ofgem
Making a positive difference
for energy consumers

Transcript of IR call on 30th November

Akshay Kaul

Welcome everybody to this investor call hosted by OFGEM on the RIIO-ED2 final determinations, and a very good afternoon or good morning or good evening to wherever you are joining in from the world. I just like to start with a big note of thanks to everybody, all the stakeholders who have been a part of this journey to set these really important price controls for the next five years for the local distribution networks. And we've had really terrific engagement from right across the spectrum, from consumer charities, investors, the companies, regional national government colleagues, and a whole host of other interested in and engaged voices and all together I think the constructive debate that we've had, since the summer when we published our draft determinations, has led to a product which I genuinely think strikes the right balance between enabling the necessary investment to propel the sector, the energy sector, on its net zero journey, to enable this shift from the reliance that we have as an economy on imported gas at the moment towards a future where genuinely the economy is run on cheaper, more secure, domestically produced energy, whether it's for transport or heat or power of other purposes. So these are really, really important price controls and I'm really pleased with the engagement that we've had and a big thank you to everybody who's been a part of it.

What we're going to do this afternoon is the session is basically two parts. For the first part about 40 minutes we'll go through some highlights of the announcement of the package that was announced this morning. I'll say some very high level, contextual things, and then I'll hand over to Steve McMahon, who is Deputy Director for the ED2 price controls-- the SRO for price controls-- who will take us through some of the key highlights in the final determinations, particularly from a revenue and incentive perspective. And then Steve will hand over to Peter Bingham, director for Analysis and Assurance, who will go through the key highlights in the finance package which I know will be of particular interest to this audience. And then we'll open up for Q&A. We'll have at least an hour for Q&A, where I'll go through the rules closer to the time but basically you can just put up your hand on Teams in the usual way, if you want to ask a question. There will be a slightly more complex procedure for those

that are joining on the phone and can't operate the hands but I'll come to that when we come to the Q&A section.

So I think if we can get on to the next slide, and I'll begin with some basic notes of introduction.

These final determinations essentially set out of five years spending plan, which goes up to March of 2028. For the 14 GB distribution network licensees which are spread across essentially six ownership groups across the country. Our objective in these final determinations has been to ensure that the networks deliver the infrastructure that's needed for net zero for that shift that I mentioned, but to protect energy consumers by ensuring that this is done at lowest cost and the fact a key headline from the announcement that was made this morning is that this huge investment programme, 22 billion pounds of spending is being enabled to facilitate the net zero shift at no extra cost on the bill to energy consumers which I hope will be welcome news to a lot of consumers around the country who are obviously already quite worried about the affordability of energy bills.

The RIIO-ED2 period begins on the 1st of April 2023. Obviously any appeals to the CMA in the standard protocol must be launched by the 31st of March 2023. And then after the hearings, the CMA would normally expect to provide its final determinations towards the end of 2023, if it gets to that.

If you go on to the next slide. The key context here obviously is that ED2 will deliver the sustainable energy future for our system at no additional cost in network charges on bills for consumers. The networks need to fundamentally change to meet the needs of this net zero world because we are forecasting a significant increase in the demand for electricity whether that comes from the electrification of transport, or the electrification of heat, and also a significant increase in usage of the networks because more and more people are going to be producing their own power locally. Already about a quarter of the electricity that is produced is produced embedded in distribution grids and that is only set to expand in the future. This settlement is a vital part of forging flexible, adaptable regulation, to speed up the building of our network infrastructure and connect all of these fantastic new low carbon technologies to the local grids but it has to be done in a in a sensible way with the right kind of balance.

You know, that's where this price control, I firmly believe strikes the right balance because it pushes the network companies on customer service targets and reliability, improving the experience for a lot of customers where some companies have been lagging behind. But at the same time, it makes spending allowances for a big expansion and network capacity; encourages network companies to again improve and speed up the connection of new customers to the grid. And all of this has to be done at the least cost to consumers. And as I mentioned, the entire package has a net flat effect on network charges on bills. And that is because even though the Totex levels are rising, that is offset by the fact that we are lowering the overall rate of return compared to ED1 going into ED2 and we are imposing a strong efficiency challenge on the network companies to do more with less. If you go on to the next slide. I think that is my cue to hand over to my colleague Steve McMahon, who will talk us through some of the highlights in greater colour. So Steve over to you.

