Meeting 109

5th Nov 2020

Transmission Charging Methodologies Forum and CUSC Issues Steering Group

nationalgridESO

Agenda

1	Introduction, meeting objectives	**Jon Wisdom - NGESO**	09:30 – 09:35
2	Code administrator update	**Paul Mullen - NGESO**	09:35 – 09:50
3	EU-Exit Preparedness	**Francis Dike, Katharina Birkner - NGESO**	09:50 – 10:00
4	TCR Update	**Grahame Neale - NGESO**	10:00 – 10:05
5	Interconnector CACM Cost Recovery	**Katharina Birkner - NGESO**	10:05 – 10:20
6	CMP353 - Expansion Constant Update	**Grahame Neale, Matthew Wootton - NGESO**	10:20 – 11:00
7	Generic ALF for new technologies	**Jo Zhou, Andrew Havvas - NGESO**	11:00 – 11:15
8	AOB	**Jon Wisdom - NGESO**	11:15 – 11:20

Code Administrator Update

Paul Mullen, NGESO

Authority Decisions Summary (as at 4 November 2020)

Authority Decisions since last TCMF

- **CMP353** – Ofgem decided that this should be progressed on an urgent basis

Awaiting Authority Decision

- Ofgem prioritising decisions on TCR Modifications and **CMP324/325**
  - **CMP324/325** decision expected imminently (next 1-2 weeks)
  - No firm date on decision date for TCR Modifications*
- Update on **CMP280** published 2 October 2020. Based on this, Code Admin anticipate that Ofgem will now consider **CMP280** alongside the other Transmission Demand Residual Modifications.
- **CMP292** decision was expected 20 September 2019; however this remains de-prioritised due to Ofgem's focus on the TCR modifications.
- **CMP342** Self-Governance Appeal in progress – Ofgem have sought industry views by 16 November 2020

***** *TCR Modifications are:*

- ***Transmission Generation Residual - CMP317/327 and CMP339;***
- ***Transmission Demand Residual – CMP334, CMP335/336 and CMP343/340;*** *and*
- ***BSUoS – CMP333.***

Implementations Summary (as at 4 November 2020)

Implementations

- **CMP346/CMP347 –** No objections raised (window closed 5pm on 27 October 2020) so will be implemented 1 April 2021

Panel Update (as at 4 November 2020)

30 October 2020

- **2 new Modifications**
  - **CMP352 'Correction to 'Revised Indicative Annual TNUoS charge' formulas in Appendix 2 of CUSC Section 3' -** unanimously agreed that CMP352 met the Self Governance and Fast Track criteria and agreed the modification should be implemented. Planned date for implementation is 14 December 2020.
  - **CMP353 'Stabilising the Expansion Constant and non-specific Onshore Expansion Factors from 1st April 2021'** - Panel unanimously recommended that CMP353 met Ofgem's Urgency criteria (a)
- **CMP300 Workgroup Report -** presented to Panel to sign off that Workgroup has met its Terms of Reference but additional text on Benefits/Costs to be added first.
- **Deep-dive of Prioritisation – Change in position for CMP311 and CMP298**

Next Panels (as at 4 November 2020)

27 November 2020

- 1 possible new Modification re: CACM interconnector cost recovery
- Panel recommendation vote to be carried out for **CMP351**
- Panel to determine whether or not the **CMP344** Workgroup has met its Terms of Reference
- Re-assess positions in the prioritisation stack of **CMP326** and **CMP328** ***(and CMP308 if BSUoS 2nd Taskforce conclusions are published)***

In Flight Modification Updates

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In flight Modifications (as at 4 November 2020)

1 open Workgroup Consultation

- **CMP344 – closes 23 Nov**

1 open Code Administrator Consultation but 4 more to be launched soon

- **CMP351 – closes 12 Nov**
- **CMP353 – due to open 5 Nov and close 19 Nov**
- **CMP309 and CMP310 due to open 6 Nov and close 27 Nov**
- **CMP300 – due to open 9 Nov and close 9 Dec**

2 CUSC Workgroups held in October

- 8 held across CUSC, Grid Code, STC and SQSS
- 11 to be held across CUSC (3 CUSC), Grid Code, SQSS and STC in November

For updates on all “live” Modifications please visit “Modification Tracker” at:
https://www.nationalgrideso.com/industry-information/codes

