Decision

Update to the Transmission Constraint Licence Condition guidance

Publication date:	10 June 2024
Contact:	Graham Reeve
Team:	Wholesale market oversight and international
Email:	TCLC@ofgem.gov.uk

In December 2023 we launched a consultation on a number of proposed revisions to the guidance which sets out our approach to interpreting and enforcing the Transmission Constraint Licence Condition (TCLC).

This document sets out our decision to update the guidance following that consultation. It outlines the responses received to the consultation, and provides the rationale for our decision. Alongside this decision, we have also published to our website the updated TCLC Guidance, which takes effect immediately.

Any enquiries related to the text of this publication should be sent to Ofgem at:

10 South Colonnade, Canary Wharf, London, E14 4PU.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

Contents

1. Introduction 4

2. Background 7

Transmission constraints 7
The Balancing Mechanism 7
The TCLC 8
Recent compliance work in relation to the TCLC 10

3. Our decision 12

Overview 12
The scope of the TCLC 13
Types of transmission constraint 14
Visibility of transmission constraints 15
The use of system flags as an indicator of a transmission constraint period 17
The costs and benefits of being bid down 19
The relevance of the benefit a generator obtains in £ and £/MWh 24
The most expensive non-system flagged bid as a benchmark 28
Other profit and price benchmarks 30
Other responses 32

1. Introduction

1.1 Transmission constraints are any limits on the ability of the electricity transmission system (or any part of it) to transmit the power supplied on to the transmission system to where it is needed. Where transmission constraints occur, individual electricity generators, or groups of generators in particular areas, can hold a position of market power, with the electricity system operator (ESO) having limited options to manage the constraint other than reaching an agreement with the owners of those specific units to alter their planned output.

1.2 Standard licence condition 20A of the Generation Licence (the Transmission Constraint Licence Condition, or TCLC) exists to protect against this market power. By prohibiting licensees from obtaining an excessive benefit in relation to a reduction in generation in transmission constraint periods, it helps to keep down balancing costs – and, ultimately, consumers' bills.

1.3 We publish guidance to licensees and other interested parties on Ofgem's interpretation and approach to the enforcement of the TCLC. This guidance was first published in 2012 when the TCLC was introduced, and then updated in 2017 (the 2017 Guidance).[1]

1.4 Since 2017 the extent to which the ESO has needed to take action to manage transmission constraints has grown rapidly as the geographical and technological nature of the generation mix has changed, pushing constraint management costs higher. This trend is expected to continue.

1.5 In recent years we have on a number of occasions carried out compliance work in relation to potential concerns with specific generators' bid prices in transmission constraint periods. In some cases these enquiries have led to formal investigations, findings that licensees have breached the TCLC and financial penalties. This compliance work has brought to light some wider concerns about generators' compliance with (and interpretation of) the TCLC.

1.6 On 7 December 2023 we launched a consultation on a set of proposed updates to the TCLC guidance (the Draft Updated Guidance) designed to bring it up to date, and to provide generators with a greater level of detail in relation to our

[1] https://www.ofgem.gov.uk/sites/default/files/docs/2017/05/2017_tclc_guidance.pdf

expectations regarding compliance with the licence condition. This was in line with requests we had received from some market participants.

1.7 A total of 22 responses were received to the consultation. Having carefully considered those responses we have now updated the TCLC guidance and published this to our website (the Updated Guidance), with the new guidance taking effect from 10 June 2024.

1.8 We have decided to maintain a number of the proposed revisions to the text of the guidance set out in our consultation, and have provided our rationale for doing so throughout this decision document. We have also made some additions and amended text to provide further clarification in response to submissions received in response to the consultation.

1.9 This decision paper accompanies the publication of the Updated Guidance. It provides background to our decision to update the TCLC guidance, summarises the submissions received in response to the consultation, and sets out our response to those submissions. It also notes where we have made changes compared to Draft Updated Guidance as published on 7 December 2023.

1.10 The effect of the revisions in both the Draft Updated Guidance and the Updated Guidance are to bring the guidance up to date and to make the description given of the approach we take to interpreting and enforcing the TCLC more expansive. However, the wording of the TCLC itself, and the ultimate obligation on generators, remains unchanged since 2017.

1.11 Alongside the guidance consultation, we also on 7 December 2023 published a call for input, seeking views from industry on the question of whether any changes were required to the TCLC itself in order to ensure that it is as effective as possible in keeping bills down. While there was some support among respondents for the potential changes to the scope of the TCLC described in that document, there were also significant concerns raised by a number of generators in terms of the potential detrimental impact on competition and investment. We are continuing to consider next steps in relation to that call for input in light of the responses received, and expect to provide an update later in the year.

General feedback

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall quality of this document?

2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Are its conclusions balanced?
5. Did it make reasoned recommendations?
6. Any further comments

Please send any general feedback comments to [stakeholders Ofgem email address].

2. Background

2.1 In this chapter, we explain what the TCLC is, and the background to our decision to update the TCLC guidance.

Transmission constraints

2.2 The ESO is responsible for the secure real-time operation of the national electricity transmission system (NETS) in Great Britain.[2] Among other things, it is the ESO's responsibility to co-ordinate and direct the flow of electricity onto and over the NETS. A key consideration for the ESO when carrying out its role is the need to manage transmission constraints.

2.3 Transmission constraints as defined in the TCLC are any limits on the ability of the transmission system (or any part of it) to transmit the power supplied onto it to the location where the demand for that power is situated, such limit arising as a result of factors such as the need not to exceed the thermal rating of any asset forming part of the transmission system, or the need to maintain voltage on the system, or the need to maintain the transient and dynamic stability of plant, equipment and systems directly or indirectly connected to the transmission system.

2.4 Transmission constraints have become more prevalent over time, as the geographic and technological composition of the generation mix has changed. The impact of constraints – and the costs of resolving them – has been forecast by the ESO to continue to increase steeply in the coming years.[3] While work is underway to minimise the costs to consumers of managing constraints (including via the development of new balancing services), [4] these trends mean that the importance of the TCLC in protecting against the inherent market power which can arise in the presence of transmission constraints is greater than ever.

