

What Investors Want to Know: RIIO-3 Sector Specific Methodology Consultation

Diverging Long-Term Trends for UK Electricity and Gas Networks, but Key Regulatory Principles Largely Unchanged



Next Two Years Set Direction of Travel

Ofgem's recently published Sector Specific Methodology Consultation (SSMC) on gas networks and electricity transmission is an important step towards the definition of the next price control period RIIO-3.

Electricity and gas networks have different challenges ahead. For electricity networks, this relates to the huge investments needed for the energy transition, while for gas networks it relates to uncertainty about their long-term role.

Fitch Ratings believes that Ofgem's overarching approach for RIIO-3 will be evolutionary, rather than revolutionary, compared to RIIO-2. In particular, we expect Ofgem to confirm its general approach for several key areas of the finance framework (the focus of this report).

For gas networks, which have a more uncertain future, there is potential for the introduction of accelerated depreciation in RIIO-3 to reflect the expected gradual decline in gas consumption. However, we believe that Ofgem will generally aim for a complete recovery of regulated asset value (RAV) and any additional costs (such as repurposing or potential decommissioning) in the long term under any consumption scenario.

Ofgem's key challenge remains fulfilling its objectives of safeguarding customer interests (including intergenerational fairness) while allowing fair returns for both equity and debt investors and respecting its recently defined net zero duty.

We believe that Ofgem's concepts of financeability and investability acknowledge the substantial investment needs in the electricity sector to achieve net zero and the importance of visibility over the future of gas to allow adequate funding for gas networks.

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[Spotlight: UK Water Business Plans \(October 2023\)](#)

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The UK government's policy on the future of gas, and the role of hydrogen in the energy transition, is itself still unclear. Ofgem will have to adapt to future government policy, but we believe that it will continue to provide visibility over returns to issuers and investors, either through the reset of five-year price controls or through re-openers.

For electricity networks, we expect Ofgem to build on the success of its accelerated strategic transmission investment (ASTI) framework in RIIO-3. We anticipate that equity inflows will be contingent upon the outcome of Ofgem's final determination concerning the RIIO-3 framework.

Furthermore, the Energy Act introduced a net zero duty for Ofgem. This came into effect in December 2023, together with the Independent System Operator and Planner (ISOP) body. The SSMC seeks an effective way to ensure collaboration between the government, Ofgem, ISOP, network operators underpinned by the Centralised Strategic Network Plan (CSNP), and regional planning.

What Are the Next Steps for RIIO-3?

We expect Ofgem to provide an early view over the cost of capital in the Sector Specific Methodology Decision (SSMD) in 2Q24. The networks are set to submit their final business plans in 4Q24. We then expect a final determination in 4Q25, before RIIO-3 begins in April 2026 for the following five years.

SSMC covers RIIO-3 gas distribution and gas and electricity transmission price controls. However, we expect that any changes would naturally be reflected in the next price control for electricity distribution. The consultation period on the SSMC closes on 6 March 2024.

How Does Fitch Approach UK Networks and the Energy Transition?

Gas Networks

Fitch expects the UK regulatory environment to remain a high-quality, low-risk framework for gas networks, despite the transition scenarios and the likelihood of new government policies over time.

Our view is reinforced by Ofgem's fair attitude to investors in addressing the complexities associated with the energy transition. The regulator recognises the need to modify regulatory measures in order to meet government objectives effectively, but we believe it will continue to respect some fundamental principles, including the full recovery of RAV and of any additional costs outside of issuers' control, such as potential decommissioning or repurposing costs, in line with regulatory licence conditions.

However, we see increasing execution risk for gas networks especially in the medium to long term, mainly due to low visibility over the government policy towards net zero, the actual speed of

the transition, and the regulator's approach over time, particularly as evidence increases of a sustained decline in gas consumption.

Assuming that the UK's net-zero targets remain unchanged, in the long-term a part of the gas network could be repurposed into hydrogen or carbon capture, utilisation and storage (CCUS) applications, which could mitigate stranded asset risk for parts of the networks, in our view. In this respect the UK government's decision (currently expected in 2026) is important to assess the potential of hydrogen for heating, CCUS and the implications for the wider energy transition. We view the development of hydrogen for domestic heating as very challenging, if pursued at all. In this respect, gas transmission seems to have more potential to benefit from the development of hydrogen compared to gas distribution activity.

