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Your ref

Our Ref

Date

26 September 2014

Contact / Extension

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Dear James

**Consultation on the Treatment of Real Price Effects for the RIIO-ED1 Slow Track Electricity Distribution Network Operators (DNOs)**

I enclose SPEN's response to the consultation on the Treatment of Real Price Effects (RPEs) for the RIIO-ED1 Slow Track DNOs.

Although we recognise the difficulty of setting an *ex ante* RPE allowance for RIIO-ED1, as the economy emerges from a deep and prolonged recession, we believe that an appropriate *ex ante* allowance would be preferable to a hastily constructed and untested index. This reflects our views that:

- An *ex ante* allowance has stronger incentive properties;
- DNOs are better placed than customers to manage the risks associated with RPEs;
- Indexation and the consequent true-up would lead to greater volatility in network charges;
- Indexation would increase the systematic risk of DNOs, as revenue would be increased when the economy is in growth;
- Indexation would lead to greater complexity in design and operation of the price control;
- Interactions with other incentive and uncertainty mechanisms need to be considered;
- The design of an index which tracks DNO costs would be difficult;
- The selection of the proposed indices appears arbitrary;
- The inclusion of proprietary cost indices hinders transparency; and
- There is a significant risk of unintended consequences.

In our view, a strong case has not yet been made for replacing the existing *ex ante* approach with indexation of RPEs.

In conclusion, we believe that Ofgem should maintain the incentive on DNOs to manage the impact of RPEs on their cost base. This would be consistent with RIIO-T1 when Ofgem concluded an uncertainty mechanism for copper prices was not required, on the basis that NGET and its investors are better placed to manage the risk of price volatility than customers.

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Regulation & Commercial

We would be happy to meet with you and the relevant members of your team to discuss these issues further. We would wish to participate actively to support any working group that Ofgem may consider establishing, at some stage, to consider further the potential development of the indexation for RPEs, possibly for the next round of RIIO price controls.

Yours sincerely,

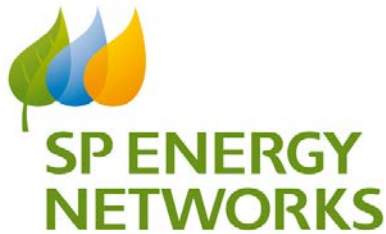
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## **SPEN response to Ofgem consultation on the treatment of real price effects for RIIO-ED1**

**26 September 2014**

### **Overview**

We welcome the opportunity to respond to Ofgem's consultation on the treatment of real price effects (RPEs) for RIIO-ED1, for RIIO-ED1 slow-track electricity distribution network operators. Nevertheless, we are disappointed that, by consulting at this late stage of the RIIO-ED1 price control review, Ofgem have left only a very brief period in which to consider and evaluate this significant proposal.

Although we recognise the difficulty of setting an *ex ante* RPE allowance for RIIO-ED1, as the economy emerges from a deep and prolonged recession, we believe that an appropriate *ex ante* allowance would be preferable to a hastily constructed and untested index. This reflects our views that:

- An *ex ante* allowance has stronger incentive properties;
- DNOs are better placed than customers to manage the risks associated with RPEs;
- Indexation and the consequent true-up would lead to greater volatility in network charges;
- Indexation would increase the systematic risk of DNOs, as revenue would be increased when the economy is in growth;
- Indexation would lead to greater complexity in design and operation of the price control;
- Interactions with other incentive and uncertainty mechanisms need to be considered;
- The design of an index which tracks DNO costs would be difficult;
- The selection of the proposed indices appears arbitrary;
- The inclusion of proprietary cost indices hinders transparency; and
- There is a significant risk of unintended consequences.

In our view, a strong case has not yet been made for replacing the existing *ex ante* approach with indexation of RPEs. Nevertheless, we consider that the work programme necessary to develop an appropriate approach to indexation of RPEs for DNOs could be undertaken for RIIO-ED2, which would allow both a more complete assessment of the pros and cons of such indexation and more detailed analysis of the design and construction of the index and evaluation of its impact.

Furthermore, this longer timescale would provide for an opportunity to work with statistical experts and industry organisations to research the development and construction of more suitable cost indices, especially for electrical materials, plant and equipment.

In our response to Ofgem's Draft Determination, we set out a number of ways in which Ofgem should improve its forecast of RPEs for RIIO-ED1. We believe this would result in a more appropriate

*ex ante* allowance, which would avoid the need for indexation of RPEs. In addition, we understand suppliers prefer greater certainty over network charges, which an *ex ante* allowance would provide.

In conclusion, we believe that Ofgem should maintain the incentive on DNOs to manage the impact of RPEs on their cost base. This would be consistent with RIIO-T1 when Ofgem concluded an uncertainty mechanism for copper prices was not required, on the basis that NGET and its investors are better placed to manage the risk of price volatility than customers.

