

National Grid House Warwick Technology Park Gallows Hill, Warwick CV34 6DA

To all interested industry parties

Paul Wakeley Revenue Manager

paul.wakeley@nationalgrid.com Direct tel +44 (0)1926 655582

www.nationalgrid.com

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Dear Colleague,

# Reflecting variations in Offshore Transmission Owner (OFTO) revenue in Offshore Local TNUoS Tariffs

In response to industry feedback we have received regarding Offshore Charging arrangements, this letter seeks to clarify how variations in OFTO revenues are recovered through Transmission Network Use of System (TNUoS) tariffs.

#### OFTOs' allowed revenue

Each individual OFTO's allowed revenue is based on a forecast of their costs and is fixed for a 20 year period. However, this can be subject to adjustments such as Income Adjusting Events (IAEs).

An OFTO's allowed revenue includes:

- base revenue
- pass through costs (e.g. Income Adjusting Events, crown estate fees)
- a performance availability revenue adjustment
- a revenue restriction correction factor.

### Offshore TNUoS local tariffs

As System Operator, National Grid (NG) collects TNUoS charges from both generation and demand customers; these tariffs collect the allowed revenue which is passed through to the Transmission Owners such as OFTOs. As a reminder, TNUoS tariffs for **Offshore** Generators are made up of:

- Wider generation tariff
  - Locational
  - Residual
- Offshore local circuit tariff
- Offshore local substation tariff
- Onshore local circuit tariff (if applicable)

Within TNUoS, the offshore local circuit tariff and the offshore local substation tariffs are only paid by offshore generators. These tariffs cover the capital costs of developing and building offshore local substation(s) or local circuit assets, and recover most of the OFTO revenue.

Offshore local substation and local circuit tariffs are set at the point of transfer of the offshore assets to an OFTO and increased each year by inflation only. These are then revised at the start of each TO price control, on the basis of new forecasts of OFTO allowed revenue.

### Adjusting offshore local tariffs to recover actual OFTO revenue

As the offshore local circuit and substation tariffs are set at the point of asset transfer any changes in revenue (positive or negative) for the OFTO, for example due to an income adjusting event, are not reflected in the relevant offshore generator's tariffs. To ensure that any changes in OFTO revenues are reflected within the relevant offshore generator's tariffs, an adjustment is made at the start of the next price control. This is outlined in Section 14, (paragraphs 14.15.80-14.15.84) of the CUSC. This ensures that historic differences between the forecast OFTO revenue and actual OFTO revenue that occurred within the previous price control are correctly allocated. A worked example is provided within Appendix A.

Adjustments for the current price control (RIIO-T1) will take effect from 2021/2022 and will be spread over the duration of the next price control period (RIIO-T2). These tariffs will also include allowed OFTO revenue forecasts for the new price control period (RIIO-T2).

This letter is to clarify the current process. We keep our methodology under constant review and so this could change in the future.

We are happy to answer any questions you may have on this or any other transmission network charging topic. The Revenue Team can be contacted on 01926 654633.

Yours sincerely

**Paul Wakeley** 

Revenue Manager

### 8 September 2017

This letter was reissued on 8/9/17 to correct a printing error in the Appendix, and to change the example income adjusting event to an increase in revenue of £10m in 2016/17 (rather than a decrease). No changes have been made to the letter.

## **Appendix A**

## **Worked Example of Calculating Offshore Local Tariffs**

Tariff calculation at the start of T1

At the start of the price control RIIO-T1, an OFTO is forecast to have an average revenue (in 2013/14 prices) of £25m per annum during that price control period. This figure, along with details of the initial capital costs of the OFTO assets, is used to calculate the offshore local tariff paid by the generator. This is calculated as **40.02** £/kW, as shown in the following table for 2013/14. For each of the other charging years in the T1 price control period, the tariff increases by inflation (assumed to be 3% in this example).

