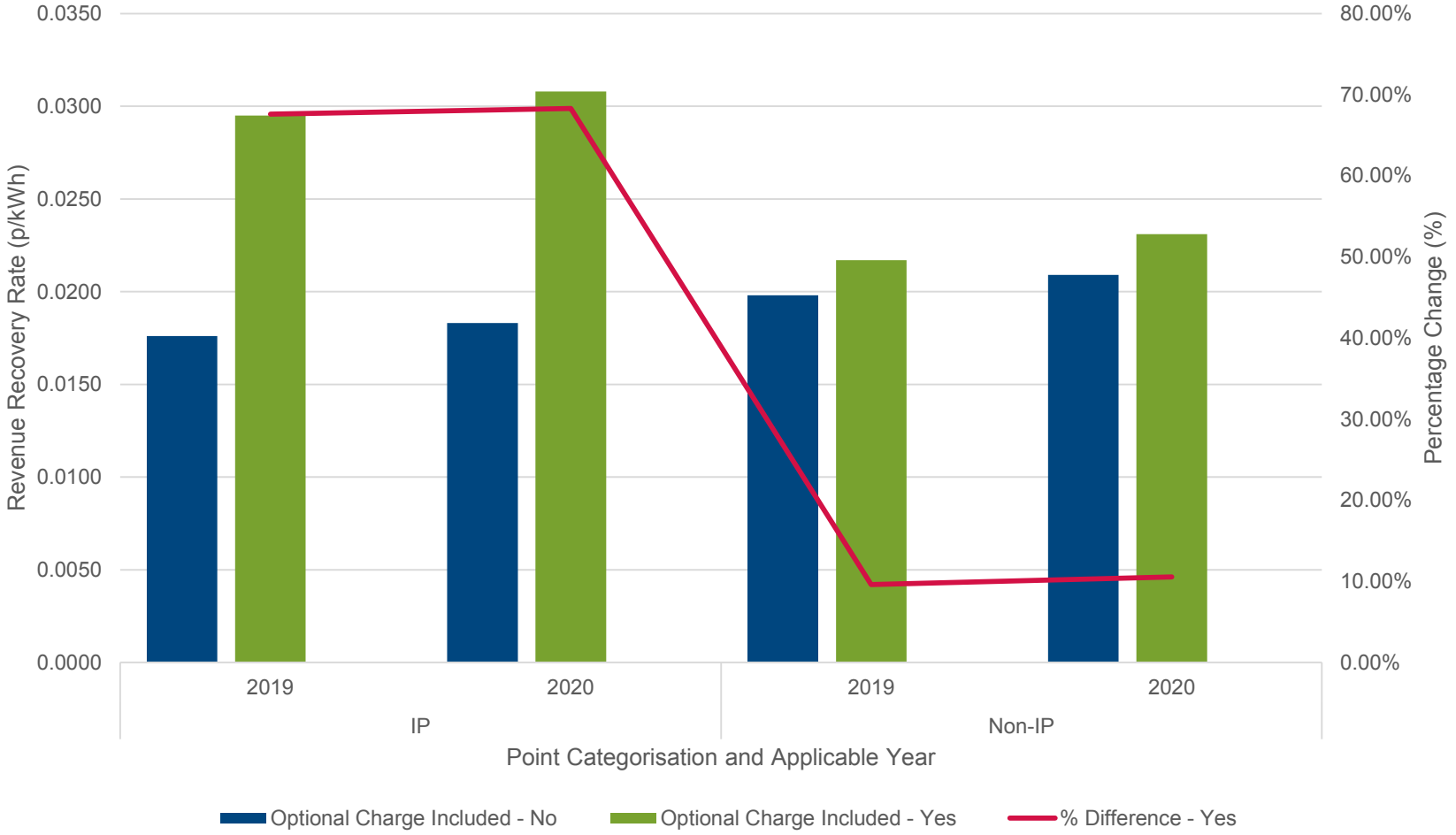
- Due to the different revenue recovery mechanisms at Non-IP and IP the Optional Charge forecast revenues and flows has to be splits into Entry and Exit as well as Non-IP and IP. This allows;
  - Non-IP commodity charge (entry and exit) target revenue and denominator to be reduced by the necessary values
  - IP capacity revenue recovery charge target revenue and denominator to be reduced by the necessary values
- The inputs for the relevant charge are in the table below

	Non-IP Flows (GWh/annum)	Non-IP Revenues (£)	IP Flows (GWh/annum)	IP Revenues (£)
Entry	150,673	£7,351,819	3,832	£189,062
Exit	102,698	£7,253,764	51,807	£285,017

