RIIO Carnival

How new Ofgem regulations are failing to hit high network company profits

January 2018

EXECUTIVE SUMMARY

Network costs – payments for transporting electricity from generator to user – are the second-biggest component of domestic electricity bills, accounting for 27% of the total. And according to government advisors, high network costs are one of the reasons why British industry pays more for electricity than most of its European competitors.[1] Unlike virtually all other European nations, electricity transmission and distribution in the UK is carried out by private companies – and as these are monopolies, revenues are regulated by Ofgem.

An ECIU report last year showed that the six companies that operate Britain's regional electricity distribution networks made extraordinarily high profits for the period 2010-2015 – averaging 32% of revenue.[2] Around half of this is paid out as dividends.

The distribution companies' lobby group, the Energy Networks Association, described our previous report as 'flawed' and 'out-of-date', but gave no reasons other than that our findings related to the period before a new regulatory regime, known as RIIO, came into force.[3] The implication was that RIIO would reduce profit margins down to a more reasonable level.

Now all of the network operating companies have released at least one annual return from the period after RIIO came into force. Examining these shows that nothing has changed. In the first year of RIIO, the six distribution network operators posted an average profit margin of 30.4%, with an average dividend pay-out ratio of 13.3%.

These businesses are monopolies operating in a non-competitive environment, and the services they provide are essential - therefore, they are among the lowest-risk investments available. Yet, their profit margins are far higher than in many markets that are genuinely competitive - including energy generation and retailing.

In fact, if the network operating companies continue at the same level of profit margins this year, that will make the average annual household electricity bill about £20 higher than if their profits were in the same ballpark as the 'Big Six' energy companies. There will be an impact on business energy costs as well, though it is difficult to analyse this on a per-customer basis as businesses' energy use varies so widely.

Distribution network operators generally perform well on the criteria set out by Ofgem. In particular, energy security is improving, with the number of outages caused by distribution faults each year declining. However, a significant need for investment remains, both to update old kit, and to drive the transition to the smart energy system that the government says it wants, and which is set to cut UK energy bills by an estimated £8bn per year. While companies' profits may be used to fund these badly-needed upgrades, that taken out as dividends is, by definition, unavailable for reinvestment.

This analysis shows that the concerns we raised in our previous report still prevail. From the evidence available, RIIO has made no impact on network operators' profit margins or dividends. This will add to questions already being asked by MPs and organisations such

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[1] https://www.ft.com/content/f8880f4a-09a6-11e7-ac5a-903b21361b43
[2] http://eciu.net/press-releases/2017/electricity-network-firms-profits-add-10bn-to-bills
[3] http://www.energynetworks.org/news/press-releases/2017/september/energy-network-companies-totally-reject-inaccurate-claims-about-network-company-profits.html

as Citizens Advice[4] about the effectiveness of Ofgem's regulation, and whether they are in fact allowing monopoly companies to make unreasonable amounts of largesse.

[4] https://wearecitizensadvice.org.uk/energy-consumers-missing-billions-875c433fc34c

Introduction

Energy bills remain the focus of intense political pressure, with both ministers and regulators under constant calls to keep costs as low as possible for British homes. Of all components that make up domestic electricity bills, the majority of focus has fallen on the effect of fluctuations in the wholesale market, and of the effect of government policies.

Second only to wholesale costs as a component of domestic bills (Figure 1), the cost of using the UK's electricity networks is beginning to face increased scrutiny. Network costs reimburse owners of electricity cables, substations and other infrastructure for the service of transporting power from the point of generation to the point of use. These companies are natural monopolies – there is no economic rationale for running two sets of cables down each street in the UK – and are therefore regulated by Ofgem to ensure that they represent good value for British bill-payers.