Steve McMahon

Okay, afternoon everyone and thanks, Akshay. I think as Akshay said in his introduction. I'm Steve McMahon. I'm the deputy director responsible for us setting price controls at Ofgem. I'm head of Scotland and SRO for the ED2 programme. I think the format that you've seen this afternoon is probably very similar to what you've seen in previous stages of the process, including the draft determinations that we published in the summer, and as Akshay said I'm going to spend a bit of time running through the substance of the final determinations, mainly in terms of the Totex allowances, outputs and incentives and the use of uncertainty mechanisms to flex funding over time and then Pete will come in and walk you through the regulatory finance decisions. So next slide.

In terms of, I think in terms of the like, yeah, so I think that this is quite straightforward. But in terms of the context here, many are going to be very familiar with ED2 and what it is and why the settlements or for the local grids are so important up and down the country at the moment get households and businesses that are facing significant increases in their energy bills. As part of a much wider cost of living crisis and inflation running at its highest for 40 years and Treasury rates are rising. The country is effectively in a recession. And the economic outlook is highly uncertain. Since we made the set of our draft determinations in the

summer, we've also come through quite a period of significant financial market volatility, particularly after events in late September. I think it's pretty clear that the decisions that have now been made by the new government have stabilised the markets which gives us a stronger platform to confirm the decisions that we're setting out today. And I think as Akshay said in his introduction that we've got some really important priorities in the short term first of all, protecting consumers like through the winter and helping them getting through that. I think secondly, is what we're doing with the networks particularly National Grid and government to maintain secure supplies of gas and power and prepare for any eventuality. I think we maintain that it's very unlikely that we're going to see any shortages, but any sensible regulator needs to plan accordingly. But what we've got today, is much more about how do we come out the other side of this in better shape than we are now. So we know that we need to decarbonize the economy. We need to make sure that we can wean ourselves away from gas to cleaner and cheaper and more secure sources of energy that will ultimately save people money is going to safeguard our security of supply and make sure that we're no longer at the mercy of international energy prices. So to achieve that we've we need to invest. I think that's absolutely clear, and as Akshay said the settlement that we have today help us to make that shift over time. Next slide, please.

In terms of the process, I mean, these these decisions are the culmination of a programme that stretches back to the summer of 2019. When we published an open letter, I think it's pretty clear that there's a lot that's changed since then, and the strain customers have had to come through a lot of challenges. I don't think we lose sight of the fact that the cost for a typical household, for the energy bills is going to be 3000 pounds a year from April and this for them and for everyone out there is completely unprecedented. But for us the regulatory problems that we're trying to solve are very clear. We need to secure sufficient distribution grid capacity and speedy connections to support new sources of clean energy and accommodate the growth and demand for power, particularly for electric vehicles and heat pumps. And we're expecting to see what's more important than ever, is that we expect the right balance between supporting necessary and efficient investment while avoiding putting unnecessary pressure on customer bills. These determinations aren't about shovelling another 22 billion into the energy system with no consideration of the bill impacts. It's about clear pathway out of the current crisis without increasing without increasing those bills. When we

take a step back and we look at our responsibilities as that of an economic regulator is to protect the energy consumers, and that responsibility is at the heart of every decision that we take. We've consulted extensively throughout over 150 responses to our draft determinations alone, when you factor in the responses from the companies and our consultants, and our technical reports, we have considered over 10,000 pages. We've also had the CMA outcomes from the appeal processes for the Transmission and Gas Distribution last year to reflect on. So all of that data and information has been considered very carefully. We've tested all of the different perspectives which have very often been diametrically opposed and as Akshay says we believe that these final determinations, take a balanced view overall and ensure a settlement that is fair to both consumers and the companies and their investors. And next slide.

