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Consultation

Large Combustion Plants (Transitional National Plan) Regulations 2015

September 2015



Llywodraeth Cymru
Welsh Government



The Scottish
Government
Riaghaltas na h-Alba



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1 Executive Summary

This consultation focuses on the Large Combustion Plants (Transitional National Plan) Regulations 2015 (hereafter, ‘the regulations’), which will constitute the legal basis for the implementation of the UK Transitional National Plan (TNP) from 1 January 2016 to 30 June 2020 (a copy of the draft Regulations can be found at Annex A).

Under Article 32 of the Industrial Emissions Directive (IED) the TNP allows certain large combustion plants (LCPs) an additional four and a half years in which to make the necessary investments in emissions abatement technology to achieve compliance with the stringent IED emission limits for three key pollutants (nitrogen oxides, sulphur dioxide, and dust).

Article 32 also stipulates that Member States which opt to establish a TNP must submit their plans to the European Commission for approval before they can be implemented. The UK has submitted its TNP, and it is currently being reviewed by the Commission.

Implementing the UK TNP will achieve a reduction in emissions of air pollutants and the associated environmental and human health benefits in a cost-beneficial manner without imposing an unreasonable burden on industry. In particular, the UK TNP will ensure a number of LCPs across the UK make the necessary upgrades to their facilities to deliver the environmental benefits arising from a reduction in emissions of air pollutants whilst continuing to operate to ensure security of energy supply. The 116 plants included in the plan are important to the UK in terms of both economic productivity and energy security. They represent approximately 50% of the UK’s electricity generating capacity, and include LCPs which power major industrial sites. A list of the participating plants, as well as their maximum annual emissions ceilings allowable under the TNP, can be found at Annex B.

A full impact assessment of the costs and benefits of implementing the UK TNP has been undertaken. The impact assessment shows that the TNP will have a net benefit to the UK economy of £5,572.2million over the course of the plan. Further detail on the impact assessment and the methodology used to calculate the costs and benefits can be found in section 5 of this document; a copy of the impact assessment is available at Annex C.

The draft regulations we are consulting on establish the duties and powers of the Secretary of State for the Environment, the Environment Agency, the other relevant UK regulatory agencies (the Scottish Environment Protection Agency, Natural Resources Wales, and the Department of the Environment Northern Ireland), and the operators of plants participating in the TNP. The regulations set out that the Environment Agency will be responsible for maintaining a register of the participating plants and collating reports on their emissions of the relevant pollutants, which will be produced by operators and submitted to their relevant regulator. The regulations also establish an emissions trading system, which will allow participants to trade any unused ‘emissions allowances’ with other

participating plants in order to reduce total costs of implementation while delivering the same level of overall environmental benefits. Existing environmental permitting legislation provides the necessary framework for ensuring compliance and the issuing of penalties for non-compliance with the conditions of the TNP.

The consultation questions (see section 6) are focused on whether the approach taken in the regulations is practical and workable, as well as canvassing interested parties for thoughts on the methodology used in the impact assessment.

2 Background

2.1 The Industrial Emissions Directive and Transitional National Plans

The Industrial Emissions Directive (IED)¹ includes a wide range of provisions to reduce the emission of pollutants from industrial sources ranging from intensive pig and poultry farms to chemical manufacturing sites. It sets specific requirements on Large Combustion Plants (LCPs) set out in chapter III of the directive. These requirements include stringent emission limit values (ELVs) for emissions of nitrogen oxides (NO_x), sulphur dioxide (SO₂), and dust (particulate matter, PM) from 1 January 2016. The IED does, however, allow Member States certain flexibilities.

One of these flexibilities, the Transitional National Plan (TNP), allows operators of LCPs until 30 June 2020 to achieve compliance with the emissions levels set by the IED (the TNP provisions are set out in Article 32 of the IED). The option to participate in the plan is available to combustion plants which were granted their first permit before 27 November 2002, or the operators of which had submitted a complete application for a permit before that date, provided the plant was put into operation no later than 27 November 2003.