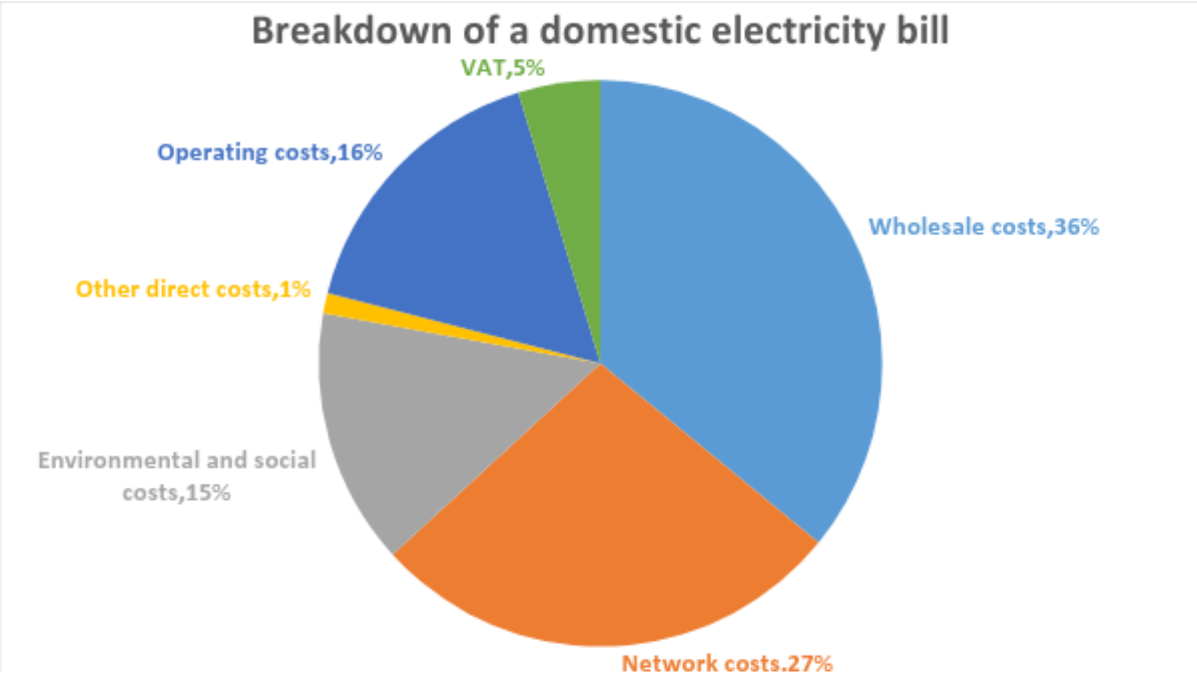

Figure 1: Breakdown of UK domestic electricity bill. **Source:** Ofgem[5]

Distribution network operators (DNOs) provide a vital service, operating regional power networks that bring electricity from the national high voltage transmission network into homes and businesses. They are also becoming increasingly important arbiters of the shift to a decentralised electricity system, managing fluctuations from a growing amount of distribution-connected capacity.

During 2017, two reports highlighted 'unjustified profits' that DNOs are recording. One – retrospective – found that DNOs recorded average profit levels of 32% from 2010-2015, with around half of this figure paid to shareholders as dividends.[6] The second – prospective – showed that DNO customers are set to overpay by £7.5 billion from 2015-23, although in this case the figure includes gas transmission and distribution as well as power.[7]

[5] https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills
[6] http://eciu.net/assets/Reports/ECIU_Monopoly_Money.pdf
[7] https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/energy-consumers-missing-billions/

DNOs are regulated under the RIIO-ED1 price control mechanism (henceforth referred to as 'RIIO'). Their revenue is set by Ofgem through negotiations with DNOs and trade bodies, but can change due to performance levels in certain categories, a metric designed to encourage innovation and above-expectation performance.

RIIO: Revenue = Incentives + Innovation + Outputs

These categories are:

- Safety
- Customer service
- Improving service to vulnerable customer
- Network reliability
- Servicing new connections
- Environmental performance.

The current RIIO period began in 2015 and is set to run until 2023, when a new control mechanism will come into force. Ofgem has responded to criticism of DNO profits by vowing to tighten return in the next price control period.[8] However, the possibility of 're-opening' the current RIIO control (which is possible at the 4-year mark) and the suggestion that profits should be returned to consumers have not been explored.