The Balancing Mechanism

2.5 The primary tool used by the ESO to manage transmission constraints and ensure that power flows across the NETS remain within the necessary bounds is the Balancing Mechanism (BM). In the BM, parties to the Balancing and Settlement

[2] It is our expectation that from summer 2024, the new National Energy System Operator will take on the role of the ESO, subject to a decision on the proposals set out in our statutory consultation (available at: https://www.ofgem.gov.uk/publications/national-energy-system-operator-neso-licences-and-other-impacted-licences-statutory-consultation).
[3] See for example ESO Modelled Constraint Costs, NOA 2021/22 Refresh, August 2022
4 For example, under the ESO's constraint management pathfinder

Code (BSC) – including all licensed electricity generators - submit one or more pairs of bids and offers. Bids represent the price at which the party would be willing to decrease its generation or increase its consumption of electricity for a given unit in a given half-hourly delivery period, while offers represent the price at which the party would be willing to increase its generation or decrease its consumption of electricity. Bid and offer prices are specified in £ per megawatt hour (£/MWh) of reduced or additional output or consumption that the ESO requires that a unit deliver (relative to the unit's expected output or consumption prior to the action being taken).

2.6 A unit's expected level of output or consumption in each half-hourly settlement period – prior to any actions taken in the BM – is indicated through parties' submissions of Physical Notifications (PNs), made in accordance with the Grid Code. The prevailing PNs at the point which is one hour prior to delivery (referred to as gate closure) are confirmed by the ESO as Final Physical Notifications (FPNs), and used for the purposes of taking any required balancing actions in the BM. For each half-hourly settlement period, the ESO may accept various sets of bids and offers, making payments to (or receiving payments from) different parties in exchange for them agreeing to alter their generation or consumption as compared to their FPNs.

2.7 In addition to the BM, the ESO also uses other balancing services to manage transmission constraints. This includes agreements with specific generators ahead of BM timescales to alter their generation, which are conducted under Schedule 7 of the Grid Trade Master Agreement.

The TCLC

2.8 The TCLC requires that generation licensees must not obtain or seek to obtain an excessive benefit from entering into relevant arrangements with the ESO in periods when a transmission constraint (as defined in the licence condition) occurs. In practice, this means that – where a transmission constraint occurs and a generation unit intends to export power – the licensee responsible for that unit must not submit bid prices in the BM at a level which would result in them obtaining an excessive benefit were that bid subsequently accepted by the ESO.

2.9 The objective of the TCLC is to protect against the exploitation of market power by generators operating in the presence of transmission constraints. Transmission constraints routinely lead to either individual generators or groups of generators in particular areas holding a position of market power in one or more settlement periods, with the ESO having limited options to manage the constraint other than

reaching an agreement with the owners of those specific units to reduce their planned output in those periods. If generators were free to take advantage of this market power in their agreements with the ESO, this would increase balancing costs (which are ultimately passed on to consumers) and create harmful incentives – encouraging further generation in those same areas or by generators with the same characteristics, exacerbating the constraints, and increasing system costs further.

2.10 The TCLC was first introduced in 2012 through powers under section 18 of the Energy Act 2010 for an initial period of five years. The original wording of the TCLC prohibited generators from seeking to obtain an excessive benefit in relation to reductions in electricity generation in transmission constraint periods (known as "Circumstance 2"). It also contained a further prohibition, requiring that licensees did not seek to create or exacerbate a transmission constraint by dispatching or withholding one or more generation units in circumstances where the generator had more economic options available to them (known as "Circumstance 1").

2.11 Following consultation in 2017,[5] Ofgem decided to extend the prohibition by introducing a new, permanent licence condition to the Generation Licence as Standard Licence Condition (SLC) 20A, in line with the licensing framework regulated by Ofgem. Updated guidance was issued alongside that licence condition (the 2017 Guidance).[6]

2.12 Unlike the previous obligation, the new licence condition no longer included the Circumstance 1 prohibition – ie no longer included an obligation regarding the creation or exacerbation of a constraint. This element of the TCLC was removed because the behaviour described under Circumstance 1 is captured by Article 5 of the Regulation on Energy Market Integrity and Transparency (REMIT).[7]

2.13 Also in 2017, the licence condition was amended such that the definition of a transmission constraint was widened to capture a broader set of limits on the ability of the NETS to transmit power. In particular, the original TCLC defined transmission constraint periods as capturing only limits on the NETS arising specifically as a result of the thermal, voltage or stability requirements of the

[5] https://www.ofgem.gov.uk/publications/statutory-consultation-transmission-constraint-licence-condition
[6] https://www.ofgem.gov.uk/sites/default/files/docs/2017/05/2017_tclc_guidance.pdf
[7] Article 5 of Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (Text with EEA relevance) (Retained EU Legislation).

NETS or equipment attached to it (in line with the definition of a transmission constraint which appears in the Transmission licence). In 2017 this was widened such that the list of factors cited in the licence condition – ie thermal, voltage and stability requirements – was no longer exhaustive. This change dealt with the possibility that as the system evolved, types of transmission constraints beyond those originally listed in the TCLC could arise – and thereby to future-proof the obligation.

Recent compliance work in relation to the TCLC

2.14 In recent years, in light of the increasing cost of constraint management and evidence of potentially excessive bid prices, Ofgem has carried out significant program of compliance work looking at possible concerns with different generators' bid prices in transmission constraint periods. In some cases, this has resulted in Ofgem making formal findings under the Electricity Act 1989 that certain generation licensees' have breached the TCLC. In other cases, Ofgem's compliance work has resulted in admissions by licensees that they have breached the TCLC which have then been resolved via the Alternative Action process,[8] without Ofgem taking any formal enforcement action.

2.15 In particular:

- In October 2021, we opened two formal investigations: one into bid prices submitted by SSE Generation Limited in relation to Foyers pumped storage power station, the other into bid prices submitted by EP SHB Limited in relation to South Humber Bank gas-fired power station.[9] Both investigations concluded in 2023, resulting in findings that the two licensees had breached the TCLC, and the requirement that the generators make a payment of £9.78m and £23.63m respectively into the Ofgem consumer redress fund as a consequence; and
- Between January 2023 and May 2024, we closed three compliance reviews via Alternative Action following admissions by Drax Pumped Storage Limited, Dorenell Windfarm Limited and Beatrice Offshore Windfarm Limited that they

[8] This process is described in further detail in our Enforcement Procedural Guidance https://www.ofgem.gov.uk/publications/enforcement-guidelines
[9] See https://www.ofgem.gov.uk/publications/notice-penalty-sse-generation-limited and https://www.ofgem.gov.uk/publications/investigation-ep-shb-limiteds-compliance-tclc for further details.

had breached the TCLC.[10] As a consequence of the breaches, the generators made payments into the Ofgem consumer redress fund of £6.13m, £5.53m and £33.14m respectively.