Prioritisation Stack

5 categories – High, Medium to High, Medium, Low to Medium and Low

Panel continue to take into account Proposer's views and Code Admin formally ask for such views on a quarterly basis

October 2020 review has taken place – we currently look 3 months ahead, we are seeking to look even further ahead and have a clear view on numbers of Workgroups needed (and what they are seeking to achieve) for each Modification – we will need Proposers help

Prioritisation will continue to be reviewed at Panel on a monthly basis with deep dive on a quarterly basis (next deep dive January 2021)

CUSC Workgroups for next 3 months (as at 4 November 2020)

November (total = 3)

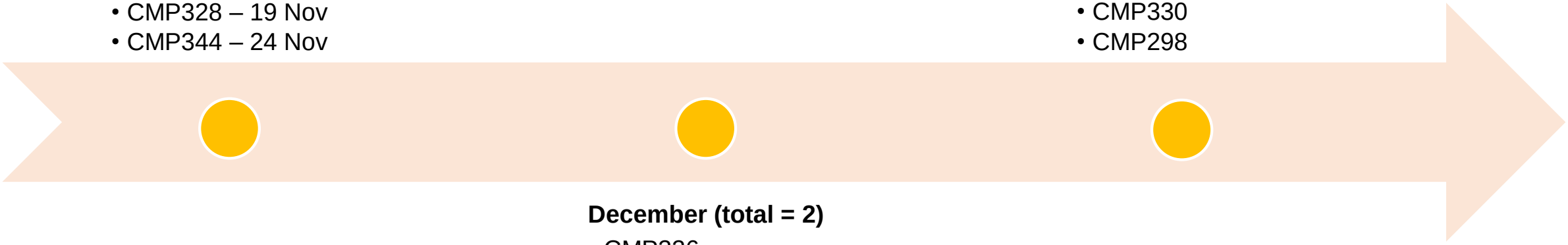
- CMP330 – 9 Nov
- CMP328 – 19 Nov
- CMP344 – 24 Nov

December (total = 2)

- CMP326
- CMP330

January (total = 5)

- CMP328 x 2
- CMP326
- CMP330
- CMP298



See Notes explaining what each Modification is seeking to achieve

2020 and 2021 Dates

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CUSC 2020 Workgroups and Panel dates

CUSC - Workgroups	1	2	3	4
March	6	12	20	26
April	3	9	15	23
May	8	14	22	28
June	5	10	15	25
July	10	16	24	30
August	7	13	21	27
September	4	10	18	24
October	9	14	23	29
November	6	11	16	23
December	30/11	7	17	21

CUSC	Panel Dates	Papers Day	Modification Submission Date	TCMF
January	31	23	16	9
February	28	20	13	6
March	27	19	12	5
April	24	16	7	2
May	29	20	13	7
June	26	18	11	4
July	31	23	16	9
August	28	20	13	6
September	25	17	10	3
October	30	22	15	8
November	27	19	12	5
December	18	10	3	26/11

CUSC 2021 - Panel dates

CUSC	(TCMF) CUSC Development Forum	Modification Submission Date	Papers Day	Panel Dates
January	7	14	21	29
February	4	11	18	26
March	4	11	18	26
April	8	15	22	30
May	6	13	20	28
June	3	10	17	25
July	8	15	22	30
August	5	12	19	27
September	2	9	16	24
October	7	14	21	29
November	4	11	18	26
December	25/11	2	9	17

ESO EU-Exit Preparedness – TCMF Update

Francis Dike, Katharina Birkner

Overview of ESO Preparedness

- Continuously reviewing Supply and Demand Risks in advance of and following EU transition end date

- Working to ensure GB industry has operational information and tools required to operate efficiently post-EU

- Proactive role in the industry processes to align legislation, licenses, codes for end of EU Transition Period

Operability and Adequacy

COVID-19

Due to the uncertainty caused by COVID-19, we're examining a range of scenarios for margins rather than a single forecast. We expect to see downward pressure on demand compared to last winter.

Operability

Operability remains complex. We have existing tools & services and are developing others, including dynamic containment, to manage anticipated operability challenges across the winter period. We expect to use these similarly to last winter as increased demands generally cause relatively fewer operability challenges than we have seen this summer.