ECIU's previous report – *Monopoly Money* – highlighted returns made by DNOs since the beginning of the decade, the majority of which fell outside the current RIIO period. The Energy Networks Association[9] responded to *Monopoly Money*, implicitly suggesting that the current RIIO price control would solve any issues we had uncovered[10]. Now, all DNOs have published their 2016 annual returns, enabling an assessment of the effect of RIIO on the profit levels of these companies.

The methodology in this report is simple and straightforward, and consistent with that employed in *Monopoly Money*. Real figures for revenue, final profits and dividends paid are extracted from annual reports published by DNO companies, from which both profit margins and the share of revenue that is ultimately returned to shareholders can be calculated.

Different companies use different reporting periods – some submit their annual returns each December, others in March – and we simply use whichever the particular company submits, without any recalculations.

[8] https://www.cleanenergynews.co.uk/news/efficiency/ofgem-reinforces-tougher-price-control-warning-to-network-companies

[9] The Energy Networks Association (ENA) is the trade body that represents the DNOs. It acts as the 'voice' of the industry. Details can be found here: http://www.energynetworks.org/

[10] http://www.energynetworks.org/news/press-releases/2017/september/energy-network-companies-totally-reject-inaccurate-claims-about-network-company-profits.html

Is new regulation bringing down profits and dividends?

Analysis of annual reports from 2010-2015 shows that – relative to total revenue – DNOs recorded average annual profit margins of 32%, with a dividend pay-out ratio of 15.5%. This latest analysis shows that during 2016 the comparative profit margin was 30.4%, with dividends at 13.3%. A breakdown of 2016 results by company is shown in table 1.

Company	Revenue (£m)	Final Profit (£m)	Profit Margin (%)	Dividend payout (£m)	Dividend Pay-Out ratio (%)
SEPD (SSE)	690	185	26.8	100	14.5
SHEPD (SSE)	383	73	19	50	13
SP Manweb (Scottish Power)	360	110	30.6	26	7.2
SP Distribution (Scottish Power)	404	127	31.4	69	17.1
UKPN	1,702	447	26.3	217	12.8
Electricity NW	486	71	14.6	81	16.7
Northern Powergrid	768	254	33.1	0	0
Western Power	1,665	694	41.7	314	18.9
TOTALS	**6,457**	**1,961**	**30.4**	**857**	**13.3**

Table 1: 2016 financials. Totals rounded to the nearest £m. **Source**: Annual reports.[11]

Figure 2 shows that there is no notable difference between the 2016 results and those in previous years, despite the latter falling entirely under the RIIO price control mechanism. This suggests that the new RIIO framework has not changed anything with regard to profit and dividends levels. Were 2016-level dividends to remain unchanged across the remaining years of the current price control period, shareholders would be remunerated to the tune of £5.1 billion.

