STA briefing: the Levy Control Framework

The need for clarity and transparency from the Government to show how the projected overspend under the LCF in 2020 has been calculated

24 November 2015

Summary

Despite repeated requests from all parts of the energy industry, the government has yet to fully explain the sudden increase in projected 2020 spend under the Levy Control Framework that took place in the four months between the OBR's March 2015 and July 2015 budget estimates. The design of the LCF is flawed in that spend under the new Contract for Difference mechanism will inevitably vary in direct proportion to changes in the wholesale electricity price, yet the levy caps are now being presented as fixed. Reductions of the projected wholesale price for 2020 (since the LCF caps were set in 2013) suggest that the 2020 cap should now be above £10bn, rather than £7.6bn. The mechanism therefore needs to be urgently fixed. Importantly, combined with wholesale price variation, this will result in no net increase in consumer bills, as confirmed by the National Audit Office in 2013. In the short term the government must also demonstrate much greater clarity and transparency in the way in which the LCF caps have been calculated, including the underlying assumptions. Industry also urgently needs forward visibility on the LCF beyond 2020.

Introduction

The Solar Trade Association, along with many other organisations, has grave concerns about the level of clarity and transparency around the figures put forward by the government under the Levy Control Framework (LCF). In particular there has been no detailed explanation given for the projected £1.5bn overspend in 2020 suddenly announced in July 2015 and which is now being used as justification to drastically curtail renewables expenditure under LCF funded programmes. The STA submitted a Freedom of Information request to the Department of Energy and Climate Change (DECC) on 30 July 2015 (Annex A) which was eventually declined on 25 September as being "manifestly unreasonable" and having the potential to "affect the confidentiality of commercial information". This note provides some background on the LCF and explains why it is so important for the government to provide clear and transparent evidence to justify its policy decisions.

Background

The Levy Control Framework is an agreement between HM Treasury and DECC originally established in March 2011 as a means of controlling expenditure under levy funded energy programmes. It initially covered expenditure to 2014/15 and was subsequently updated in July 2013 to 2020/21. It was this update that projected an upper levy limit in 2020/21 of £7.6bn, in 2011/12 prices. The agreed caps are shown in the following table.

LCF projections (£m, 2011/12)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
LCF budget cap	2,094	2,627	3,184	3,870	4,300	4,900	5,600	6,450	7,000	7,600

The LCF agreement also allowed for "headroom", representing the level of permissible variation before DECC has to urgently develop plans for bringing policies back into line with the cap. Headroom was initially set at 20% of the total cap, "to be reviewed during the Renewables Obligation Banding Review and the Feed-in Tariffs Comprehensive Review" (however it has remained at that level).

It should be noted that the Committee on Climate Change, the government's official advisor in this area, stated in its 2012 Progress Report to Parliament that the LCF cap required is highly dependent on the wholesale electricity price, due to the way in which the new Contract for Difference works[1]. Their estimates assumed a wholesale price range of 5.3-9.2p/kWh in 2020, with a central estimate of 7.0p/kWh (real £2011). Based on that the CCC recommended that the 2020/21 LCF cap be set at around £8bn in real terms (£2011/12) with a range of £6-10bn, reflecting the range for wholesale electricity prices.

Events since 2013

The National Audit Office undertook an investigation of the LCF in 2013, publishing its report in November. The report identified the risk that levy expenditure for CfDs was tied to variations in the wholesale price – paragraph 3.19 says "*a lower than expected wholesale price will mean a higher than expected charge from the scheme against the Framework. For consumers, this increase in levy spending should be offset by lower bills resulting from lower wholesale prices*". An explanation of why overall consumer spend is not increased is presented in Annex B. The NAO felt that DECC's modelling underpinning the LCF was reasonable but concluded that DECC "*will need to work with its Framework partners to provide up-to-date and transparent forecasts of levy costs and outcomes*".

DECC revised its forward wholesale electricity price estimates downwards in late 2014 to reflect lower fossil fuel prices and the increasing impact of low marginal cost renewables, as well as the Chancellor's decision in Budget 2014 to freeze the Carbon Price Floor at the 2018 level. Estimates have just been revised further downwards with the release of DECC's Updated energy and emissions projections: 2015. The figure for 2020 is now projected to be 4.6p/kWh (2012 prices), therefore well below the bottom of the CCC's 5.3-9.2p/kWh range, suggesting that the corresponding LCF cap should now be above £10bn. As confirmed by the NAO (see above), this should not increase consumers' bills, as any increase in levy expenditure is compensated through the lower wholesale price.