Security of supply

System margins aren't quite as high as last winter but remain well within the Reliability Standard set by the Government under all COVID-19 scenarios.

End of the EU Transition Period

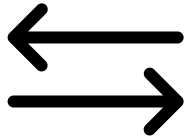
We foresee no additional operability or adequacy challenges this winter as a result of the EU Exit transition period ending.

ENTSO-E Membership, EU Platforms and ITC

ENTSO-E Membership

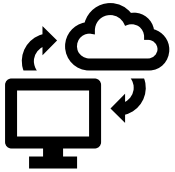
- Future membership will be impacted by the outcome of the UK – EU negotiations
- Degree of Impact on membership still uncertain
- We are working closely with ENTSO- E to address potential challenges

Inter-TSO Compensation Mechanism (ITC)



- Continuation in the ITC mechanism
- We are aware of EU soft powers which could force 3rd Country perimeter fees

EU IT Platforms



- TERRE Go-Live paused
- Ongoing review of Pan EU-IT tools delivery (Planning and Realtime Data)

Operational Readiness Update

Electricity System

- Forward look of energy expectations – demands, interconnector flows and plant availability
- Assurances gained of all systems working as planned and a change freeze in place for the days in advance of and following EU transition end date

Incident Management

- Stand up of Silver Command daily call, 1 week in advance and following EU transition end date
- Close liaison with BEIS/Ofgem on the day of expectations

Staffing

- Critical staff identified and Incident response staff on standby over the period

Regulatory Framework

- All major EU regulations have been copied into GB statute book to give industry clarity from 1 January 2021
- These regulations will **enter into force** unless a deal is agreed with the EU in time for 1 January 2021
- The Electricity Directive will also be transposed into UK law before the end of the year.
- Housekeeping code modifications will be raised where necessary to reflect this new reality.

Domestic Statutory Instrument	What it does?
Market Codes	Amends EBGL and makes it more operable Revokes CACM and FCA codes Amends the ITC Regulation to make it more operable
Connection Codes	Retains DCC, RFG and HVDC codes in domestic legislation and makes it operable
System Operations and E&R Codes	Retains SOGL and E&R in domestic legislation and amends to make operable
Electricity Regulation	Retains Electricity Regulation (CEP), addresses failure of retained law
ACER Regulation	Revokes ACER regulation
Risk Preparedness Reg *(Draft S.I)*	Planning to retain the Risk Prep. Regulation in domestic legislation and make it operable
Remit Regulation	Planning to retain Remit & Transparency Regulation in domestic legislation and make it more operable
State Aid Regulations *(Draft S.I)*	Revokes Direct EU legislation and Treaty provisions (Consequential impact on Capacity Market)

ESO position regarding ITC agreement in light of EU Commission letter

- The European Commission letter* is not a legally binding document
- The only existing arrangement in place that determines electricity cross border charges within Europe is the ITC agreement, which is a commercial agreement
- The UK is currently an ITC member and adheres to the ITC agreement as an internal energy market member
- We will become a third country after Brexit, but we will continue to be an ITC party (third countries under the ITC agreement do not pay cross border transmission fees in excess of the ITC agreement)
- Perimeter countries, countries that have not accepted the ITC agreement, are charged for the use of cross border transmission systems
- This position has been confirmed by ENTSOE legal, we are in ongoing conversations with ENTSOE to work on our views and assumptions on post Brexit collaboration
- This arrangement could change in the future, but currently there is no expectation or reason for change. Introducing trade tariffs on energy to European TSOs would not be a CUSC matter.

*NOTICE TO STAKEHOLDERS WITHDRAWAL OF THE UNITED KINGDOM AND THE INTERNAL ENERGY MARKET

TCR - Update

Grahame Neale, National Grid ESO

Ofgem Decision on CACM Cost Sharing New Modification Proposal

Katharina Birkner, National Grid ESO

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Background

On the 15th October Ofgem published their decision on proposed license changes to reflect the Clean Energy Package and the approach to cost sharing under CACM (Capacity Allocation and Congestion Management Regulation)

This decision includes the approval for interconnectors to recover one off cost relating to CACM implementation

To implement this decision licence changes are required to the Electricity Interconnector License and the Electricity Transmission Licence. The licence changes are expected to take effect on the 11th December 2020.