[10] See https://www.ofgem.gov.uk/publications/ofgem-closes-its-compliance-engagement-drax-pumped-storage-limited-relation-breach-transmission-constraint-licence-condition-tclc ; https://www.ofgem.gov.uk/publications/compliance-dorenell-windfarm-limited-tclc; and https://www.ofgem.gov.uk/decision/compliance-beatrice-offshore-windfarm-limited-tclc

3. Our decision

Overview

3.1 Our consultation of 7 December 2023 described a number of proposed changes to the TCLC guidance. These revisions were intended to both bring the guidance up to date, and to make the guidance more expansive, providing generators with a greater level of detail in relation to our interpretation of and approach to enforcing the TCLC. The changes reflected developments in the market since the guidance was last updated in 2017, and explicitly addressed concerns in relation to the approach some licensees were taking to compliance with the TCLC which had come to light in the context of recent compliance work.

3.2 In order to help prompt industry views on those proposed changes, we included in the consultation document a number of specific consultation questions, highlighting areas where we would particularly welcome feedback. These questions are set out in the box below.

Consultation questions from 7 December 2023

Q1. Are there additional areas of background that respondents would find it useful to have covered in the guidance?

Q2. Are there areas where respondents consider that the guidance would benefit from additional detail on Ofgem's interpretation of or approach to the enforcement of the TCLC?

Q3. Are there any areas where respondents consider that the proposed changes to the guidance are unclear?

Q4. Are there any examples of material costs or benefits of curtailment that are missing from Table 1?

Q5. Are there circumstances which could objectively justify bid prices that would otherwise be excessive, which are not captured in the updated guidance?

Q6. Do respondents have any other comments on the proposed changes to the TCLC guidance?

3.3 In total, 22 responses were received to our consultation, of which 7 were confidential. Those responses which were non-confidential have been published on our website.

3.4 Many stakeholders welcomed our proposal to update the guidance and to provide further detail regarding Ofgem's approach to interpreting and enforcing the TCLC, in some cases noting the length of time which had elapsed since the previous update. For the reasons set out in paragraph 3.1 above (which are expanded upon throughout this document), we have decided to proceed with making an update to the TCLC guidance at this time.

3.5 In a number of cases respondents also raised significant concerns with parts of the revised guidance. In the remainder of this chapter, we describe the key points raised in response to the consultation (organised by theme, arranged broadly in the order that each issue appears in the Updated Guidance), and set out our view on these submissions. We also note where we have and have not decided to make any changes to the TCLC guidance as a result of the submissions. For the convenience of licensees, we have in addition published on our website a version of the Updated Guidance with changes compared to the draft published in December 2023 highlighted.

The scope of the TCLC

3.6 In its response to the consultation, one party asked for clarification as to whether energy storage projects are considered to be generation within the context of the TCLC. Another respondent queried whether licence exempt generators would be covered by the TCLC. We have decided to add a footnote to paragraph 1.10 of the Updated Guidance to further clarify that the TCLC applies to all licenced electricity generators, including storage projects that hold an electricity generation licence. Licence-exempt generators are not subject to the requirements of the TCLC at present. Notwithstanding this, our expectation is that these generators should take steps to ensure that they do not exploit their position behind transmission constraints in order to obtain excess profits (and - as described in the Updated Guidance - these generators do have other obligations including under REMIT and Competition Law which place restrictions on their conduct in the BM in transmission constraint periods).

3.7 One respondent requested that Ofgem clarify where responsibility for TCLC compliance sits where BM prices are submitted by a party other than the licensee. We have decided to add a footnote to paragraph 1.10 of the guidance to clarify that it is the generation licensee which remains ultimately responsible for

compliance with the TCLC, irrespective of whether the task of submitting and/or determining bid prices is managed via a different party, appointed by the licensee.

3.8 Some respondents asked for further detail around the link between REMIT and the TCLC, including which of the requirements would take precedence if a generator has breached multiple rules, and whether the same conduct could breach more than one set of regulations. We have decided to make some amendments to the text in the guidance to make clearer where some of the similarities and differences between REMIT and the TCLC lie. We have also clarified that if a generator were considered to have breached multiple regulations, then rather than any given set of requirements taking precedence, it would be open to Ofgem to open multiple investigations in parallel.

Types of transmission constraint

3.9 One respondent submitted that because the definition of a transmission constraint in the licence condition is so broad, the only way that market participants can be sure that they are compliant with the TCLC is to assume that all bids are subject to the licence condition. It therefore requested that Ofgem publish a list of all balancing actions which would be covered by the TCLC.

3.10 One of the proposed changes included in the Draft Updated Guidance was to include significantly more information about the types of transmission constraint which would be captured under the TCLC than was presented in the 2017 Guidance. We have decided not to go beyond this and to publish an exhaustive list of all specific balancing actions which would be covered by the TCLC. This is for the same reason that an exhaustive list of the specific limits that would constitute a transmission constraint was specifically removed from the licence condition in 2017 – ie to deal with the possibility that as the system evolves, other types of transmission constraints could arise and thereby to future-proof the obligation.

3.11 Referring to paragraph 2.9 of the Draft Updated Guidance, one respondent submitted that Ofgem should not include economic considerations in addition to purely technical considerations in its assessment of constraints covered by the TCLC, as generators will not know the cost of the different system management options available to the ESO.

3.12 We have decided not to amend the relevant part of the guidance. First, we note that considerable transparency around the cost of different types of balancing actions is in fact available to generators, and so it is not clear to us that the

submission is correct. Second, irrespective of what information is available to generators, a review of the alternatives available to the ESO will commonly be something that Ofgem will consider as part of an investigation. This is because we consider it to follow from the purpose of the TCLC that when assessing potential breaches of the TCLC, our focus should be on those constraints which can only be practicably and/or economically resolved by the ESO by instructing either a single generator or a particular group of generators connected to a specific part of the network to reduce their output.

Visibility of transmission constraints

3.13 A number of respondents raised concerns about their lack of visibility as to when their bids would relate to a transmission constraint period, and the implications of this lack of visibility for the requirements of the TCLC. In particular, among the concerns raised were:

- That the uncertainty as to whether a constraint exists could force generators to price in line with the TCLC in all periods, not just transmission constraint periods. This would go beyond the intended scope of the TCLC and reduce the incentive of companies to invest in increased flexibility;
- That expecting generators to price according to the TCLC when they do not know in advance if a transmission constraint exists runs counter to a principle of good regulation – that licensees should know when they are at risk of breaching an applicable requirement; and
- The significant limitations of the information that is currently available about transmission constraints, including that this can be inaccurate, lack specificity and/or only become available retrospectively.

