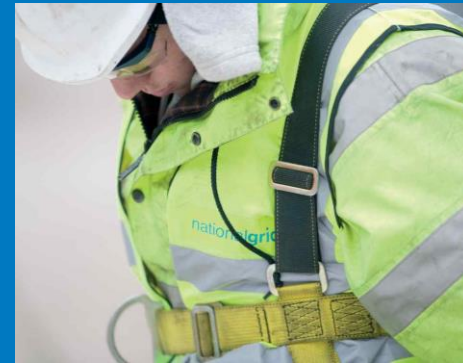


LRMC, CWD, Postage Stamp and Square Root of CWD Comparison Analysis



UNC Mod 0621 Analysis
15/03/18

Contents of Presentation

Background of Analysis

[Slide 3](#)

Analysis Assumptions

[Slide 4](#)

Entry Point Analysis

[Slide 5](#)

Individual Entry Point Analysis

[Slide 6](#)

Exit Point Analysis

[Slide 10](#)

Categorised Exit Point Analysis

[Slide 11](#)

Scotland GDN Offtake Analysis

[Slide 15](#)

“Northern” GDN Offtake Analysis

[Slide 20](#)

“Middle” GDN Offtake Analysis

[Slide 25](#)

“Southern” GDN Offtake Analysis

[Slide 30](#)

Power Station Offtake Analysis

[Slide 35](#)

Industrial Site Offtake Analysis

[Slide 40](#)

Storage Offtake Analysis

[Slide 45](#)

Interconnection Point Offtake Analysis

[Slide 50](#)

Background of Analysis

- This analysis shows the different between LRMC, CWD, Postage Stamp (referred to as PSTMP) and Square Root version of CWD (referred to as SQRT) reference price methodologies
- Analysis for both Transition and Enduring periods has been undertaken, the assumptions for this can be found on the next slide
- Analysis shows the comparison of LRMC, CWD, PSTMP and SQRT firm prices
- Analysis shows a comparison of LRMC, CWD, PSTMP and SQRT “combined” prices. The “combined” price is a combination of firm price and revenue recovery (commodity or capacity, as applicable per point classification) rate

N.B. This is a comparison of the LRMC, CWD and Postage Stamp reference price methodologies and is based on a number of assumptions (stated above). Further analysis will be provided as part of future workgroups.

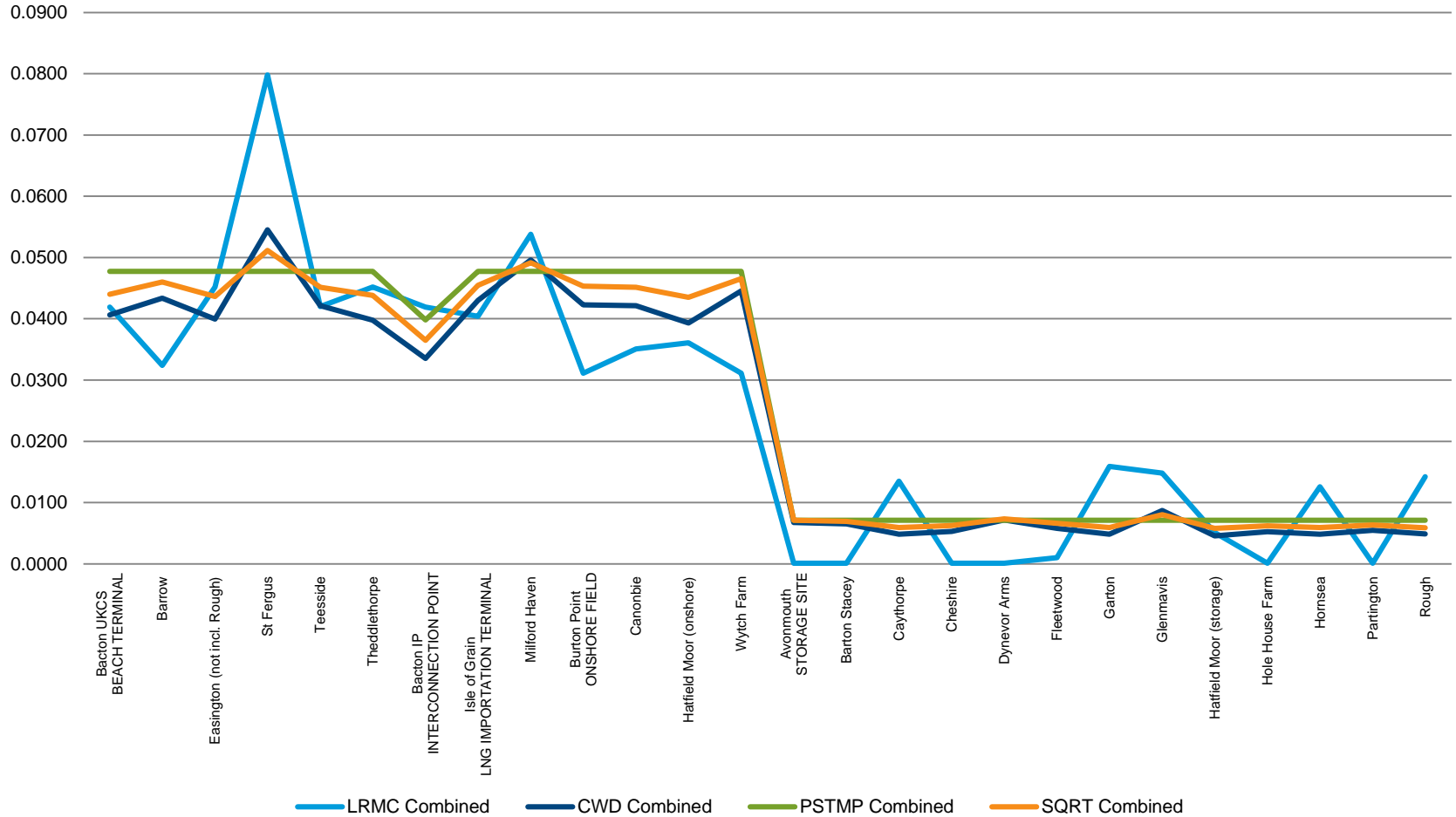
Assumptions

- All revenue recovery (commodity for all point except IP's who have capacity) rates are added together to create a combined rate
 - This assumes each unit of capacity is booked **and** flowed against
 - “Combined” within this presentation refers to this price
- All revenue recovery rates are calculated excluding Optional Commodity Charge (OCC)
 - Current commodity rates are from April 2018 and have been recalculated so that they **do not** include Optional Commodity Charge
- FCC for firm prices are;
 - Entry and Exit obligated levels for the transition period
 - For the enduring period, historic flows has been used for exit and entry, except DN exit points where historic bookings has been used
- The booking scenarios used to calculate the revenue recovered, over or under recovery, and subsequent revenue recovery rates are;
 - Historic flows for entry points
 - Historic flows for exit points, except DN exit points where historic bookings has been used

Entry Point Analysis

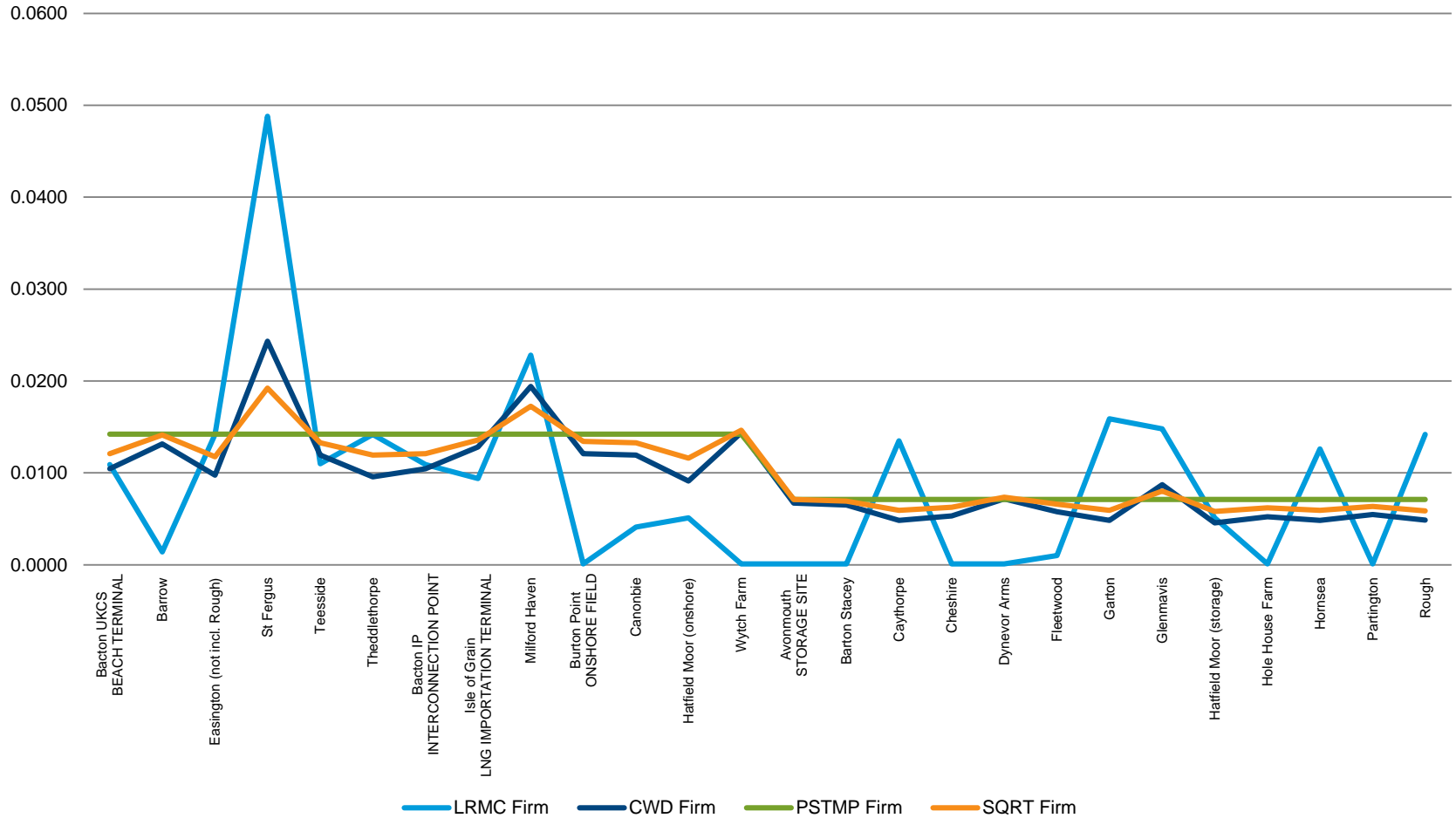
- This section includes;
 - Comparison of Entry Transition Combined Prices
 - Comparison of Entry Transition Firm Prices
 - Comparison of Entry Enduring Combined Prices
 - Comparison of Entry Enduring Firm Prices

Entry Transition Period Combined Prices

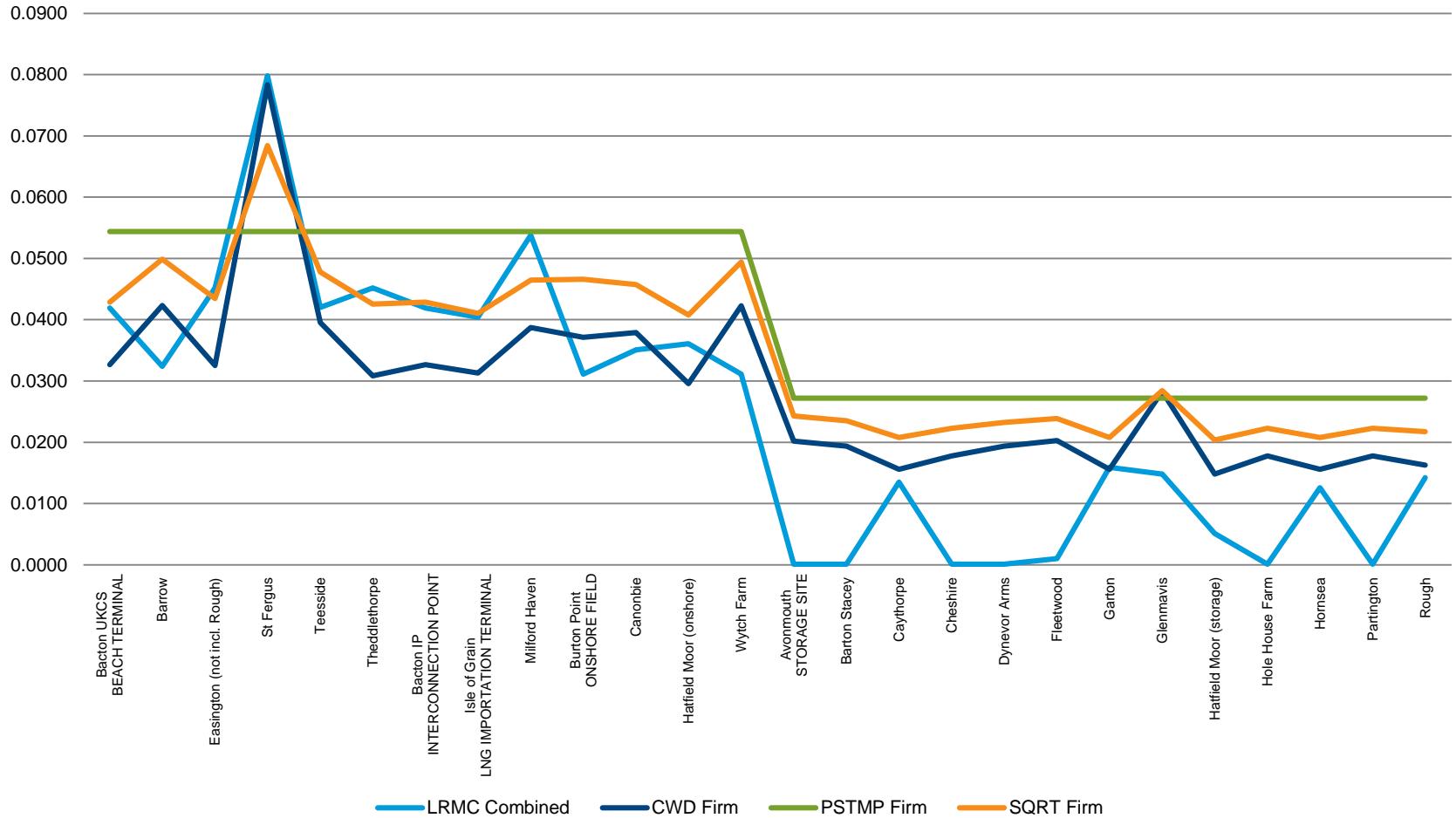


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0310	0.0302	£231,745,023	0.0335	£256,902,989	0.0319	£244,581,776
Capacity Charge	-	0.0231	£20,416,226	0.0256	£22,632,587	0.0244	£21,547,116