The freezing of the Carbon Price Floor deserves special mention, as the impact on the wholesale price (estimated at up to £100m in 2020) was the direct result of government intervention and therefore should have resulted in an increase of the Levy cap in order not to constrain deployment.

The DECC Annual Energy Statement published in November 2014 included the table overleaf, presenting the estimated committed expenditure on existing renewable generating capacity and projected expenditure on new build generation (Annex A, Table 2, Page 75, 2011/12 prices). This included a line presenting the potentially remaining budget against the LCF upper limits for new build, large-scale low carbon generation, which rises to £1,350million in 2020/21 (of which £350m was

[1] Generators are paid the difference between the wholesale price and their agreed strike price, measured on a half hourly basis.

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already announced for the first auction round). The total committed spend in 2020/21 is £6.6bn, including the CfD FIDeR projects and the first CfD auction round.

£m 11/12 prices	*2015/16*	*2016/17*	*2017/18*	*2018/19*	*2019/20*	*2020/21*
LCF upper limits	4,300	4,900	5,600	6,450	7,000	7,600
Estimated committed expenditure						
FIT scheme	760	760	760	760	760	760
RO	2,895	2,795	2,795	2,795	2,795	2,795
Projected expenditure on new						
FIT scheme	40	125	200	260	315	365
RO	460	790	985	1,160	1,160	1,160
Early CfDs (FIDeR ICs)	30	280	355	780	1,040	1,155
LCCC operating costs	10	15	15	15	15	15
Potentially remaining budget against the LCF upper limits for new build, large-scale low carbon	**105**	**135**	**490**	**680**	**915**	**1,350**
Of which CfD budget announced to date	50	270	350	350	350	350

The Office for Budget Responsibility's Economic and fiscal outlook (published for the Chancellor's Budget on 8th July 2015) contained a number of statements about environmental levies (Paragraphs 4.57-4.59), including revised estimates of these. Table 4.6 (Page 94) presents the increases in projected environmental levies in the four months between the OBR's March 2015 and July 2015 estimates. Table 4.6 shows that the projection for 2020/21 has risen by £2.9 billion in 2015 prices (£2.5bn in 2011 prices), compared with the previous Annual Energy Statement. The data are presented more fully in our FOI request to DECC (Annex A).

The government urgently needs to explain how the projections can have increased so dramatically between March and July 2015. Explanations to date have been vague, citing:

- **Lower wholesale electricity prices** – however these were already known in late 2014 when the Annual Energy Statement was published, and certainly in March 2015. In any case, as explained above, this factor should be cost neutral for consumers. There is a strong case that the LCF should be reviewed annually to adjust for changes in the projected wholesale electricity prices.

- **Higher offshore wind load factors** – there has been a steady increase in offshore wind load factors recorded since 2004, the latest being 38% in 2014. It is not clear how much higher these are expected to go by 2020, or how big an impact this would have on LCF spend, but it would be most surprising if DECC's modelling in setting the LCF had not made assumptions about efficiency increases in line with the historical trend.

- **Higher than expected deployment** – again no details have been given of how DECC's estimates in July 2015 can have changed so significantly since the end of 2014, or worse since March 2015. Clearly from the STA's perspective we want to understand what assumptions have been

made about solar deployment. We believe that DECC has always underestimated and down-played the potential for solar to deploy, despite indications to the contrary from the marketplace and advice from organisations like ourselves.

The request for clarity and transparency on the LCF has come from many other quarters:

Open letter LibDem leader Tim Farron and former Energy Secretary Ed Davey to Amber Rudd: "the assumptions behind the LCF figures published to date are not transparent, and beg many questions such as the assumption made on project attrition. Because you are using these figures to try to justify the devastation being reaped on the UK renewables industry, we call on you to publish all the assumptions behind those figures. We are also calling for the DECC Select Committee and the Public Accounts Committee to hold an inquiry into the LCF figures you are using to justify this damage."

E.ON evidence to the ECC Committee: "the evidence around cost overruns of the Levy Control Framework (LCF) is questionable and not transparent; publication of detailed analysis of the status of the LCF should be a priority."

Scottish Power evidence to the ECC Committee: "Recently there has been a lot of uncertainty around the budget remaining under the LCF, with an adverse movement of some £2.4bn in the Office for Budget Responsibility's estimate of the take up of the LCF from the March Budget to the Summer Budget in July, resulting in a projected overspend of £1.5bn. This has caused considerable concern to industry, especially given the limited visibility of input assumptions (power prices, load factors) that have led to the figures. Going forward it will be important for the industry to have better visibility of the underlying assumptions and calculations under the LCF so as to enable efficient long-term planning."