3.14 In response, we note that it has been the case that generation licensees have not had perfect foresight of the existence of transmission constraints since the TCLC was first introduced. This was explicitly recognised in the original decision giving rise to the introduction of the TCLC, which noted the difficulties of providing advance notice of constraints, and concluded that generators did not require this information to judge whether they would be acting in breach of the licence condition in light of the information available regarding factors that influence transmission constraints from a number of sources.[11]

[11] https://assets.publishing.service.gov.uk/media/5a79e701e5274a18ba50fa48/5771-government-response-to-the-transmission-constraint.pdf page 9

3.15 Our position remains in line with this, and with what was set out in the Draft Updated Guidance. We consider that, while limitations exist, significant information regarding the occurrence of transmission constraints is nonetheless available to generators, allowing them to form an expectation as to whether they are likely to be bidding in relation to a transmission constraint period (and so need to take appropriate steps to ensure they do not obtain or seek to obtain an excessive benefit via their bid prices).

3.16 Notwithstanding this, in order to provide further clarity with regards our existing practice in enforcing the TCLC, we have decided to add to paragraph 2.20 of the Updated Guidance further text to reflect that we would expect to take into account whether a licensee could reasonably have been expected to anticipate that a transmission constraint period was likely to have been in effect when deciding whether to open an investigation in the first place.

3.17 A number of generators said that the ESO should publish more information about constraints, including in real time. One respondent requested that distribution network operators should do the same. It was also requested that Ofgem provide more detail about how it considers market participants should determine whether they are likely to be subject to a transmission constraint when submitting bids, and how Ofgem would reach a view on whether a generator could have reasonably anticipated a constraint period.

3.18 In terms of how Ofgem would reach a view on whether a generator could have reasonably anticipated a constraint period, this would depend on the circumstances of the case. In general, we would expect to base our conclusions on an assessment of the information that was available to the generator at the time[12] as well as the steps taken by the generator to seek out and understand that information. We have decided to add a footnote to paragraph 2.20 of the Updated Guidance so as to provide the additional clarification requested.

3.19 In terms of what steps Ofgem considers a generator should take when determining whether it is likely to be subject to a transmission constraint when submitting bids, we note that the Draft Updated Guidance already included some (non-exhaustive) examples of the types of information which we would consider relevant. We have decided not to provide a fuller description of exactly what

[12] To give an example, in previous compliance work we have taken into account factors such as the proportion of a generator's bids which were system flagged, and whether the generator had been able to observe that it was having more bids accepted than its rivals on an ongoing basis, despite its prices being more expensive.

information we consider that a generator should use and how because this would inevitably not capture every circumstance that a generator may find itself in; would be at risk of becoming outdated as, eg, the nature of constraints or the information that is available changes over time; and could be overly restrictive in terms of determining how generators should approach this task.

3.20 Finally, with respect to the information published by the ESO regarding constraints, we note that providing transparency of operational decision making is a key part of its role, as set out in its RIIO-2 business plan. We are also conscious of the potential practical challenges associated with publishing such information (given that actions are being taken in real time, and given the number of actions being taken); and the potential commercial implications of doing so. We have highlighted to the ESO the requests received from industry for greater transparency regarding transmission constraints as part of this consultation process, and asked it to consider what further information might in principle be provided in this area. We will also consider the question of whether the right level of information is published with respect to transmission constraints as part of our wider programme of work looking at whether changes to the TCLC are required, following on from the call for input published in December.

The use of system flags as an indicator of a transmission constraint period

3.21 A number of respondents raised concerns regarding new text in the Draft Updated Guidance which noted that system flags could be a relevant indicator of whether a generator is likely to be bidding in relation to a transmission constraint period.

3.22 In particular, some respondents noted that the system flagging process is not designed for the purpose of identifying transmission constraint periods as defined in the TCLC. Related, concerns were raised about the statement in the Draft Updated Guidance that even some bids which were not flagged may relate to a transmission constraint as defined in the TCLC.

3.23 In response, we note that it is correct to say that the system flagging process is designed to identify actions to be excluded from calculation of imbalance charges, rather than to inform generators of periods in which transmission constraints as defined under the TCLC occur. Nevertheless, there is a close overlap between the types of bids in the BM which are excluded from the calculation of imbalance charges and those which are likely to be subject to the requirements of the TCLC. As such, where a generator has a bid accepted, and that bid is retrospectively

system flagged, that provides an important signal to the generator that its bid was likely to have been subject to the requirements of the TCLC.

3.24 We noted in the Draft Updated Guidance the possibility that on occasion bids which are not system flagged may nevertheless relate to a transmission constraint as defined in the TCLC. This arises because the definition of a transmission constraint in the TCLC differs to the list of balancing actions that will be system flagged as set out in the system flagging methodology document,[13] capturing a wider set of limits. In light of the submissions received in response to the consultation, we have decided to add a footnote at paragraph 2.18 to the Updated Guidance to explain this.

3.25 We would expect scenarios where a bid was not flagged but did relate to a transmission constraint period to be uncommon. As set out in the guidance we will take into account in our assessment of the seriousness of a breach the information available to a generator – including where applicable the signal given by that generator's bids not being system flagged, and the existence or otherwise of any alternative information which would have provided an indication to the generator that the bid had been accepted in relation to a constraint period.

3.26 Other respondents highlighted that system flags are only known retrospectively and can be subject to errors, limiting their usefulness to a generator as a source of information as to whether it is bidding in relation to a transmission constraint period. However, we do not consider that this undermines the position taken in the Draft Updated Guidance that system flags can be used as a key source of information as to the likely existence of a transmission constraint period. In particular, while it is correct that generators will only become aware as to whether a bid has been system flagged after the event, the observation of a system flag in a preceding period can inform a generator's expectations about the likelihood of a bid being system flagged under similar conditions in a subsequent period. Furthermore, ESO reporting indicates that it is very rare for queries to be raised regarding the accuracy of system flags by the ESO control room, post event analysis or market participants under the relevant processes, and even rarer for system flags to be found to be incorrect and retrospectively updated.[14]

3.27 One respondent said that it was not reasonable to expect licensees to familiarise themselves with all aspects of system operations to comply with the TCLC.

---

[13] April 2024 version of the ESO's system management action flagging methodology available here: https://www.nationalgrideso.com/document/315611/download
[14] See for example https://www.nationalgrideso.com/document/283341/download

However, we do not agree with the premise that this is required by the Draft Updated Guidance (or the TCLC more generally). What we do expect is that licensees take steps to understand whether their bids relate to transmission constraint periods (with reference to the definition set out in the TCLC licence condition), in light of the information that is available to them.