**Question 1: Do you think these criteria are appropriate and sufficient? If not, please explain why and justify any alternative assessment criteria.**

We broadly agree with the criteria which are set out in Appendix 1 of the consultation document.

As regards the “exposure to risk criterion”, this should also consider which party (i.e. the DNO or the customer) is best placed to manage the risk. Ofgem focused on this, when assessing National Grid’s proposals for a copper price uncertainty mechanism for RIIO-T1. Ofgem concluded:

“NGET proposed an uncertainty mechanism to deal with volatility in copper prices. This mechanism would adjust the RPE allowance if the price of these metals were to go outside a dead-band. We are not proposing to provide an uncertainty mechanism in this area on the grounds that NGET and its investors are better placed to manage the risk of price volatility than consumers.”

**Question 2: Which of the RPE approaches (including the current approach of a fixed ex ante allowance, or any not explicitly discussed in this consultation) do you favour and why? Please justify with reference to the criteria.**

Although we recognise the difficulty of setting an *ex ante* RPE allowance for RIIO-ED1, as the economy emerges from a deep and prolonged recession, we believe that an appropriate *ex ante* allowance would be preferable to a hastily constructed and untested index. This reflects our views that:

- An *ex ante* allowance has stronger incentive properties;
- DNOs are better placed than customers to manage the risks associated with RPEs;
- Indexation and the consequent true-up would lead to greater volatility in network charges;
- Indexation would increase the systematic risk of DNOs, as revenue would be increased when the economy was in growth;
- Indexation would lead to greater complexity in design and operation of the price control;
- Interactions with other incentive and uncertainty mechanisms need to be considered;
- The design of an index which tracks DNO costs would be difficult;
- The selection of the proposed indices appears arbitrary;
- The inclusion of proprietary cost indices hinders transparency; and
- There is a significant risk of unintended consequences.

The proposed indexation would create uncertainty and price volatility for consumers and would not mitigate the risks to the DNOs of changes over time. We therefore do not believe that the proposed RPE Index should be implemented.

We therefore believe indexation of RPEs would not be consistent with the requests suppliers have made to Ofgem, as detailed in the 4 October 2013 consultation on the timing of a decision on electricity distribution network revenue, which stated:

“Suppliers have indicated that volatility in network charges, the way each DNO recovers the cost of operating its system, is a key concern. Some suppliers have indicated that in order to manage the risk of unexpected changes in revenue they include a risk premium in consumers’ energy bills to compensate them for bearing this risk. We agree that the ability to predict charges with a degree of accuracy is important for suppliers and ultimately energy consumers.”

Furthermore, Ofgem would become reliant on third-party providers of indices, and would not be in a position to guarantee either their data quality or continued availability through to 2023. We do not believe that limiting the number of component indices, adequately resolves this issue. It seems likely that, at some stage, cessation of publication of a component index or a substantial change in its construction or coverage would disrupt or distort the indexation. In such circumstances, there would need to be a pre-determined approach to mitigating the effects.

**Question 3: If we use indexation with a deadband, at what value should the thresholds be set?**

We do not consider a deadband to be a desirable feature of an indexation mechanism, as it leads to step changes, which are likely to be less predictable than smaller, more gradual changes. For example, it would be hard to predict in which year the deadband would be exceeded and, so, whether an adjustment to allowances would be triggered.

**Question 4: If we use indexation, do you think the proposed indices are appropriate? If not please justify alternatives.**

The selection of the proposed indices appears arbitrary and we are not convinced that it is necessary to reduce the number of constituent indices from those which would otherwise be used to set an *ex ante* allowance, if indexation were to be implemented. Once the annual updating procedure has been established, it seems unlikely that the additional cost of incorporating more indices into the indexation adjustment would be material.

Further work is required to identify the most appropriate set of cost indices to use. The proposed reduction in the number of cost indices which would be used in the RPE indexation is likely to lead to greater divergence from the movements in DNOs’ costs.

We have particular concerns with:

- 1) The exclusion of potentially relevant indices;
- 2) the FOCOS Resource Cost index, Infrastructure materials, as this appears to be based on the costs of materials used in other sectors, not electricity networks;
- 3) The PPI for machinery and equipment output (K389) which is volatile;
- 4) A reduction of 40bps per year to the RPI for transport and other costs.

The CMA, in its report on NIE, used the FOCOS Resource Cost index, Infrastructure materials, as a measure of general materials not specialist materials. For DNOs, greater weight should be given to indices of specialist materials, such as relevant ONS PPI and BEAMA (Materials in Electrical Engineering) indices.

The volatility of candidate indices should be assessed, as a volatile series is more likely to be exposed to outliers.