The TNP operates on the basis that each plant within the plan contributes to a total annual emissions ceiling for one or more of the pollutants (NO_x, SO₂, and dust), based, in 2016, on the actual operation of each plant between 2001 and 2010 and the ELVs which applied to those plants under the Large Combustion Plants Directive (LCPD)². Together, these contributions create an overall cap within the TNP that is reduced, year on year, on a linear basis. In 2019 and 2020, the cap is based on the ELVs set out in Annex V of the IED. Each plant is allocated a total allowance of annual emissions which they must stay within based on their contribution to the overall ceiling. However, in order to allow plants to invest in technologies to reduce their emissions in the most cost-effective way, a cap and

¹ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control). Full text: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1430313235043&uri=CELEX:32010L0075>

² Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the emissions of certain pollutants into the air from large combustion plants. Full text: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2001.309.01.0001.01.ENG

trade scheme has been included in the UK TNP Regulations. This cap and trade system will enable plants which invest early to sell, if they so choose, an unused part of their annual allowance to other plants which have not yet made the investment. Overall, the total maximum amount of emissions from plants within the TNP in a given year will be the same.

The rules for operating a TNP are set out in Commission Implementing Decision 2012/115/EU³ (hereafter, 'the Commission Implementing Decision').

2.2 The UK Transitional National Plan

The UK TNP⁴ includes 116 plants, representing approximately 50% of the UK's electricity-generating capacity and plants from major industrial sites. The UK TNP will achieve the environmental improvements introduced through the IED, whilst maintaining the security of the UK's energy supply and industrial output.

The UK TNP is currently being reviewed by the European Commission prior to receiving its formal approval, as required by Article 32 of the IED. We are launching this consultation prior to the approval of the final version of the UK TNP in order to allow stakeholders and other interested parties an opportunity to comment on the legislation that we intend to introduce so that, upon its acceptance by the European Commission, the UK TNP can be implemented from 1 January 2016. In addition, a small number of plants included in the current UK TNP in Annex B have also declared that they intend to make use of the "limited life time" (LLD) derogation under Article 33 of the IED. If these plants intend to participate in the final version of the UK TNP they will be required to rescind their LLD declaration as they are not be allowed to participate in both the UK TNP and LLD.

As mentioned above, the proposed Regulations include a cap and trade mechanism which will allow those plants which make early investments in abatement technology to sell their unused allowances to those operators who require more time to upgrade for financial or technical reasons.

The pollutants covered by the UK TNP are NO_x, SO₂ and dust. Implementing the UK TNP will achieve a reduction in emission of these air pollutants and the associated environmental and human health benefits in a cost-beneficial manner without imposing an unreasonable burden on industry. The European Commission has started infraction

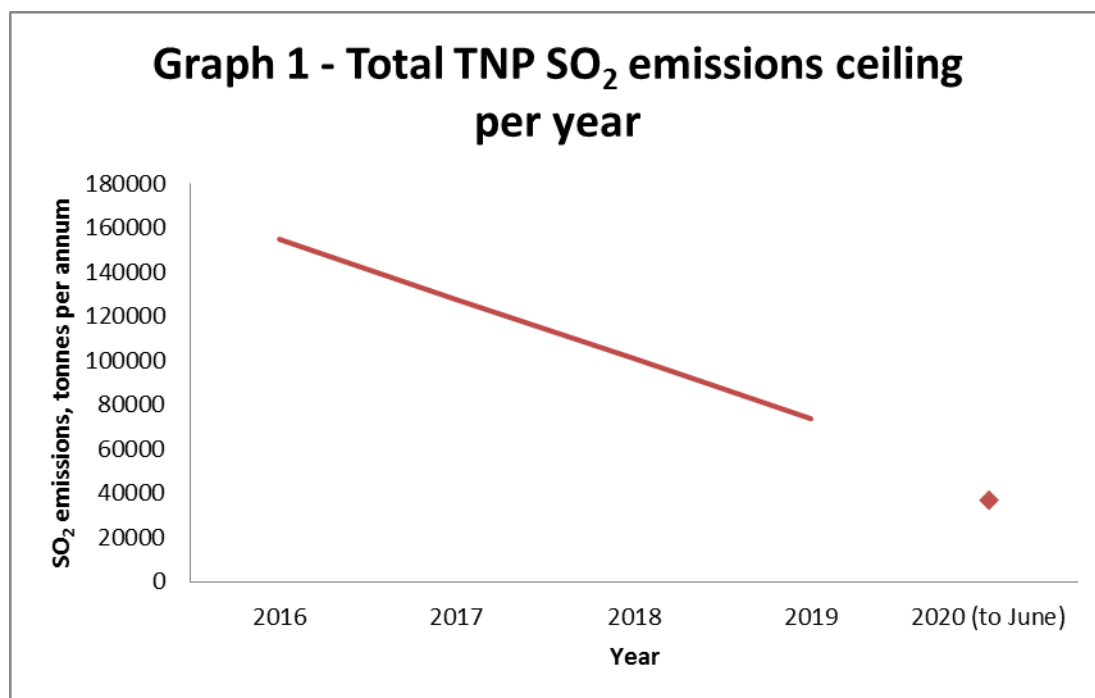
³ 2012/115/EU: Commission Implementing Decision of 10 February 2012 laying down rules concerning the transitional national plans referred to in Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012D0115>