3.28 Finally, one respondent noted that for a given settlement period, generators can have both flagged and unflagged bids accepted, creating a lack of clarity for licensees. While correct, we consider that the fact that any part of a generator's bid volume accepted in a settlement period is being system flagged should provide an indication that it is likely to be bidding in relation to a transmission constraint period, and that it should set its bid prices accordingly.

The costs and benefits of being bid down

3.29 Table 1 of the Draft Updated Guidance set out various examples of the costs and benefits of being bid down for different generation technologies – a key consideration when we are assessing whether a given bid price is likely to be excessive. A number of generators made comments on this Table, included noting a number of other costs that they considered to be relevant, and asking for clarifications around terminology in some areas.

3.30 In some cases, it appeared to us that the potential costs of curtailment cited by respondents could at least in some circumstances be material, and so we have decided to add them to the Updated Guidance (either in Table 1, or at paragraph 2.33). These were:

- The potential opportunity costs for renewable generators associated with foregone Renewable Energy Guarantees of Origin certificates;
- The potential costs to thermal generators associated with the lower efficiency of running at lower levels of output;
- The potential costs associated with the risk of failing to deliver instructed actions;
- The potential costs associated with a bid acceptance where that reduction in output risked the generator no longer being able to meet its obligations under an ancillary balancing services contract;
- The potential costs associated with a turbine being unable to resynchronise following a bid acceptance; and

- The long term impact of bid acceptances on asset and component lifespan due to increased strain from operating outside of normal operation windows.

3.31 One respondent asked for greater clarity around the following terms used in Table 1: "rent charges", "spill" and "charging costs". To provide this clarity, we have expanded the description of these examples of the potential costs and benefits of being bid down in the table in the Updated Guidance.

3.32 It was not clear that the costs highlighted to us in some respondents' submissions would be incurred specifically as a result of a bid acceptance in a transmission constraint period, or would be widely applicable to licensees. For instance, one respondent highlighted the administrative and control room costs associated with bid acceptances. However, the requirement for generators to have the capacity to deliver reductions in generation in response to a bid acceptance is a cost that would have to be incurred irrespective of whether or not the TCLC existed (noting that indirect costs are discussed elsewhere in the guidance document). Two respondents highlighted potential non-delivery charges under contracts which might be held by the generator if their output were to be reduced following a bid acceptance, however whether any such charges existed would be very specific to the commercial arrangements of the individual licensee. In these cases, we have therefore decided not to amend the guidance.

3.33 Other respondents highlighted potential costs that were specific to particular technology types but in relation to which we did not have evidence to judge likely materiality, and so which we have decided not to add to the Updated Guidance. This included potential curtailment costs specifically relating to batteries and biomass units.

3.34 We note that the costs and benefits listed in the Updated Guidance are examples only, and the list is neither intended to be exhaustive, nor is it the case that all costs and benefits listed will necessarily apply to (or be material for) all generation units of a particular technology type. As such, if a generator were able to demonstrate why an alternative cost was material and directly related to bid acceptances in transmission constraint periods (including any of the costs cited in consultation responses), then we would expect to take that into account in our assessment under the TCLC, irrespective of whether it was explicitly cited in the Updated Guidance. Equally if the evidence available did not support that a potential cost of curtailment listed in the Table was material for a given generator, then we would not take it into account in our assessment of the excessiveness or otherwise of the licensee's prices, despite that cost being cited in the Updated Guidance.

3.35 A number of respondents pointed to other potential reasons why generators may submit what might otherwise appear to be excessive bid prices. This included:

- The potential added costs and risks associated with bid acceptances where a unit is in a testing or commissioning phase.
- Particular engineering or safety issues associated with bid acceptances. For instance locational gas trades that require the consumption of gas at a particular location; engineering issues which would result in a subsequent start being impossible without a significant outage; or physical considerations when ramping two units close together which mean that bids on one of the units must be avoided.

3.36 It appeared to us that engineering issues of this type – particularly at the time a unit was in a testing or commissioning phase - could at least in some circumstances result in material specific costs associated with being bid down, and so we have decided to add a reference to paragraph 2.36 of the Updated Guidance, noting that factors of this type would be something that we would take into account in our assessment of whether a generator's bid prices were excessive under the TCLC. With regards safety issues, we note that paragraph 2.29 of the Draft Updated Guidance already noted the possibility that on rare occasions it may be necessary for generators to submit what are on face value excessive bid prices due to environmental and other regulatory obligations.

3.37 One respondent noted that batteries providing frequency response may submit very expensive bid prices to ensure that they have sufficient volumes to provide the contracted service. These bids are not intended to be accepted, and so should not be treated as subject to the TCLC. However, while we recognise that there may be occasions where circumstances are such that the cost to a generator of a bid acceptance in a particular transmission constraint period is very high, in such instances our expectation remains that the generator should submit bid prices that remain reflective of the (significant) costs of being bid down. We note in this respect that on occasion it may be necessary for the ESO to accept bids even where the associated prices are very high – and so were a generator to submit bid prices in these circumstances that were not cost reflective, this could still result in a consumer harm. A generator that submits an extremely expensive bid price in a transmission constraint period that would cause it to obtain an excessive benefit if it were accepted would still be in breach of the TCLC, even if its intent was to price itself out of the market. We have decided to add text in paragraph 2.41 of the Updated Guidance clarifying this point.

3.38 One respondent requested that – in light of the lack of understanding within industry of the interplay between constraint prices and foregone subsidies – the TCLC guidance provide greater detail about the different impact of bid acceptances on subsidised generators under the Contracts for Difference and Renewable Obligations schemes. To improve clarity around this point, we have added some further detail to paragraph 2.35 of the Updated Guidance noting that the subsidy costs / benefits of curtailment can vary between sites depending on their specific subsidy arrangements.

3.39 A number of generators said that it was impossible for them to know how long they might be bid down for when estimating their curtailment costs, as this was outside of their control. They said that it was unclear what a reasonable expectation might be in these circumstances. One generator argued that the part of the Draft Updated Guidance that referred to the importance of generators taking the likely duration of bid acceptances into account (paragraph 2.35 of that document) should be removed for this reason.

3.40 While we agree that the extent of any bid acceptances is outside of generators' control and may be subject to significant uncertainty, this does not mean that the baseline assumption used by a licensee to estimate expected curtailment costs should be that the bid acceptance will only last for a single settlement period.

3.41 Instead, we would expect generators' assumptions in this regard to be based on historic patterns of bid acceptances, either for the same or comparable generators. In light of the comments received, we have decided to add a note regarding the potential source of assumptions around how long bid acceptances may last to paragraph 2.39 of the Updated Guidance. If a generator were to instead set its bids on the basis that bid acceptances will only ever last for a single settlement period, then this risks a significant over-recovery of costs, which may amount to an excessive benefit (as costs that are driven by the number of consecutive periods that a unit is curtailed for, rather than the number of settlement periods per se, will be recovered multiple times).