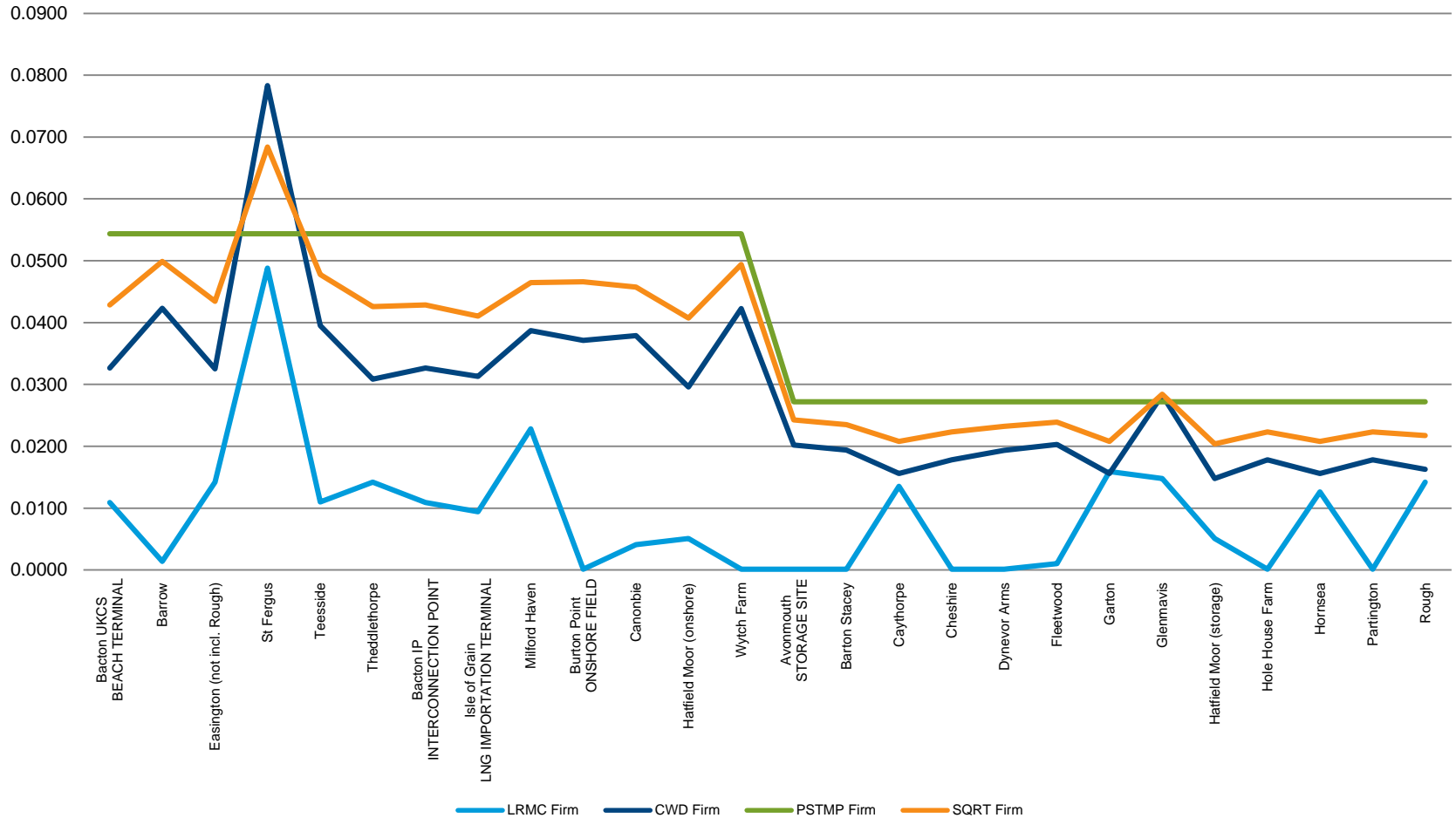
Entry Transition Period Firm Prices



Entry Enduring Period Combined Prices



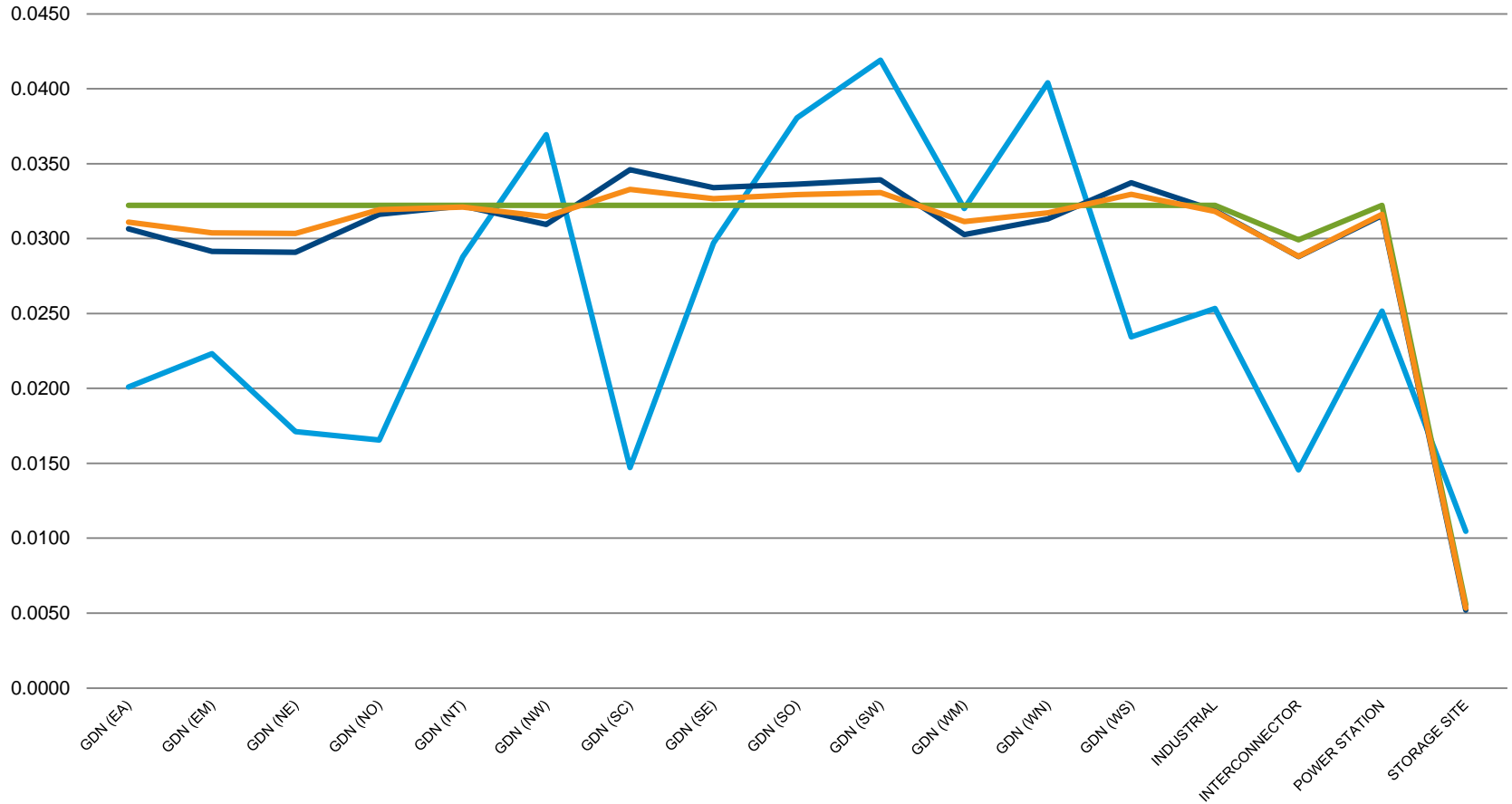
Entry Enduring Period Firm Prices



Exit Point Analysis

- This section includes;
 - Comparison of Exit Transition Combined Prices at an aggregate (categorised) level and individual exit points
 - Comparison of Exit Transition Firm Prices at an aggregate (categorised) level and individual exit points
 - Comparison of Exit Enduring Combined Prices at an aggregate (categorised) level and individual exit points
 - Comparison of Exit Enduring Firm Prices at an aggregate (categorised) level and individual exit points

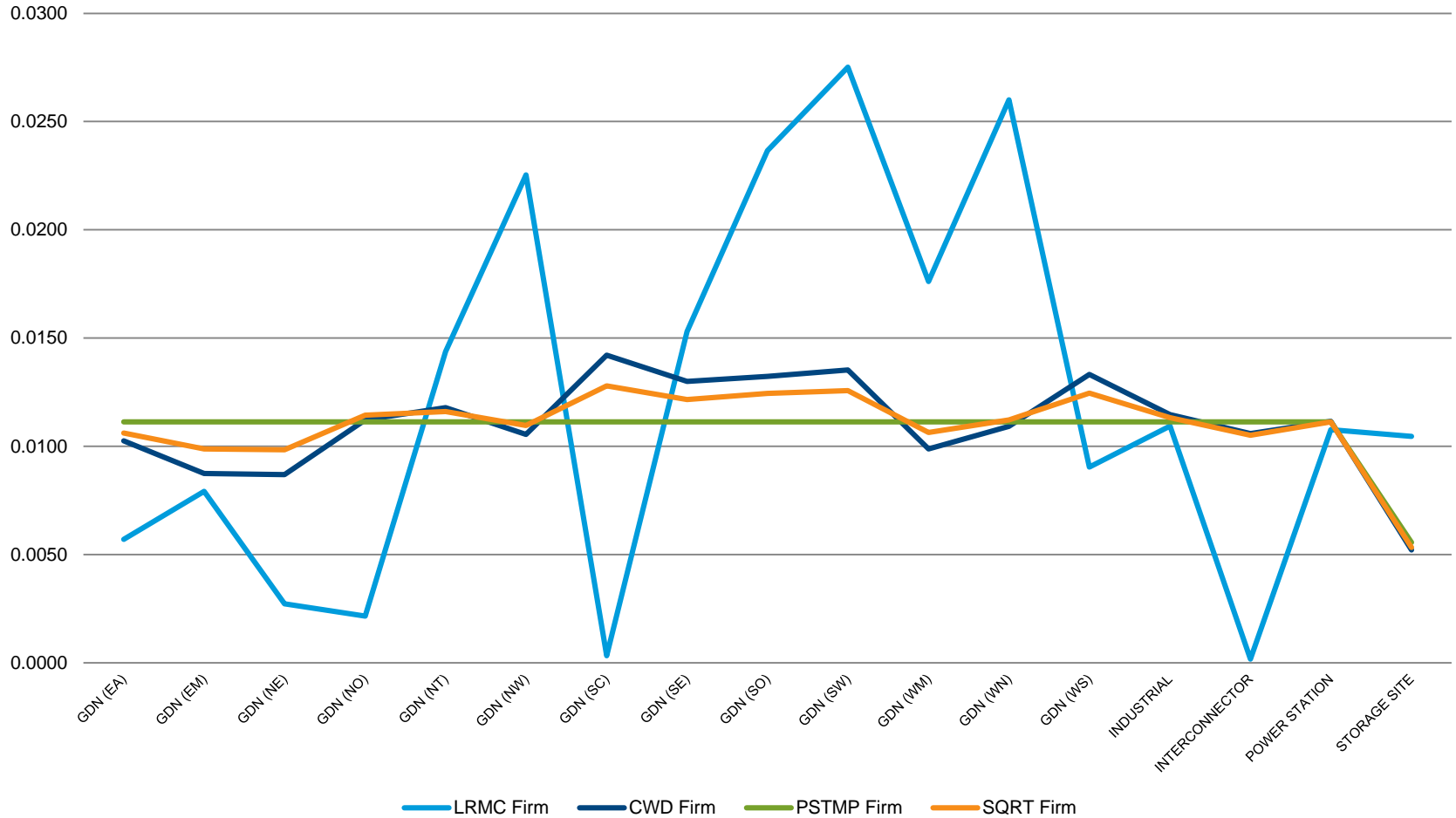
Exit Transition Period Combined Prices



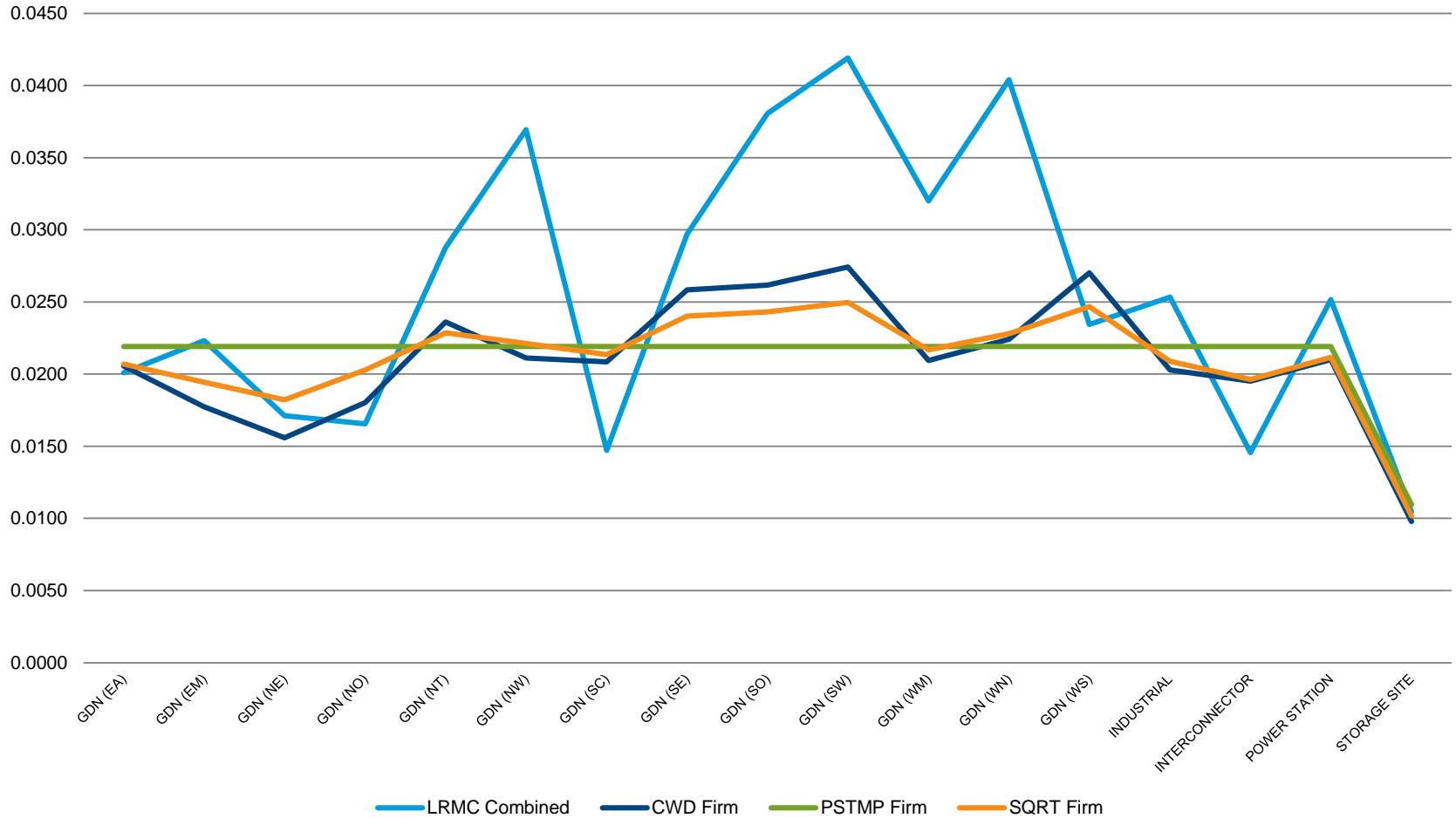
— LRM Combined — CWD Combined — PSTMP Combined — SQRT Combined

Revenue Recovery Charges	LRM Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