Ofgem's expectation is to allow for this cost recovery in 2021. This means consequential CUSC changes are required.

CUSC Impact

- CUSC changes are required to allow interconnectors to recover these one-off costs through TNUoS using the existing cost sharing process detailed in CUSC Section 9 (Interconnectors)
- **Ofgem have encouraged the ESO to make relevant CUSC changes at the earliest opportunity to allow cost recovery in 2021.**
- Changes to CUSC section 9 (Interconnectors) and section 11 (Definitions) are required to allow the CUSC to align with electricity interconnector and electricity transmission licence changes and enable the cost recovery.
- The solution involves aligning the CUSC with the electricity transmission license to allow interconnectors to recover costs approved by Ofgem (positive and negative) through the existing interconnector adjustment payments process.
- This alignment and simplification through the legal text allows a level of future proofing for future cost recovery (positive or negative) of interconnector costs through the CUSC should this be required.
- Next steps: CUSC mod to be raised for Nov CUSC panel with recommendation to proceed as self-governance as Ofgem have already made decision

CMP353 - Stabilising the Expansion Constant and onshore generic Expansion Factors from 1st April 2021

Grahame Neale and Matt Wootton, National Grid ESO

Overview of the modification

- The Expansion Constant (EC) & Factors are key elements of the TNUoS charging methodology. These parameters are reset at each price control based on TO's data.
- CMP353 aims to stabilise the locational signal at the start of the RIIO-2 period at the RIIO-1 value plus relevant inflation until such time as the effect of any change in the locational signal can be better understood.
- Unless action is taken there will be significant changes to the locational element of TNUoS tariffs as the Expansion Constant and some Expansion Factor values
- Feedback from industry has been for certainty and early visibility of changes. This modification aims to achieve this stability, whilst further work is undertaken and industry can have sufficient time to understand the impact of any changes

The modification was discussed at October's CUSC Panel

- CMP353 was discussed at October's CUSC panel and was unanimously agreed it should proceed as Urgent. It was also agreed that it should go straight to Code Admin Consultation. The panel also recommended that the modification was discussed today at TCMF.
- On 3rd November, Ofgem approved urgency for CMP353
- The Code Admin Consultation will be published later today (5th November)

Summary of modification background

- In accordance with STCP (14 – 1.3.3), NGESO sent out the data request for the calculation of the EC and EF last year
- During the preparation of the 5 year view in August, the EC and EF was re-calculated using the data from NGET and SPT which led to the significant increase from the current value.
- Based on this initial view, we engaged via TCMF in both September and October. On both occasions we received substantial feedback on the unwelcome volatility that using the approach to setting the current Expansion Constant would create.
- We raised the modification at October's Panel to provide stability whilst allowing further work to be done to review and potentially change the methodology if necessary in RIIO-2

Revenue impacts

Overall there is minimal change between the total TNUoS revenue recovery of generation and demand in 2021-22

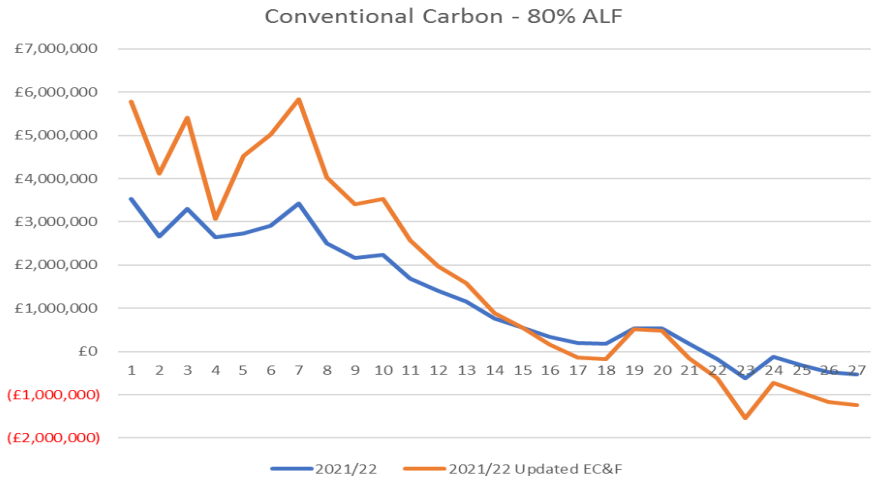
2021-22 Forecast Revenue (£m)	Total Demand Recovery	Total Generation Recovery
RIIO-1 Uplifted	2222.2	826.4
Current RIIO-2*	2213.9	834.7
Variance	(8.3)	8.3