⁴ An overview of the plants included in the TNP and their contributions to the annual emissions ceilings is available at Annex C.

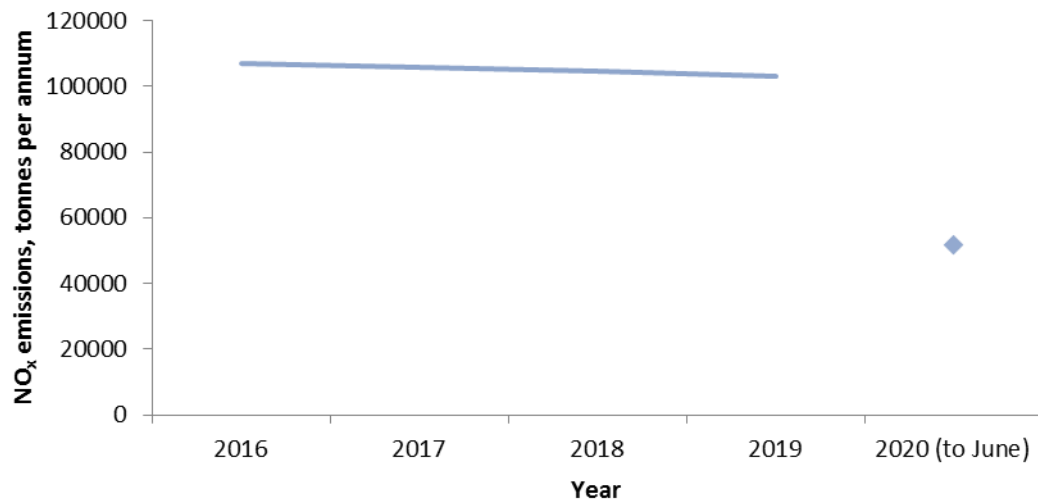
procedures against the UK for exceedances of EU limit values for concentration of nitrogen dioxide (NO₂) in certain areas. NO_x emissions include NO₂ and other oxides of nitrogen which are a precursor to NO₂. However, the causes of such exceedances are primarily from transport (e.g. vehicles such as cars, heavy goods vehicles, buses and vans) as opposed to industrial emissions (such as those from the plants in the TNP). The Government is currently consulting on the draft UK NO₂ Plan to address this.

As regards SO₂ and dust, while it is beneficial to human health to achieve reductions in emissions of both pollutants, the UK is currently meeting relevant requirements for these pollutants and therefore it would be disproportionate to require plants in the TNP to achieve compliance with the IED limits by 2016 when the equivalent reduction in emissions – and the associated human health and environmental benefits – could be achieved by 2020 in a more sustainable manner.

Graphs 1-3 show the total TNP emissions ceilings for each of the 3 pollutants SO₂, NO_x and dust for each year of the TNP. These clearly show the reduction in emissions that will be achieved over the course of the plan. It should be noted that the emissions ceiling for 2020 covers only the period 1 January - 30 June 2020, therefore the emissions ceiling for this year has been indicated by a single point on the graph and is lower than if the whole year had been included. This is because the TNP will finish on 30 June 2020. A list of the participating plants, as well as their annual emissions ceilings, can be found at Annex B.