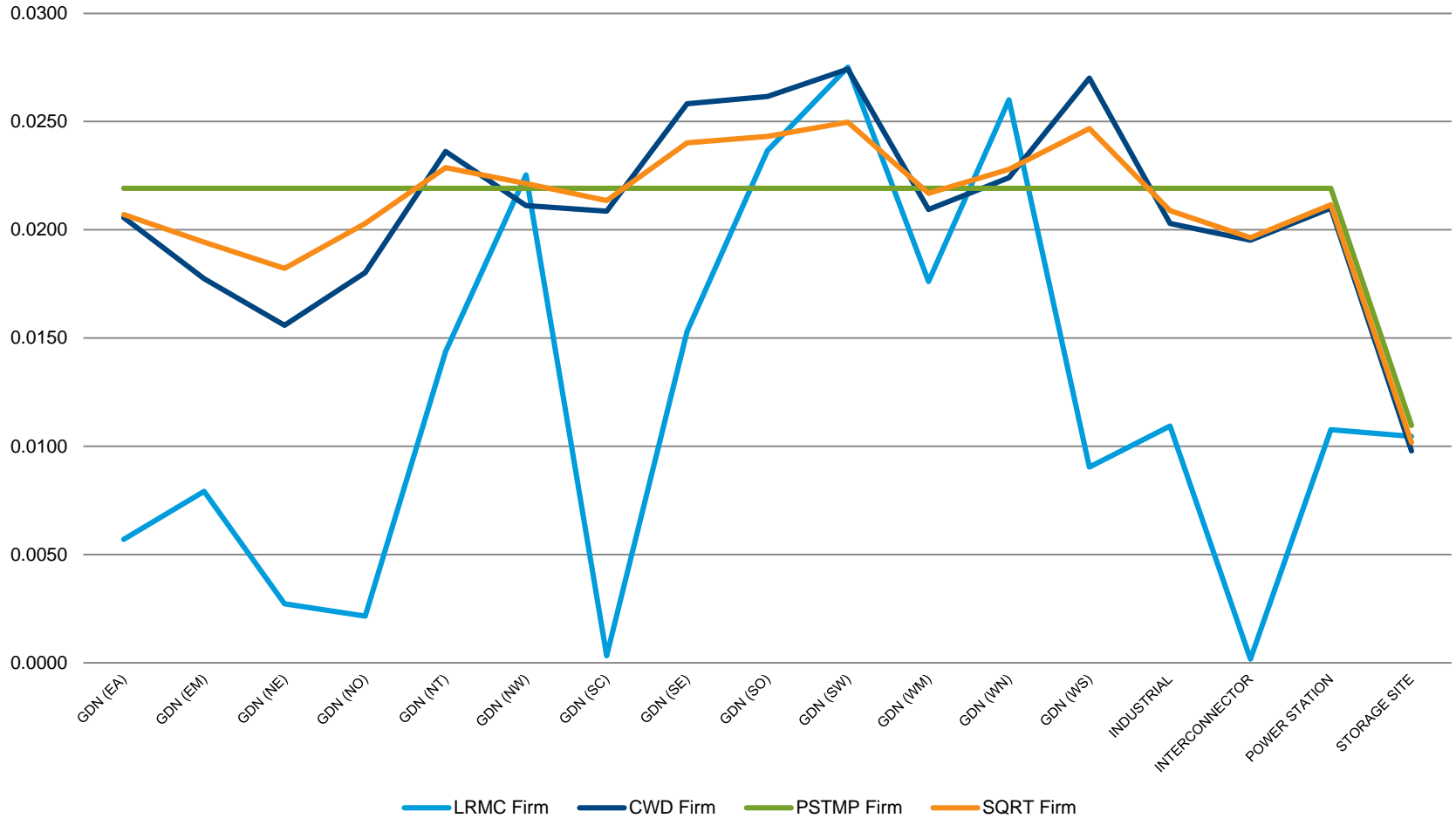
Exit Transition Period Firm Prices



Exit Enduring Period Combined Prices



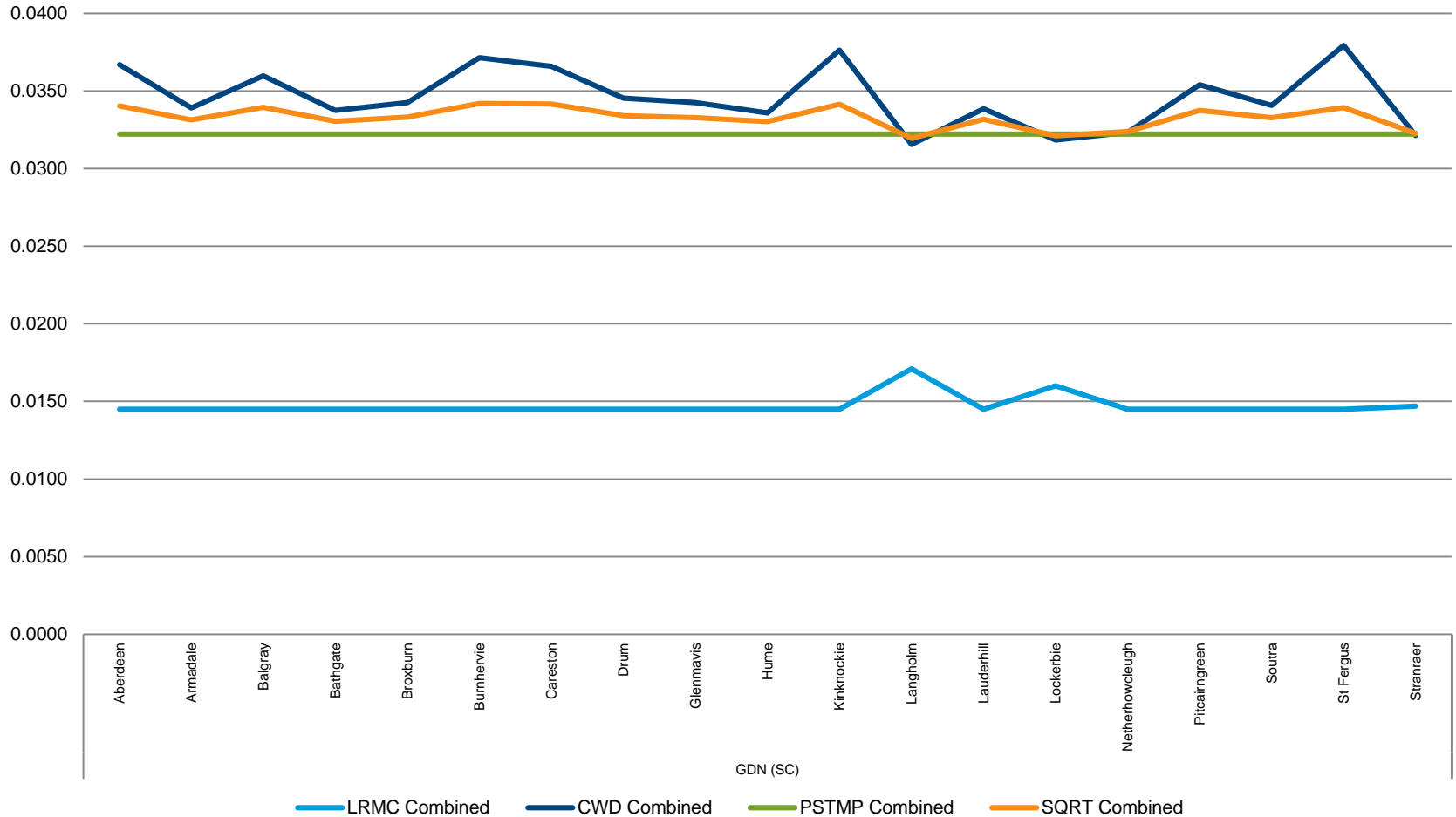
Exit Enduring Period Firm Prices



Scotland Distribution Network Offtakes

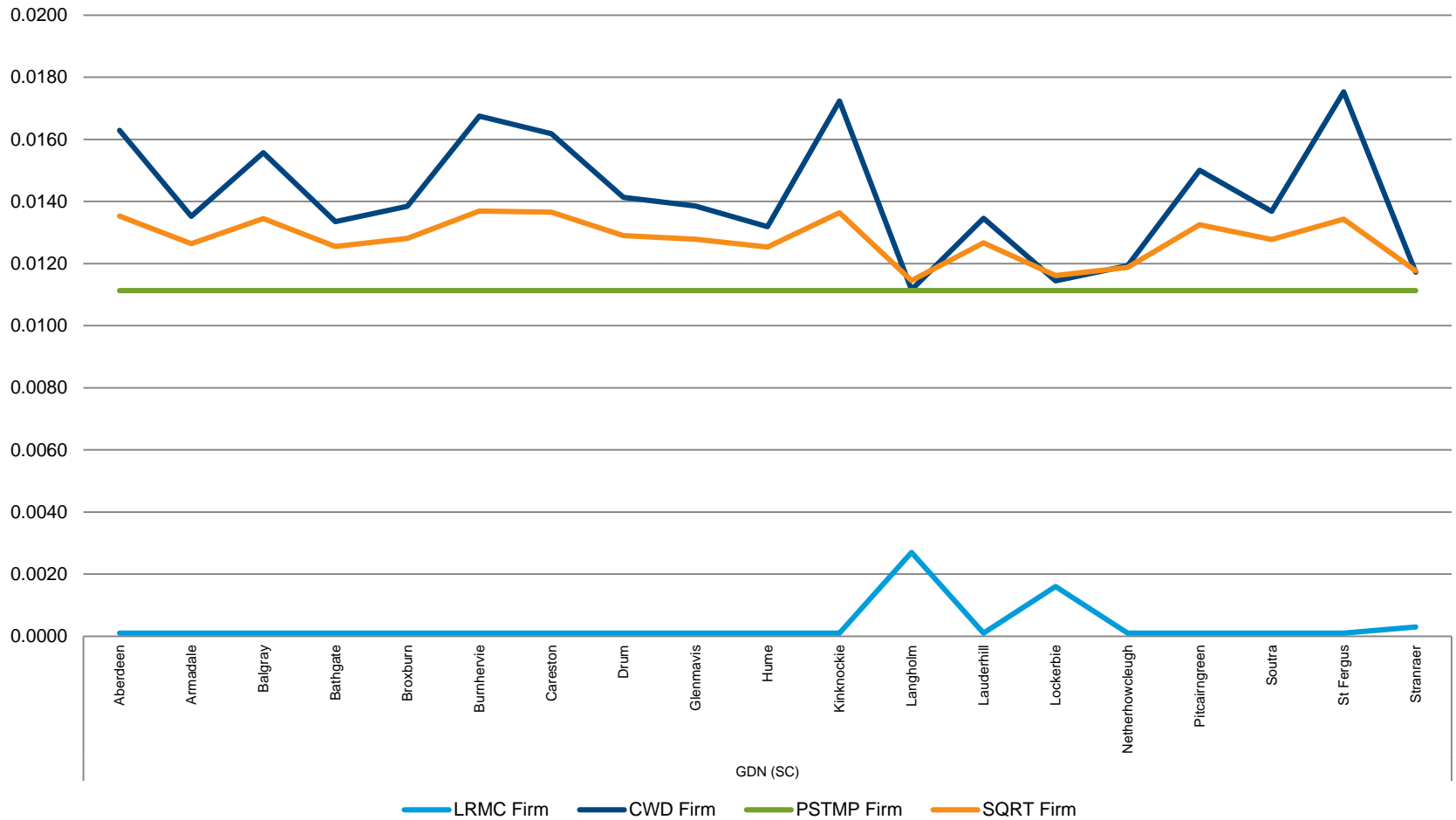
- This section includes;
 - Comparison of Exit Transition Combined Prices within the Scotland Distribution Network zone
 - Comparison of Exit Transition Firm Prices within the Scotland Distribution Network zone
 - Comparison of Exit Enduring Combined Prices within the Scotland Distribution Network zone
 - Comparison of Exit Enduring Firm Prices within the Scotland Distribution Network zone

Scotland Transition Period Combined Exit Prices

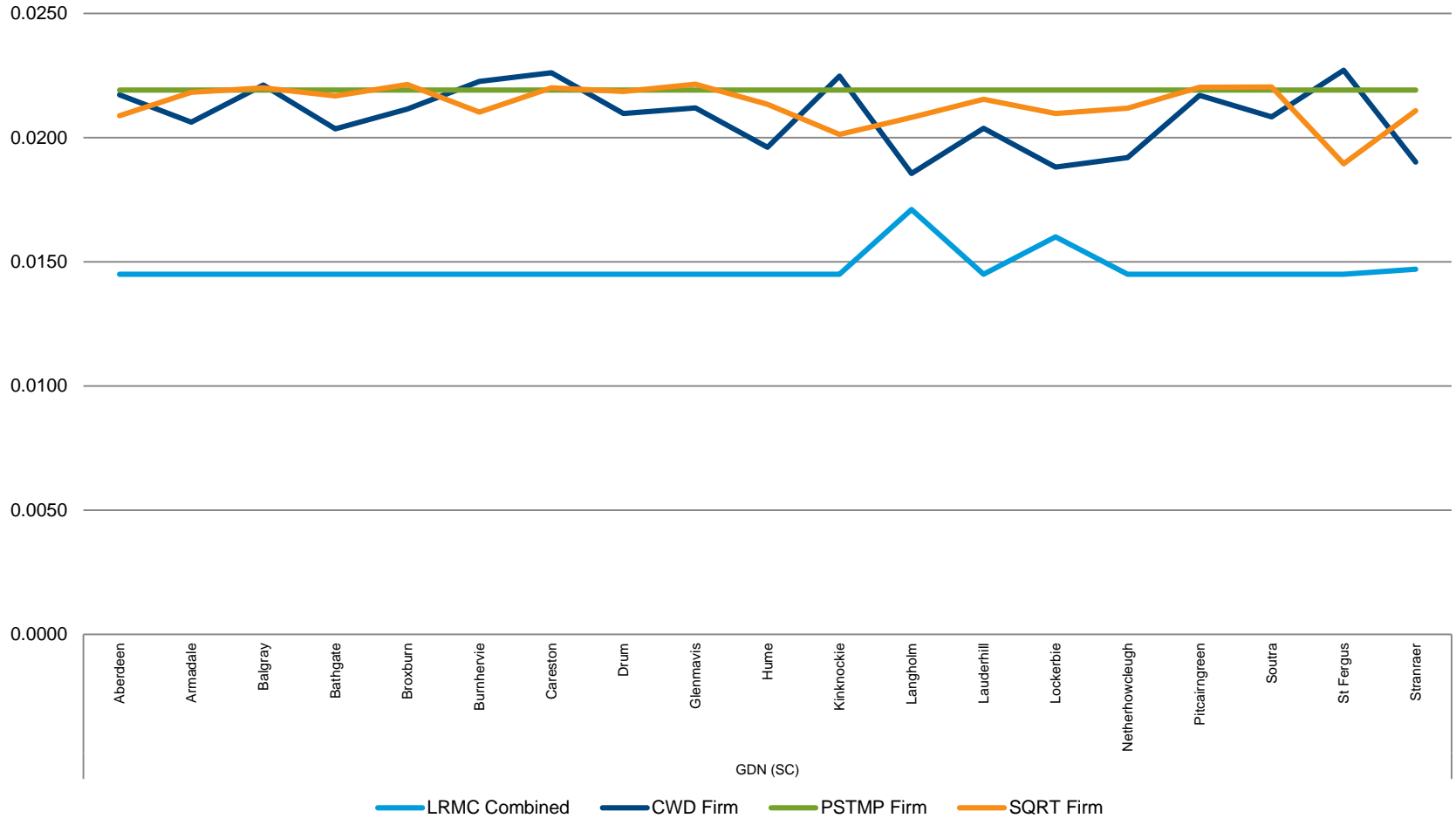


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

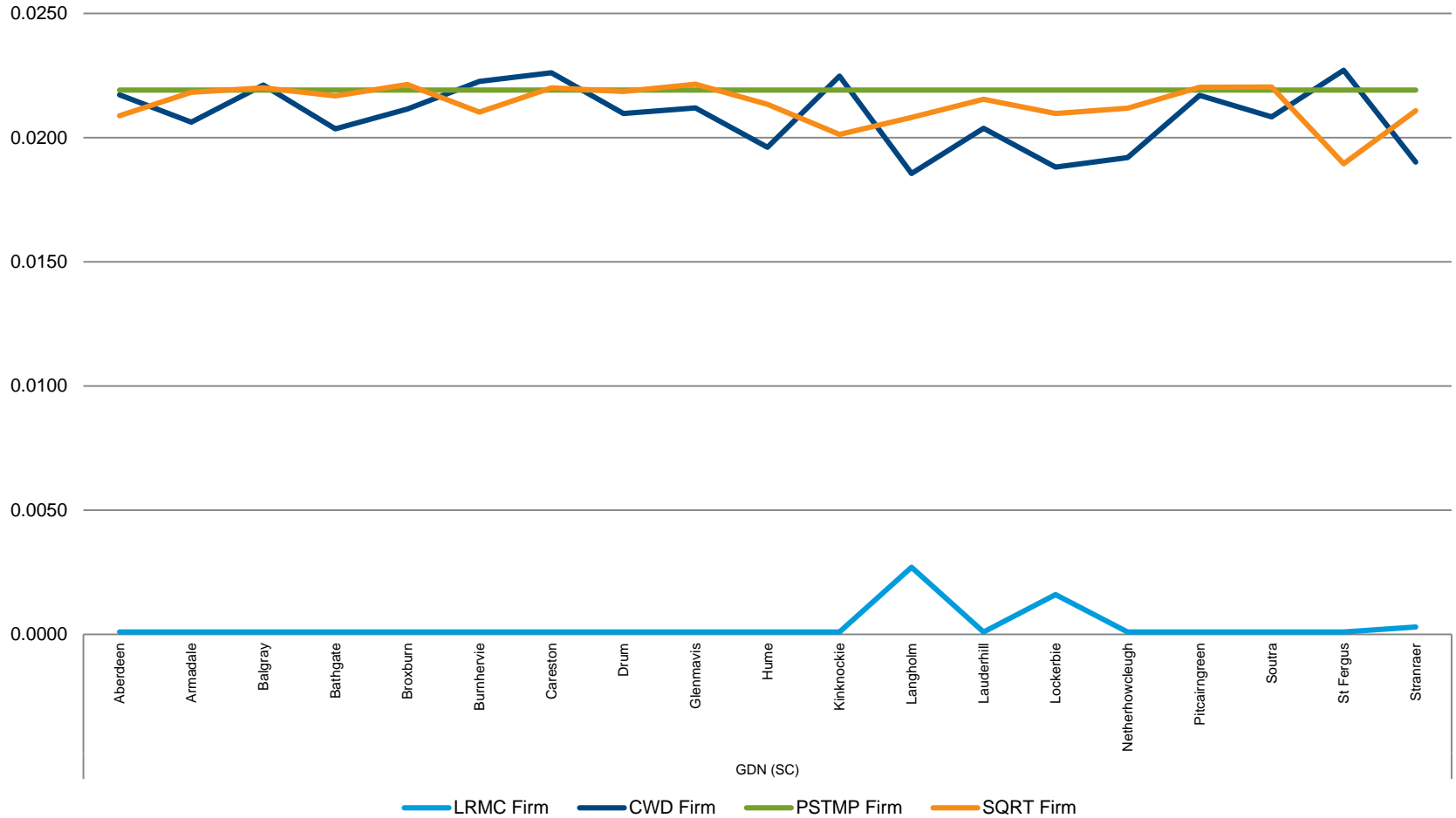
Scotland Transition Period Firm Prices



Scotland Enduring Period Combined Exit Prices



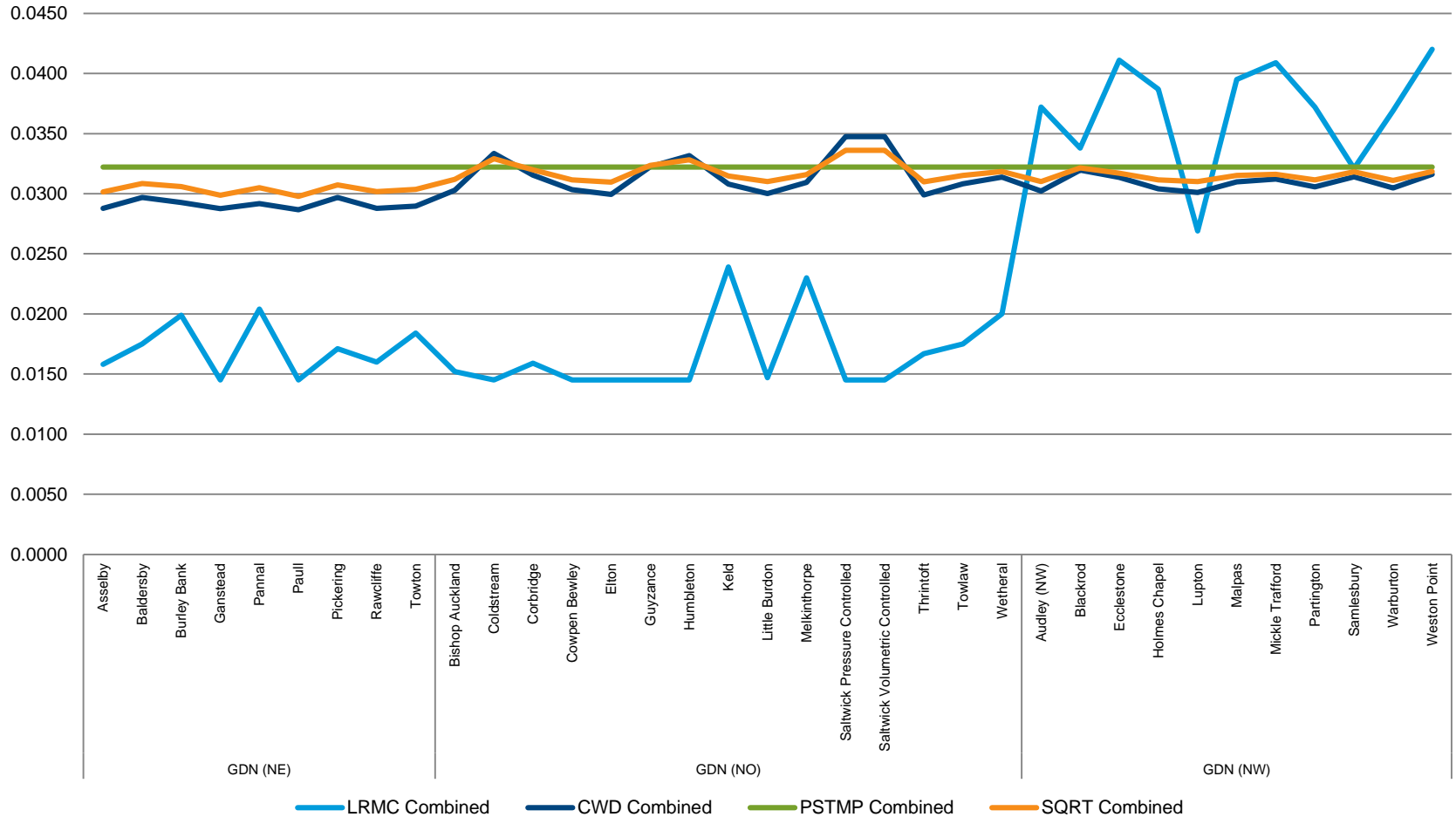
Scotland Enduring Period Firm Prices



“Northern” Section Distribution Network Offtakes

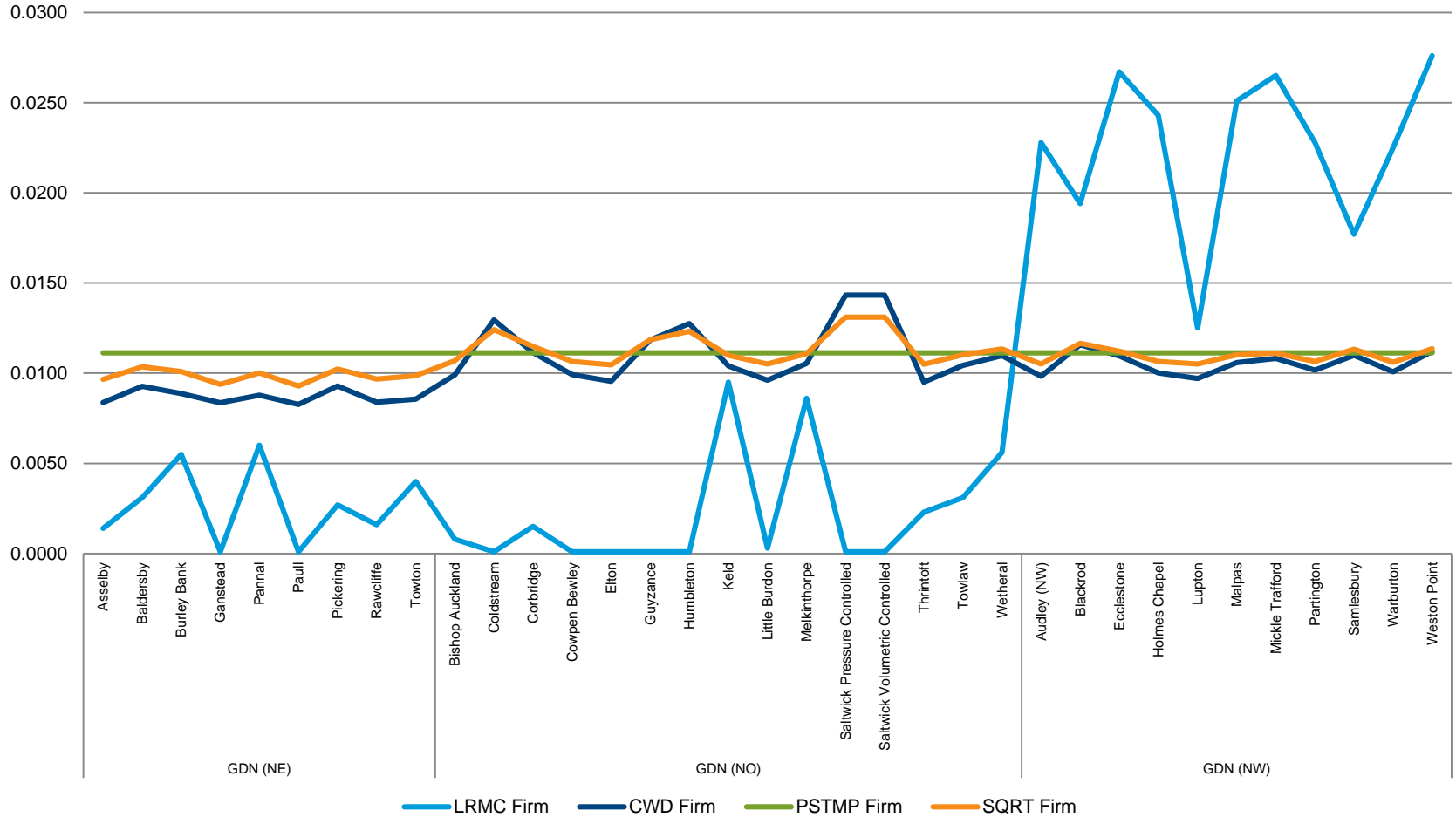
- This section includes;
 - Comparison of Exit Transition Combined Prices within the Northern (NO), Northern Western (NW) and North Eastern (NE) Distribution Network zones
 - Comparison of Exit Transition Firm Prices within the Northern (NO), Northern Western (NW) and North Eastern (NE) Distribution Network zones
 - Comparison of Exit Enduring Combined Prices within the Northern (NO), Northern Western (NW) and North Eastern (NE) Distribution Network zones
 - Comparison of Exit Enduring Firm Prices within the Northern (NO), Northern Western (NW) and North Eastern (NE) Distribution Network zones