Electricity Networks

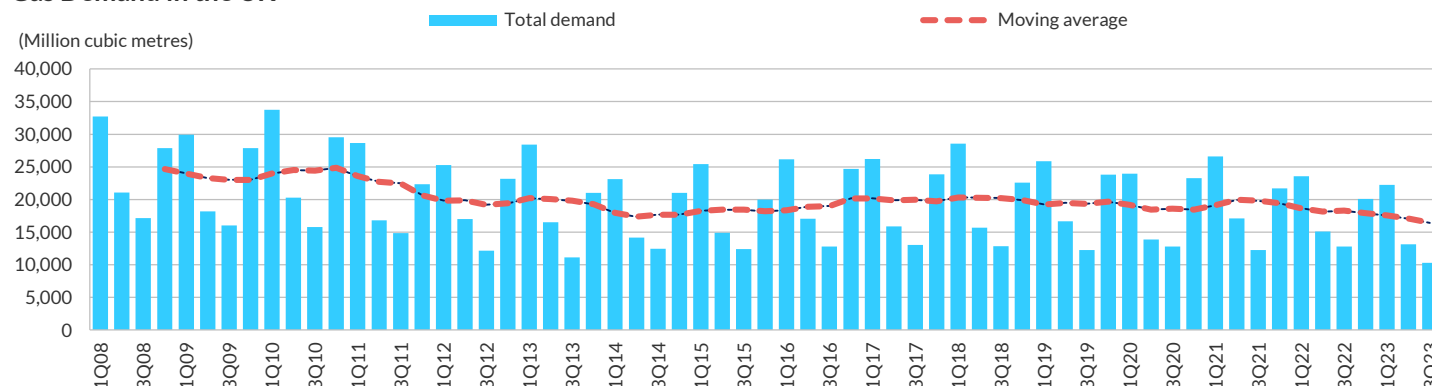
The transition to net zero will require massive investments in electricity networks to cope with the electrification of the economy, connect new renewable capacities and improve resilience and flexibility. Rising electricity demand will mainly derive from domestic heating (the National Infrastructure Commission believes that heat pumps are best placed for domestic heating) and the gradual electrification of transport. For electricity networks, this will result in large investments and substantially negative free cash flow.

Ofgem's ASTI regulatory framework is likely to streamline the regulatory approval process further, potentially contributing to the UK government's target to deliver 50 gigawatt (GW) of wind generation by 2030. Fitch also forecasts additional allowed investments under Ofgem's re-openers, a type of uncertainty mechanism under which Ofgem adjusts and approves allowances within the period. This is on top of the baseline financial determination allowances for totex in a given regulatory period.

ASTI covers a total of 26 projects on the electricity transmission network for about GBP20 billion and extends mostly into RIIO-3, from 2026 to 2031. Furthermore, the introduction of potential changes to the queue management system for new connections could help achieve energy reform targets. If the requesting parties do not achieve key milestones, the ISOP could have the right to terminate connections, thereby reducing connections times for efficient counterparties.

In light of this macro trend, in our approach to electricity networks ratings we acknowledge the long-term industry trends and the constructive approach of the regulator, and would tolerate a temporary moderate breach of rating guidelines if it were due to an investment peak (and not related to structurally weaker operational performance or more aggressive dividend policies), as investments are added to RAV and guaranteed to earn a regulated return in the long term.

Gas Demand in the UK



Source: Fitch Ratings, Fitch Solutions, UK Government National Statistics, Department of Energy Security and Net Zero

When Do You Expect to Take Rating Actions?

Gas Networks

Given the evolutionary content of the SSMC, our assessment of the overall quality of the regulatory framework is unchanged. We do not expect to take widespread rating actions on gas networks solely due to the SSMC or SSMD.

That said, we may revise debt capacity downwards for gas networks, based on the materialisation of or increasing evidence for the execution risks already mentioned. However, for now and in absence of unexpected measures from Ofgem, we see this more as a gradual process depending on many variables. We do not necessarily link debt capacity parameters to a specific phase of the regulatory process before RIIO-3.

In a scenario of a decline in gas demand that significantly outpaces normal RAV depreciation, the cost of the RAV will be recovered from fewer consumers, leading to increasing charges per remaining consumer. We understand that the regulator aims to preserve intergenerational fairness in terms of RAV recovery, and could support an introduction of accelerated depreciation as early as RIIO-3, leading to a faster decline in RAV.

