NERA

Long-term implications of Ofgem's T3 DD capitalisation rate adjustment proposal

Prepared for SPT

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Summary

- In a separate NERA report for SPT,[1)] we showed that Ofgem's RIIO-1 extension of asset lives from 20 to 45 years had the effect of creating a material depreciation under-recovery or "gap" in depreciation allowances up to the 2060s. This depreciation under-recovery, if not addressed at future reviews, would create issues with inter-generational equity, undermine financeability, increase overall costs to consumers and undermine long-term affordability and investability in the sector.
- In its RIIO-T3 Draft Determinations, Ofgem proposes to reduce the capitalisation rate for bucket 2 totex from a natural average rate of close to 100 per cent to 85 per cent to support financeability in RIIO-T3. In this report, we assess the impact of Ofgem's proposed capitalisation rate adjustment on the depreciation under-recovery issue and long-term financeability for SPT.
- We find that:
  - A temporary adjustment to capitalisation rates in principle reprofiles the depreciation allowance under the existing RIIO-1 rules, but does not increase them overall, failing to address the depreciation under-recovery issue identified in our separate report. The size of the depreciation gap for SPT widens (to £3bn in 23/24 prices using our benchmark 2 of economic depreciation) from T5+, due to bringing forward depreciation into T3 (and T4 under Ofgem's DD modelling assumption of the same adjustment being applied also in T4)
  - The cap rate 2 adjustment brings cash forward and improves financeability in T3 (and T4) but leads to financeability issues for SPT in the long-run. Specifically:
    - In T5 and T6, SPT's S&P's FFO/debt is below or close to the 9% threshold required for BBB+ rating with the second key ratio Net Debt/EBITDA below investment-grade. S&P ratios remain weak also in T7 and T8, although FFO/ND meets BBB+ threshold in the base case
    - SPT meets ratio thresholds required for Moody's Baa1 in T5 but with minimum headroom and risk of downgrade from downside shocks. From T6, reduction in capex/RAV improves scorecard rating, although cash ratios (FFO/ND and RCF/ND) are below investment-grade
- We conclude that Ofgem's DD proposal to adjust capitalisation rates in T3 does not address the depreciation under-recovery issue, delaying it to future reviews, and worsens long-term financeability due to significant front-loading of depreciation/fast money into T3 (and T4) at the expense of future periods
  - An enduring solution would therefore need to be considered at future reviews to address the depreciation gap and the deterioration in long-term financeability associated with the T3 capitalisation rate adjustment

1) NERA (21 August 2025), Depreciation under-recovery from RIIO-1 extension of asset lives – A report for SPT