[11] See annex 1

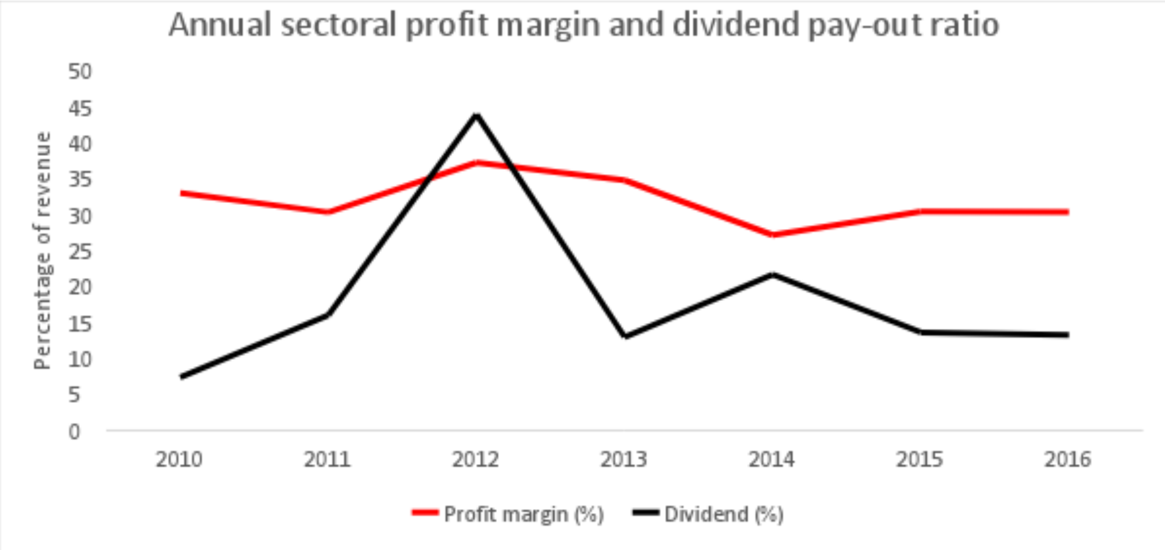

Figure 2: Annual DNO sector profit margin and dividend pay-out ratio.
Source: Companies House

Some DNOs – SSE, Electricity North West and Western Power – operate an April-March reporting period, and have therefore produced two annual reports since the introduction of RIIO. This extra data provides further scope to analyse these companies, and the effect of Ofgem regulation on their profits and dividend levels.

Total revenue for the combined SSE DNOs was £116.5m higher in year two than year one, and final profit up by £17.4m. Year two of RIIO saw a fall in dividend payout of £100 million, falling from 26.2% of revenue to 14%.

Interestingly, the parent company of the SSE DNOs announced that it would voluntarily return £65.1m to customers, following an internal performance review under *transmission* network price controls.[12] Currently, there are no plans for a similar review of distribution networks.

Final profit figures for Electricity North West fell from £117m to £71m from year one to two (26% of revenue to 14.6%). Despite this, reported dividend payout ratio jumped from 6.7% to 16.7%. In absolute terms, dividends paid under year one of RIIO totalled £30m, rising to £81m in year two.

Western Power's final profit figures went from £557m in year one to £694m in year two, giving margins of 38% and 42% respectively. Western Power did not pay a dividend in year one, but that did change in year two with a £313.8m payout. This equated to an 18.9% dividend payout ratio.

[12] https://www.ofgem.gov.uk/publications-and-updates/ofgem-welcomes-sse-s-contribution-consumers

COMPARISONS

Compared with DNOs, the financials of the 'Big Six' energy suppliers face high levels of media and political scrutiny. While they are much larger companies – with absolute figures that dwarf those of DNOs – it is still possible to compare profit margins and dividend levels.

In addition to retail arms, some of the Big Six have overseas operations, and all have generating assets. It is also worth noting that DNO figures for Scottish Power and SSE flow into the overall figures for their respective Big Six parent companies. Another difference is the markets in which these companies operate; energy supply is a competitive market, with customers able to change supplier if they wish. Comparable 2016 financial data for the Big Six are shown in table 2.

Company	Revenue (£m)	Final Profit (£m)	Profit Margin (%)	Dividend payout (£m)	Dividend Pay-Out ratio (%)
Centrica	27,102	885	3.3	651	2.4
EDF	7,588	293	3.9	242	3.2
E.ON	6,248	740	11.8	110	1.8
Npower	3,365	-4	-0.1	0	0
Scottish Power	5,423	581	10.7	663	12.2
SSE	29,038	1,346	4.6	907	3.1
TOTALS	**78,764**	**3,841**	**4.9**	**2,537**	**3.3**

Table 2: Big Six 2016 financials. Totals rounded to the nearest £m. **Source**: Annual reports.[13]

There is another important player in the UK's electricity system: National Grid Electricity Transmission PLC (NGET), which operates most of the UK's transmission system. It had 2016 revenues of £4,439m, final profit figures of £599m, and paid dividends of £150m[14]. These figures equate to a profit margin of 13.5% and dividend payout ratio of 3.4%. NGET revenues are also controlled and regulated by Ofgem, under transmission network price controls.