This would basically represent RAV 'paid back' to networks. However, we would expect networks to use the additional cash flow to proportionately reduce net debt, while a more than proportionate amount would be preferable from a rating perspective mainly to factor in firstly the changing nature of the business, which may transition into activities with a defined operational lifespan, and secondly the need to repay all financial debt before the RAV is fully depreciated, to factor in an adequate cushion against any negative unexpected developments at the end of the useful life.

As a result, we believe that the impact on networks' credit profiles will depend mostly on issuer-specific financial policies and their ability and willingness to adjust capital structures to the decline in RAV. We also recognise that this will most likely be a very long process covering several price control periods, and we do not expect any sudden material reduction in debt capacity (measured in particular through net debt/RAV) to preserve the current ratings, but rather a gradual and steady decline of debt capacity over time.

Against this backdrop, we believe that gas network operators seeking to preserve their ratings in the long term will have to periodically check the adequacy of their financial policies and, where needed, adjust their capital structures to reflect the speed of the decline in the RAV.

For the time being, rating headroom is comfortable to adequate for gas networks for the current price control periods (RIIO-GD2 and RIIO-GT2), reflecting overall gearing, nominal post-maintenance interest coverage ratios (PMICRs) and cash PMICRs.

The exceptions are Wales & West Utilities Limited (WWU, senior secured class A debt rating 'A-'), with depleted nominal PMICR headroom. However, we expect WWU will maintain its rating, even in the event of a slight deterioration in nominal PMICRs below negative rating sensitivities. This is underpinned by the large headroom for the existing net debt/RAV.

We could consider using Fitch-adjusted maximum allowed net debt/RAV (i.e. an adjusted net debt/RAV level below the negative rating sensitivity) at WWU that adequately offsets the forecast shortfall in nominal PMICR (i.e. the difference between the forecast PMICR and the PMICR negative rating sensitivity). The Fitch-adjusted maximum allowed net debt/RAV would then change with our forecast updates.

The other exception is Scotland Gas Networks plc (senior unsecured debt rating of 'BBB+') and Southern Gas Networks plc (senior unsecured debt rating of 'BBB+'), with exhausted cash PMICRs headroom. However, the robust nominal PMICRs and adequate net debt/RAV headroom effectively counterbalance this pressure.

Electricity Networks

We may be a bit more tolerant towards leverage for electricity networks, depending on many factors driven primarily by the pace and scale of investments linked to the energy transition. In addition, we expect a greater role for fresh equity (above retained earnings) in electricity networks, especially if the sector expects to maintain average net debt/RAV in RIIO-3 at similar levels to RIIO-2.

We view current rating headroom as comfortable for the electricity networks for the current price control (RIIO-ED2 and RIIO-ET2), reflecting overall net debt/RAV, nominal PMICRs and cash PMICRs. The exceptions are Electricity North West Limited (ENW; senior unsecured debt rating of 'A-') and North West Electricity Networks

plc (NWEN; senior secured debt rating of 'BBB'). NWEN's Negative Outlook reflects depleted headroom for nominal PMICR and net debt/RAV. The Negative Outlook of ENW is driven by that on NWEN, given the two-notch maximum rating differential. These are the only energy networks on Negative Outlook in our UK rated portfolio.

What Does the New Investability Concept Entail?

We believe that, with the proposed concept of investability in SSMC, Ofgem acknowledges that unprecedented investments in the sector are required to deliver net zero and allowed return on equity will need to be sufficient to retain and attract fresh equity. Fitch also expects that equity will play an increasingly important role in the UK's transition to net zero, to support the huge investment needed while maintaining sustainable financial profiles.

Fitch believes that the investability concept will not affect credit profiles on its own. However, it is a credit-positive development that shows the attention of the regulator towards the financial sustainability of the transition. Ultimately, the possibility of attracting new equity to the system is key to strengthening issuers' financial profiles and preserving their ratings.

As for the assessment of the existing financeability concept (companies' ability to finance their activities on the basis of notional capital structures), Fitch views the proposed extension of the time horizon to the longer term (beyond the current price control) as a step towards greater viability, particularly amid the uncertainty over the pace of gas demand reduction.

What to Watch

- SSMD 2Q24
- UK general election in 2024
- Business plan submission in 4Q24
- Draft determinations in 2Q25
- Final determinations in 4Q25
- Government policy on heating, transport and hydrogen in 2026
- Government policy on the energy transition
- Gas and electricity demand
- Central and regional planning from ISOP, CSNP and distribution networks
- Consumer behaviour
- Government subsidies

Could Regulatory Depreciation and Asset Lives Change for Gas Networks?