Modelling assumptions

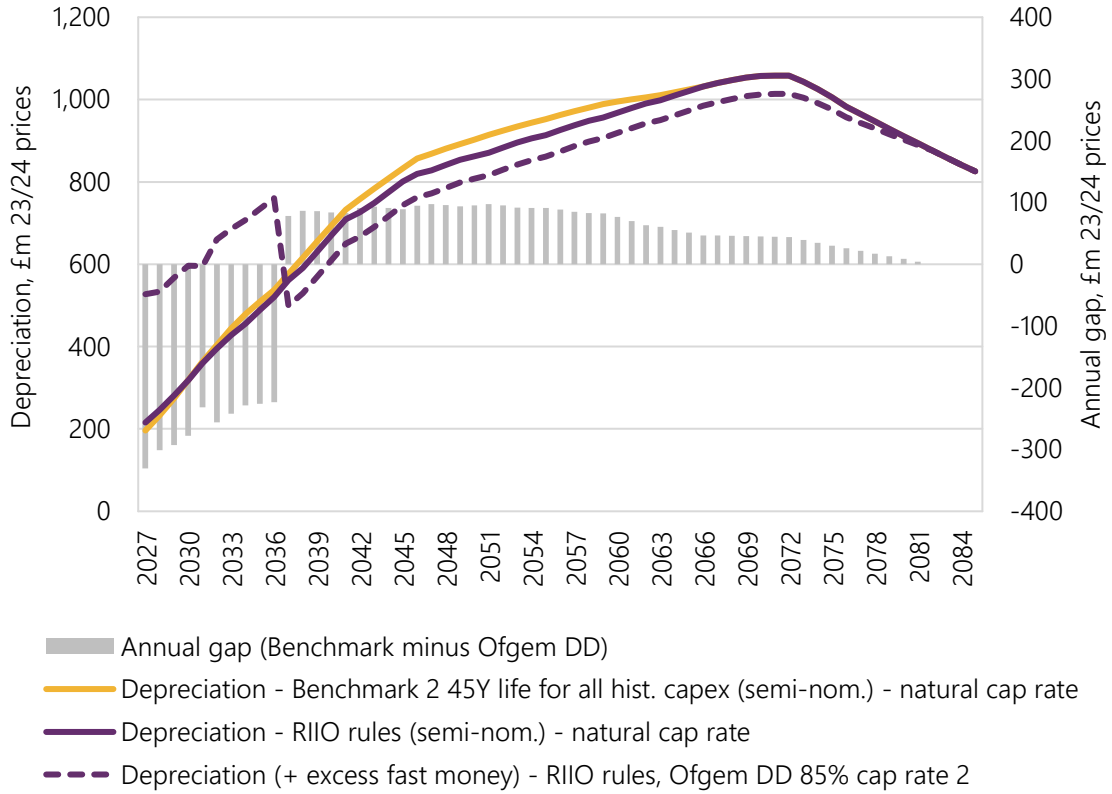
- To model the implications of Ofgem's RIIO-T3 DD capitalisation rate proposal on the depreciation gap and on long-term financeability we have developed a simplified model of allowed revenues for SPT
- The key assumptions of our modelling are set out in the table below. As shown, regulatory assumptions are based on Ofgem's T3 DD, and totex and natural capitalisation rates are informed by Ofgem's T3 DD and projections provided by SPT

Category	Updated Assumption
Historical RAV additions	• SPT's historical RAV additions taken from latest (i.e., July 2025) T2 PCFM • For pre-vesting (pre-1991) capex, we use 2011 Ofgem data on the MEAV of pre-1991 capex for the electricity transmission sector* – To derive SPT specific estimates of pre-1991 capex, we scale the sector-wide MEAV figures downward by SPT's share of total sector 1991 opening RAV (i.e. 15%)
Allowed return	• Allowed cost of equity of 5.64% real CPIH as per T3 DD proposal • Allowed cost of debt ranging from 3.24% (Year 1) to 4.20% (Year 5) real CPIH over T3 as per T3 DD proposal. Assuming constant 4.20% in T4+
Capital structure	• 10% ILD share and 55% notional gearing as per Ofgem T3 DD proposal
T3+ Totex	• Informed by projections of totex and capitalisation rates from SPT. Assumes elevated totex until 2045, and lower, constant steady-state levels thereafter. – Illustrative modelling assumes the following totex levels: For T3, assume totex in line with T3 DD, and then average of T3 totex until 2040. From 2041-2045 assume totex equasl to 0.75x T3 average, and 0.5x T3 average thereafter (= base case) • Natural capitalisation rates start at 91% until 2040 in line with T3 DD, slightly decreasing to 88% from 2041, and falling to 83% from 2045. • We consider two sensitivities to the base case totex: – High: T3 totex as per base, T4+ equal to 1.2x base case; natural cap rates as per base case for T3, 92% until 2040, 90% from 2041-2045, 88% from 2045 – Low: T3 totex as per base, T4+ equal to 0.8x base case; natural cap rates as per base case for T3, 89% until 2040, 86% from 2041-2045, 78% from 2045
Cap rate adjustment	• Adjustment to capitalisation rate for bucket 2 totex to 85% in T3 as per DD proposals. Assume same adjustment also applied in T4, as per Ofgem's DD modelling**
Other	• Assume pass through stays constant in real terms in line with T2 levels, taken from latest (July 2025) T2 PCFM • Assume all other revenue elements (incentives, taxes etc.) are zero for simplicity

* See Ofgem (31 March 2011), Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues, Figure A2.1. ** See RIIO-3 Draft Determinations, Finance Annex, para 5.71.