3.42 Some respondents noted that new generators can face significant uncertainty around curtailment costs in the early years of operation. While it is not clear to us that this uncertainty will last for years, we do agree that licensees may face particular uncertainty immediately after a unit begins operation, and we have decided to add to paragraph 2.37 of the Updated Guidance a note to acknowledge that this will be something we would expect to take into account in our assessment. The same parties submitted that where cost information is not available for a newly operational site, benchmarking can be helpful. We agree

that in such a scenario, benchmarking against comparable unconstrained generators may be one relevant input for a licensee to consider when setting its bid prices in transmission constraint periods. We would suggest however that it will generally also be possible to model the expected costs and benefits of being bid down based on a set of reasonable assumptions about the generation asset and patterns of bid acceptances, which can then be updated over time as more information becomes available to the licensee.

3.43 Some respondents raised queries regarding the reference in the Draft Updated Guidance to the relevance of cost efficiency. One party argued that this went beyond the original intention of the TCLC, while another respondent said that a comparison of efficiencies between frequently constrained and less frequently constrained generators would be fundamentally flawed. Another respondent requested additional clarity on how cost efficiency would be taken into account, given that a generator could not know what costs were faced by its competitors.

3.44 As set out in the Draft Updated Guidance, we consider that the relevance of an assessment of the efficiency of costs that are passed through by licensees in their bids in transmission constraint periods follows directly from the purpose of the TCLC. This is because one way that market power may result in consumer harm is due to cost inefficiency arising as a result of the lack of pricing pressure faced by the company enjoying an absence of competition. Notwithstanding this, we would not expect to carry out an assessment of cost inefficiency as part of every TCLC investigation, nor do we expect generators to carry out a comparison of their costs with those of their rivals in order to comply with the TCLC. Rather, our expectation is that licensees take steps to keep any costs of curtailment that they seek to pass through via their bid prices in transmission constraint periods to a minimum – and if evidence came to light that certain costs that a licensee was seeking to pass through via its bid prices in transmission constraint periods were not reasonable, either because they appeared particularly high or did not appear to be a necessary cost of curtailment, then we would seek to take that into account in our assessment. We have decided to amend paragraph 2.42 of the Updated Guidance to clarify this point.

3.45 One respondent requested that Ofgem outline exactly what generators should document in terms of their costs/prices when considering their compliance with the TCLC, and to share some best practice. While Ofgem does not consider it appropriate to prescribe exactly how generators should document their approach to setting bid prices in constraint periods, so as to help generator's better understand Ofgem's expectations here we have decided to add to paragraph 2.40

of the Updated Guidance a footnote listing some examples of the types of evidence which we might expect to underpin a generator's approach to setting its bid prices in constraint periods.

3.46 Some respondents raised concern with the reference in the Draft Updated Guidance to the importance of generators setting bid prices that are reflective of the benefits of avoided subsidy payments under the Contracts for Difference scheme. It was noted that this could encourage the ESO to bid off renewable generation ahead of thermal generation where wholesale prices are elevated, as well as potentially distorting imbalance prices. However, we note that the requirement for generators to not obtain (or seek to obtain) an excessive benefit in transmission constraint periods already exists in the TCLC – including where that benefit arises as a result of avoided subsidy costs. The purpose of the TCLC is limited to ensuring that licensees that are subject to a transmission constraint do not obtain an excessive profit by virtue of their market power. Separately, work is ongoing to consider a modification to the Balancing and Settlement Code which is related to potential distortions in the merit order arising from the interaction between the design of the BM and the CfD scheme.

The relevance of the benefit a generator obtains in £ and £/MWh

3.47 A number of respondents raised concerns about paragraphs 2.38 to 2.40 of the Draft Updated Guidance which referred to the profit obtained by a generator measured in pounds as being a relevant consideration in our assessment of the TCLC. In summary, the concerns raised were:

- The practical difficulty to a generator of limiting its profits in £ given in particular that these would depend on bid acceptance volumes, which are not known;
- The lack of clarity about how Ofgem would expect bid prices to be adjusted over time in response to historic bid acceptances to ensure the profit gained in £ was not excessive – including what actions Ofgem would expect a generator to take where a constraint persists;
- The implication that requiring generators to monitor profits in £ could require them to submit bid prices cheaper than their rivals in order to avoid exceeding a backwards-looking cumulative profit measure, and that this could put those generators at a disadvantage; and
- That the interpretation proposed by Ofgem was inconsistent with the licence condition itself.

3.48 However, having considered these submissions carefully, our view remains that the benefit obtained (or which would be obtained) by a generator in £ in transmission constraint periods is one – although not the only – relevant consideration when assessing whether its bid prices are excessive.

3.49 This follows directly from the objective of the TCLC, which is to protect against the exploitation of market power by generators operating in the presence of transmission constraints. Our concern is the risk that if (a) the same profit margin in £/MWh were priced into bids by a constrained generator as an identical generator that was not typically bidding in transmission constraint periods and (b) the transmission constraint resulted in the constrained generator having a particularly large volume of bids accepted, then the constrained generator would end up earning a much more significant profit / contribution to indirect costs in £. As a result, rather than it being prejudiced (as was suggested in the submissions received in response to our consultation), failing to take into account profits in £ could instead risk putting the constrained generator at a considerable advantage to its rivals as a direct result of the market power it enjoyed due to its position behind a constraint.

3.50 We acknowledge that generators can face considerable uncertainty about bid acceptance volumes – both with respect to the volume of bids that the generator will in fact have accepted in transmission constraint periods, and how many bids it would have had accepted in those same periods if it were not subject to a transmission constraint. We will take this uncertainty into account in our assessment – and in light of the comments received in response to the consultation, have decided to add a note to paragraph 2.46 of the Updated Guidance to confirm this, and in this way provide further clarity around our approach to interpreting and enforcing the TCLC.

3.51 Responding to the requests for further guidance raised in the consultation responses, we have also decided to add to the Updated Guidance at paragraph 2.47 further text to make clear that we would not expect a licensee to price bids at a loss in order to compensate for a temporary over-recovery arising as a result of bid volumes exceeding the expected level (just as we would not expect generators to price bids at a higher profit margin in order to compensate for a temporary under-recovery arising as a result of bid volumes coming in under forecast). However, we do expect licensees to base any forward-looking assumptions they make around bid acceptance volumes on an appropriate and well-evidenced methodology; and to keep bid acceptances and the profits obtained in transmission constraint periods under close review. In the event that

a generator observes unexpectedly large bid volumes or high profits as a result of a transmission constraint, and this indicates inadequacies in the licensee's previous forecasts, then it should update its bid prices without delay to reflect this, and so ensure that any benefit that the generator obtains in subsequent transmission constraint periods does not significantly exceed what would be expected absent any constraint.[15] For the avoidance of doubt, this could in principle mean that generators take actions such as making bid prices less expensive over time and/or submitting bid prices that are cheaper than their rivals in response to a persistent constraint leading to unexpectedly high bid acceptance volumes.