“Northern” Transition Period Combined Exit Prices

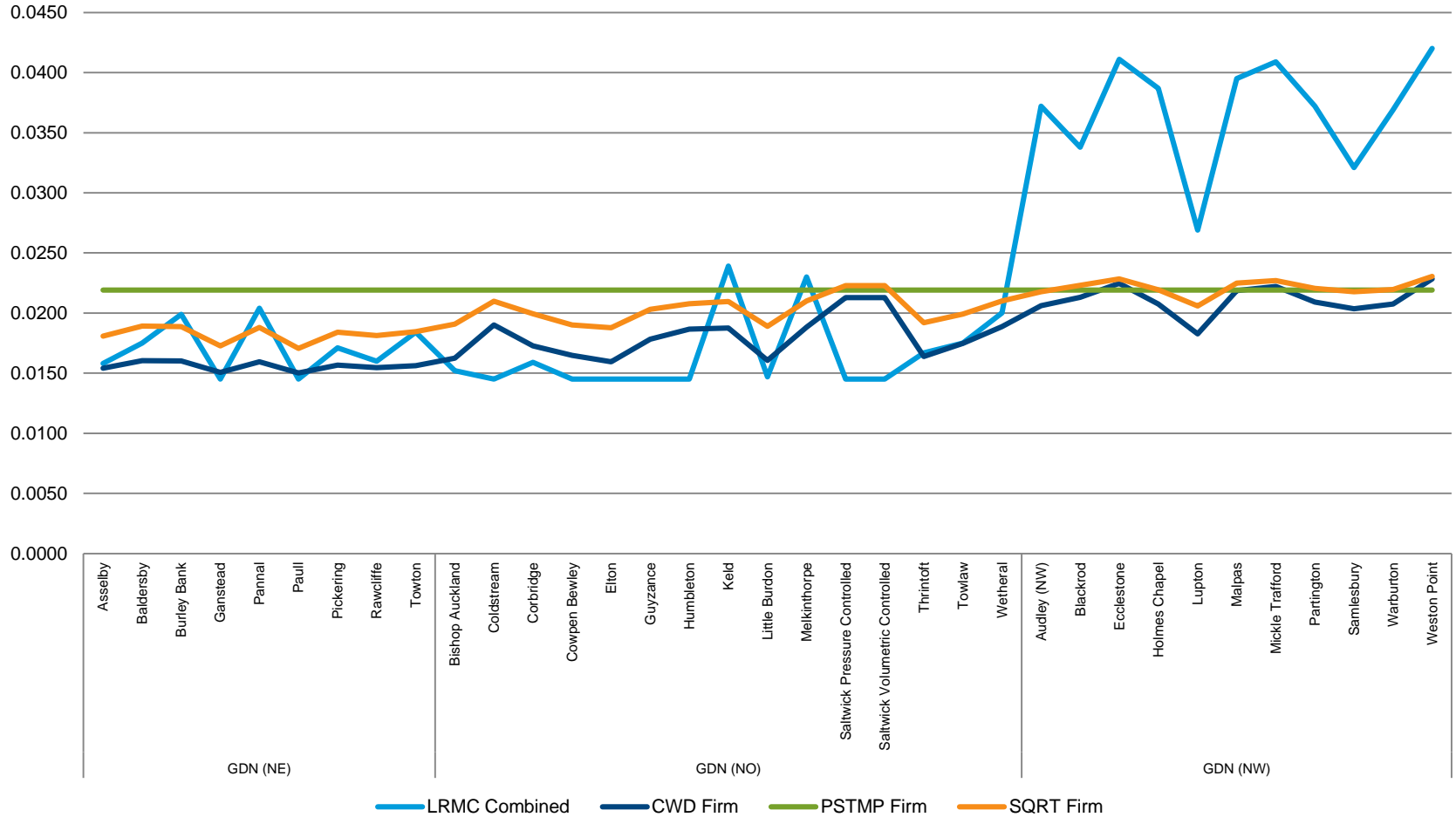


Revenue Recovery Charges	LRMV Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

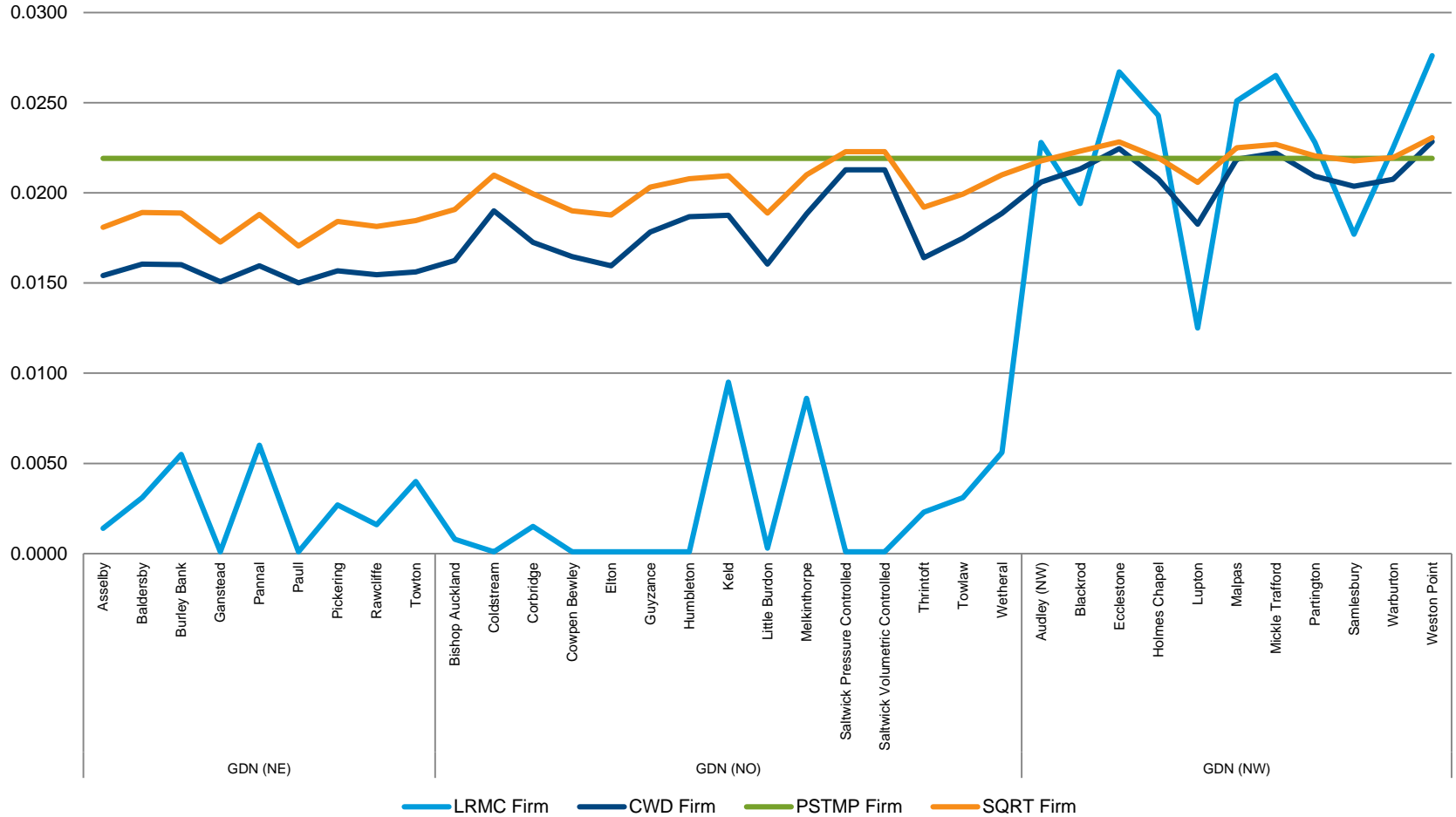
“Northern” Transition Period Firm Prices



“Northern” Enduring Period Combined Exit Prices



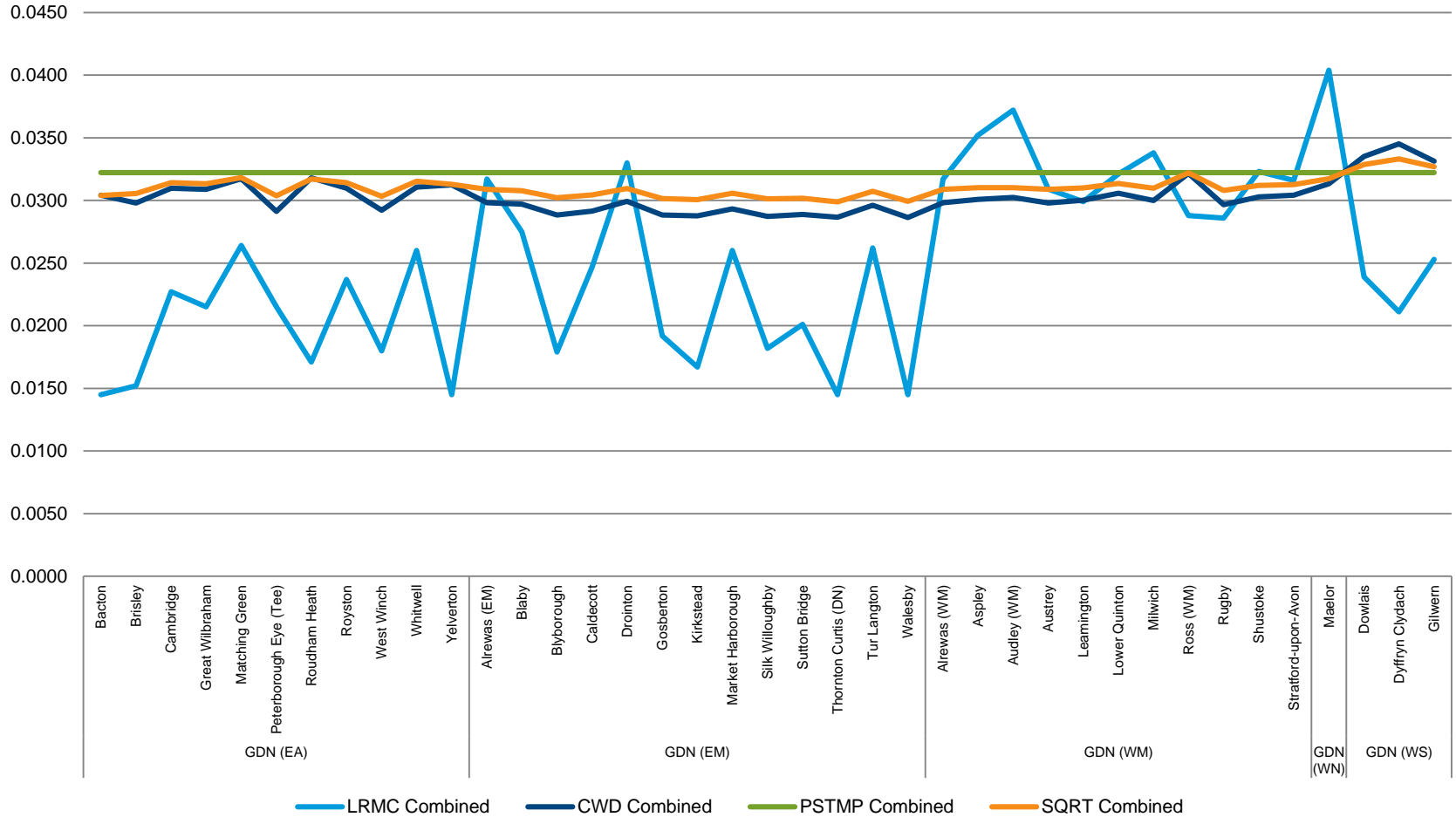
“Northern” Enduring Period Firm Prices



“Middle” Section Distribution Network Offtakes

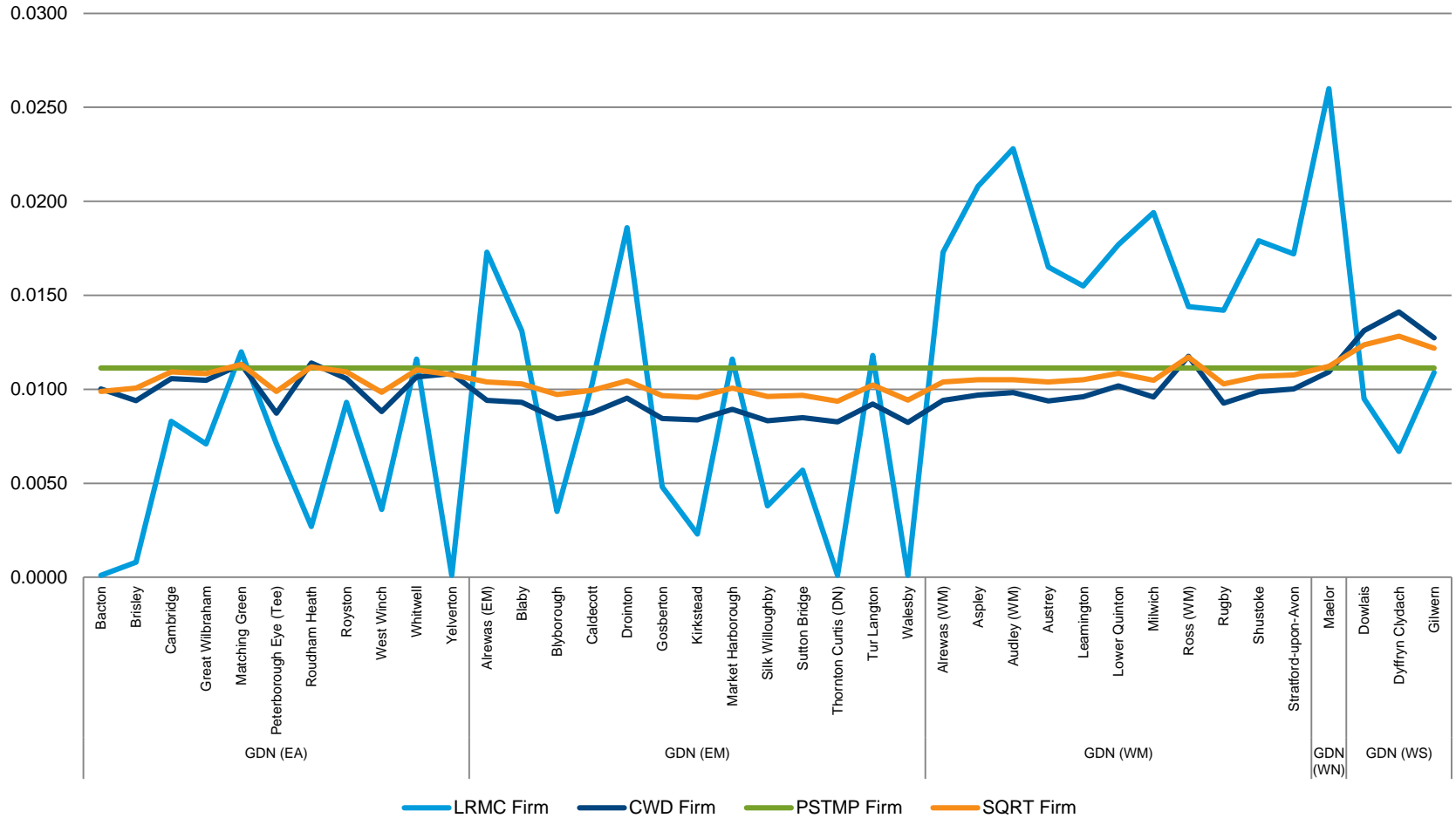
- This section includes;
 - Comparison of Exit Transition Combined Prices within the East Anglia (EA), West Midlands (WM), East Midlands (EM), South Wales (WS) and North Wales (WN) Distribution Network zones
 - Comparison of Exit Transition Firm Prices within the East Anglia (EA), West Midlands (WM), East Midlands (EM), South Wales (WS) and North Wales (WN) Distribution Network zones
 - Comparison of Exit Enduring Combined Prices within the East Anglia (EA), West Midlands (WM), East Midlands (EM), South Wales (WS) and North Wales (WN) Distribution Network zones
 - Comparison of Exit Enduring Firm Prices within the East Anglia (EA), West Midlands (WM), East Midlands (EM), South Wales (WS) and North Wales (WN) Distribution Network zones