We understand that a change in the depreciation profile of gas networks is possible in RIIO-3. We do not expect it to be necessarily a game-changer but Ofgem could start to factor the direction of travel in its decisions ahead of the likely November 2026 government decisions on the energy transition (after the start of RIIO-3 in April 2026).

Under the current depreciation policy, Ofgem estimates that gas networks' RAV will not fully depreciate by 2050, leaving the networks with an unfunded gap. We understand that any change in the depreciation policy will depend on the timing, speed, and pathway of the transition to net zero, over which the regulator currently has limited visibility.

A transition from the current depreciation profile (45 years for new assets with a front-loaded profile) to a shorter recovery period would boost the networks' cash flow generation in the medium term, which would be positive for cash PMICRs, but we may need to adjust the ratio definition to the new reality.

Under the 'current depreciation profile' in the table below, the numerator of the ratio – post-maintenance cash flow (PMCF) – represents allowed capital return plus retained totex out/under-performance and incentive income/penalty, and assumes all revenue from regulatory depreciation is used to maintain the economic value of the RAV.

Under the 'accelerated depreciation profile', cash PMICR would become less relevant, as the numerator would be inflated by the additional cash flow from the accelerated depreciation, while inflating the capex required to preserve the economic value of the RAV would not add value to the analysis. We could therefore introduce new credit metrics to better reflect project finance-like features, or adjust the PMICR calculation, or place greater reliance on net debt/RAV and networks' financial policies.

The table shows a high-level example of how cash PMICRs would evolve after accelerated depreciation if we use maintenance capex instead of regulatory depreciation in the numerator.

Change in Depreciation Profile

(GBPm)

Current depreciation profile		Accelerated depreciation profile	
Regulatory depreciation	30	Regulatory depreciation	40
Other revenue building blocks	100	Other revenue building blocks	100
Operating expenses	-50	Operating expenses	-50
EBITDA	80	EBITDA	90
Less nominal regulatory depreciation	-30	Less maintenance capex	-20
Less cash tax	-5	Less cash tax	-5
Less cash pension deficit repair	-2	Less cash pension deficit repair	-2
PMCF (a)	43	PMCF (a)	63
Interest (b)	40	Interest (b)	40
Cash PMICR (a/b) (x)	1.1	Cash PMICR (a/b) (x)	1.6

Source: Fitch Ratings, Fitch Solutions

We expect nominal PMICRs to follow a similar trend to cash PMICRs. While the year-on-year RAV indexation will reduce over time, accretion on index-linked debt (ILD) would follow a similar trend as ILD is paid down.

Will the Cost of Equity Change?

Fitch views Ofgem's proposal to amend its approach in estimating the cost of equity allowance as mildly positive for credit profiles. Ofgem's consultation supports a more accurate assessment of the allowed equity rate of return, which better captures the risk associated with investments essential to achieving the UK's net zero target. Together with the investability concept, the proposed change aims to attract the much-needed equity required for the energy transition, while ensuring that customer needs are met.

While Ofgem aims to continue basing its estimation primarily on the capital asset pricing model (CAPM), it is considering a change to the equity risk premium (ERP) component of the formula (the ERP is defined as the difference between total market return, or TMR, and risk-free rate, or RFR).

We do not expect any changes to the RFR, which is updated annually and based on the average daily index-linked gilt yields of the previous October. However, Ofgem is considering using both historical ex-post and historical ex-ante analysis of yields as a more appropriate estimation of ERP. Current RIIO-2 methodology focuses only on historical ex-post data. Ofgem has not indicated the weight split between the two data sets. However, in the interest of a stable long-term TMR, forward-looking evidence should not be the main component.

Another key consideration is a change to the equity beta estimation. Ofgem is proposing to review the beta assessment time period and comparable listed companies, including listed UK energy and water networks, although listed pure firms are not directly available. If some networks hold different systematic risk, beta can be amended to a more accurate estimate. This could result in different beta estimates for different regulated network sectors.

All companies' beta analysis will be adjusted to reflect a notional capital structure. Ofgem also aims to consider different timeframes and frequencies in its estimation.

Furthermore, similar to RIIO-2, we expect a 5% allowance in RIIO-3 to cover the direct and indirect costs of issuing new equity.