In terms of ED2, we've really got five core objectives first is ensuring the network can deliver the capacity that we need to deliver a transition to net zero, so supporting the millions of EVs heat pumps and low carbon power. Second is about enabling a smarter and more flexible and more digitally enabled local energy system, making sure that we make best use of innovation and all of the new technologies that are emerging. Third and as Akshay said delivering world class network services, like we can't lose sight of the fact that the vast majority of the funding that we're announcing today is about reliant, resilient networks that deliver great service to the customers. Fourth, ensuring that everyone can access the benefits again to net zero, including the vulnerable and the fuel poor, I think particularly so in the current environment. And then fifth, achieving all of this at the lowest cost to customers, so avoiding customers paying more than you need to. Next slide please.

I've said that we need to reshape and remake our networks at scale. That's probably unseen in almost a century. What we've confirmed today is that we'll see a doubling of the annual investment and network upgrades. So load related spend relative to the current spending levels that we see and ED1 that equates to 3.1 billion pounds in total ex ante. And I would say that that also reflects some of the initial costs relating to the change in the charging arrangements triggered by or an access Significant Code Review decision that we took in May. We've increased funding by over 400 million to take account of that decision, and the funding

package for network upgrades as a result is larger than what we proposed at Draft determination. Flexible and adaptive regulation will also allow investment to align to the changes that the network's actually see over time, and so ensuring that customers are only paying for the work that's necessary. And I think getting that balance right will mean that we can ensure the investment in the grid is made in the right place at the right time for the right price. We also need to harness the full potential of flexibility and other smart technologies. So in ED2 we believe these determinations provides a flat platform that we can do things differently in terms of how we organise and operate the networks to help unlock the network capacity that customers will need. Some of that as about a regulatory framework that drives better energy planning, and better system planning locally that needs investment to protect them with the digital and data capabilities and networks and better regulating the distribution system operation functions through clearer outputs and strengthened incentive. So moving from just in time network planning to something that can be more strategically organised at a local level. Next slide please.

In terms of like services and vulnerability, we start with services like the fundamental role of the networks is to deliver high quality network of services to the customer. So this is an area in which I think generally speaking, I've said on the stakeholder call earlier ED1 has been very, very successful, whether that be in terms of network reliability or customer satisfaction levels, but there's always the ability to do more keeping power flow and speeding up the connections, processes, and improving company's own environmental performance, strengthen and support for vulnerable customers across the board. We're dialling up the requirements on that. So using clear outputs and a combination of reputational and financial incentives to drive the quality of service that customers expect and I'll come back to the incentive framework a little bit later. Next slides.

In terms of getting into the hard cash like any economic regulator tends to be at the toughest possession at draft determinations. In the summer we set out provisional totex allowances just shy of 21 billion, and that represented around a 17% reduction on the company submitted cost. As you would expect, we received a significant amount of data and information in response and the assessment of which has given us more confidence and the

investment case that's been made. And across a number a key areas of spend. So overall, what we're seeing is that we've increased ex ante allowances to over 22.2 billion and which is an increase of over 1.3 billion overall against the draft determinations and that net reduction against the company submitted costs is 12%. And the some variations that you'll see across the individual companies.

Overall, we believe that that's a national level of funding provides value for customers is sufficient to enable the DNOs to maintain safe and resilient networks and prepare those networks for net zero whilst also send a fair efficiency challenge on the DNOs. In terms of what's changed across most DNOs, the major I think shifts have been around ex ante allowances on asset replacement and refurbishment based on our engineering assessments, IT and telecoms and the baseline cyber allowances. And again, these changes reflect our confidence that we've got in the investment case, the needs case, consideration of risk, as well as a number of improvements that we've made to our cost assessment and econometric benchmarking. Another change that's important is a round the ongoing efficiency challenge that we apply so draft determinations we had set that one provisionally at about 1.2%. We've now moved that down to 1%. And but we think that as reflective of the latest data and information that is available to us.