The CMA, in its report on NIE, used the unadjusted RPI for “Other” costs. We do not consider the proposed reduction of 40bps per year to the RPI for transport and other costs has been justified.

Preliminary analysis of available indices indicates that they vary in terms of:

- Volatility;
- Coverage;
- Relevance to electricity DNOs;
- Governance arrangements;
- Transparency of design and construction of the index;
- Revision process and timescales.

We suggest that the following criteria would be appropriate for evaluating candidate indices for inclusion in the indexation mechanism:

- Relevance to electricity distribution;
- Length of available time series;
- Timeliness and frequency of publication;
- Revision process and timescales;
- Sample size;
- Volatility of time series;
- Assessment of outlying observations;
- Transparency of the coverage and construction of each index;
- Governance of the design, construction and modification of the indices;
- Quality control measures in place;
- Extent used by third parties e.g. for cost escalation for procurement contracts or deflation of nominal expenditure by statistical or economic organisations;
- Availability of independent forecasts;
- Regulatory precedents set by Ofgem and the CMA (formerly CC).

We include an initial high level survey of candidate indices in the Appendix. However, we do not believe that there is sufficient time remaining to research and assess adequately the full range of potential indices, prior to the publication of the Final Determination for RIIO-ED1. This again suggests that it would be more appropriate to undertake a more comprehensive programme of work and consultation process, following RIIO-ED1.

**Question 5: Do you think that using a single mechanism covering all cost types is more appropriate than multiple mechanisms? If you think multiple mechanisms would be appropriate please justify which one you think should apply to each cost type.**

We agree that a single mechanism is most appropriate. Multiple mechanisms would make operation of the price control even more complicated. This would further increase the risk of unintended consequences arising. Furthermore, potential differences in the treatment of different cost categories could lead to artificial incentives, which would distort expenditure decisions.



Labour

Index	Relevance	Data Availability		Regulatory Precedent	
		Time Period	CC NIE	RIIO-T1/GD1	DPCR5
Private Sector Average Weekly Earnings incl. Bonus <i>(Combined with older AEI series)</i>	Covers all industries within the Private Sector, including electricity distribution networks. May provide proxy for change in wages for general grades but not specialist (engineering) grades	1990-2014	✓	✓	✓
Labour and Supervision in Civil Engineering (70/2)	Highly relevant as it is based on specialised labour costs in civil engineering.	1977-2014	✗	✓	✓
Electrical Installations - Cost of Labour (2/E1)	Highly relevant as it is based solely on labour costs within the electricity sector.	1977-2014	✗	✗	✗
Electrical Labour (CPA/4)	Highly relevant as it is based solely on labour costs within the electricity sector.	1970-2014	✗	✓	✓
ONS ASHE Survey 4-digit SOC Codes (2, 212, 2123, 2124, 3112, 3113, 3114, 52, 5249, 5241, 53)	Highly relevant as selected codes are specific to the electricity sector.	1997-2014	✓	✗	✗
Construction (EARN03)	Includes "construction of utility projects for electricity and telecommunication" and "electrical installation", which has some relevance to electricity distribution.	2000-2014	✗	✓	✗

Transport & Storage (EARN03)	The transport industry is not directly related to electricity distribution. Therefore this index is likely to have limited relevance, compared to the other industry-specific indices we have considered.	2000-2014	✗	✓	✗
JIB Electrical Contracting Standard Rates	Lists industry-standard hourly wages for electrical contractors in many specific categories. Relevant for specialist labour as DNOs hire contractors, but could be difficult to determine which categories to include.	2005-2014	✓	✗	✗
Union nominal pay settlements across GB DNOs	Highly relevant as this measures what DNOs have actually paid their employees. However, there is no central data source and data is hard to come by.	2010-2012?	✓	✗	✗
Manufacturing - Engineering & Allied Industries (EARN03)	Manufacturing is not directly related to electricity distribution. Therefore this index is likely to have limited relevance, compared to the other industry-specific indices we have considered.	2000-2014	✗	✗	✗

Electricity, Gas and Water Supply (EARN03)	Includes "operation of distribution systems (i.e., consisting of lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer"	2000-2014	*	*	✓
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**Materials**

Index	Relevance	Data Availability			Regulatory Precedent
		Time Period	CC NIE	RIIO-T1/GD1	DPCR5
Resource Cost Index: Infrastructure Materials (FOCOS)	Provides a measure of input prices paid by contractors in infrastructure. This should capture the broad range of materials costs faced by a DNO.	1990-2014	✓	✓	✓
PAFI (Building) Series 3, Pipes and Accessories: Copper	We would expect the price of metal pipes to vary in a similar way to the price of metal products used by DNOs. Should act as a good proxy for a DNO's materials input costs.	1991-2014	✗	✓	✗
BEAMA CPA Large Power Transformer Materials		2000-2014	✗	✗	✗
BEAMA CPA Basic Electrical Equipment	Constructed using weighted averages of PPIs and targeted specifically at materials costs in the electricity industry. Thus, particularly relevant to DNOs.	1970-2014	✗	✗	✗