Will the Cost of Debt Allowance Change?

We believe the proposed weighted cost of debt allowance will particularly benefit electricity networks, as the sector foresees a material increase in investments. Ofgem aims to better align cost of debt allowances to diverging investment trends between gas and

electricity networks through a weighted trailing average index by the annual RAV additions, with refinancing assumed over the tenor of the index, as opposed to the unweighted approach in RIIO-2.

On the inflation component of the allowed cost of debt, Fitch expects the proposed mechanisms to remove the benefits (in terms of allowances or RAV indexation) of high inflation. However, it would also protect networks from risk, reducing overall volatility. To achieve this, Ofgem has proposed three options:

1. Cost of debt allowance set in nominal terms for fixed-rate debt, compared to real currently, and real allowances for index-linked debt. Simultaneously, the RAV would be indexed only in proportion to the ILD and equity. The notional fixed rate debt assumption would be delinked from out-turn inflation to avoid compensating investors twice. This would better align the actual cash allowance with the issuer's cash interest payments, in our view.
2. Cost of debt allowance unchanged, but RAV indexed on the long-term assumption of CPIH (the five-year Office for Budget Responsibility, or OBR, forecast of about 2%, based on OBR forecasts at the time, which is used to deflate the cost of debt allowance), instead of out-turn inflation.
3. Unchanged remuneration mechanism but a more appropriate measure of long-term inflation expectations priced into debt.

Ofgem acknowledge that the first two options would require a long transition period and/or phased implementation for issuers to adapt their capital structures, considering the long-dated maturities of ILD.

What Does this Mean for Issuers' Financial Resilience?

We believe the impact of the proposed consultation mechanisms on issuers' credit profiles, availability of resources and dividend lock-up triggers would be neutral on financial resilience in RIIO-3 compared to RIIO-2.

The consultation has stricter language that includes a requirement for licensees to hold more than one investment-grade rating, implying a minimum rating of 'BBB-'. All Fitch-rated licensed ring-fenced energy Opcos are currently rated at least 'BBB', so the introduction would not require any adjustment to capital structures.

Ofgem's Proposed Mechanisms to Reduce the Impact of Out-Turn Inflation Debt Performance

Key Factors Considered	RIIO-2	Nominal allowance	Indexation of the RAV to the long-term assumption	Unchanged methodology; review of the long-term assumption
Cash allowance	Real allowance	Nominal allowance for fixed-rate debt + real allowance for ILD	Unchanged	Unchanged
RAV indexation	Indexed on outturn inflation	Indexed only in proportion to ILD & equity notional assumption	RAV indexed by a combination of long run assumption + out-turn	Unchanged
Eliminate real equity returns correlation to inflation	No	Yes	Yes	No
Transition mechanism under consideration	NA	Yes	Yes	No

Source: Fitch Ratings, Fitch Solutions, Ofgem

Ofgem's Proposals to Strengthen Financial Resilience

Key factors considered	RIIO-2	RIIO-3 proposal
Credit ratings	Licensees must "use reasonable endeavours" or "take appropriate steps" to maintain an investment-grade rating.	Amend language to "require" more than one investment-grade rating.
Availability of resources	Every year, the licensee's board must certify that it has sufficient financial resources for 12 months.	Require cover of the entire price control or a minimum of three years.
Dividend lock-up trigger	Pre-dividend certificate of compliance with licence conditions including credit rating.	To be the earlier of reaching: 'BBB-' with a Negative Watch/Outlook; or 80% regulatory gearing.

Source: Fitch Ratings, Fitch Solution, Ofgem

Fitch applies a one-notch rating uplift above the issuer default rating (IDR) to debt issued by regulated utilities (or their guaranteed Fincos) in creditor-friendly jurisdictions with a robust regulatory environment, like the UK. Fitch's generic sector uplift is supported by above-average recovery expectations for regulated networks, in turn driven by fair regulatory frameworks and licencing ring-fence provisions (as is the case for Ofgem). Furthermore, the valuation of regulated utilities is much clearer, supported by the known RAV.

We believe that the senior debt rating¹ (rather than the IDR²) would be a more appropriate rating to monitor, to factor in recovery considerations and to allow better comparison with the ratings of other agencies (where rating definitions may vary).

Under the consultation, Ofgem has also put forward a proposition requiring the licensee's board to attest to having adequate financial resources to sustain operations for a minimum of three years (or the entire price control period), considering dividend distributions. This measure is indicative of the regulator's recognition of the importance of financial resilience.