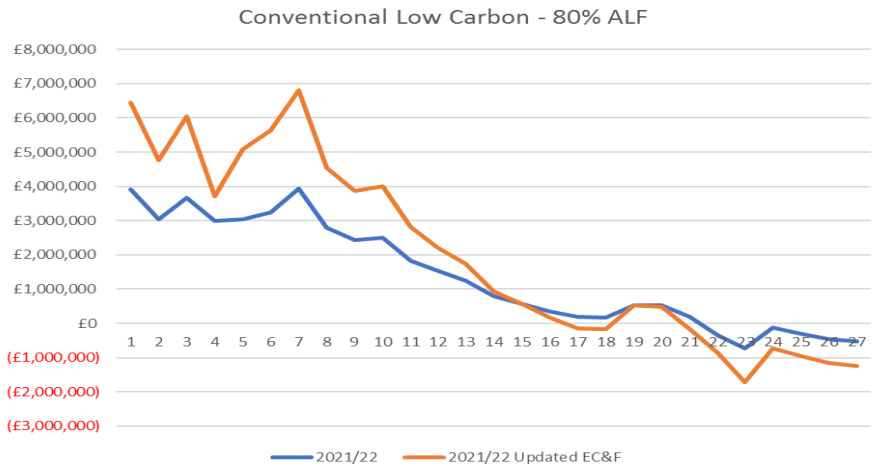
* Based on initial data received by TO's related to the calculation of the update EC&F as part of the RIIO-2 parameter refresh

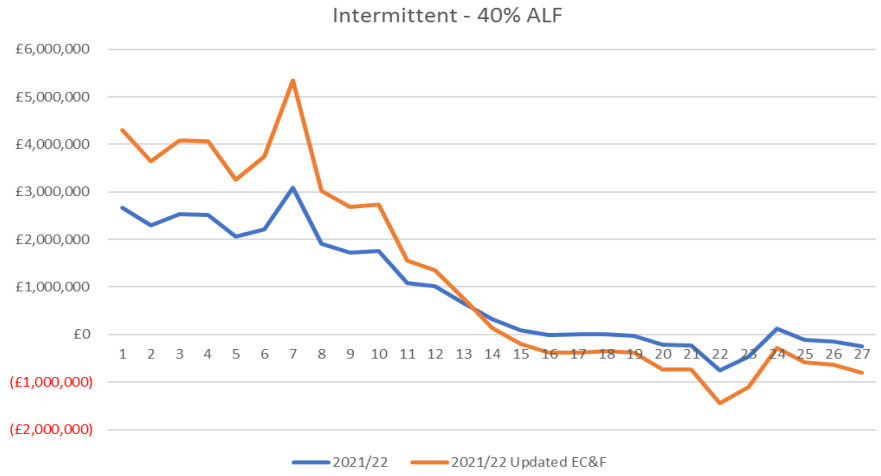
Impacts on generation

The locational elements of TNUoS however will be significantly effected.

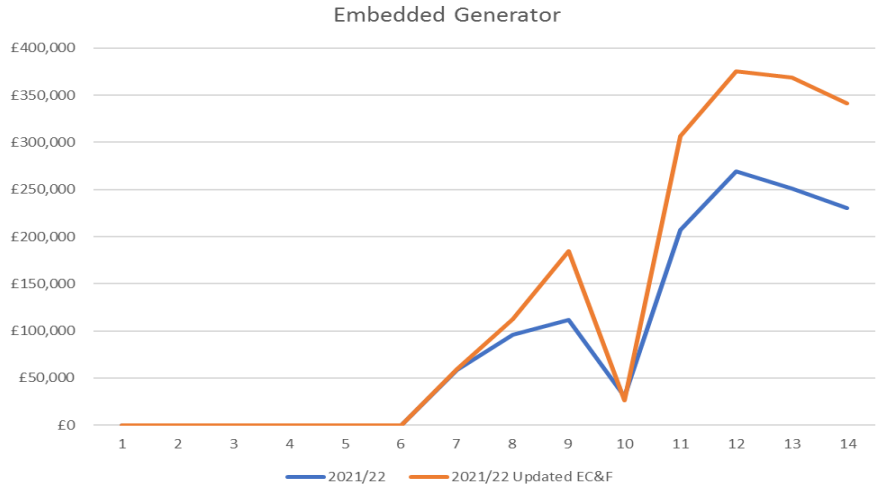
Transmission connected generation (based on 100MW generator)