“Middle” Transition Period Combined Exit Prices

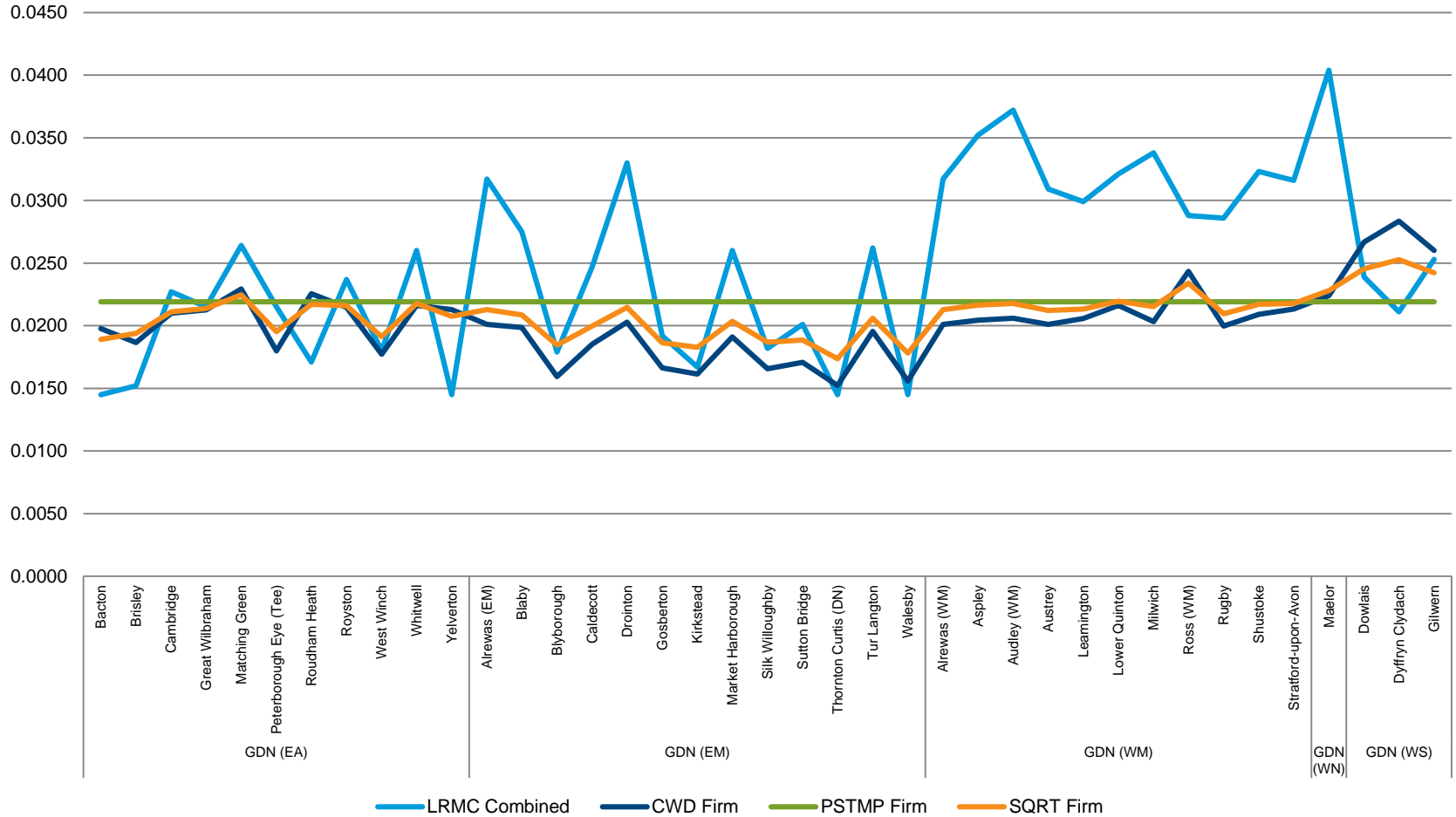


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

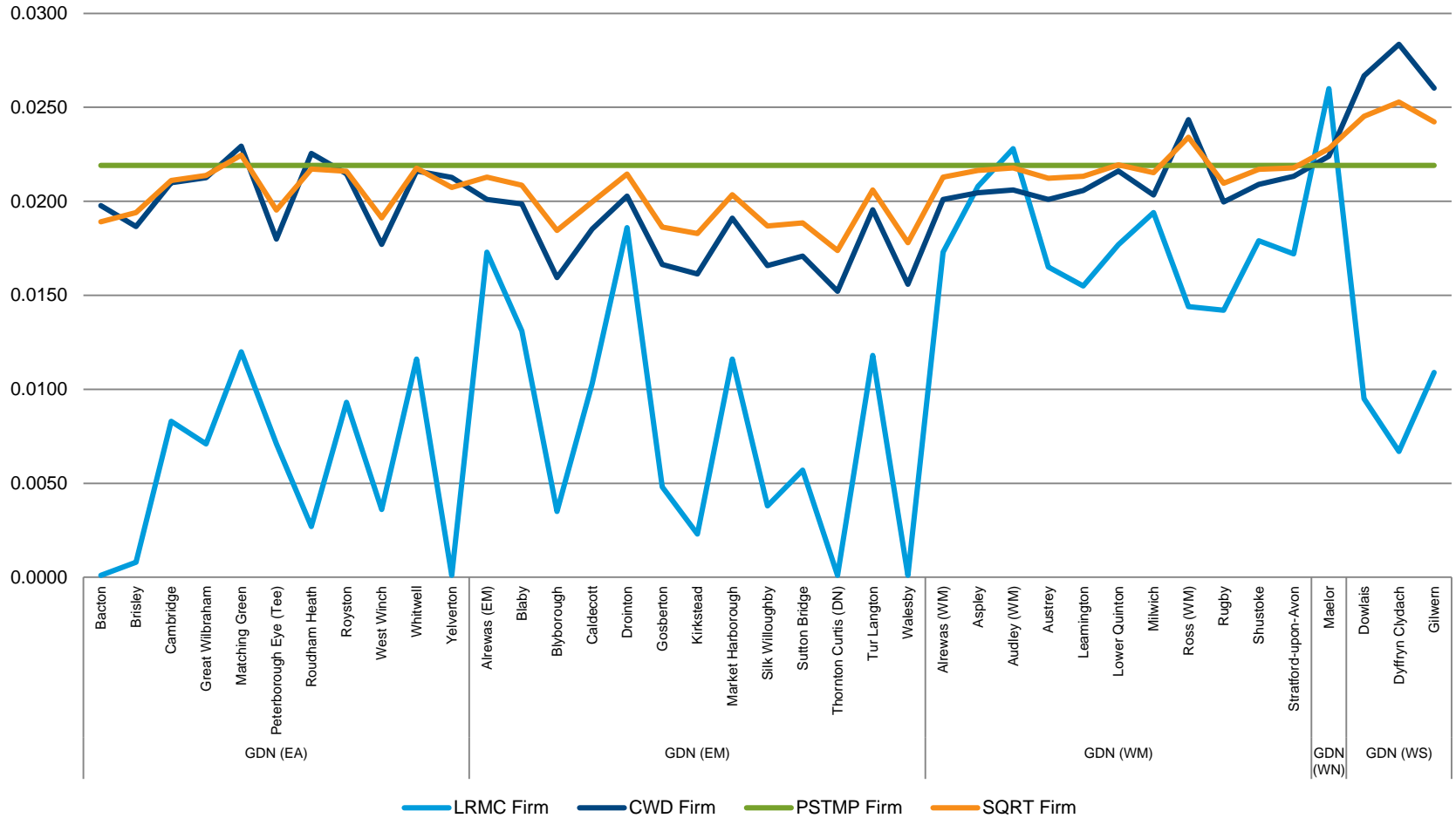
“Middle” Transition Period Firm Prices



“Middle” Enduring Period Combined Exit Prices



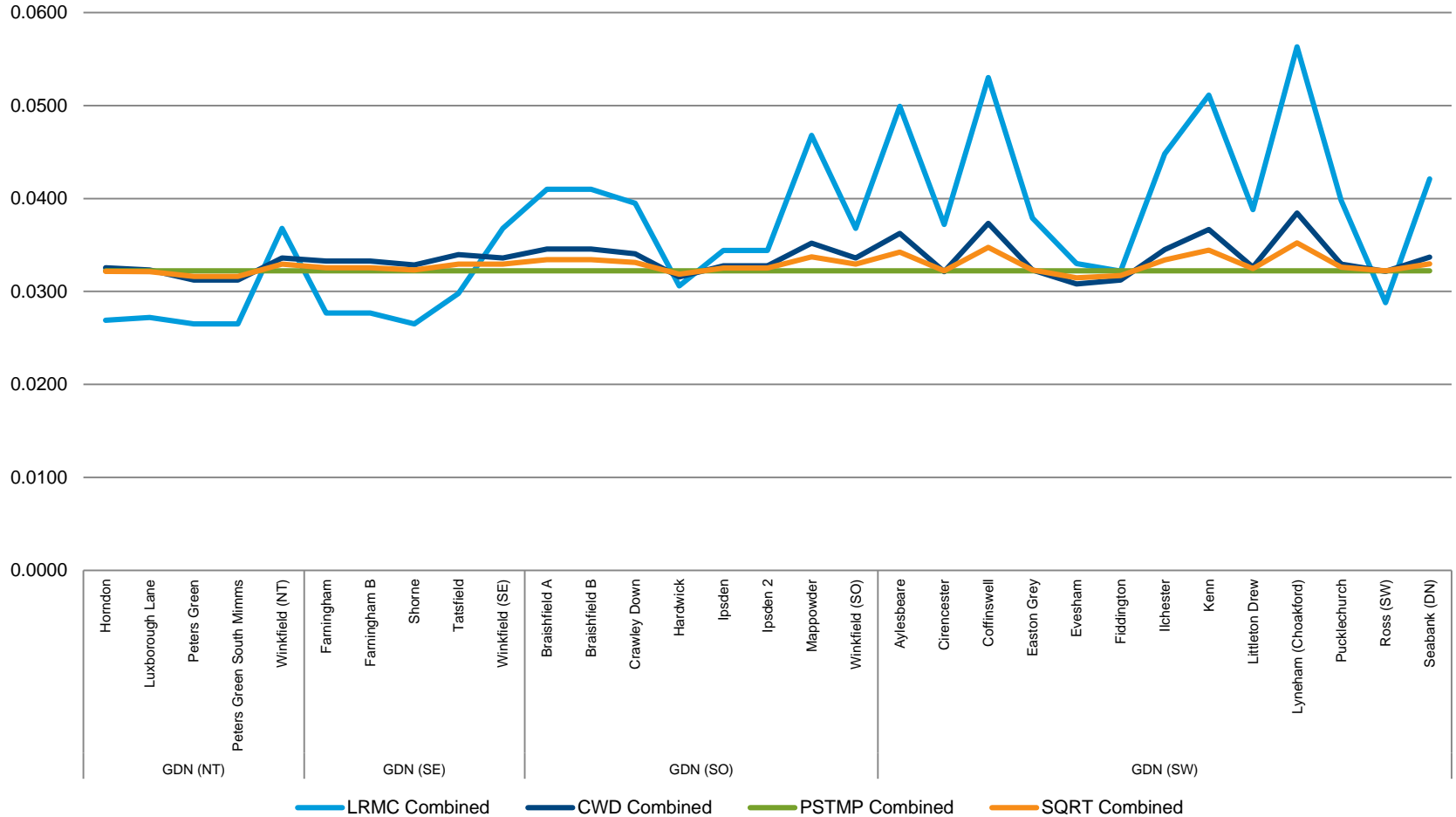
“Middle” Enduring Period Firm Prices



“Southern” Section Distribution Network Offtakes

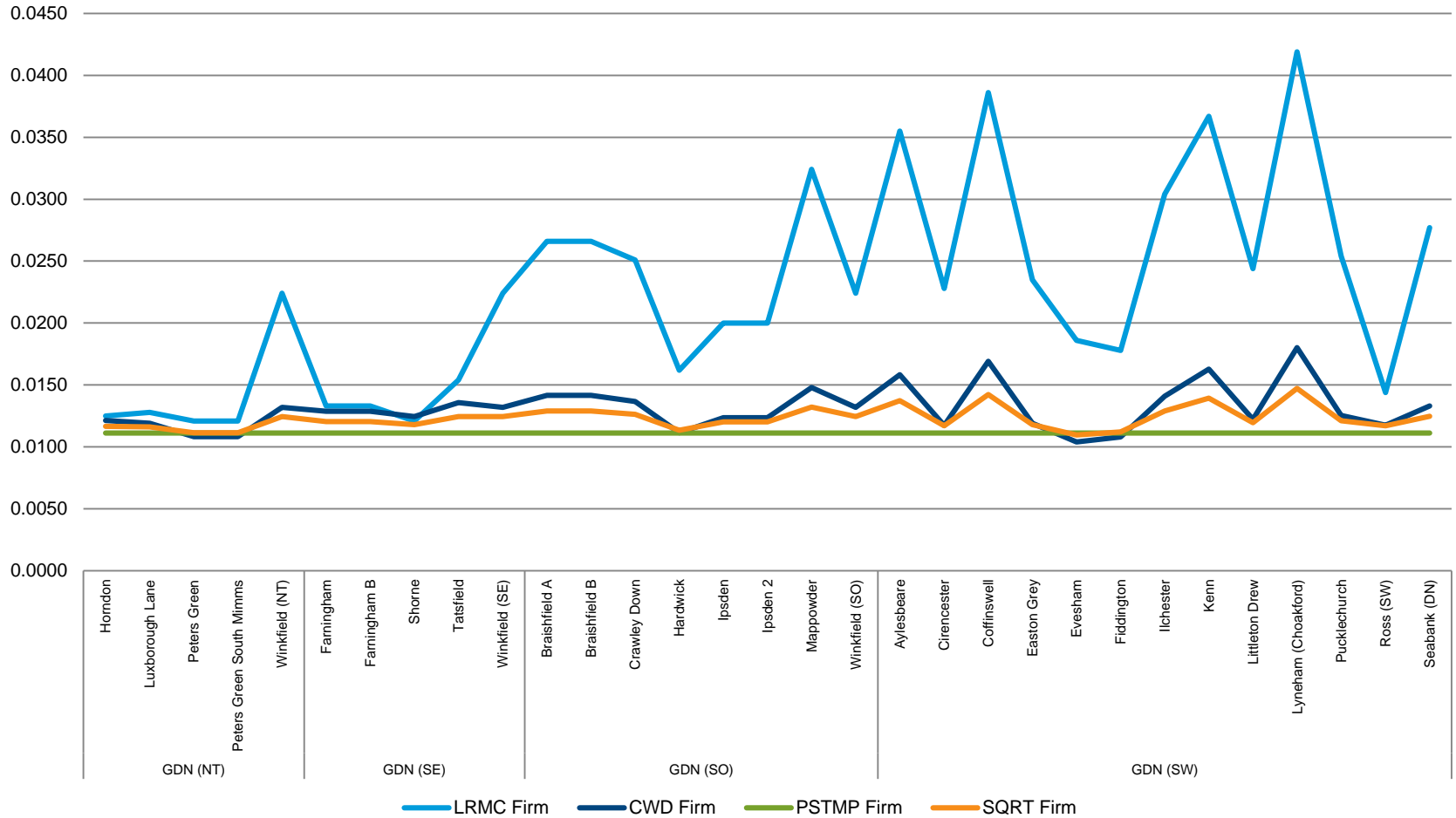
- This section includes;
 - Comparison of Exit Transition Combined Prices within the North Thames (NT), South East (SE), Southern (SO) and South West (SW) Distribution Network Zones
 - Comparison of Exit Transition Firm Prices within the North Thames (NT), South East (SE), Southern (SO) and South West (SW) Distribution Network Zones
 - Comparison of Exit Enduring Combined Prices within the North Thames (NT), South East (SE), Southern (SO) and South West (SW) Distribution Network Zones
 - Comparison of Exit Enduring Firm Prices within the North Thames (NT), South East (SE), Southern (SO) and South West (SW) Distribution Network Zones

“Southern” Transition Period Combined Exit Prices

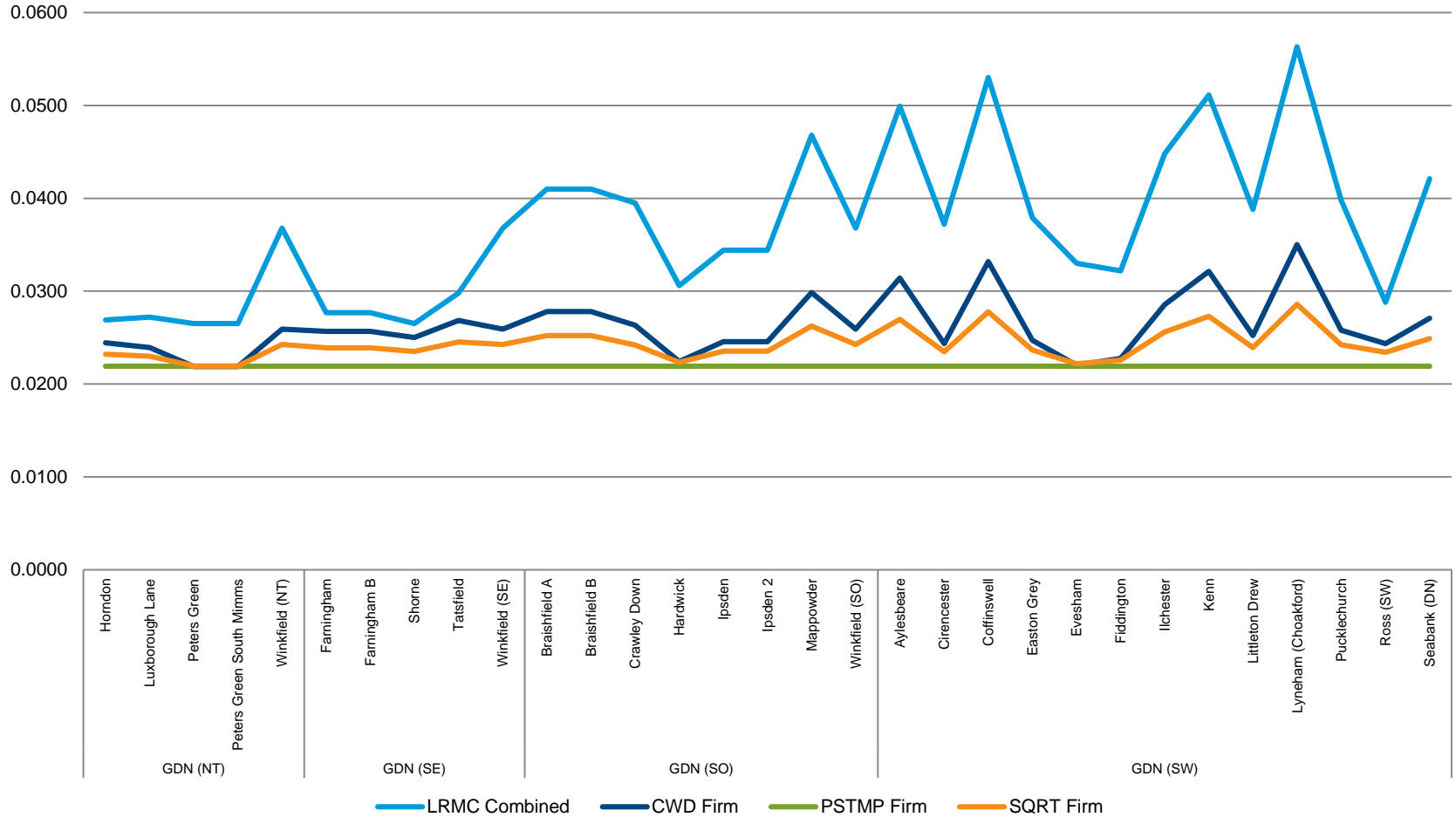


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

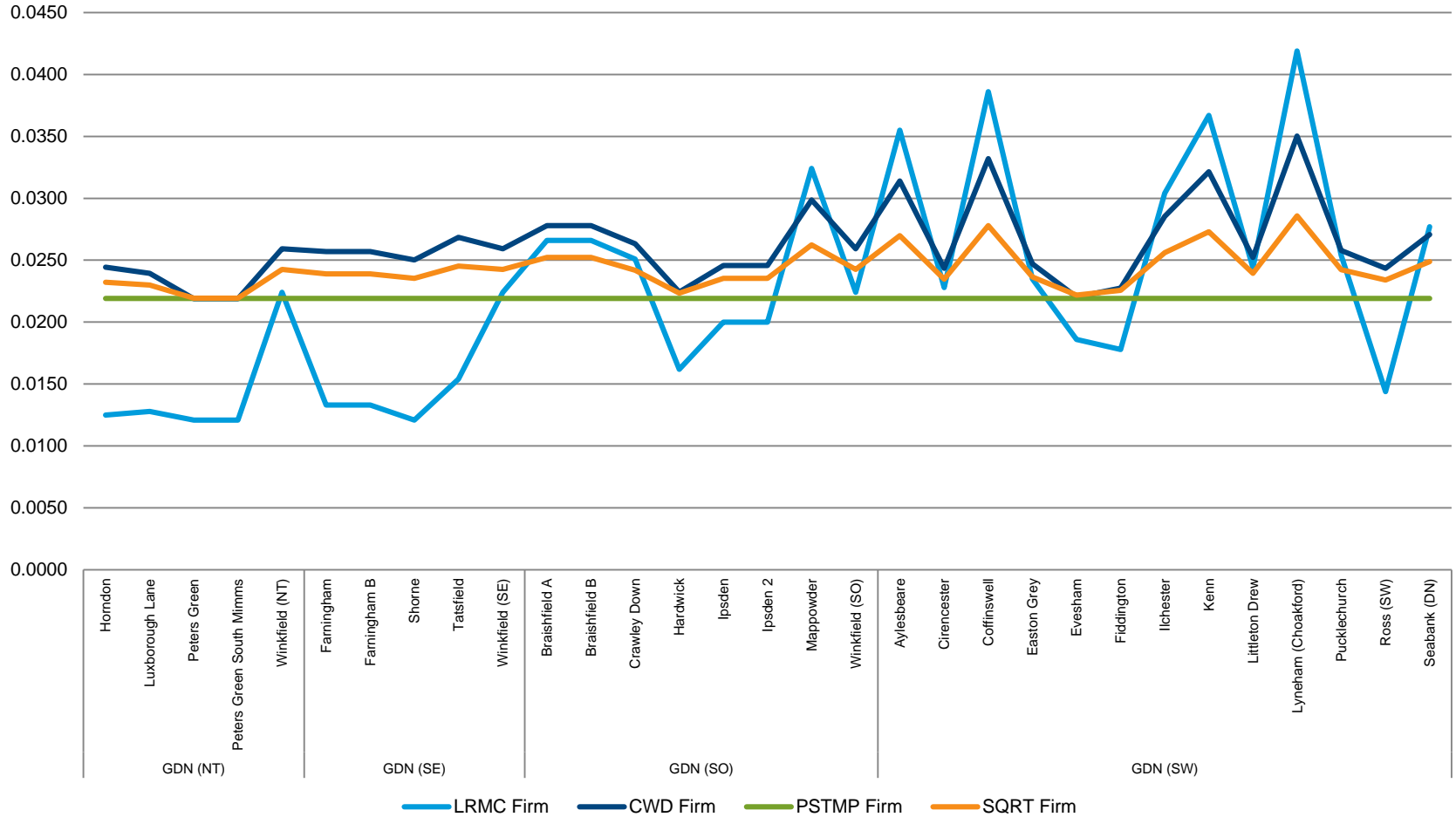
“Southern” Transition Period Firm Prices