A cap rate adjustment in principle reprofiles existing RIIO depreciation, without increasing it to address under-recovery issue. SPT's depreciation "gap" from T5+ widens to £3.0bn (23/24 prices), which would need addressing at future reviews

Ofgem's proposed cap rate 2 adjustment increases revenues in T3 and T4 through excess fast money, but leads to lower depreciation allowances in T5+ than under existing RIIO rules



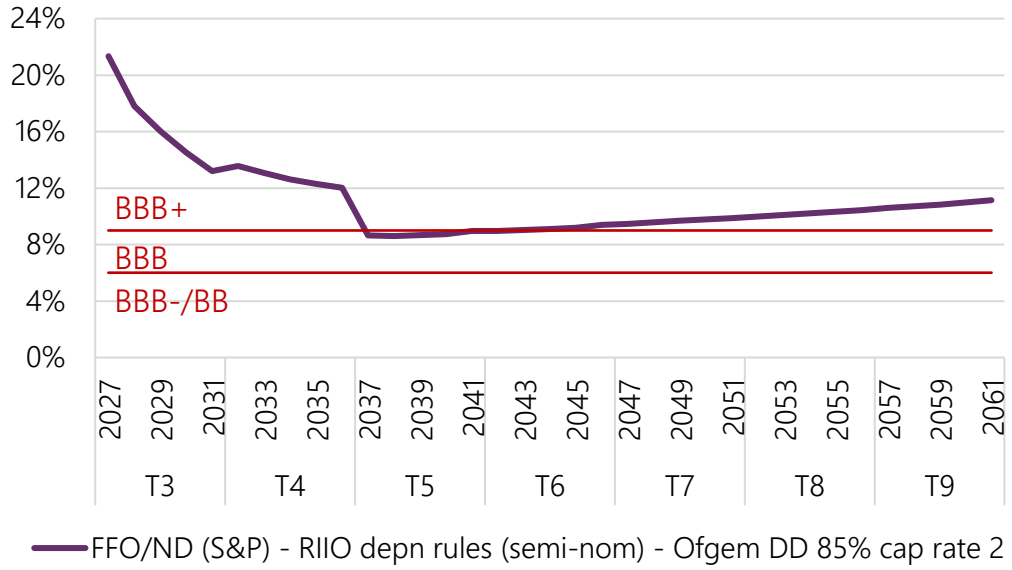
- Cap rate 2 adjustment in T3 (and T4) re-profiles depreciation under the existing RIIO rules by bringing forward allowances into T3/T4 (see purple dashed v purple full line) at the expense of T5+
  - T3 and T4 depreciation (+ excess fast money) is higher than under natural cap rates, but this is offset by lower depreciation in T5 to 2080s, due to lower capex added to RAV in T3 and T4, relative to under natural rates
- The cap rate adjustment therefore acts as a short-term "fix" to the depreciation gap issue in T3, deferring the consequences of the gap into future periods
  - In T3/T4 depreciation is above the economic benchmark (for financeability reasons), but moves further below our economic benchmark in T5+ (purple dashed v yellow line)
  - Mathematically, the cap rate 2 adjustment causes the overall depreciation gap under bmk 2* to fall from £1.0bn to £0.3bn (23/24 prices), as a result of the effects of semi-nominal indexation.** But from T5 onwards once capitalisation rates are back to natural, the gap increases to £3.0bn (23/24 prices) under bmk 2 (as shown in the figure on the LHS purple dashed line vs yellow). This T5+ gap would need addressing at future reviews
  - Under "high" and "low" totex scenarios gap from T5 becomes £3.3bn and £2.6bn, respectively
- As shown in previous report, depreciation gap puts pressure on financeability in the short and long run. Proposed cap rate adjustment for T3 (and T4) improves financeability in T3 (T4), but worsens it from T5+ due to front-loading of depreciation/fast money at expense of future periods, with SPT failing to meet S&P BBB+ thresholds after T4 (see next slides)