However, liquidity and market access are generally not key rating drivers for investment-grade networks. Networks typically show a consistent ability to raise debt, which can be largely attributed to a robust regulatory environment and a sustainable capital structure.

The proposed dividend lock-up trigger of the earlier of 80% regulatory gearing or a 'BBB-' rating should not bring any material consequence, in our view, in light of current ratings and capital structures of the rated UK energy networks. Furthermore, networks are expected to provide a financial resilience report if ratings fall to 'BBB'/Negative.

Could Midcos and Holdcos Be Negatively Affected?

Fitch believes that Ofgem's proposal to link distributions directly to financial resilience, performance and investment needs will increase the vulnerability of creditors higher up in company structures (Midcos and Holdcos), which primarily rely on dividends from licensed ring-fenced Opcos to service their debt. The actual increase in risk will depend on the financial headroom at Opco level and the operating performance record of the Opcos.

¹ Issue ratings include an expectation of recovery and may be notched above or below the IDRs, and are assigned to secured and unsecured debt.

This provision should not have any short-term consequence but it indicates a more protective stance towards Opcos and therefore potential higher risk for Midcos and Holdcos in the long term. If these licence changes were to be implemented, Fitch would expect some Opcos to shift towards more conservative financial policies due to the risk of dividend restrictions.

Ofgem is also proposing increased scrutiny regarding decision-making processes related to distributions higher up the financial structures of licensed ring-fenced Opcos. This implies potential amendments to the licence provisions aimed at restricting distributions when Ofgem has concerns about weak financial resilience, poor operational performance or increasing investment needs.

Ofgem plans to distinguish between expectations for distributions to adequately reward risk and performance of the Opcos and the necessity of distributions solely to meet contractual obligations aiming at maintaining debt service at Midco or Holdco levels. We assume that Ofgem is unlikely to accept the latter as the only justification for distributions.

Ofgem's defines distributions as dividends to ordinary equity and equity-like instruments, as well as receipts to shareholder loans including interest, irrespective of whether they are disbursed to external shareholders. Ofgem also expects to strengthen the reporting for licensed Opcos through regulatory instructions and guidance (RIGs) and regulatory financial performance reports (RFPRs).

Ofgem is consulting to review the modification of RIGs and RFPRs. The objective is to underscore the significance of financial resilience reporting and to ensure availability of a comprehensive set of early warning indicators for identifying financial resilience issues.

How Does Government Policy Link to Investment Plans?

UK targets for a net zero power system by 2035 and a net zero economy by 2050 will boost demand for electricity as heating and transportation is progressively electrified. We believe this will require a coordinated effort between the government, regulator, networks, supply chain (including skilled workforce engineers and

² IDRs show an entity's relative vulnerability to default on financial obligations. In aggregate, IDRs provide an ordinal ranking of issuers based on Fitch's view of their relative vulnerability to default, rather than a prediction of a specific percentage likelihood of default.

new technologies) and consideration for consumer behavioural changes and acceptance of the energy transition.

In September 2023, UK Prime Minister Rishi Sunak committed to the development of a strong spatial planning framework for the energy system, intended to bridge the gap between government policy and infrastructure development plans. Ofgem's new network planning, CSNP, will be delivered by the Future System Operator (FSO). Taking into consideration all the expected onshore and offshore developments, recommendations should be set on how the system will develop to decarbonise the electricity system by 2035.

The Energy Act enables the separation of the National Grid Electricity System Operator Limited (ESO), owned by National Grid Electricity Transmission, and the Gas System Operator (GSO), owned by National Gas Transmission, to form ISOP, replacing the FSO.

The ISOP would be regulated by Ofgem and would be responsible for:

- Planning how electricity and gas transmission systems are developed,
- The operation of the electricity transmission system,
- Promoting three main objectives: net zero, security of supply, and efficiency and economy; and
- Additional net zero-focused roles, which could include planning for new systems for hydrogen and CCUS.

The ISOP will take on all the existing roles and responsibilities of the ESO and GSO, including coordination, long-term planning, forecasting and market strategy activities in respect of electricity and gas. The SSMC seeks to find an effective way to ensure collaboration between ISOP and transmission operators and the CSNP.