“Southern” Enduring Period Combined Exit Prices



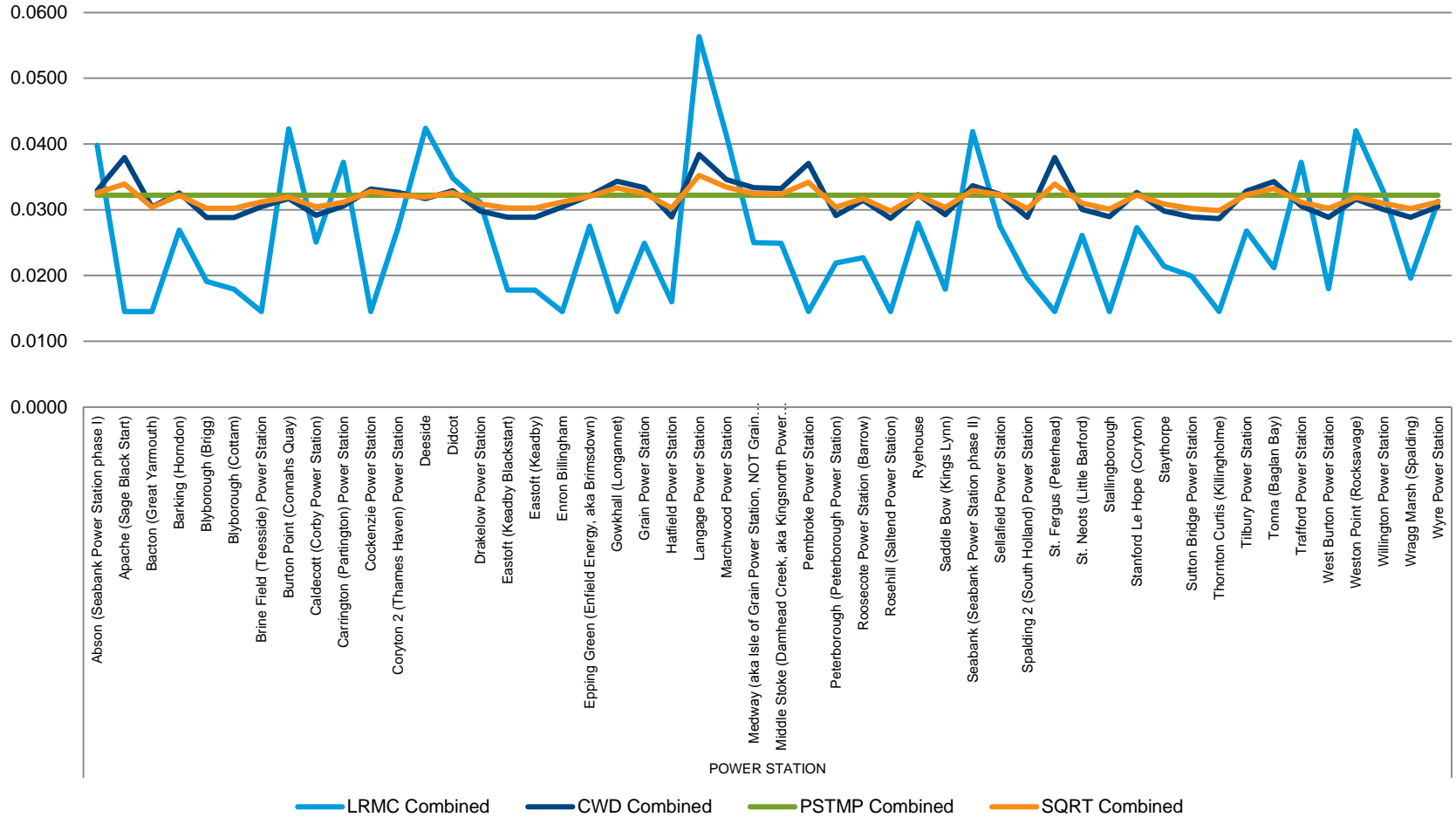
“Southern” Enduring Period Firm Prices



Power Station Offtake Breakdown

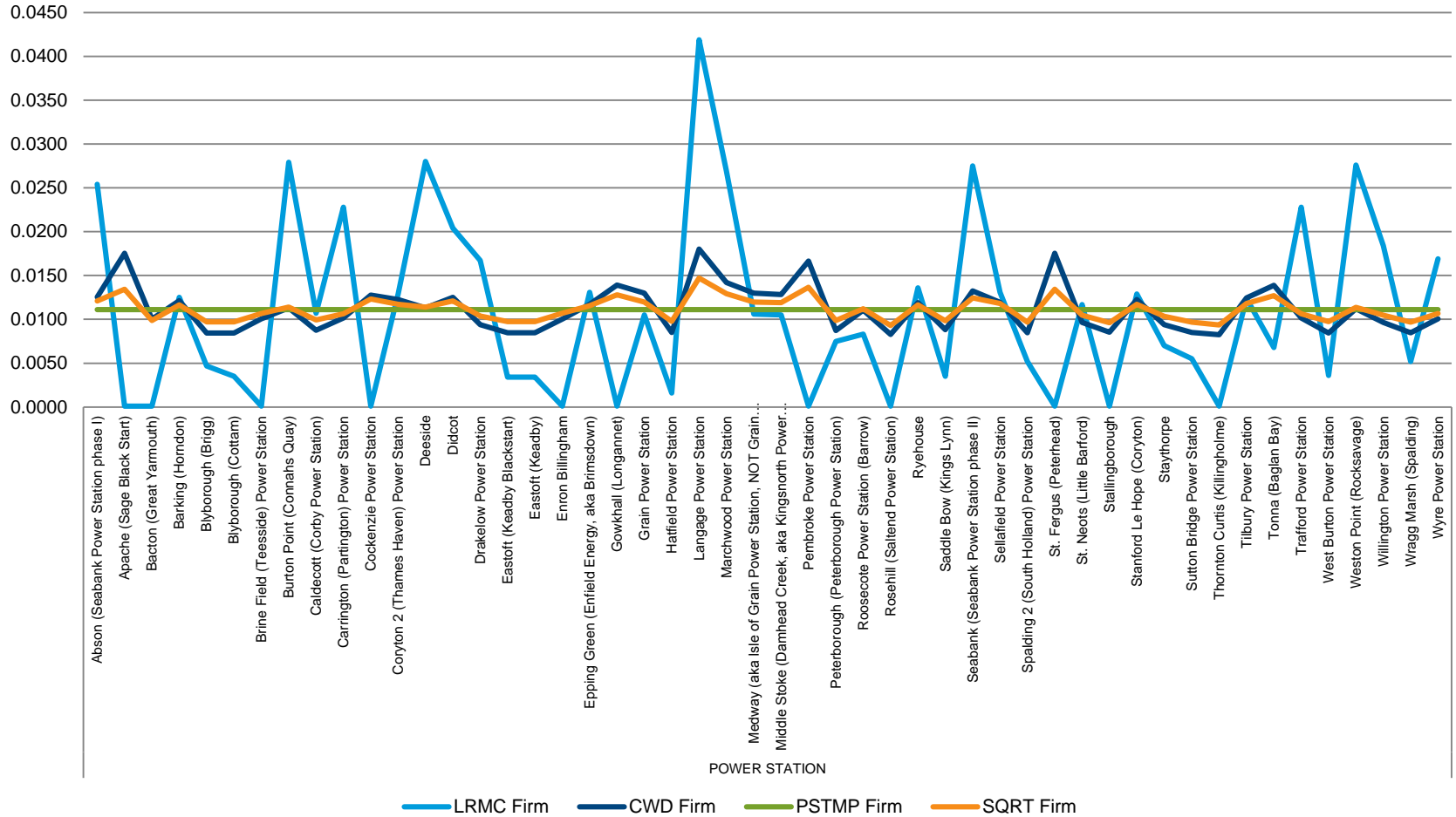
- This section includes;
 - Comparison of Exit Transition Combined Prices for individual Power Station offtakes
 - Comparison of Exit Transition Firm Prices for individual Power Station offtakes
 - Comparison of Exit Enduring Combined Prices for individual Power Station offtakes
 - Comparison of Exit Enduring Firm Prices within for individual Power Station offtakes

Power Station Transition Period Combined Exit Prices

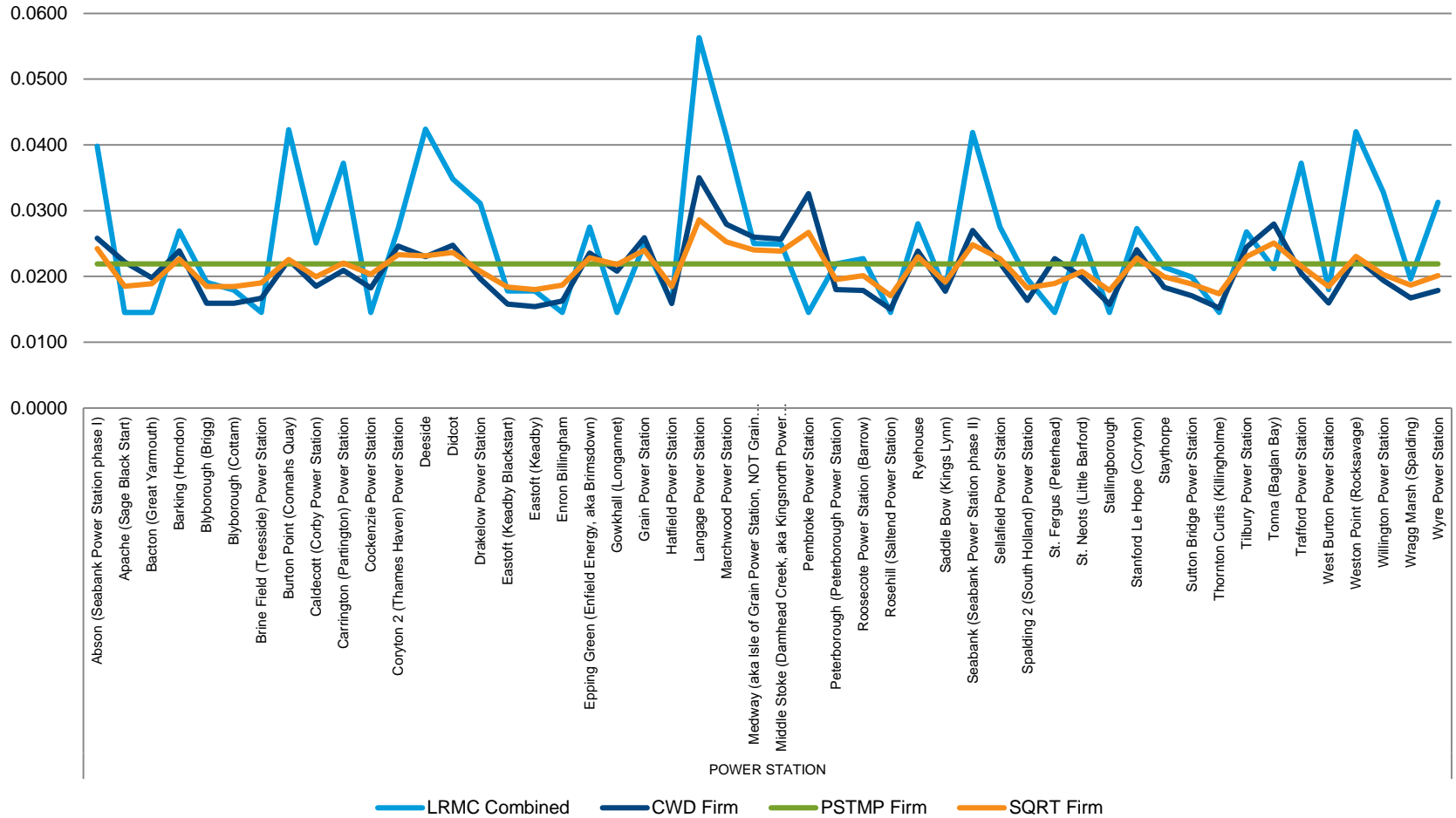


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

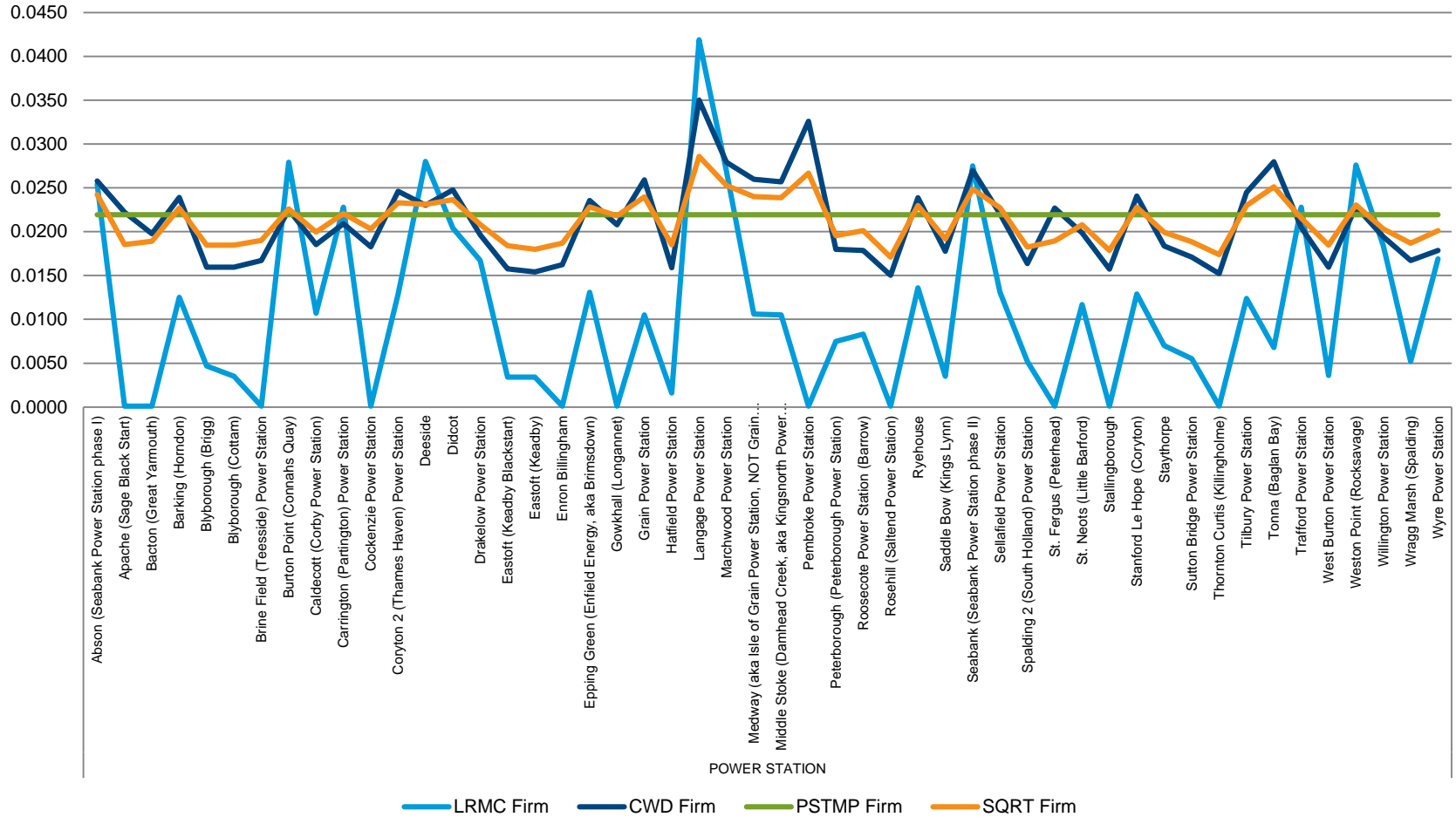
Power Station Transition Period Firm Prices



Power Station Enduring Period Combined Exit Prices



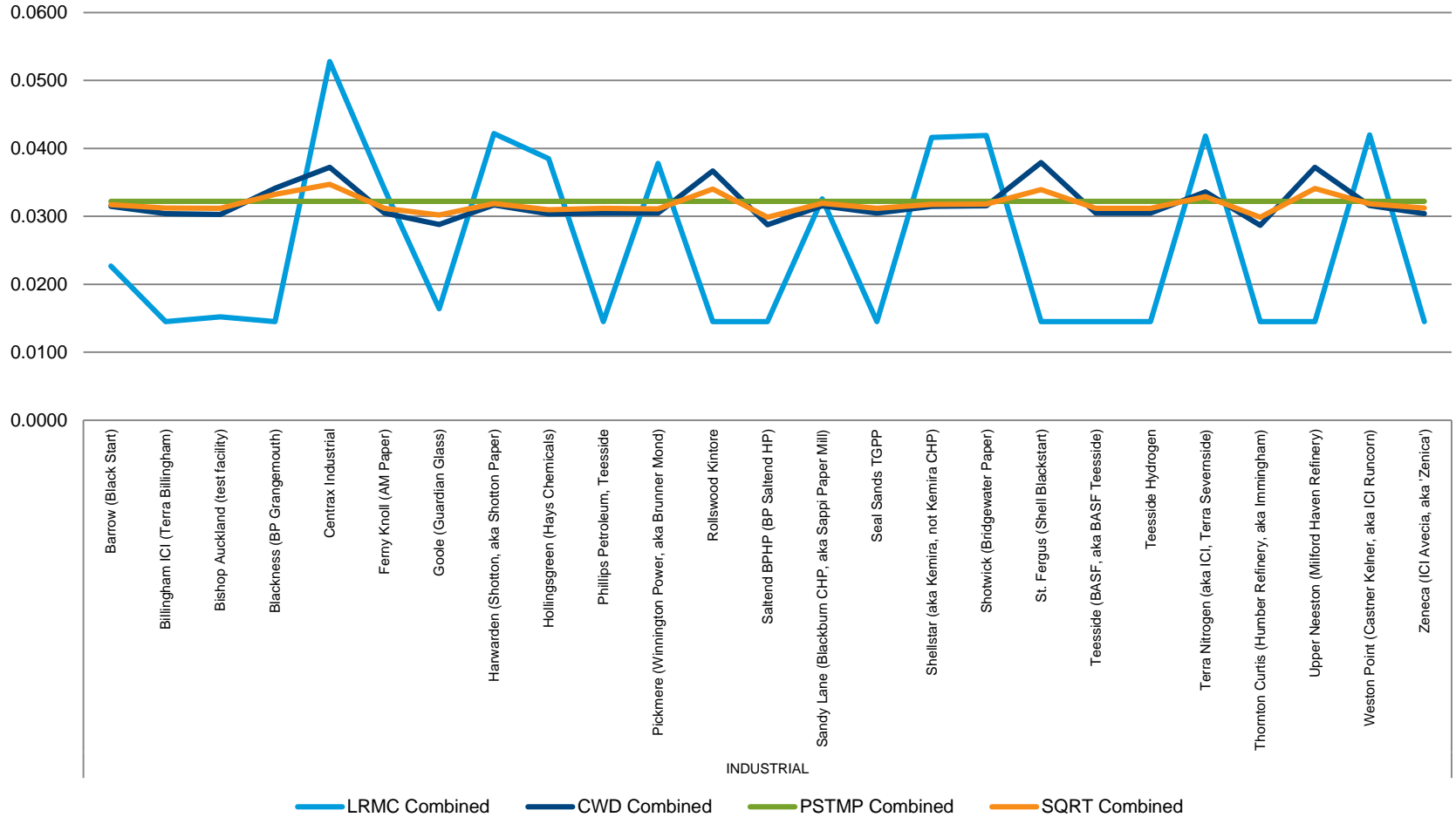
Power Station Enduring Period Firm Prices