[13] See annex 2

[14] Figures obtained from NGET's annual report made up to 31st March 2017, available here: https://beta.companieshouse.gov.uk/company/02366977/filing-history

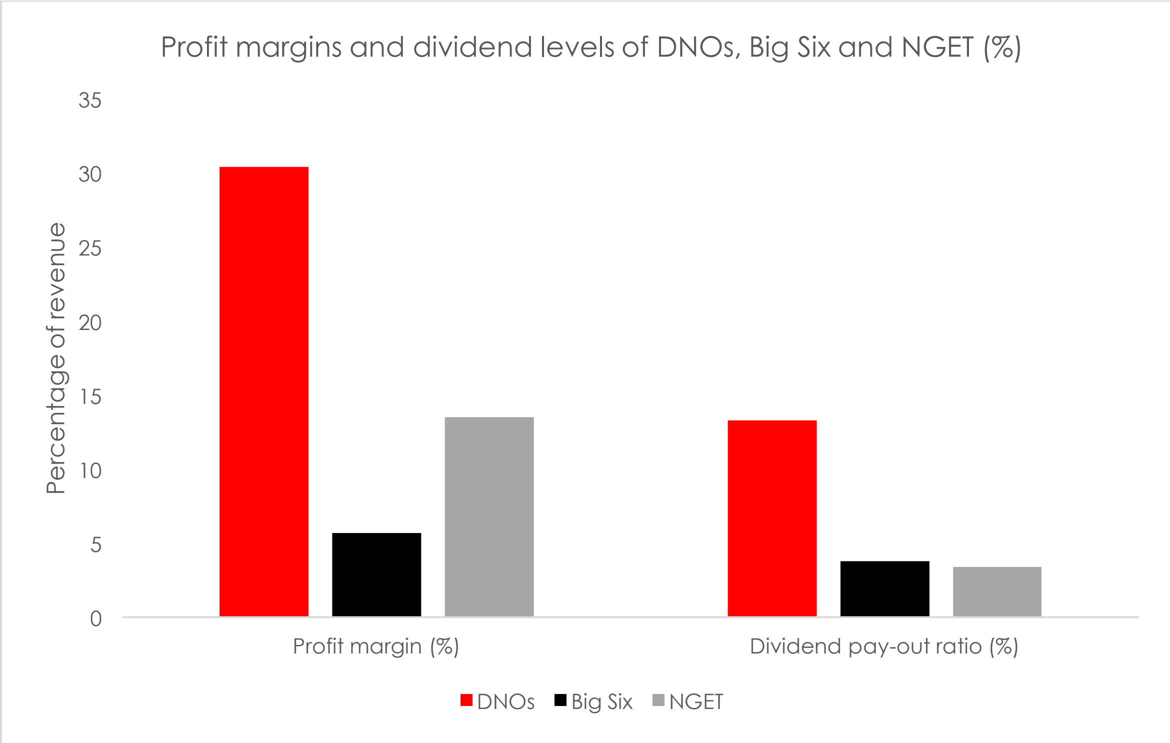

Figure 3: 2016 Profit margins and dividend pay-out ratios of DNOs, the Big Six and NGET

In percentage terms, the DNOs were the most profitable sector of the UK electricity supply chain in 2016. They also returned the highest dividends (as a percentage of turnover) to shareholders (Figure 3). This is despite the fact that compared to generators and retailers, they do not operate in a competitive market, accordingly shouldering significantly lower financial risks.

Were DNO profit margins reduced to levels seen in the Big Six, profits would fall from nearly £2 billion to around £300 million. This difference corresponds to an average £20 top-up on domestic electricity bills, and a burden of more than £1 billion for UK businesses.

Conclusions

The start of the RIIO price control in April 2015 was intended to ensure that distribution companies were operating in a way that provided value-for-money to consumers, however these figures show that little has changed on the back of new regulation. Indeed, the DNOs' lobby group, the Energy Networks Association, criticised our previous report on exactly these grounds, with Chief Executive David Smith saying: "The report has ignored the current price control period which began in 2015 and determines how much companies invest in the electricity network and the cost to customers." [15]

This work shows that, during the 2016 reporting period, which falls inside the RIIO period, nothing has changed. Of every £100 received by DNOs, they paid £13.30 to shareholders as dividends, a total of £857 million over the year. This is only slightly lower than the average across the previous six years, when current price control regulations did not apply. Overall profit margins are also alarmingly consistent with previous years, averaging 30.4% during 2016, compared with 32% for 2010-2015.

Those DNOs that have reported two sets of annual figures after the introduction of RIIO also show little if any change in performance. The point we made in our previous report is that money exiting DNOs as dividends cannot be ploughed back into improving distribution infrastructure or improving performance in other ways.