In addition the following parliamentary question was asked by Labour MP Helen Hayes on 2nd November 2015:

"*To ask the Secretary of State for Energy and Climate Change, how much of the projected increase in spend under the Levy Control Framework for 2020-21 is directly attributable to solar energy.*"

Unfortunately the answer provided by Energy Minister Andrea Leadsom on 19 November 2015 was simply a repetition of the previous vague explanation:

"*The projected overspend in 2020/21 is not attributable to an individual technology but rather a collection of factors, for example changes in wholesale prices, accelerated developments in technological efficiency and higher than expected uptake of demand led schemes*".

Conclusion and recommendation

It is difficult to escape the conclusion that the government has something to hide concerning the sudden increase in 2020 projected spend under the LCF announced in July 2015. Its reluctance to provide details of how the increase came about, and the suddenness with which the increase appeared, raises suspicions that should be allayed by publishing the evidence-base. We accept that the government has the right to set budgets for renewables spend (sufficient to achieve national deployment targets) and an obligation to control the impact on consumers' bills. However, having introduced a mechanism through CfDs that results in expenditure under the levy being tied to the wholesale electricity price, it must adjust the forward budget under the LCF in line with wholesale

price projections. It must also demonstrate transparency in how the levy caps are calculated and forward visibility to account for the long investment cycles in the energy industry.

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Annex A – STA Freedom of Information request to DECC

Solar Trade Association
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Mr Michael Rutter
Head of Renewables Delivery Team
Department of Energy and Climate Change
3 Whitehall Place
London SW1A 2HD
30 July 2015

Dear Mr Rutter

Re: Freedom of Information request to DECC on the Levy Control Framework

The Solar Trade Association submits the following Freedom of Information (FOI) request with regard to the Levy Control Framework (LCF):

The DECC Annual Energy Statement published in November 2014 included a table presenting the estimated committed expenditure on existing renewable generating capacity and projected expenditure on new build generation (Annex A, Table 2, Page 75, 2011/12 prices). This included a row presenting the potentially remaining budget against the LCF upper limits for new build, large-scale low carbon generation, which rises to £1,350million in 2020/21 (of which £350m was already announced for the first auction round). The total committed spend in 2020/21 is £6.6bn, including the first CfD round.

The Office for Budget Responsibility's Economic and fiscal outlook (published for the Chancellor's Budget on 8th July) contained a number of statements about environmental levies (Paragraphs 4.57-4.59), including revised estimates of these. Table 4.6 (Page 94) presents the increases in projected environmental levies between the OBR's March 2015 and July 2015 estimates. Presumably the information these projections are based on is provided by DECC. Table 4.6 shows that the projection for 2020/21 has risen by £2.9 billion in 2015 prices. The revised forecasts for the levy-funded renewable energy support schemes are presented in Table 2.7 of the OBR's accompanying workbook, which is copied below.

2.7 Environmental levies							
	£ billion						
	Estimate	Forecast					
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Carbon reduction commitment	0.6	0.8	0.7	0.6	0.6	0.6	0.5
Warm homes discount[1]	0.0	0.3	0.3	0.3	0.3	0.3	0.4
Feed-in tariffs[1]	0.0	1.1	1.3	1.5	1.7	1.9	2.1
Renewables obligation	3.1	3.9	4.7	5.3	5.9	6.1	6.3
Contracts for difference	0.0	0.1	0.3	0.6	1.1	2.3	3.1
Capacity market	0.0	0.0	0.0	0.0	0.6	1.1	1.3
Environmental levies	**3.6**	**6.0**	**7.3**	**8.3**	**10.2**	**12.3**	**13.6**

[1] The ONS have yet to include Warm Homes Discount and Feed-in Tariffs in their outturn numbers.

Note: This is consistent with the 'Environmental levies' line in Table 4.5 of the July 2015 *Economic and fiscal outlook.*

These show that together these three schemes are now projected to cost £11.5bn in 2020/21, or £9.1bn at 2011/12 prices. This figure has been quoted extensively, representing as it does a £1.5bn overspend on the agreed LCF cap of £7.6bn.

