

SHE Transmission – T1 Uncertainty Mechanisms

October 2018



Scottish & Southern
Electricity Networks

T1 Uncertainty Mechanism Overview

TWO MAIN UNCERTAINTY MECHANISMS IN T1:

- SWW
- VOLUME DRIVER

Our general view is that both mechanisms have worked well during T1 and we support evolution of these mechanisms in T2:

3 x SWW schemes have been approved during the period, potential for another 3 schemes during T1 for island connections.

Under the volume driver mechanism we are forecasting to connect 1572MW sole use and 4179MVA shared use infrastructure during the RIIO T1 period.

SWW

Our view is the SWW process has worked well during the T1 period:

- Robust and challenging approval process – protects the interest of consumers
- Cost allowances set during prices control after detailed cost assessment
- Clear output (Boundary uplift) with flexibility to propose innovative solutions where applicable
- Support proposal for alternative approach to recovery of High Impact Low Probability risks

SUMMARY OF VOLUME DRIVER MECHANISM

| | | | |
|---------------------------------------|---|---|---|
| Objective | Fund uncertain costs associated with Sole-Use and Shared-Use Connections Infrastructure | Primary Outputs | Capacity Outputs: <ul style="list-style-type: none"> • 1,168 MW Sole-Use Connections Infrastructure • 1,008 MVA Shared-Use Connections Infrastructure |
| Funding & Incentives | Ex-ante totex allowance at 90% capitalisation: <ul style="list-style-type: none"> • £99m for Sole-Use Connections Infrastructure • £83m for Shared-Use Connections Infrastructure Clawback for under-delivery of Primary Outputs using pre-threshold UCA Totex incentive with 50% sharing factor Atypical projects (above atypical threshold) will be subject to separate treatment. | Additional Investment Beyond Primary Outputs | Delivery of capacity over the Primary Output Funded in 2 parts: <ul style="list-style-type: none"> • Allowance automatically calculated prior to project commencement on basis of capacity to be delivered multiplied by revenue driver UCA (£/MW & £/MVA), allowed in 4 equal amounts commencing year works start • Funding of incremental Opex at 1% of Gross Asset Value for the remainder of the T1 period • Atypical projects (above atypical threshold) will be subject to separate treatment. |
| Treatment of Atypical Projects | Irrespective of timing, Atypical Projects (above atypical threshold) will be funded in 3 parts: <ul style="list-style-type: none"> • 50% of actual costs incurred by SHETL passthrough to consumers • Allowance for remaining 50% automatically calculated prior to project commencement on basis of capacity to be delivered multiplied by Atypical UCA, multiplied by 50% allowed in 4 equal amounts commencing year works start • Funding of incremental Opex at 1% of Gross Asset Value for the remainder of the T1 period | | |

SOLE USE

T1 EXPERIENCE:

- High degree of change in actual delivery versus schemes used to determine the business plan parameters (i.e. contracted position)
- High degree of variance across the portfolio (i.e. connection lengths) with some significant schemes delivered during the period – e.g. Stronlairg wind farm connection (new 400/132kV substation, 132kV/33kV indoor substation plus associated underground cabling works)
- Application of the mechanism has been straightforward, winners and losers across the portfolio – overall spend forecast for period currently lower than allowance
- Has supported innovation during the period – i.e. Dornell composite towers

T2 THOUGHTS:

- Similar approach would be welcomed – could consider banding for schemes (e.g. build upon the typical/atypical approach)
- Level of ex-ante schemes may be greater in T2
- Need to think about some of the complications from T1 – e.g. schemes changing between sole/shared use
- Need to consider T1/T2 crossover plus approach for T2/T3 crossover

SHARED USE

T1 EXPERIENCE:

- High degree of change in actual delivery versus schemes used to determine the business plan parameters (i.e. contracted position)
- Mechanism has provided a platform to deliver optimal solutions in T1 – high degree of flexibility in solutions across the Portfolio (e.g. use of new HTLS conductors etc)
- Some thought required in the application of the mechanism – e.g. schemes changing from sole to shared use, schemes delivering both LR & NLRE output
- Winners and losers across the portfolio – overall spend forecast for period currently lower than allowance

T2 THOUGHTS:

- Similar approach would be welcomed – requirement to be specific in some areas (NLRE interface, sole/shared use interface etc)
- Level of ex-ante schemes may be greater in T2
- Need to consider T1/T2 crossover plus approach for T2/T3 crossover

OTHER AREAS TO BE CONSIDERED FOR T2 UNCERTAINTY MECHANISM

DEMAND SCHEMES – single scheme included in T1 with ex-ante funding.

SYSTEM STABILITY – requirement for some investment during T1, requirements likely to be greater in T2?

SCHEMES DELIVERING BOUNDARY UPLIFT (below SWW threshold) – a number of schemes identified during T1 but didn't come to fruition?

ACCOMODATION OF DSO SOLUTIONS?