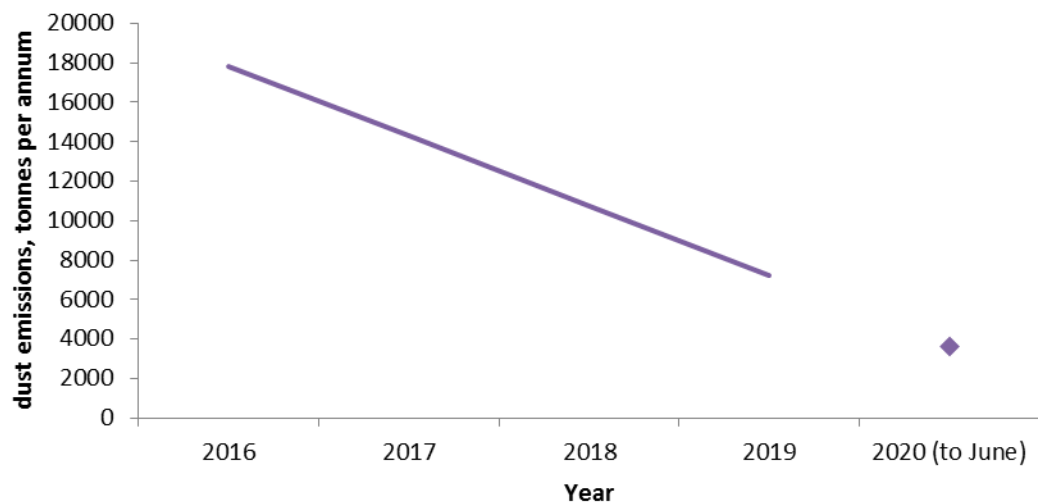


Graph 2 - Total TNP NO_x emissions ceiling per year



To note: the contribution of the Aberthaw Power station is not included calculation of the NO_x ceilings set out in this graph. Please see the first footnote in Annex B.

Graph 3 - Total TNP dust emissions ceiling per year



3 Purpose of the Consultation

This consultation focuses on the proposed domestic legislation intended to implement and regulate the UK TNP and on the impact assessment which has been carried out to determine the overall impacts of the TNP. We are not consulting on the TNP itself, or on the Industrial Emissions Directive more broadly (Consultations related to the IED were carried out during 2008 and 2011).

We are seeking suggestions and comments from interested parties regarding the approach taken in, and the contents of, the draft Large Combustion Plants (Transitional National Plan) Regulations 2015. We are particularly interested in views on the appropriateness and workability of the regulations. We are also interested in stakeholders' views on the overall approach we have taken and the data sources we have used in developing the impact assessment.

This consultation will be of most interest to operators of participating plants, environmental groups and regulators.

4 Large Combustion Plants (Transitional National Plan) Regulations 2015

4.1 Overview

Draft Regulations are included at Annex A.

The proposed Large Combustion Plants (Transitional National Plan) Regulations 2015 are the statutory instrument through which the UK TNP will be implemented in UK law. The regulations establish the duties and responsibilities of the Secretary of State for the Environment, the relevant UK regulatory agencies, and operators of LCPs with regards to the UK TNP. The regulations also provide for the operation of an emissions trading scheme for plants participating in the TNP.

There will be no civil or criminal enforcement components to the regulations as these are already provided for by existing environmental permitting legislation⁵.

The principal provisions in the regulations are planned to come into force as soon as possible in anticipation of the TNP operating with effect from 1 January 2016. Regulation 12, which revokes the Large Combustion Plant (National Reduction Plan) Regulations 2007 (which are effectively superseded by the TNP Regulations) and makes associated consequential and transitional provisions and savings, will enter into force on 1 April 2016.

⁵ As environmental permitting is a devolved matter, relevant enforcement provisions are included in several pieces of legislation, e.g. the Environmental Permitting (England and Wales) Regulations 2010.