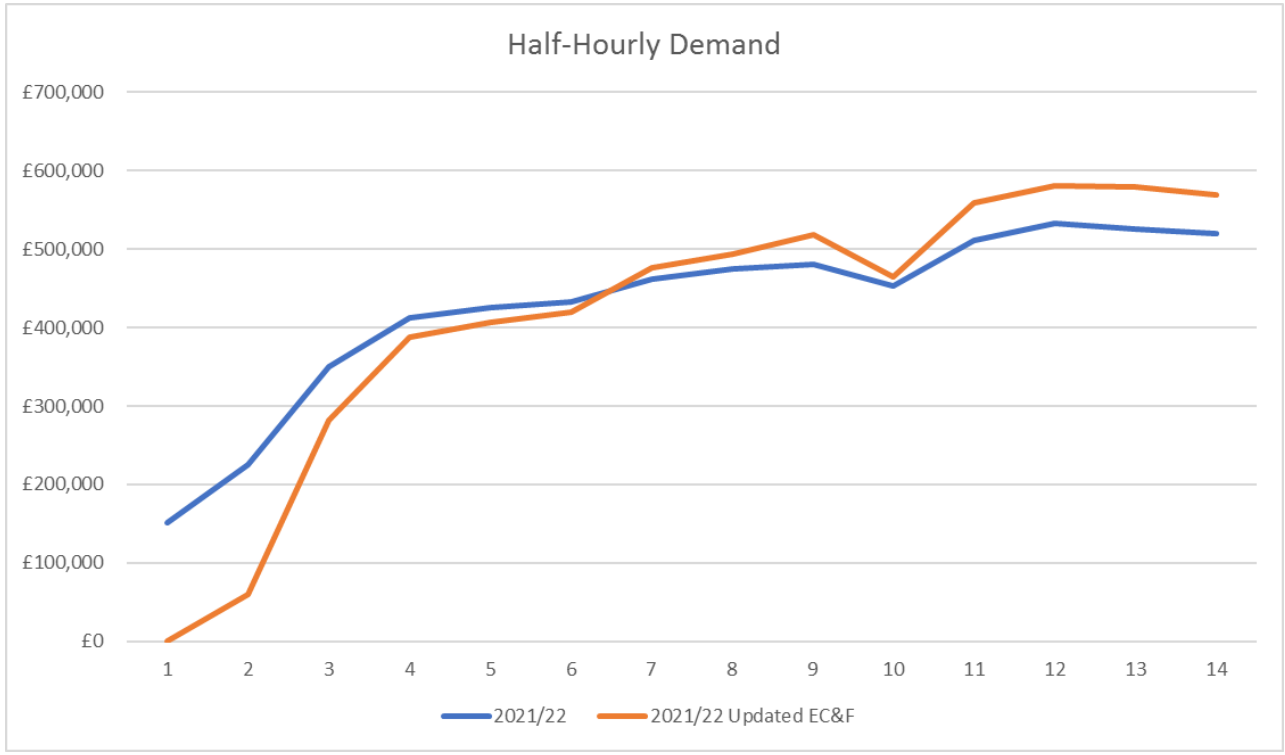




Embedded generation (based on 30MW generator) - Credit



Impacts on demand



Summary

- The Code Admin Consultation will be available shortly for responses
- We believe that this modification is required to provide stability to TNUoS, whilst further work is undertaken and industry can have sufficient time to understand the impact of any changes
- We will continue to work with the TOs to understand the impacts of the data received to date and for potential routes forward.
- We will engage with you throughout this process

Additional Information

2021/22 Generation Tariffs – Using RIIO-1 EC (Uplifted) & F's (August 2020 Forecast)