3.52 We do not agree that taking the profit that a generator would obtain in £ into account in our assessment of the TCLC is inconsistent with the wording of the licence condition. The licence condition does not address whether the benefit in question should be measured in £/MWh or £, and does not dictate the factors that Ofgem should take into account in its assessment of whether a given benefit is excessive (including the relevance or otherwise of the persistence of any excess profit over time).

3.53 In terms of the length of time across which Ofgem might consider the profits obtained by a generator, one respondent queried whether Ofgem would isolate single settlement periods, or assess bids across a wider timeframe. Two respondents submitted that Ofgem should be looking at excessive benefits over a period of at least a year, while another respondent suggested a horizon of 5 to 7 years to fit with the investment cycle of the energy market.

3.54 In light of respondents' requests for greater clarity on this point, we have sought to provide greater detail of our approach at paragraph 2.30 of the Updated Guidance. A transmission constraint period in the TCLC is defined as any period of time, regardless of the duration, when a transmission constraint occurs. In practice, while we would not rule out looking at the benefit that a generator obtained or sought to obtain in an individual settlement period (particularly a period with extreme prices), we would generally expect to consider generators' pricing behaviour over longer timeframes than this. By way of illustration, in previous enforcement and compliance work, our analysis has focused on pricing behaviour in time periods ranging from around a year up to around three years.

[15] In such a scenario, the licensee may also want to consider pro-actively contacting Ofgem to explain the circumstances that have led to it obtaining what might –based on a retrospective analysis – appear to have been an excessive benefit.

3.55 This is not, however, to say that an excessive benefit would need to have been sustained over a period of more than one year for it to be considered of concern from the perspective of the consumer harm that the TCLC is designed to prevent. The most appropriate period will instead depend on the circumstances of the case, including factors such as the extent of the excessive benefit that is considered to have been obtained; the length of time for which a particular bid price policy was in place; and the pattern over time of bid acceptances in constraint periods for the given generator.

3.56 Two respondents questioned whether Ofgem's logic as set out in the Draft Updated Guidance might imply that a generator would be permitted to recover the same overall profit in £ from a single flagged bid as the profit earned across all of its unflagged bids in a given time horizon. However, this appears to misunderstand the relevant counterfactual which is used when assessing compliance with the TCLC, as set out in the Draft Updated Guidance. In particular, the relevant comparison for assessing compliance with the TCLC is not the benefit that the generator would have obtained outside of constraint periods – but rather the benefit that the generator would have obtained in those same settlement periods, but in the absence of any transmission constraint.

3.57 One respondent queried whether the references in the Draft Updated Guidance to a comparison of overall profits in £s was consistent with standard definitions used in market power and market abuse, which are typically expressed as a producer's ability to charge higher prices than would be the outcome of a perfectly competitive market. As the Draft Updated Guidance made clear, we consider that price benchmarks can provide a useful reference point to an assessment of whether a generator has obtained an excessive benefit. However, we do not agree that this implies that benchmarks based on profits (either in £/MWh or £m) cannot also be useful, and we note that metrics based on profits as measured in a range of different ways (including £ per unit, absolute £s and %) are routinely calculated and considered by authorities in market power investigations in other domains.

3.58 One respondent cautioned that the proposal to benchmark the overall profit obtained by a generator could risk distortions where the units being considered are of different sizes, as a larger unit will accrue a greater profit in £ at a given bid price due to its size. Where carrying out comparisons between generation units we would generally expect to take this factor into account, noting that this could in principle also affect the volume of bids that we would expect the unit to have had accepted in the same settlement periods absent any constraint.

The most expensive non-system flagged bid as a benchmark

3.59 Some respondents said that where a generator submitted a bid price in a constraint period that would have been accepted absent the constraint – due to it being no more expensive than the most expensive bid that the ESO was subsequently observed to have accepted in that period which was not system flagged – then that bid price should never be excessive under the TCLC.

3.60 One respondent argued that if the updated guidance prohibited such bids, this would remove the scope for generators to earn infra-marginal rent on constrained bids, which was not proportionate to the intended objective of the TCLC. The onus on licensees to bid cost-reflectively in constraint periods placed them at a disadvantage relative to unconstrained generators.

3.61 We do not agree that where a generator submits bid prices that are no more expensive than the price of the most expensive non-flagged bid accepted by the ESO in the same period that those bids will necessarily not be excessive, and have decided to add further text to paragraph 2.53 the Updated Guidance to confirm our position on this point. This is because, as set out at paragraph 2.26 of the Draft Updated Guidance, the key question underlying our analysis of whether a generator has obtained an excessive benefit when assessing TCLC compliance will be whether the benefit that the generator has obtained (or sought to obtain) is significantly greater than that which would have been expected absent the transmission constraint. However, the retrospectively observed 'marginal' price will typically not provide a reliable guide to the level of benefit that a constrained generator would have been able to capture in each period absent the constraint.

3.62 One reason for this is that the cost to some generators of being curtailed may exceed that marginal price. In this case, we would not expect that generator to have bid at the marginal level absent the constraint, as this would have caused it to make a loss had the bid been accepted. Using this price as a benchmark in this case could therefore incorrectly give the impression that those generators' bid prices were set at a level which would have given rise to an excessive benefit.

3.63 In other cases, this benchmark could exceed the level of benefit that we would expect a generator to obtain absent a transmission constraint. One reason for this is that because of the significant uncertainty around the ESO's requirements and the prices of their rivals in any given period, generators that are not subject to a transmission constraint typically face a trade-off. On the one hand, they can choose to submit more expensive prices, increasing their profit if the bid is

accepted, but reducing the probability of the bid being accepted if the ESO's requirements are less than anticipated or rivals submit cheaper prices than expected. On the other hand, they can submit less expensive bid prices, increasing their chance of having a bid accepted, but sacrificing some profit in the process.

3.64 The effect of this trade-off is that in practice we see significant variation in the bid prices submitted by different generators in any given settlement period, with most of those units having bids accepted in the period submitting prices that are less expensive than what ultimately turns out to be the marginal level. A generator which sought to maximise profit by setting its bid prices at the very top of the expected acceptance range in every settlement period would frequently not have a bid accepted at all.