The regulations will apply to England, Scotland, Wales, and Northern Ireland.

The content and implications of the Regulations are discussed in more detail below.

4.2 Duties and Powers of the Secretary of State

While the overall responsibility of operating and maintaining a register for the purposes of the UK TNP is placed upon the Environment Agency (EA), Regulation 3, which concerns the 'Provision of information by the Secretary of State', sets out the duty of the Secretary of State to provide the EA with details about each of the plants participating in the TNP and their operators (e.g. their names and addresses), and the overall emissions allowance allocated to the TNP plants in the calendar years 2016 to 2020. applied. This must be done within one month of the entry into force of the Regulations. No consultation with the Devolved Administrations is provided for as this communication is essentially a matter of informing the EA of the details in the final version of the UK TNP.

The Secretary of State is also required to inform the EA of any variations in the information regarding the participating plants as she considers appropriate, following consultation with the relevant Ministers in the Devolved Administrations. The inclusion of this duty will ensure that the UK TNP is compliant with Article 5 of the Commission Implementing Decision, which covers 'Subsequent changes to the transitional national plan.'

4.3 Duties and Powers of the Environment Agency

The EA is tasked with establishing and maintaining a register of the plants participating in the TNP, containing the information referred to in Schedule 1. This register is to be kept electronically and made available online.

Regulation 8 confers upon the EA the duty to reduce the overall emissions allowance in the TNP, within 10 working days, in the event that a plant closes or alters its operations such that it is no longer considered a large combustion plant according to the definition in the Industrial Emissions Directive. This power is necessary as it will allow for the amendment of the TNP to ensure that the annual emissions ceiling is an accurate reflection of the total combined emissions of the participating plants as stipulated under the IED and the Commission Implementing Decision. It also ensures compliance with Article 5 and Annex 4 of the Commission Implementing Decision on 'Subsequent changes to the transitional national plan'.

Regulation 9 allows the EA to charge the other relevant UK regulators a reasonable proportion of the costs of establishing and maintaining the TNP register. This will allow for sharing of the financial burden of operating the register.

In order to comply with Regulation 6, the EA will vary the permits of all participating plants for which it is the regulator such that they are required to provide annual reports on their emissions of the relevant pollutants to the EA for the duration of the TNP. The other UK

regulators will also need to vary permits of participating plants they regulate as set out below.

4.4 Duties and Powers of Other UK Regulators

The other relevant UK regulators are as follows: the Scottish Environment Protection Agency (SEPA), the Natural Resources Wales (NRW), and the Chief Inspector appointed by the Department of the Environment Northern Ireland under Article 8(3) of the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013⁶.

As discussed in relation to the EA above, the regulators will also vary the permits of participating plants such that they must produce annual reports of their emissions of NO_x, SO₂, and dust for the duration of the TNP. Under Regulation 4(5), the regulators must have links to the TNP register displayed on their respective websites.

Regulation 6 requires that the regulators submit copies of the quarterly emissions reports of participating plants within their jurisdiction within one month of receipt of the report from the operator.

Regulators are required, by Regulation 7, to report to the EA on any transfers of emissions allowances by participating plants within their jurisdiction as part of the emissions trading scheme established by the Regulations.

Regulation 8(1) requires that, upon the closure or variation of a participating plant, the regulator must determine the required reduction in the plant's annual emission allowance. Under Regulation 8(2), the regulators must then report this information to the EA within 10 working days of receipt of the plant's notification of closure or variation.

4.5 Duties of the Operators of Plants Participating in the TNP

Regulation 6 requires that operators provide their regulator with quarterly reports of their emissions of each of the relevant pollutants (NO_x, SO₂, and dust) throughout the course of the TNP. From January 2017, and for each year of the TNP thereafter, each operator of a participating plant must provide a full report of its total annual emissions during the previous calendar year.

Regulation 6 also requires that operators inform the relevant regulator in the event of the closure or variation of a participating plant.