Combining the projections from the DECC November 2014 Annual Energy Statement (excluding the then uncommitted spend) with the data from the OBR's Table 2.7 above for each scheme (corrected to 2011/12 prices) gives the following comparison:

Levy Control Framework projections (£m, 2011/12)	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Feed-in Tariff scheme - DECC Annual Energy Statement Nov 2014	800	885	960	1,020	1,075	1,125
OBR figure July 2015	1,000	1,200	1,300	1,400	1,600	1,600
Renewables Obligation - DECC Annual Energy Statement Nov 2014	3,355	3,585	3,780	3,955	3,955	3,955
OBR figure July 2015	3,600	4,200	4,600	5,000	5,000	4,900
Contracts for Difference - DECC Annual Energy Statement Nov 2014	90	565	720	1,145	1,405	1,520
OBR figure July 2015	100	300	500	1,000	2,000	2,600
Total - DECC Annual Energy Statement Nov 2014	**4,245**	**5,035**	**5,460**	**6,120**	**6,435**	**6,600**
OBR figure July 2015	**4,700**	**5,700**	**6,400**	**7,400**	**8,600**	**9,100**

The increases in LCF projections between the November 2014 Annual Energy Statement and the July 2015 OBR data are summarised in the table overleaf. It is these figures that we believe require explanation by DECC.

Increase in LCF projections between the Nov 2014 Annual Energy Statement and the July 2015 OBR data (£m, 2011/12)	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Feed-in Tariffs	200	315	340	380	525	475
Renewables Obligation	245	615	820	1,045	1,045	945
Contracts for Difference	10	-265	-220	-145	595	1,080
Total	**455**	**665**	**940**	**1,280**	**2,165**	**2,500**

Our Freedom of Information request

Our request is for DECC to provide the breakdown of the changes (by technology or other contributing factor) between the 2014 Annual Energy Statement and the July 2015 OBR projection for the three programmes, so that it is transparent for all concerned how the OBR's increased estimates have been arrived at. To be clear, using 2020/21 as example, we want to know the breakdown of the £2.5bn that represents the difference between the Annual Energy Statement and OBR projections, for each of the FiT, RO and CfD schemes. Of most importance to us is the increase attributed to solar, so that we can understand by how much DECC has modelled these changing for each programme between November 2014 and July 2015.

I look forward to receiving your prompt response. Please do not hesitate to contact me if anything in this request needs further clarification.

Yours sincerely

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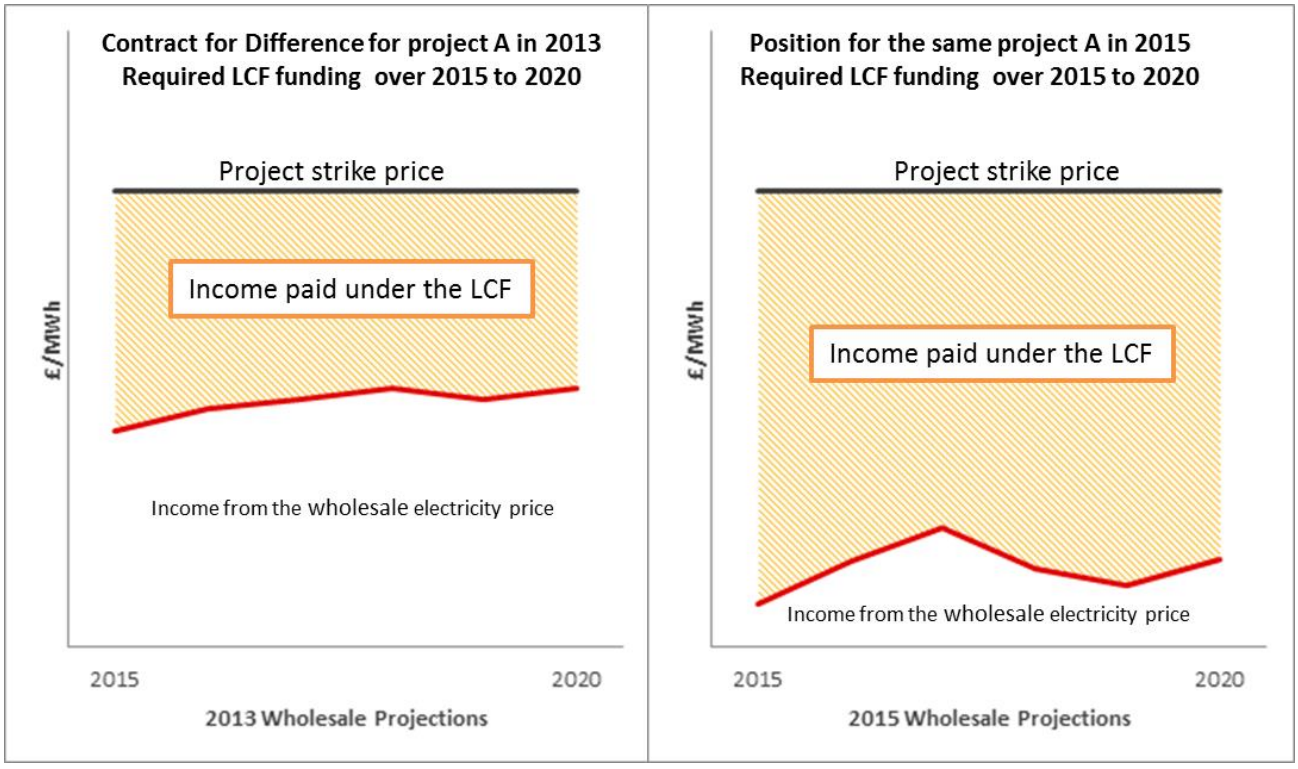
Annex B - STA briefing: why the LCF needs to be adjusted annually for changing wholesale electricity prices