Optional Charge Impacts – Entry Revenue Recovery Rates



Optional Charge Impacts – Exit Revenue Recovery Rates



Difference between the Transitional and Enduring Periods

UNC Mod 0621 Analysis
10/04/2018

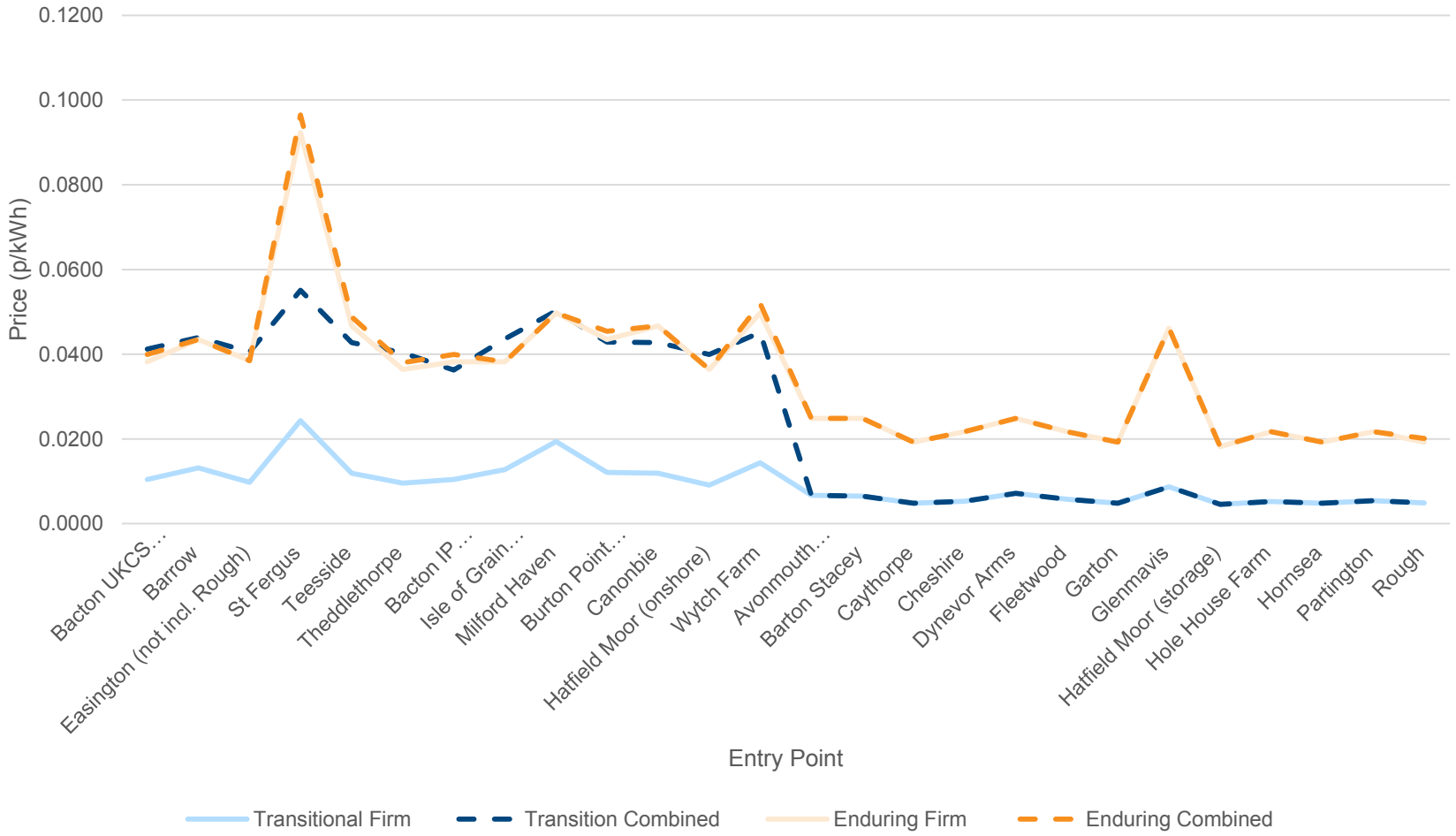
nationalgrid

Transitional vs Enduring – Background / Assumptions

- Analysis List #6
- Assess the impact of the FCC change between Transition and Enduring period by keeping all other variables the same
- Graphs show the Firm and Combined (Firm + Revenue Recovery) rates for transitional and enduring period

- Assumptions
  - Used the 2019/20 Transitional parameters from CWD model (i.e. Model reset to transitional period) for both scenarios
  - Obligated levels have been used for the transitional FCC
  - The revenue recovery rates for the transitional period have been taken from the anticipated revenue recovery sheets using the anticipated booking scenario and excluding Optional Charge
  - Enduring Capacity Scenarios have been used for the Enduring FCC
  - The under-recovery (from Storage and Interruptible discounts) has been “re-run” through the model using the “Calculate Adjustment” button, to calculate a revenue Adjustment Figure

Transition vs Enduring – Entry Prices



Transition vs Enduring – Exit Prices