4.6 Transfer of Emission Allowance

The Regulations establish an emissions trading system, which will permit plants which make investments in abatement technology early to trade their excess emissions

⁶ <http://www.legislation.gov.uk/nisr/2013/160/regulation/8/made>

allowance with those plants which have yet to make the investment. Operators are therefore incentivised to fit abatement equipment quickly where possible, whilst allowing those who require more time – whether for financial or technical reasons – to comply with the IED ELVs to augment their emissions allowance where necessary during the course of the TNP. The overall annual emissions ceiling for all plants participating in the TNP will be unaffected.

Regulation 7 establishes the emission allowance transfer system and sets out the rules for its operation. The key rules are:

- operators must complete an emissions transfer form (to be provided by the EA), which must be returned, in digital format, to the EA within five working days of the date of the transfer (failure to comply renders the transfer void);
- transfers may take place during the calendar year in which the emissions allowance has been allocated, and within three months of the end of that calendar year;
- the EA must record transfers within ten working days of notification by the operator; and
- excess emissions allowances may not be carried forward from one calendar year into the next.

4.7 Issues Regarding the Part-Closure of Participating Large Combustion Plants

As set out in Section 3 of the Annex to the Commission Implementing Decision, the emissions ceilings for each plant participating in a TNP are established based on their historical operating data for the years 2001-2010. Using this data for the setting of emissions ceilings raises a number of issues. In particular, it does not take into account the possibility that a plant might choose to undergo part-closure between the end of 2010 and the implementation of the TNP. This could mean for example, a 300MW participating plant had, in 2011, chosen to reduce its generating capacity so that its rated thermal input became 75MW, its annual emissions ceiling in the TNP would have been set on the basis of it operating at 300MW. In practice, this would mean that the plant could emit a higher level of pollutants than it would otherwise have been allocated had its ceiling been calculated on the basis of operating at 75MW.

These issues have been resolved under previous EU industrial emissions legislation, specifically the national emission reduction plan (NERP) allowed for under Article 6 of the Large Combustion Plant Directive (LCPD)⁷, by requiring the annual emissions ceiling for a plant to be reduced accordingly in the event of a part-closure. However, neither the Commission Implementing Decision, nor the IED itself, contain such requirements. We have not, therefore, included such a requirement in the TNP Regulations. We would be

⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1435839808438&uri=CELEX:32001L0080>

interested to understand the views from interested parties on this approach (see section 6).

5 TNP Impact Assessment

5.1 Overview

A copy of the impact assessment is included at Annex C.

A full impact assessment has been carried out in order to determine the overall impacts of the UK TNP.

The full assessment produced a best estimate of the costs of implementing the TNP of around £7.069.2million over the duration of the UK TNP (from 1 January 2016 to 30 June 2020). These costs reflect the expense of operating the plants (£5.9billion), the impact of additional air pollution (£1,071.7million), the offset of CO₂ emissions through the EU Emission Trading Scheme (£-836million)⁸ and the administration costs of the scheme (£0.8million).

In terms of the benefits of implementing the TNP, the economic assessment produced a best estimate of around £12,641.4million over the duration of the UK TNP (from Jan 2016 to Jun 2020). This figure largely reflects a part of the social value of the output of participating plants⁹ over the course of the TNP and is calculated based on the increased level of electricity supply and consumption valued at the expected market price.

There is, therefore, a net benefit to the UK from implementing the TNP of £5,572.2million over the duration of the UK TNP (from Jan 2016 to Jun 2020).

5.2 Methodology

The methodology used in the development of the impact assessment is outlined in detail in section 7 of the impact assessment.

The economic impact of implementing the TNP has been calculated on the basis that, as a result of the TNP, all participating large combustion plants will be able to generate more electricity or power (since they will not have to close with effect from 1 January 2016 due to their immediate inability to comply with the IED ELVs). This will provide benefits both to

⁸ As the impact assessment works on the assumption that all participating plants would close due to non-compliance if the TNP were not to be implemented (see section 5.2), the impact assessment considers that plants will therefore operate for longer as a result of their participation in the TNP, and hence they will emit higher levels of CO₂. Any CO₂ emissions will need to be offset through the purchase of CO₂ emission permits under the EU emissions trading scheme (EU ETS). This is an EU requirement.