Industrial Offtake Breakdown

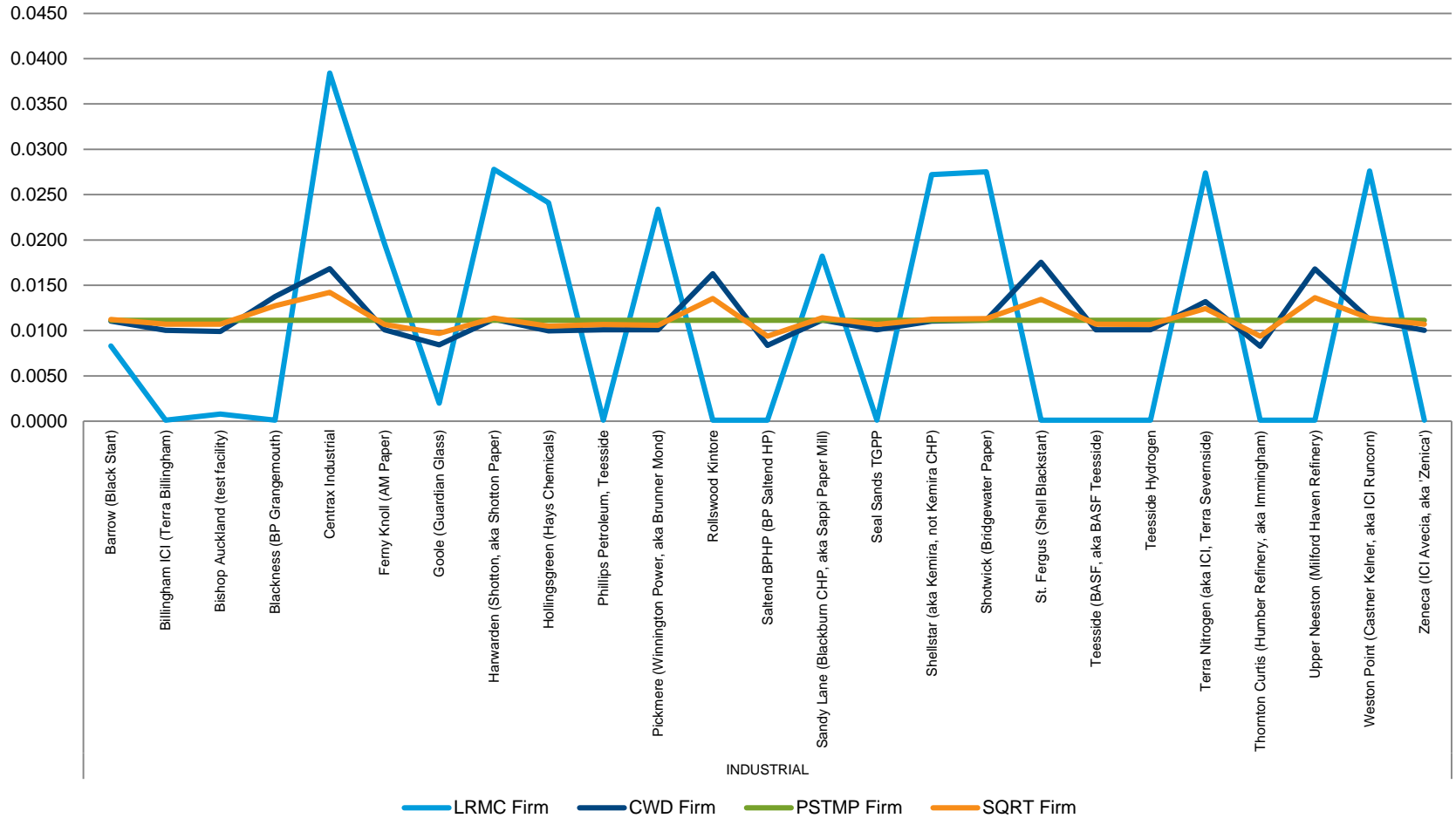
- This section includes;
 - Comparison of Exit Transition Combined Prices for individual Industrial offtakes
 - Comparison of Exit Transition Firm Prices for individual Industrial offtakes
 - Comparison of Exit Enduring Combined Prices for individual Industrial offtakes
 - Comparison of Exit Enduring Firm Prices within for individual Industrial offtakes

Industrial Transition Period Combined Exit Prices

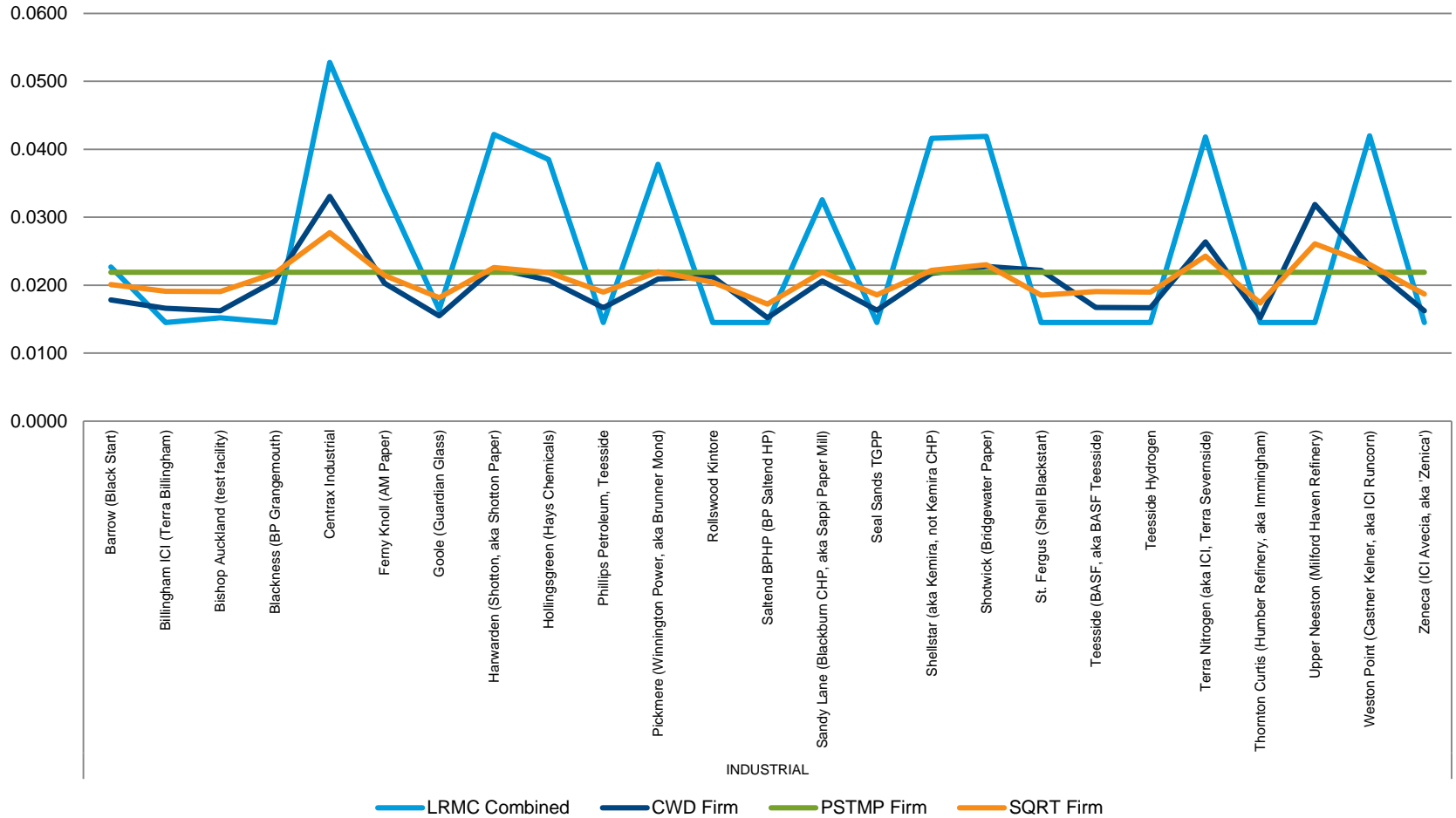


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

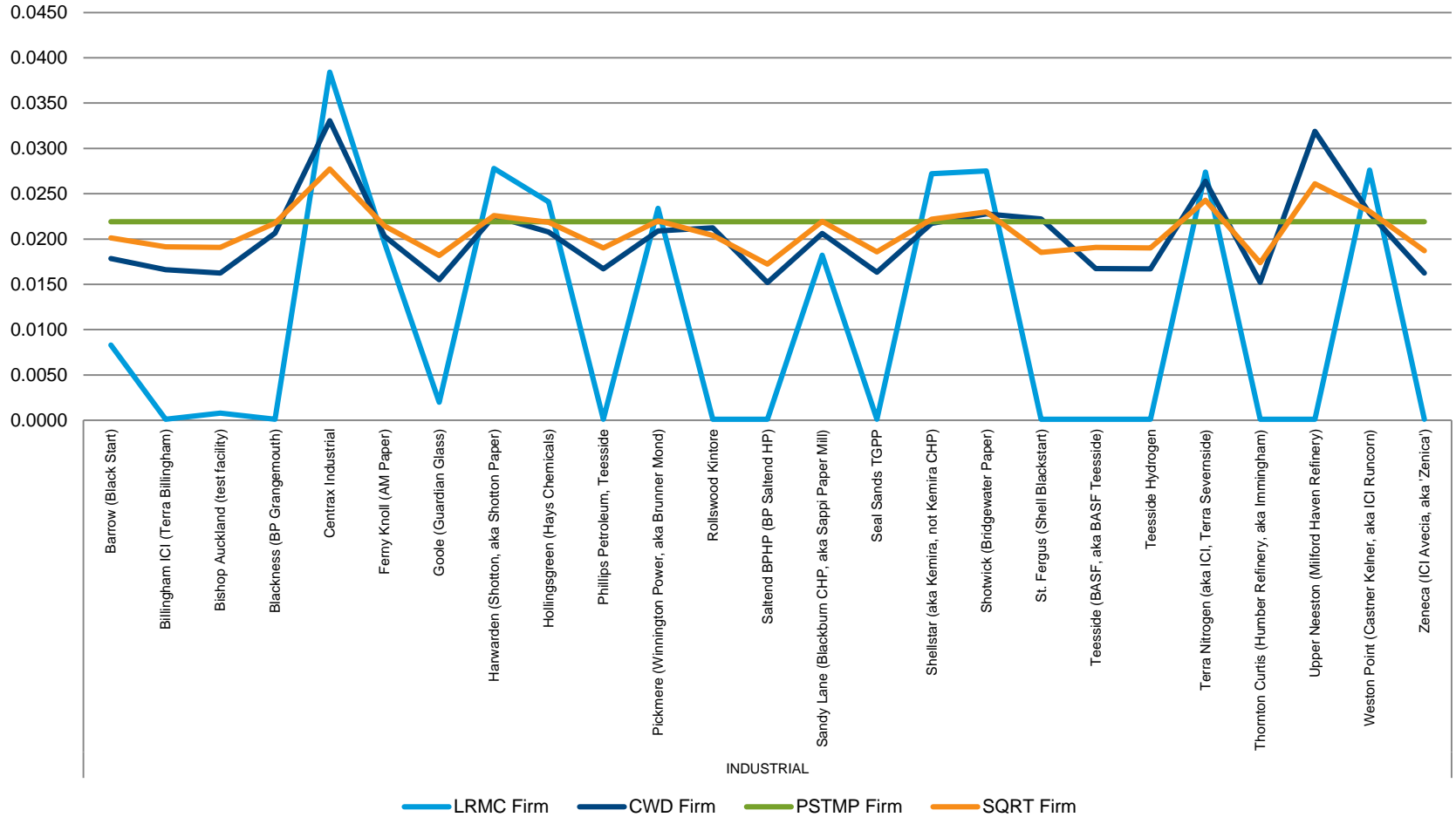
Industrial Transition Period Firm Prices



Industrial Enduring Period Combined Exit Prices



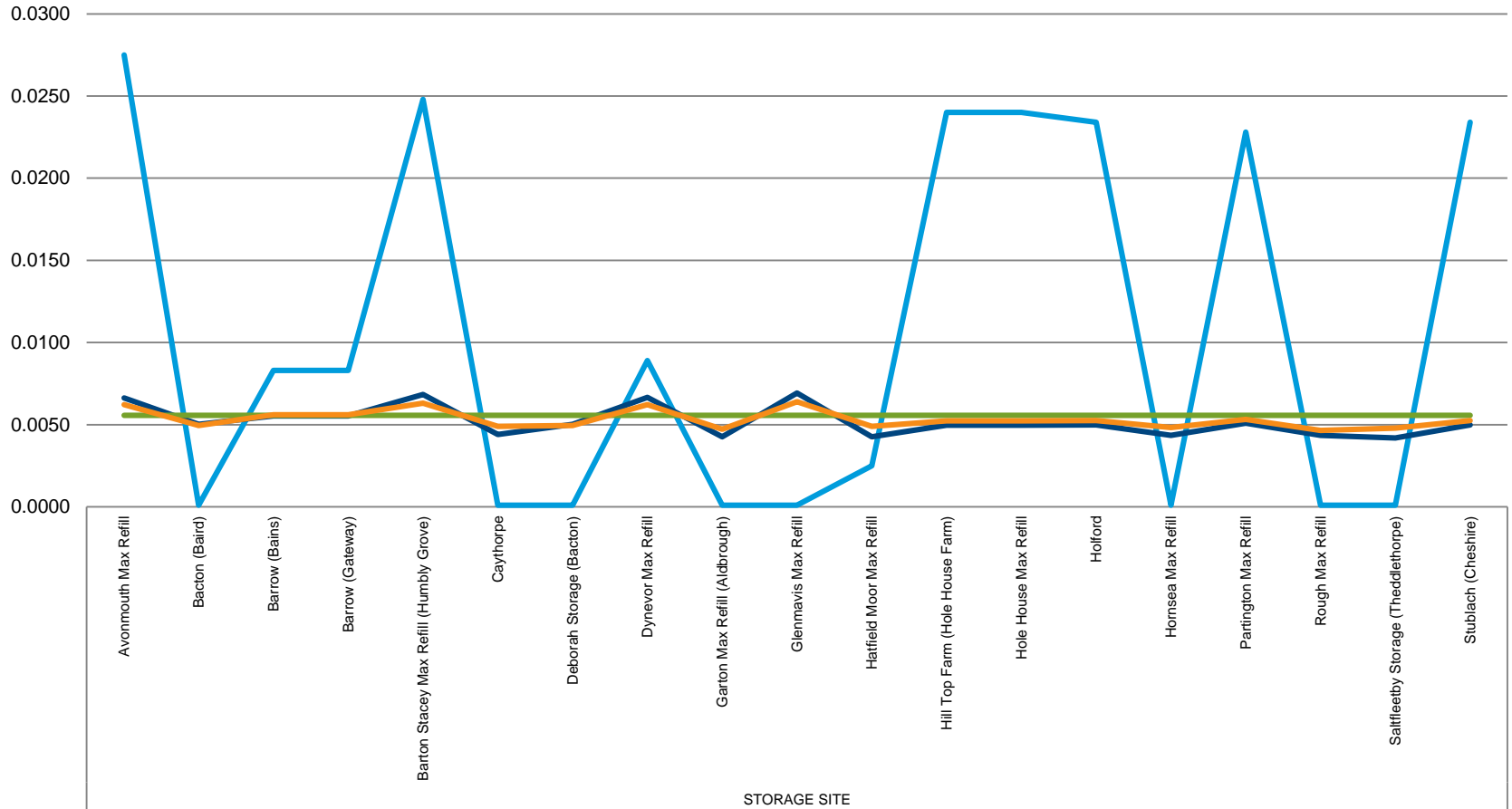
Industrial Enduring Period Firm Prices



Storage Offtake Breakdown

- This section includes;
 - Comparison of Exit Transition Combined Prices for individual Storage offtakes
 - Comparison of Exit Transition Firm Prices for individual Storage offtakes
 - Comparison of Exit Enduring Combined Prices for individual Storage offtakes
 - Comparison of Exit Enduring Firm Prices within for individual Storage offtakes

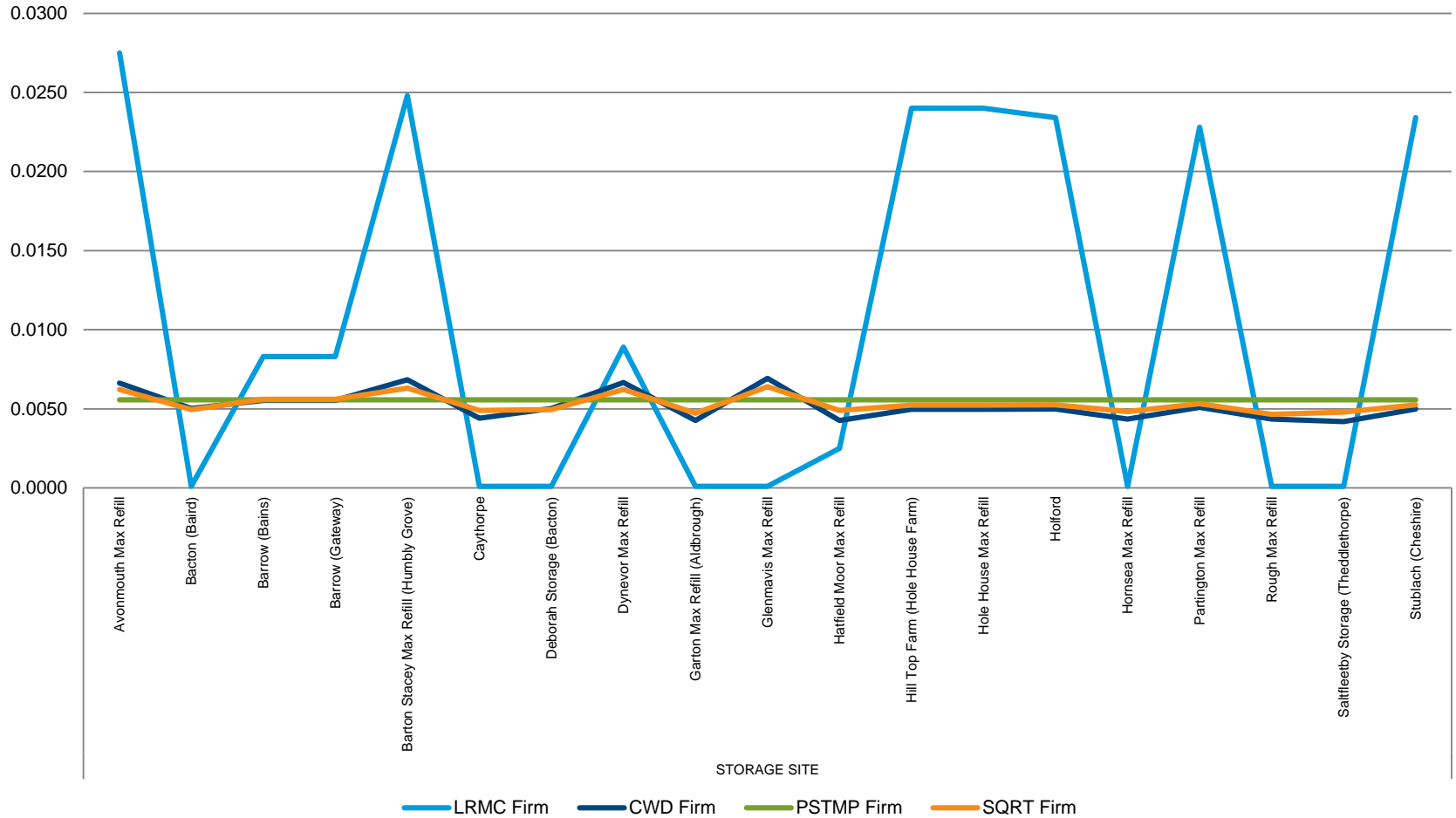
Storage Transition Period Combined Exit Prices