Expenditure under the Levy Control Framework rises if the wholesale electricity price falls but consumer bills remain unchanged

The Solar Trade Association has produced a briefing note on the Levy Control Framework (LCF), focusing on the lack of transparency of the cap (budget) calculations and, in particular, the very large increase in projected 2020 spend reported by the OBR in July 2015. This is important as it is being used by the government as its justification for curtailing LCF-funded renewable energy support schemes, citing the impact on consumer bills.

The briefing note explains that one of the main reasons for the increase in projected spend under the LCF is the falling wholesale electricity prices, yet the impact of this on consumer bills is actually cost neutral. This note explains why and recommends that the LCF caps should be revised annually to account for changes to the projected wholesale electricity price.

The diagram below is a pictorial representation of the remuneration received by a project supported under the Contract the Difference funding scheme. The graph on the left shows the position in 2013,



while the graph on the right shows the position for the same project in 2015. Fundamental to each CfD project is its so-called strike price which, for renewable generators, is paid for 15 years. The income within that is derived from two sources: a power purchase agreement (PPA) and a payment made under the LCF. The red line in the graphs is called the "reference price" and is closely related to the wholesale electricity price. Generators will seek to negotiate their PPA to achieve at least this reference price as their income from the LCF will only make up the difference between the reference price and their strike price, calculated on a half hourly basis.

It can be seen therefore that the level of the wholesale price is critical to the sums that need to be paid out from the LCF. The graph on the left shows the position in 2013 when the LCF caps were set and wholesale price projections between 2015 and 2020 were relatively high (£61.1/MWh rising to £65.3/MWh). However since 2013 wholesale prices have been falling and are projected to be lower in the future. The graph on the right shows the position for the same project based on the now lower wholesale electricity prices projected in 2015 (£44.1/MWh rising to £48.5/MWh). It can be seen clearly that the income required from the LCF is significantly higher than had been predicted in 2013 when the LCF was set. However consumers are effectively only paying the strike price (the two elements combined) which remains constant throughout.

We have quantified the magnitude of this "wholesale effect" by analysing the projects that have been successful in securing CfDs to date (these include the eight FIDeR projects and those successful in the 2014/15 (first) auction round). These projects account for 29% of the OBR's revised 2020 spend under the LCF (see the table published by DECC). Using typical load factors, the additional payments in 2020 under the LCF resulting from the lower projected wholesale price would total £410million.

The LCF budget is therefore subject to a moving variable, namely the projected wholesale electricity price, and it becomes impossible to know how much deployment can be afforded under future LCF caps. A 20% headroom for the LCF was agreed but DECC is expected to take action to bring spend back down in line with the cap. However for the CfD projects that make up an increasing share of future spend under the LCF this should not be necessary, given that there should be no impact on consumer bills for these.

DECC revises its wholesale electricity price projections annually in the autumn (indeed the 2015 projections have just been published). **The STA recommends that the LCF annual caps should be indexed to the revised wholesale prices based on the projected share of expenditure under the LCF related to CfD projects.** In this way any changes to projected wholesale prices will be automatically reflected in the LCF caps, either upwards or downwards, but without influencing either the volume of future CFD projects that can be funded or the cost to consumers.

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24 November 2015