⁹ This represents the additional economic output generated by the continued operations of the participating plants.

the operators and to consumers, as well as protecting energy security and resilience through the maintenance of additional energy-producing capacity.

However, the increase in air pollution caused by the continued operation of participating plants not yet meeting IED emission limits will have a limited impact on human health and on the environment. The associated increase in greenhouse gas emissions will also need to be offset and is valued here at the price of purchase of EU Emissions Trading System allowances. In addition, there will be a cost to operators as a result of the need to invest in abatement technology which will allow plants to comply with the IED emission limit values. Finally, there will be an administrative cost to operators as a result of participation in the TNP.

To calculate the overall costs and benefits to the UK of implementing the TNP, the factors outlined above have been monetised. A summary of the monetisation can be seen on page 4 of the impact assessment.

The net impact of the TNP has been calculated by deducting the total monetised costs from the total monetised benefits. Detail of this calculation can be seen in Table 1 on page 5 of the impact assessment.

There are certain key assumptions, uncertainties, and sensitivities which should be kept in mind when considering the analysis. These factors are explained in detail on page 5 of the impact assessment. The key considerations to be aware of are that:

- there are certain impacts which, for practical reasons, we have not been able to monetise or quantify, such as the consumer benefit derived from additional electricity generated as a result of the TNP (we believe this means that the calculated benefit of the TNP is likely to have been significantly underestimated); the consumer surplus (the value above the market price that consumers place on the consumption of electricity, a concept explained in more detail in the impact assessment); and the increased security of the UK electricity supply arising from the TNP (currently, the UK is expected to have tight margins in the electricity market – the demand for electricity is expected to be very close to the limit of available supply – and the TNP will ensure additional capacity in the electricity market);
- it has been assumed that all the participating plants would close due to their inability to meet the IED ELVs if the TNP were not implemented, and the possible reaction to these closures (e.g. construction of new plants or investment in renewables) has not been calculated; and
- the analysis is highly sensitive to the relative fuel prices of gas and coal, so high and low price scenarios have been modelled.

6 Consultation Questions

We would specifically welcome comments and suggestions in relation to the following questions:

Large Combustion Plants (Transitional National Plan) Regulations 2015

For each of these questions, please clearly explain the reasons for your answer and any evidence or information on which you have based your answer.

1. Overall, do you agree that the approach taken in the regulations is workable?
2. Do you agree that the regulations should include provisions for the establishment of an emissions trading system?
3. Do you agree with the approach taken on annual emissions ceiling for participating plants in the event of part-closure is the correct approach?
4. Do you have any other comments regarding the approach taken in the proposed Regulations?

Transitional National Plan Impact Assessment

For each of these questions, please explain clearly the reasons for your answer and any evidence or information on which you have based your answer.

5. Do you agree with the general approach taken in the impact assessment?
6. Do you have any additional or different data sources from those used in the impact assessment that you can share?
7. Do you have any other comments on the impact assessment?

7 Tell Us What You Think

4.1 Who will be interested in responding?

This is a public consultation and it is open to anyone with an interest to provide comments. It should be of particular interest to those operating plants which will be a part of the UK TNP. It may also be of interest to environmental groups. The proposed domestic Regulations will apply to England, Scotland, Wales, and Northern Ireland.

A list of stakeholders and interested groups that we have made aware of this consultation is available at Annex D.

4.2 Having Your Say

If you wish to respond, please submit your comments by **26 October 2015**

You can respond in one of three ways:

1. Online, by completing a questionnaire at:

<https://consult.defra.gov.uk/industrial-pollution-control/transitional-national-plan-consultation>

2. Email, by sending comments to:

Control.Pollution@defra.gsi.gov.uk

3. Post, by sending comments to:

Industrial Pollution Team

Department for Environment, Food and Rural Affairs

Area 2C

Nobel House

17 Smith Square

London

SW1P 3JR

Our preferred method is online because it is the fastest and most cost-effective way for us to collate and analyse responses.

Please note that, unless you specifically request for it to be treated confidentially, your response may be made publically available.

8 Next Steps

We will publish a summary of responses to this consultation within a maximum of 12 weeks of the closing date for the submission of comments.

We plan to make the legislation as soon as practicable.