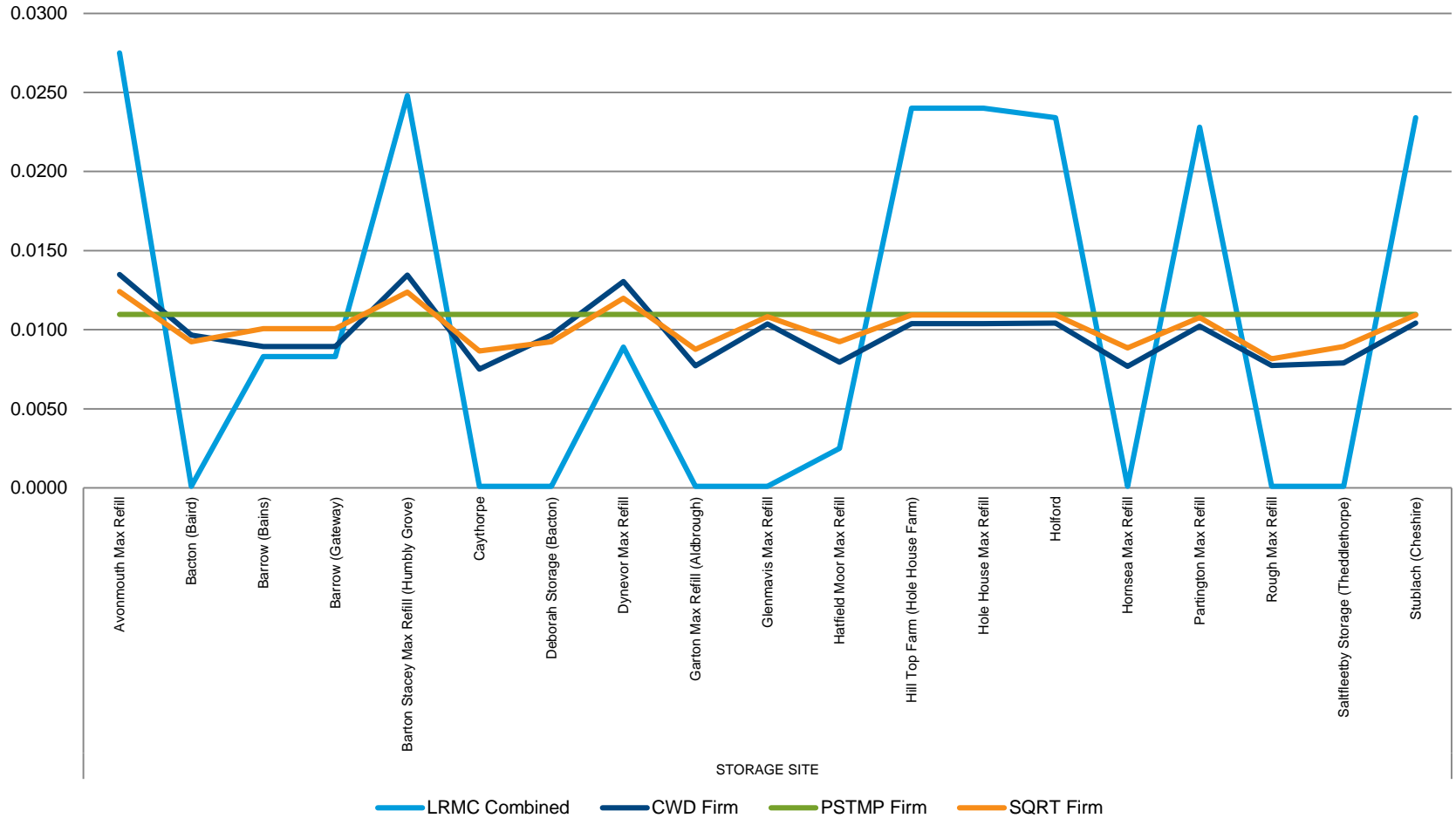
— LRM Combined — CWD Combined — PSTMP Combined — SQRT Combined

Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

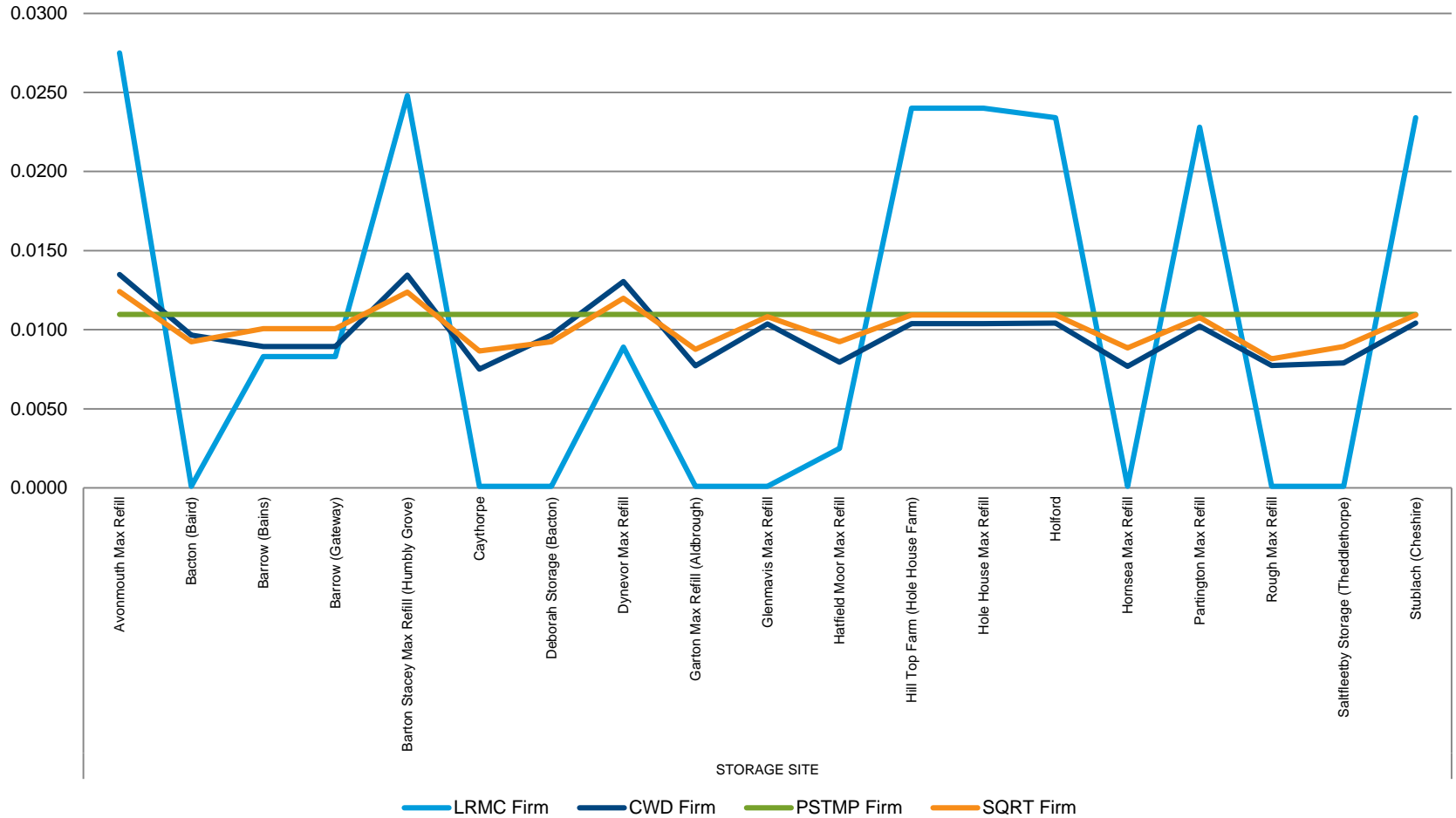
Storage Transition Period Firm Prices



Storage Enduring Period Combined Exit Prices



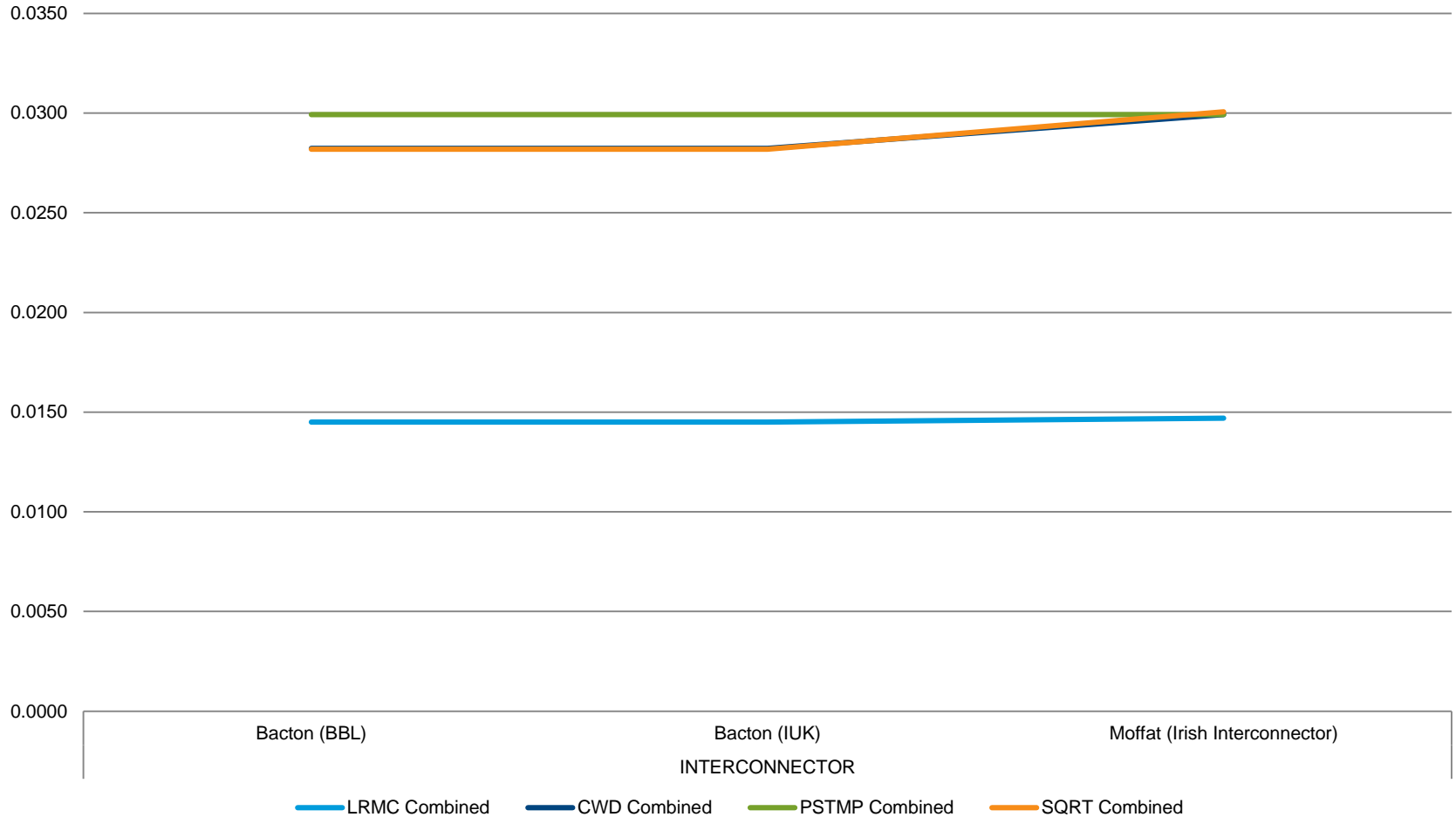
Storage Enduring Period Firm Prices



Interconnection Point Offtake Breakdown

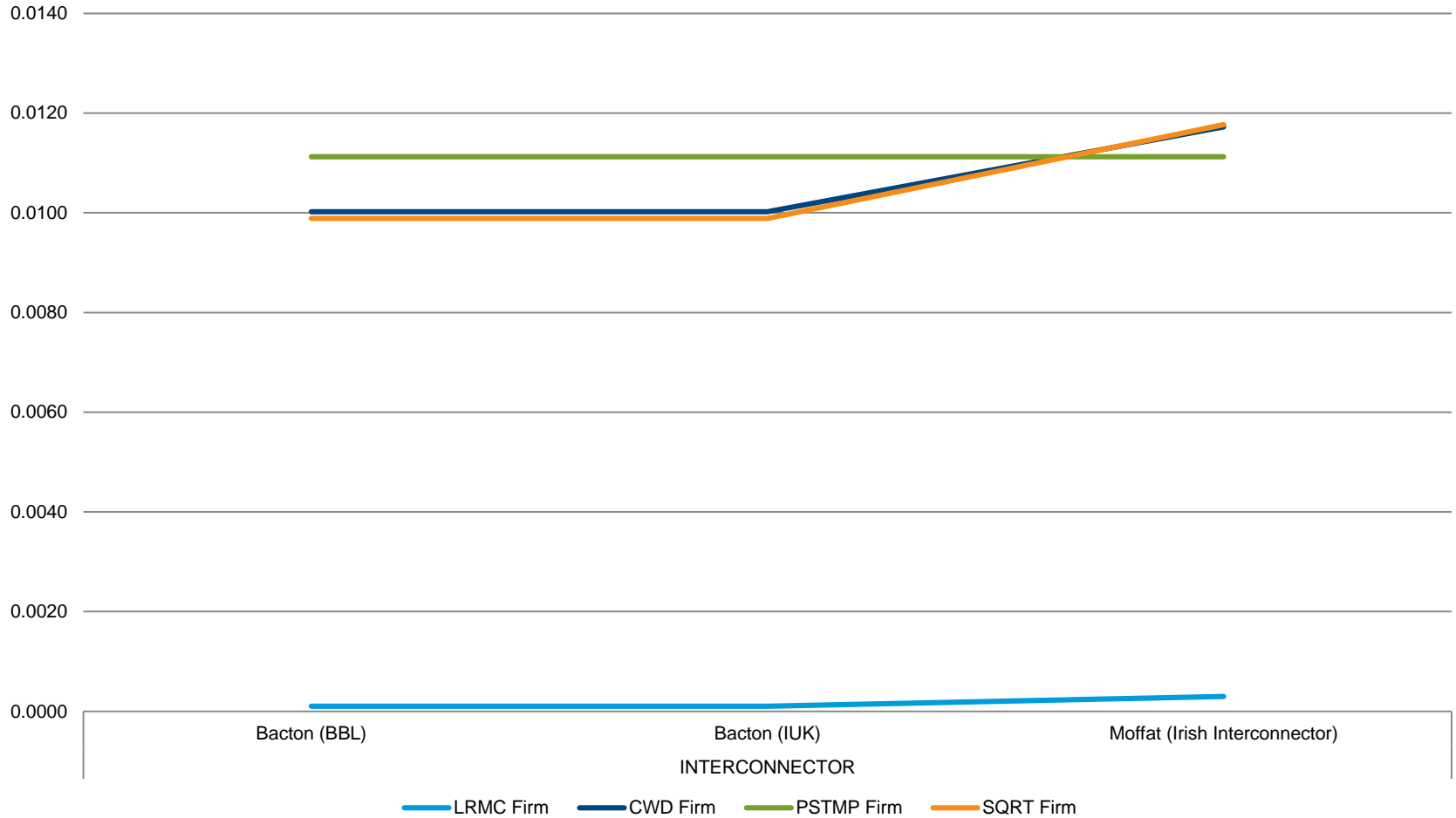
- This section includes;
 - Comparison of Exit Transition Combined Prices for individual Interconnection Point offtakes
 - Comparison of Exit Transition Firm Prices for individual Interconnection Point offtakes
 - Comparison of Exit Enduring Combined Prices for individual Interconnection Point offtakes
 - Comparison of Exit Enduring Firm Prices within for individual Interconnection Point offtakes

Interconnection Point Transition Period Combined Exit Prices

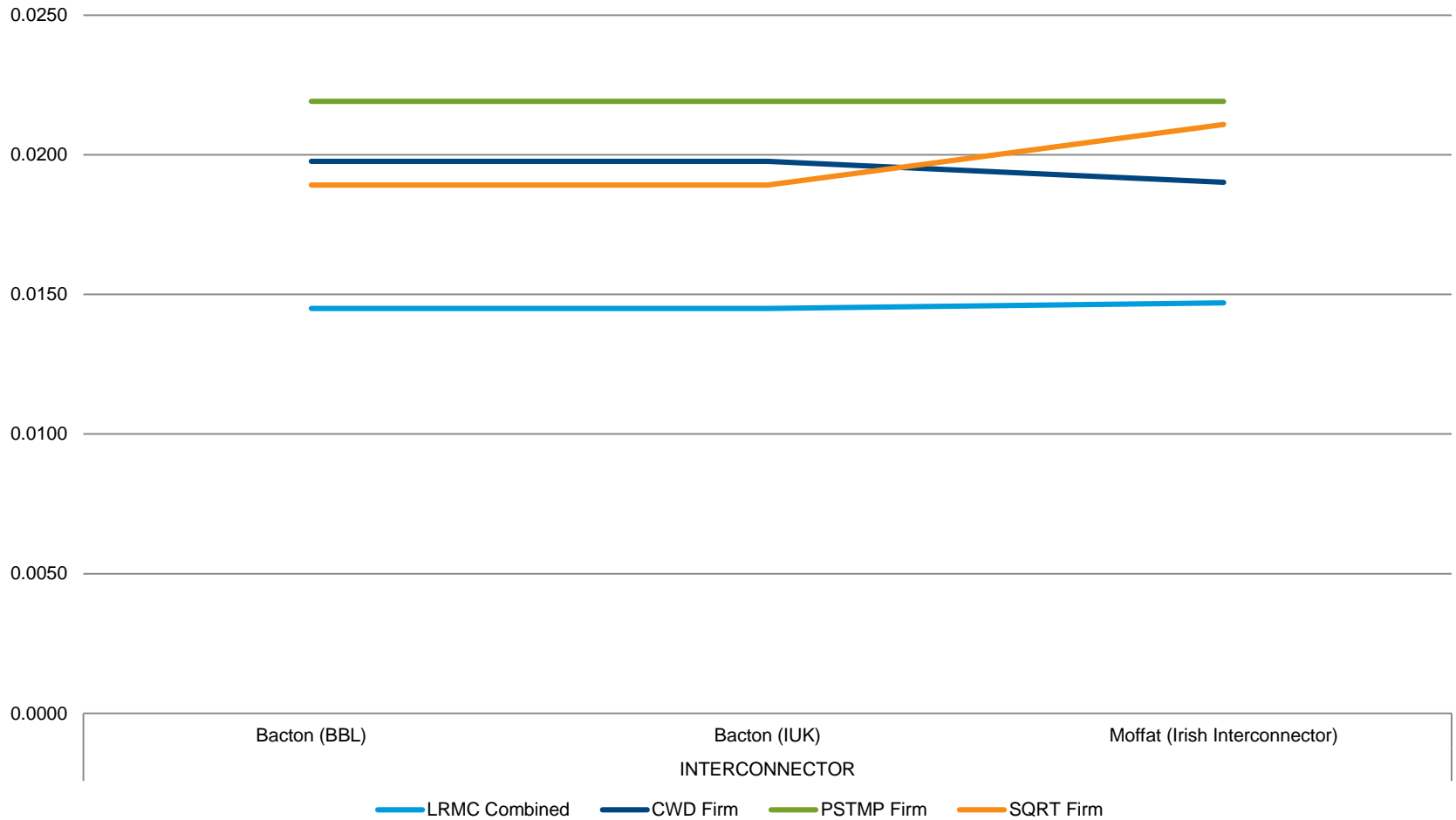


Revenue Recovery Charges	LRMC Rates	CWD Rates	CWD Under Recovery	Postage Stamp Rates	Postage Stamp Under Recovery	Square Root Rates	Square Root Under Recovery
Commodity Charge	0.0144	0.0204	£156,481,658	0.0211	£161,710,169	0.0205	£157,776,786
Capacity Charge	-	0.0182	£19,010,145	0.0188	£19,645,330	0.0183	£19,167,483

Interconnection Point Transition Period Firm Prices



Interconnection Point Enduring Period Combined Exit Prices



Interconnection Point Enduring Period Firm Prices