Comparisons with other parts of the electricity supply chain – the Big Six suppliers and National Grid's power transmission arm – show disproportionately high profit margins and dividend pay-out ratios for distribution operators.

Operating as regulated monopolies, DNO profits are largely a function of regulator actions, yet they continue to post financial returns that would be unseen in competitive industries. With the lion's share of the RIIO price control period still to come, should Ofgem wish to curb these profits it could pursue two courses of action; re-open the current RIIO regime, or force companies to repay 'excessive profits' to consumers. This is on top of the promises of tighter control for the next price control period.

[15] http://www.energynetworks.org/news/press-releases/2017/september/energy-network-companies-totally-reject-inaccurate-claims-about-network-company-profits.html

APPENDIX 1: DNO ANNUAL REPORTS

Company	Reporting Period	Revenue & Profits (page)	Dividends (page)	Link to Annual report (AR)
SEPD (SSE)[16]	Financial	19	21	SEPD AR
SHEPD (SSE)[17]	Financial	19	22	SHEPD AR
SP Manweb (Scottish Power)[18]	Calendar	16	17	SPM AR
SP Distribution (Scottish Power)[19]	Calendar	16	17	SPD AR
UKPN[20]	Financial	26	30	UKPN AR
Electricity North West[21]	Financial	55	59	ENW AR
Northern Powergrid[22]	Calendar	35	40	NP AR
Western Power[23]	Financial	26	27	WP AR

For ease of reference, we have provided not only links to the relevant annual reports, but also the specific page numbers where our figures were extracted from.

The calendar year reporting period runs from 1st January to 31st December. The financial year reporting period runs from 1st April to 31st March, so (for instance) in SSE's case their reporting period covers 1st April 2016 - 31st March 2017.

Note on UKPN: In the previous ECIU report on the financials of the DNOs, *Monopoly Money*, we used the annual reports of 'PPL UK Distribution Holdings Limited'. However, due to a restructure of the group of companies, the most relevant individual company to extract figures from now is 'UK Power Networks Holdings Limited'. For reference, details of the restructure can be found in the latest PPL UK Distribution Holdings Limited annual report, available here: https://beta.companieshouse.gov.uk/company/04267536/filing-history

16 https://www.ssepd.co.uk/Library/FinancialInformation/
17 https://www.ssepd.co.uk/Library/FinancialInformation/
18 https://beta.companieshouse.gov.uk/company/02366937/filing-history
19 https://beta.companieshouse.gov.uk/company/SC189125/filing-history
20 http://www.ukpowernetworks.co.uk/internet/en/about-us/documents/UK%20Power%20Networks%20Holdings%20Limited-2.pdf
21 https://www.enwl.co.uk/globalassets/investor-relations/documents/financial-reports/enw-limited/annual-report-31-march-2017.pdf
22 https://www.northernpowergrid.com/asset/0/document/3342.pdf
23 https://www.westernpower.co.uk/docs/About-us/financial-information/2017/GROUP_WPD_IFRS_Stats_Mar17-FINAL.aspx

Appendix 2: Big Six annual reports

Company	Reporting Period	Revenue & Profits (page)	Dividends (page)	Link to Annual report (AR)
Centrica[24]	Calendar	108	109	Centrica AR
EDF[25]	Calendar	19	24	EDF AR
E.On[26]	Calendar	9	11	E.On AR
Npower[27]	Calendar	12	15	Npower AR
Scottish Power[28]	Calendar	22	23	SP AR
SSE[29]	Financial	106	109	SSE AR

24 https://www.centrica.com/sites/default/files/aras/centrica_annual_report_and_accounts_2016.pdf
25 https://www.edfenergy.com/sites/default/files/edf_energy_holdings_limited_2016.pdf
26 https://beta.companieshouse.gov.uk/company/03407430/filing-history
27 https://beta.companieshouse.gov.uk/company/03653277/filing-history
28 https://beta.companieshouse.gov.uk/company/SC117120/filing-history
29 http://sse.com/media/472591/SSE-26520-AR2017-web-3-.pdf