* We illustrate the effects of the cap rate adjustment by using our benchmark 2 for the proxy of the economic depreciation charge, which applies 45-year asset life to all of SPT's historical capex. ** This reduction in the size of the gap due to the reprofiling of depreciation under the cap rate 2 adjustment is driven by the impact of introducing semi-nominal indexation, under which future depreciation is only partly indexed , and therefore delaying depreciation recovery reduces its real value. The reduction in cap rates brings depreciation forward into earlier years, when it holds more real value, which mathematically reduces the overall size of the "gap" in real terms. This effect does not occur under full CPIH indexation, where depreciation is fully indexed regardless of timing, and the impact of the cap rate adjustment is reprofiling of depreciation allowances between periods, with no impact on the overall size of the gap.

SPT's S&P core ratios do not meet BBB+ requirements in T5 and T6 due to substantial front-loading of depreciation/fast money into T3/T4 at the expense of future periods. S&P ratios remain weak until the mid 2050s

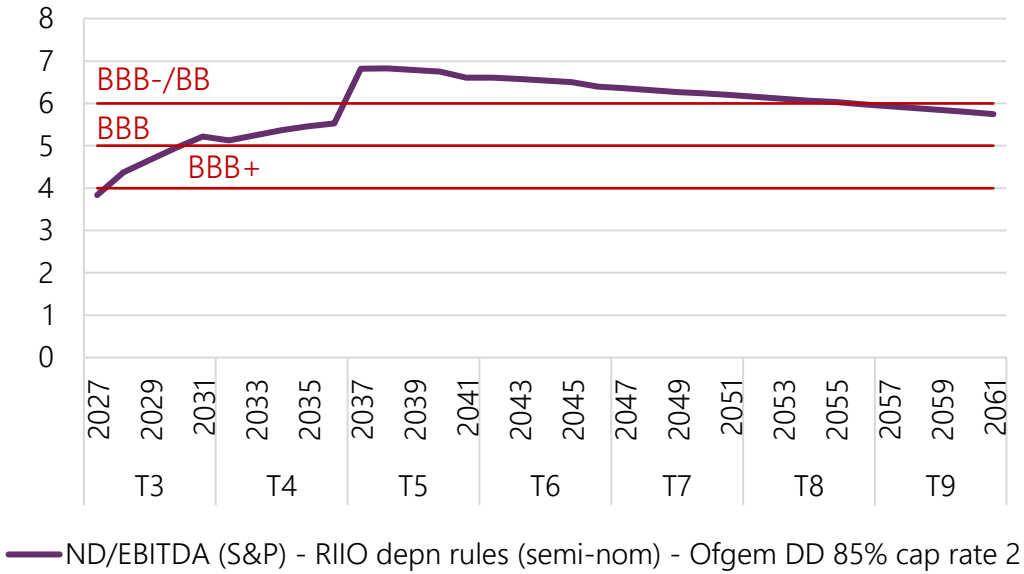
Key S&P ratio FFO/ND is at or below 9 per cent threshold for BBB+ in T5 and T6 (and remains below 10% until T7)

- FFO/ND strong in T3 (and deteriorating albeit still resilient in T4, but drops below 9 per cent threshold for BBB+ in T5 and lies just at threshold in T6
- Ratio recovers above 10 per cent from late 2040s onwards



Second S&P core ratio ND/EBITDA falls below investment grade in T5 until around T8

- ND/EBITDA comparatively weaker relative to FFO/ND, which is S&P's key ratio
- ND/EBITDA does not meet IG threshold of 6.0x from T5 until the mid 2050s



The above conclusions also hold in the "high" and "low" totex scenarios, with only minor deterioration (improvement) in ratios under the "high" ("low") case