BEAMA Materials in Electrical Engineering	Similarly to the "Basic Electrical Equipment", this captures many materials costs associated with the electricity industry.	1987-2014	✓	✗	✗
Manufacture of Electricity Distribution and Control Apparatus (2712000000) (Including older series)	Highly relevant. Covers a number of DNO input costs such as circuit breakers, surge suppressors and switchgear.	1987-2014	✓	✗	✗
Manufacture of Electric Motors, Generators and Transformers (2711000000) (Including older series)	Highly relevant. Covers distribution transformers and transmission and distribution voltage regulators.	1987-2014	✓	✗	✗
Manufacture of Other Electronics and Electric Wires (2732000000) (Including older series)		1987-2014	✓	✗	✗
Manufacture of Cold Drawn Wire (2434000000) (Including older series)	These PPIs cover the cost of wires and power cables.	1987-2014	✓	✗	✗
COPI Construction Output Price Index (Infrastructure)	Of all available COPIs, this is likely to be the most relevant to a DNO's materials costs.	1955-2014	✗	✗	✗

PAFI (Building) Series 3, Pipes and Accessories: Aluminium	We would expect the price of metal pipes to vary in a similar way to the price of metal products used by DNOs. Therefore these indices should act as good proxies for a DNO's materials input costs.	1991-2014	x	x	x
PAFI (Building) Series 3, Pipes and Accessories: Steel		1991-2014	x	✓	x
Manufacture of other Builders' Carpentry and Joinery	We would expect the price of wooden utility poles to follow trends in the price level of wooden goods used in the construction industry, such as beams and rafters. Therefore this PPI should act as a good proxy for the cost of utility poles	1996-2014	x	x	x
Resource Cost Index: Non-housing Building Materials (NOCOS)	Covers many input costs associated with a DNO's construction projects, but less specific than FOCOS	1990-2014	x	x	x
COPI Construction Output Price Index (Private Industrial)		1955-2014	x	x	x
COPI Construction Output Price Index (All Construction)	The Private Industrial COPI targets construction costs which have some relevance to DNOs.	1955-2014	x	x	x

All Construction Tender Price Index (ALLCON)	Measure of price level in tenders across all construction sectors. Should therefore reflect a DNO's materials costs to a certain extent. However, tender prices also depend on a number of other costs such as labour and transport.	1985-2014	x	x	x
PAFI Plastic Pipes	Not relevant as plastic is not a major input material for DNOs	1991-2014	x	✓	x
Manufacture of Copper (2444000000)		1996-2014	x	x	x
Manufacture of Basic Metals (6112240000)	As Ofgem notes, DNOs buy manufactured products, not raw materials. Therefore commodity price indices are only indirectly related to a DNOs input costs as there are other important factors, such as the cost of labour, which affect the price paid by DNOs for metal-based products.	1996-2014	x	x	x
Manufacture of Basic Iron, Steel and Ferro-Alloys (2410000000)		1996-2014	x	x	x
Manufacture of Other Non-Ferrous Metals (2445000000)		1996-2014	x	x	x

Plant and Equipment

Index	Relevance	Data Availability			Regulatory Precedent
		Time Period	CC NIE	RIIO-T1/GD1	DPCR5
Plant and Road Vehicles (70/2)	This index provides a comprehensive measure of the general level of plant and equipment costs faced by a DNO.	1977-2014	✓	✓	x
Machinery and Equipment Output <i>(Including the older series)</i>	These PPIs Incorporate a broad range of both general and special purpose machinery, and should cover all major equipment costs faced by a DNO.	1987-2014	✓	✓	x
Machinery and Equipment Input <i>(Including the older series)</i>		1987-2014	x	✓	✓
Electrical and Optical Equipment Output <i>(Including older series)</i>	Provides a more targeted measure of the cost of the specialist equipment used by a DNO and specifically includes "transformers and distribution apparatus".	1987-2014	x	✓	x



Electrical and Optical Equipment Input <i>(Including older series)</i>	Provides a more targeted measure of the cost of the specialist equipment used by a DNO and specifically includes "transformers and distribution apparatus".	1987-2014	x	x	x
Wiring and Wiring Devices	Provides a more targeted measure of the cost of the specialist equipment used by a DNO.	1996-2014	x	x	x

### Transport

Index	Relevance	Data Availability		Regulatory Precedent	
		Time Period	CC NIE	RIIO-T1/GD1	DPCR5
Manufacture of Motor Vehicles (2910000000)	This index covers a broad range of motor vehicles including those relevant to a DNO's transport costs, such as vans and lorries.	1996-2014	x	x	x