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Residual Tariff	Conventional Carbon 80% Load Factor	Conventional Low Carbon 80% Load Factor	Intermittent 40% Load Factor
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)
1	North Scotland	4.342065	20.090101	18.866291	-0.232751	35.274428	39.047686	26.669580
2	East Aberdeenshire	3.251840	10.650928	18.866291	-0.232751	26.632864	30.406122	22.893911
3	Western Highlands	3.979920	18.288499	18.205231	-0.232751	32.942153	36.583199	25.287880
4	Skye and Lochalsh	-2.495443	18.288499	18.108400	-0.232751	26.389325	30.011005	25.191049
5	Eastern Grampian and Tayside	4.450991	13.378695	15.525705	-0.232751	27.341760	30.446901	20.644432
6	Central Grampian	4.446109	14.400194	16.644875	-0.232751	29.049413	32.378388	22.172202
7	Argyll	3.675455	12.382620	26.117508	-0.232751	34.242806	39.466308	30.837805
8	The Trossachs	3.827726	12.382620	14.391109	-0.232751	25.013958	27.892180	19.111406
9	Stirlingshire and Fife	2.648027	10.835846	13.137368	-0.232751	21.593847	24.221321	17.238955
10	South West Scotland	3.005321	11.165296	13.379006	-0.232751	22.408012	25.083813	17.612373
11	Lothian and Borders	2.905501	11.165296	6.590487	-0.232751	16.877376	18.195474	10.823854
12	Solway and Cheviot	2.423044	7.313546	7.402865	-0.232751	13.963422	15.443995	10.095532
13	North East England	3.611493	5.574672	4.549843	-0.232751	11.478354	12.388323	6.546961
14	North Lancashire and The Lakes	2.485067	5.574672	1.216187	-0.232751	7.685003	7.928241	3.213305
15	South Lancashire, Yorkshire and Humber	4.018904	1.885191	0.352052	-0.232751	5.575947	5.646358	0.873377
16	North Midlands and North Wales	3.384821	0.269928		-0.232751	3.368012	3.368012	-0.124780
17	South Lincolnshire and North Norfolk	1.810333	0.528105		-0.232751	2.000066	2.000066	-0.021509
18	Mid Wales and The Midlands	1.273927	0.853057		-0.232751	1.723622	1.723622	0.108472
19	Anglesey and Snowdon	5.610335	-0.068323		-0.232751	5.322926	5.322926	-0.260080
20	Pembrokeshire	9.473688	-4.907724		-0.232751	5.314758	5.314758	-2.195841
21	South Wales & Gloucester	6.050596	-5.023364		-0.232751	1.799154	1.799154	-2.242097
22	Cotswold	2.617863	3.820598	-8.882383	-0.232751	-1.664316	-3.440793	-7.586895
23	Central London	-4.237683	3.820598	-5.933549	-0.232751	-6.160795	-7.347505	-4.638061
24	Essex and Kent	-4.102577	3.820598		-0.232751	-1.278850	-1.278850	1.295488
25	Oxfordshire, Surrey and Sussex	-1.124600	-2.157597		-0.232751	-3.083429	-3.083429	-1.095790
26	Somerset and Wessex	-1.931156	-3.151614		-0.232751	-4.685198	-4.685198	-1.493397
27	West Devon and Cornwall	-0.361854	-5.783941		-0.232751	-5.221758	-5.221758	-2.546327

2021/22 Generation Tariffs – Using RIIO-2 EC & F Calculation (as of 16/10/20)