Ratings in 'A' and 'BBB' Categories

Company	Class of debt	Senior debt rating ^a	IDR ^b	Outlook	Rating Sensitivities		
					Net debt/RAV (%)	Cash PMICR (x)	Nominal PMICR (x)
Gas Networks							
NGT	Senior unsecured	A-	BBB+	Stable	64-72	1.6-1.9	1.9-2.1
NGTH	n.a.		BBB+	Stable	n.a.	n.a.	n.a.
CGL	Senior unsecured	A-	BBB+	Stable	60-67	1.8-2.0	2.0-2.2
SGN Scotland	Senior unsecured	BBB+	BBB	Stable	68-73	1.5-1.7	1.8-2.0
SGN Southern	Senior unsecured	BBB+	BBB	Stable	68-73	1.5-1.7	1.8-2.0
WWU	Senior secured class A	A-	BBB	Stable	65-70	1.4-1.6	1.7-1.9
	Senior secured class B	BBB+			68-73	1.3-1.5	1.6-1.7
PEG ^c	Senior secured	BBB+	BBB	Stable	65-70	1.5-1.8	1.9-2.2
Electricity Networks							
LPN ^d	Senior unsecured	A-	BBB+	Stable	60-70	1.6-2.0	2.0-2.2
EPN ^d	Senior unsecured	A-	BBB+	Stable	60-70	1.6-2.0	2.0-2.2
SPN ^d	Senior unsecured	A-	BBB+	Stable	60-70	1.6-2.0	2.0-2.2
NPN	Senior unsecured	A	A-	Stable	>60	<1.9	<2.2
NPY	Senior unsecured	A	A-	Stable	>60	<1.9	<2.2
NPH	Senior unsecured	A-	BBB+	Stable	60-68	<1.6	<2.0
NGET	Senior unsecured	A-	BBB+	Stable	67.5-75.0	1.5-1.7	1.8-2.0
NG PLC	Senior unsecured	BBB	BBB-	Stable	71-78	n.a.	n.a.
SPL	Senior unsecured	A-	BBB+	Stable	n.a.	n.a.	n.a.
SSE	Senior unsecured	A-	BBB+	Stable	n.a.	n.a.	n.a.
ENWL	Senior unsecured	A-	BBB+	Negative	60-70	1.6-2.0	2.0-2.2
NWEN	Senior secured	BBB	BBB-	Negative	78-82	1.3-1.4	1.7-1.8

^a Issue ratings include an expectation of recovery and may be notched above or below the IDRs, and are assigned to secured and unsecured debt.

^b IDRs show an entity's relative vulnerability to default on financial obligations. In aggregate, IDRs provide an ordinal ranking of issuers based on Fitch's view of their relative vulnerability to default, rather than a prediction of a specific percentage likelihood of default.

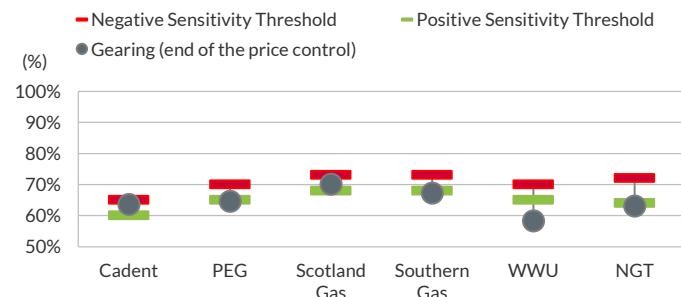
^c Phoenix Energy Group Limited (PEG) – not regulated by Ofgem.

^d London Power Networks (LPN), Eastern Power Networks plc (EPN) and South Eastern Power Networks plc (SPN) owned by UK Power Networks (UKPN), NGT – National Gas Transmission PLC, NGTH – National Gas Transmission Holdings Limited, CGL – Cadent Gas Limited, SGN Scotland – Scotland Gas Networks plc, SGN Southern – Southern Gas Networks plc, WWU – Wales & West Utilities Limited, NPN – Northern Powergrid (Northeast) plc, NPY – Northern Powergrid (Yorkshire) plc, NPH – Northern Powergrid Holdings Company, NGET – National Grid Electricity Transmission plc, NG PLC – National Grid Plc, SPL – Scottish Power Limited (subsidiary of Iberdrola), SSE – owner of Scottish and Southern Electricity Networks (SSEN), ENW – Electricity North West Limited (ENW), NWEN – North West Electricity Networks plc.