SPT still meets ratio thresholds required for Moody's Baa1 rating, but risk in T5 to withstand downside shocks. Capex/RAV improves scorecard rating from T6, but both cash ratios (FFO/ND and RCF/ND) remain below investment grade sub-factor rating

	RIIO-T3	RIIO-T4	RIIO-T5	RIIO-T6	RIIO-T7
AICR	1.77	1.71	1.71	1.71	1.71
Gearing	55.0%	55.0%	55.0%	55.0%	55.0%
FFO/ND	16.1%	12.4%	8.9%	9.3%	9.9%
RCF/ND	13.7%	9.9%	6.4%	6.9%	7.4%
Capex/RAV	29%	15%	10%	6%	4%
Moody's scorecard rating	**Baa1**	**A3**	**Baa1**	**A3**	**A3**

- Ofgem's proposed cap rate adjustment creates sizeable headroom in FFO/ND and RCF/ND in T3 (and some in T4), with comfortable Baa1 scorecard rating
- From T5 onwards, FFO/ND drops below 11 per cent and RCF/ND drops below 7 per cent required for Baa sub-factor rating, as depreciation allowances fall due to the depreciation gap widening as a result of the cap rate adjustment in T3/T4
  - Overall, SPT meets ratio thresholds for Baa1 in the base case in T5, but subject to risk of Baa2 downgrade in case of downside shocks
  - From T6, reduction in capex/RAV improves scorecard rating, although both cash ratios (FFO/ND and RCF/ND) remain below investment-grade (with FFO/ND only recovering above 11 per cent in T9). Potential risk from Moody's changing its rating approach in light of stark split between cash ratios (FFO/ND and RCF/ND) below investment grade vs gearing, AICR and capex/RAV subfactors rated at A/Baa.

The above conclusions also hold in the "high" and "low" totex scenarios, with only minor deterioration (improvement) in ratios under the "high" ("low") case

Conclusion: Ofgem's proposed capitalisation rate adjustment in T3 does not address depreciation under-recovery and worsens long-term financeability. An enduring solution to these issues would be needed at future reviews

- A temporary adjustment to capitalisation rates in principle reprofiles the depreciation allowances under the existing RIIO rules, but does not increase them overall, failing to address the depreciation under-recovery issue identified in our separate report
  - Using our benchmark 2 for the economic depreciation charge (45-year asset life applied to all historical capex), we calculate that the under-recovery for SPT widens to £3bn (in 23/24 prices) under Ofgem's proposed cap rate reduction, as a result of bringing forward depreciation into T3 (and T4)
  - In effect, the cap rate adjustment acts as a short-term temporary "fix" to the depreciation gap issue in T3 (and T4 if retained), but widening the gap for T5+.
- The DD proposed cap rate adjustment for T3 (and assumed for T4 in Ofgem's modelling) improves financeability in T3 (and T4 if retained), but worsens financeability from T5+:
  - SPT's S&P core ratios do not meet BBB+ requirements in T5 and T6 due to substantial front-loading of depreciation/fast money into T3 (and T4) at the expense of future periods. S&P ratios remain weak until the mid 2050s.
  - SPT meets ratio thresholds required for Moody's Baa1 rating in T5, but with minimum headroom and risk of downgrade from downside shocks. From T6, reduction in capex/RAV improves scorecard rating, although cash ratios (FFO/ND and RCF/ND) are below investment-grade.
  - The financeability results for T5+ contrast with the headroom incorporated for T3 (and T4) via the cap rate 2 adjustment, despite the fact that SPT expects high investment associated with meeting net zero targets up to 2045
- We conclude that Ofgem's DD proposal to adjust capitalisation rates in T3 does not address the depreciation under-recovery issue, delaying it to future reviews, and worsens long-term financeability due to significant front-loading of depreciation/fast money into T3 (and T4 if retained) at the expense of future periods. An enduring solution would therefore need to be considered at future reviews to address the depreciation gap and the deterioration in long-term financeability associated with the T3 capitalisation rate adjustment