3.65 In contrast, a generator behind a transmission constraint does not face the same trade-off. This is because the existence of the transmission constraint has the effect that even where the licensee submits relatively expensive bid prices, the ESO will have few economic alternatives available to it other than accepting the bid of that generator – irrespective of the prices of its competitors or the overall balancing requirement of the ESO.

3.66 The implication of this is that using the marginal price as a benchmark would likely overstate the price at which the generator would likely have had bids accepted absent the transmission constraint – and therefore could overlook instances where a generator has in fact obtained an excessive benefit.

3.67 Another reason why a benchmark based on the marginal price could exceed the level of benefit that we would expect a licensee to obtain absent a transmission constraint is that on occasion the bid acceptance giving rise to the marginal price may be driven by a particular balancing requirement of the ESO, and which the ESO was willing to pay a premium for. In these circumstances, this price would not provide a good indication of the benefit that the constrained generator would have been able to obtain absent the constraint, unless it was able to fulfil that same specific balancing requirement.

3.68 The above is not however to say that the prices of rival generators can never provide a useful benchmark when considering the excessiveness or otherwise of a licensee's bid prices. This fact was also reflected in the Draft Updated Guidance, which refers to such benchmarks as indicators which may be considered when determining whether an excessive benefit has been obtained. For example, in

previous investigations we have used as relevant benchmarks the average prices or profit margins of groups of comparable generators.

Other profit and price benchmarks

3.69 Some respondents asked for further detail about how exactly Ofgem would carry out any benchmarking of prices and profits, including asking it to clarify how it would choose between the benchmarks referenced in the guidance; to give examples of cases where it would not consider a price to be excessive; and to clarify the exact circumstances in which it would consider a generator would be considered comparable.

3.70 We have decided not to provide further guidance on these points. This is because our assessments must necessarily take into account the circumstances of any given case, and which benchmark or benchmark(s) are relevant may vary considerably depending on factors such as the nature of the technology, location and age of the generation unit in question; the existence of potential comparators; as well as the information that is available to us as the regulator. We note that penalty notices published in 2023 relating to previous TCLC investigations provide a summary of some of the benchmarks that we considered to be relevant in those specific cases.

3.71 Two respondents noted that information on comparable generator profits – listed in the Draft Updated Guidance as a possible benchmark - are not available to licensees. We agree that generators will generally not hold specific information on their competitors' profit levels. However, in some cases it may be possible for licensees to form estimates of competitors' profit based on a combination of information on common input costs and modelling assumptions, and additional insight may also be available based on public accounting data or financial reporting. In any event, such information may be available to Ofgem, and where this is the case, the fact that this would not have been available to the licensees at the time of setting its prices does not mean that it cannot be relevant to our analysis of whether or not there has been a breach.

3.72 One respondent submitted that it was unclear why, when considering profit benchmarks, comparators of different technology types or with higher costs would not be relevant comparators. We agree that such comparisons could in principle be of relevance, and we have decided to add text to paragraph 2.50 to the Updated Guidance to clarify this.

3.73 One respondent submitted that generators that are commonly subject to a transmission constraint may nevertheless be potentially relevant comparators if

there are not sufficient alternative benchmarks. In response, we note that while such benchmarks might in certain circumstances provide a useful guide to a non-excessive price, this is reliant on factors such as the costs and benefits to those generators of being bid down being sufficiently comparable to those of the licensee, and the level of any profit being priced into bids by that comparator properly reflecting a reasonable level of profit for the licensee in question. These factors will often not be visible to the licensee, and will be outside of its control, such that the licensee will typically not be able to itself determine the extent to which the benchmark is likely to provide an accurate guide to a non-excessive price. Therefore, we consider that the sole use of such benchmarks by a licensee for the purposes of setting its bid prices in constraint periods would carry an intrinsic risk.

3.74 Paragraph 2.40 of the Draft Updated Guidance noted that where the economics of a given generation unit are such that it would not commonly be bid down absent the constraint, then the contribution to profits or indirect costs which it would be reasonable for that generator to price into its bids in constraint periods under the TCLC might be quite limited. One respondent queried what was meant by the reference to the 'economics' of the unit here. To clarify, the intention was to refer to the net costs to that unit of being curtailed, and we have decided to amend the relevant paragraph of the Updated Guidance to make this clear. The point is that units which incur high costs / low benefits to being curtailed would be expected, all else equal, to be further down the merit order, and so less likely to be chosen to be curtailed if this wasn't required due to a transmission constraint.

3.75 In relation to the same part of the Draft Updated Guidance, one respondent submitted that Ofgem appeared to be suggesting that generators should in general be pricing their bids on a cost-only basis to ensure that they are compliant, which would disincentivise investment. This is not correct. As the Draft Updated Guidance made clear, under the TCLC licensees may choose to seek to recover a reasonable level of profit and/or contribution to their indirect costs via their bid prices. The TCLC only requires that any such profit is not excessive, and in practice – given that the relevant counterfactual is the benefit that the generator would have obtained on bids in those same periods in the absence of any transmission constraint - the level of profit which is not excessive may often be quite limited.

Other responses

3.76 One respondent highlighted the potential costs and practical challenges associated with implementing a bid pricing approach that was compliant with the requirements of the TCLC, which they said could put them at a disadvantage compared to other generators. However, we note that participation in the BM and the establishment of a bid pricing policy would be required of a licensed generator irrespective of the existence of the TCLC. While generators that are regularly subject to a transmission constraint will face more restrictions around their bid prices, we would not expect the costs associated with devising a compliant bid pricing strategy to be particularly significant – and to the extent that material costs were incurred and this could be evidenced, then we consider that would be a legitimate factor to take into account in an assessment of excessiveness – including what is a reasonable contribution to indirect costs for the generator.

3.77 One respondent noted that paragraph 2.34 in the Draft Updated Guidance referred to the uncertainties which could be associated with the costs and benefits of both having bids and offers accepted, despite offers not being within the scope of the TCLC. We have decided to remove the reference to offers from the relevant paragraph in the Updated Guidance to avoid any confusion.

3.78 One respondent queried whether the reference to 'Transmission Constraint Periods' in paragraph 2.26 of the Draft Updated Guidance should in fact refer to 'a transmission constraint period'. We have decided to update this to 'one or more transmission constraint period' to reflect both the wording of the licence condition, and the fact that (as explained above) in our analysis we will often consider a generators' bid prices over longer timeframes, which may comprise multiple transmission constraint periods.