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Residual Tariff	Conventional Carbon 80% Load Factor	Conventional Low Carbon 80% Load Factor	Intermittent 40% Load Factor
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)
1	North Scotland	7.230021	35.495924	32.971932	- 4.086882	57.917424	64.511810	43.083420
2	East Aberdeenshire	3.586921	19.069280	32.971932	- 4.086882	41.133009	47.727395	36.512762
3	Western Highlands	6.676010	32.545211	31.889230	- 4.086882	54.136681	60.514527	40.820432
4	Skye and Lochalsh	- 16.560603	32.545211	31.709633	- 4.086882	30.756390	37.098317	40.640835
5	Eastern Grampian and Tayside	8.601388	23.831827	27.133901	- 4.086882	45.287088	50.713869	32.579750
6	Central Grampian	7.949862	27.140278	30.758688	- 4.086882	50.182153	56.333890	37.527917
7	Argyll	5.612070	22.316869	48.638544	- 4.086882	58.289518	68.017227	53.478410
8	The Trossachs	6.244011	22.316869	25.370615	- 4.086882	40.307116	45.381239	30.210481
9	Stirlingshire and Fife	4.118398	19.497741	23.085565	- 4.086882	34.098161	38.715274	26.797779
10	South West Scotlands	4.758736	19.954439	23.420535	- 4.086882	35.371833	40.055940	27.315429
11	Lothian and Borders	4.648367	19.954439	11.600371	- 4.086882	25.805333	28.125407	15.495265
12	Solway and Cheviot	3.470625	12.901644	12.477846	- 4.086882	19.687335	22.182904	13.551622
13	North East England	5.677345	10.040345	7.783229	- 4.086882	15.849322	17.405968	7.712485
14	North Lancashire and The Lakes	3.839592	10.040345	1.486755	- 4.086882	8.974390	9.271741	1.416011
15	South Lancashire, Yorkshire and Humber	6.105261	3.755575	0.632590	- 4.086882	5.528911	5.655429	- 1.952062
16	North Midlands and North Wales	5.083670	0.853165		- 4.086882	1.679320	1.679320	- 3.745616
17	South Lincolnshire and North Norfolk	2.076663	0.767139		- 4.086882	- 1.396508	- 1.396508	- 3.780026
18	Mid Wales and The Midlands	1.134634	1.513005		- 4.086882	- 1.741844	- 1.741844	- 3.481680
19	Anglesey and Snowdon	8.774360	0.617825		- 4.086882	5.181738	5.181738	- 3.839752
20	Pembrokeshire	15.431676	- 8.146536		- 4.086882	4.827565	4.827565	- 7.345496
21	South Wales & Gloucester	9.193106	- 8.350841		- 4.086882	- 1.574449	- 1.574449	- 7.427218
22	Cotswold	4.574012	3.268471	- 11.702696	- 4.086882	- 6.260250	- 8.600789	- 14.482190
23	Central London	- 7.291715	3.268471	- 8.353563	- 4.086882	- 15.446671	- 17.117383	- 11.133057
24	Essex and Kent	- 5.830921	3.268471		- 4.086882	- 7.303026	- 7.303026	- 2.779494
25	Oxfordshire, Surrey and Sussex	- 1.990501	- 4.386118		- 4.086882	- 9.586277	- 9.586277	- 5.841329
26	Somerset and Wessex	- 3.017675	- 5.680392		- 4.086882	- 11.648871	- 11.648871	- 6.359039
27	West Devon and Cornwall	- 0.346884	- 9.996204		- 4.086882	- 12.430729	- 12.430729	- 8.085364

TNUoS generic Annual Load Factors (ALFs) for new technologies

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TNUoS Generic ALFs

Background

Annual load factor (ALF) is used with wider tariffs to calculate the charge for generators. It varies depends on technologies. CUSC defines the methodology for certain generic ALF calculation which is used when an individual power station that does not have three full charging years of output data.

Proposals for 2021/22 Generic ALFs for new technologies

Due to insufficient output information available to calculate generic ALFs for the new technologies, we propose:

- The generic ALFs for Tidal and Wave technology are updated based on latest data published by BEIS*
- Generic ALF for Solar technology is created based on latest data published by BEIS*
- Battery technology continues to be treated as ‘Pumped Storage’

ALF Publication Timetable

- Publish Draft ALFs by 30th November 2020 - Customers have 15 working days to notify us of any errors
- Publish Final ALFs, to be used in setting of 2021/22 TNUoS Final Tariffs, by 8th January 2021
- Any comments can be sent to: TNUoS.queries@nationalgrideso.com

Latest Digest of UK Energy Statistics (DUKES) 2020 data, published by BEIS

AOB & Close

Global security factor update

- The global security factor (currently 1.8) will be reset for 2021/22 TNUoS tariffs
- The new value has been re-calculated at ~1.755
- Discussions on the number of decimal place in September & October TCMFs
- We have also sought guidance from legal
- Three options have been considered –
  (1) status quo (1 d.p.) => 1.8
  (2) 2 d.p. to align with onshore expansion factors => 1.76
  (3) 8 d.p. to align with offshore expansion factors => 1.75548000

- We are minded to round the global security factor to two decimal places (i.e. 1.76 will be the new value)

- The new value will be applied on the November draft TNUoS tariffs for 2021/22