Source: Fitch Ratings, Fitch Solutions

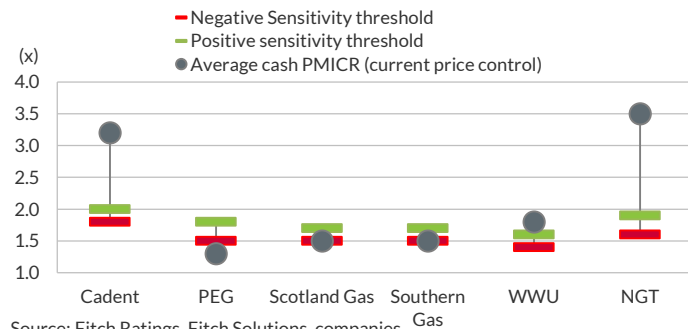
Gas Networks

Rating Headroom by Gearing



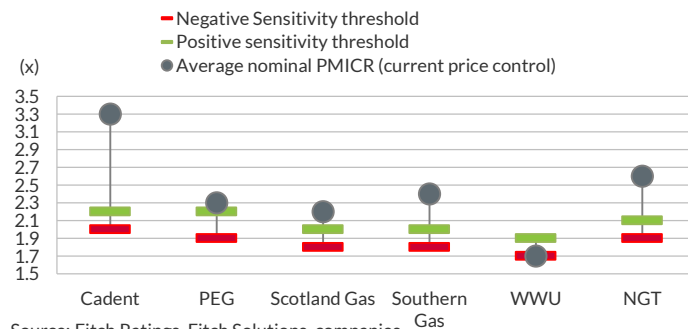
Source: Fitch Ratings, Fitch Solutions, companies

Rating Headroom by Cash PMICR



Source: Fitch Ratings, Fitch Solutions, companies

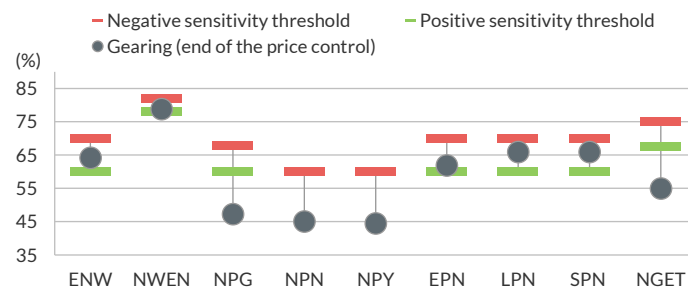
Rating Headroom by Nominal PMICR



Source: Fitch Ratings, Fitch Solutions, companies

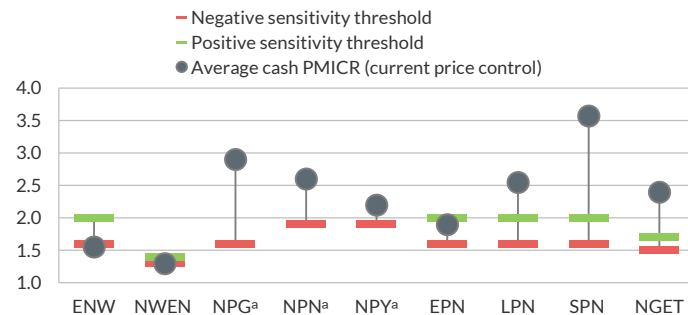
Electricity Networks

Rating Headroom by Gearing



Source: Fitch Ratings, Fitch Solutions, companies

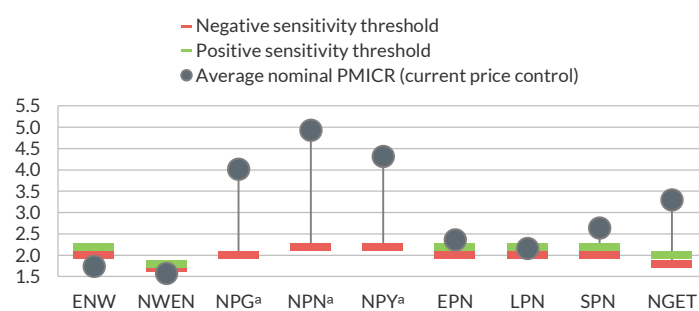
Rating Headroom by Cash PMICR



^a Four-year average

Source: Fitch Ratings, Fitch Solutions, companies

Rating Headroom by Nominal PMICR



^a Four-year average

Source: Fitch Ratings, Fitch Solutions, companies

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