T1		Capital Cost	Percentage of Total Capital Costs	Amount of OFTOt	Rating / Capability	Local Security Factor	Tariff
		(£k)		(£)	(MVA)		(£/kW)
	Offshore cable	100,000					
Circuit	Harmonic filtering equipment	1,000					
ö	Reactive plant	15,000					
	Circuit	116,000	38%	9,555,189	420	1	22.75
	Transformer	10,000	3%	823,723	640		1.29
ion	Switchgear	2,500	1%	205,931	680		0.30
Substation	Platform	125,000	41%	10,296,540	640		16.09
Sub	Onshore civils cost adjustment			-			- 0.40
	Substation	137,500	45%	11,326,194			17.27
Other	Onshore substation	50,000	16%	4,118,616			Not Applicable
	Other	50,000	16%	4,118,616			Not Applicable
	TOTAL CAPITAL COST	303,500					
			TOTAL OFTOt	25,000,000.0			
					Tota	I Local Tariff (£/kW)	40.02

### Outturn OFTO Revenue during T1

During the price control period, let us assume that the OFTO has an income adjusting event in 2016/17 which increases their income compared to forecast by £10m as summarised in this table.

OFTO Revenue	RIIO-T1											
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21			
Forecast	£m (13/14 prices)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0			
Forecast	£m (nominal)	25.0	25.8	26.5	27.3	28.1	29.0	29.9	30.7			
Outturn	£m (nominal)	25.0	25.8	26.5	37.3	28.1	29.0	29.9	30.7			
Variation	£m (nominal)	-	-	-	10.0	-	-	-	-			

### Tariff calculation at the start of T2

For the RIIO-T2 price control period, the OFTO is now forecasting an average revenue of £31.7M in 2021/22 prices (this is the same as £25M in 2013/14 prices assuming 3% inflation).

However, in recalculating the offshore tariffs we need to adjust for the £10m increase in revenue compared to the forecast from T1. This £10m needs to be converted to 2021/22 prices (£11.6m) and divided by each of the eight years (£1.45m per annum).

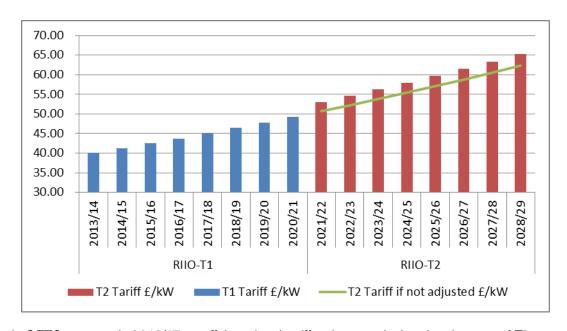
Therefore, T2 tariffs should be set based on an adjusted OFTO revenue of £31.7m + £1.45m = £33.15m

This calculates an offshore tariff of £53.04 kW for 2021/22 as shown in the following table. For each of the other charging years in the T2 price control period, the tariff increases by inflation (see table later).

T2		Capital Cost	Percentage of Total Capital Costs	Amount of OFTOt	Rating / Capability	Local Security Factor	Tariff
		(£k)		(£)	(MVA)		(£/kW)
	Offshore cable	100,000					
rcuit	Harmonic filtering equipment	1,000					
Ö	Reactive plant	15,000					
	Circuit	116,000	38%	12,658,082	420	1	30.14
	Transformer	10,000	3%	1,091,214	640		1.71
station	Switchgear	2,500	1%	272,803	680		0.40
sta	Platform	125,000	41%	13,640,175	640		21.31
Sub	Onshore civils cost adjustment			1			- 0.51
	Substation	137,500	45%	15,004,192			22.91
O.	Onshore substation	50,000	16%	5,456,070			Not Applicable
	Other	50,000	16%	5,456,070			Not Applicable
	TOTAL CAPITAL COST	303,500					
			TOTAL OFTOt	33,118,344.6			
					Tota	l Local Tariff (£/kW)	53.04

### Summary of Tariffs

Offshore Local Tari				RIIC	D-T1				RIIO-T2								
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
T1 Tariff	£/kW	40.02	41.22	42.46	43.74	45.05	46.40	47.79	49.22								
T2 Tariff	£/kW									53.04	54.64	56.28	57.96	59.70	61.49	63.34	65.24



The effect of a £10m increase in OFTO revenue in 2016/17 on offshore local tariffs when recalculated at the start of T2.