On the next slide, I think that slide like the decision document that we published today provides a waterfall diagram showing where we're at with draft determinations and where we've landed today. So I think I've already summarised a number of these changes already. I think, entirely around cost assessments and benchmarking I think consistent with our draft determinations, we've continued to use a broad toolkit to our Cost Assessment, and mainly comprise in our econometric benchmarking, as well as the disaggregated activity level analysis and after updating normalizations and to ensure that we've got compatibility across the companies we benchmark the costs and using that econometric benchmarking and the activity level analysis, we captured the engineering assessments and the qualitative review of the business plans, which challenged volumes and that produces a set of modelled costs. Like we did at draft determinations, we weighted the totex models the three Totex models collectively and the disaggregated model at 50:50. Compared to draft determination of the statistical

robustness of all our Totex models has increased. And which I think is it gives us confidence in the results and one other area I'd like to call out is just post modelling demand driven adjustment to rebase the DNOs load related to a network upgrade spend. I think it's something that we included in draft determinations. I think most companies understood the need for us to do this, given the differences and scenarios that they used in their business plans and then the need for consistency and compatibility. But they didn't believe our methodology could be strengthened. So we've reflected on that. We’ve retained the demand driven adjustment potentially given the economic outlook and the increased uncertainty that that may have on the uptake in low carbon technologies. But we have revised the methodology. We think that improves its correlation to key demand drivers and against the actual calibration of the uncertainty mechanisms that we're proposing that period. There's also a number of different ways that you can present the cost data, I think for some DNOs they're more interested in the net allowances after allocations which they may feel is more appropriate of what the price control itself is going to look like. So we have presented the numbers on that basis, I think throughout the documents that we’ve published today.

Moving on to the next slide around the incentive mechanism. We set the incentive rate to the sharing factor based on our confidence in costs. And you'll see there's very little change in our possessions relative to draft determinations and that's because the majority of the costs are benchmarked model costs. The position on the business plan incentive is also stable for most, the main change is the 29.7 million stage 4 reward that will be payable to UKPN as the frontier company. So that's a non Totex cash reward that will be payable ex ante.

On incentives, I think on the next slide, we've still got the package including five financial output delivery incentives. Four of these are carried forward from ED1, but reset to embed performance improvements that we've seen. Three are new to ED2, albeit the two of those actually just replaced similar incentives that we had (I think for ED1). And again, the key focus here is in ensuring we're incentivizing performance improvements in the areas that matter to consumers. In terms of changes from draft determinations, the overall strength of the incentive framework has increased first is that we've doubled the upside strength of the DSO incentive and in recognising the importance of developments in those related activities.

Second, we've increased the cap on rewards for the interruptions incentive scheme by 50 basis points relative to that, proposed at draft determinations and return for that though, we've set sharper performance improvement targets on customer minutes lost and customer interruption mainly affecting those DNOs, who were furthest away from the performance benchmark. So when you look at this in aggregate, there was no change to the downside RoRE range, but the upside has been increased by that 70 basis points to give a revised RoRE range of plus 2.65% against the minus 4%. So while, there does remain some asymmetry, it is our strong view that on a probability adjusted basis all the DNOs are much more likely to outperform than underperform. And we would expect an efficient licensee to be able to earn rewards and I think Peter will pick up on that in the context of how we set the parameters around the return adjustment mechanism.

Next slide just on uncertainty. While we are confirming the initial settlements today as I said, it's pretty clear that ED2 has to be flexible has to be adaptable to an uncertain future. We continue to believe that an increased reliance on the use of unpaid uncertainty mechanisms is the right strategy for consumers. And is beneficial I think for companies particularly given the worsening economic outlook and, for example, increased uncertainty and how that may impact on demand for the likes of EVs and heat pumps. Our drafting in terms of more specific cases, our draft determinations included 30 million pounds, around 30 million, for the procurement of flexibility services on the secondary networks. And on the ex ante allowances companies and wider stakeholders were concerned about the lack of a clear funding stream for additional secondary flex. While this market remains immature, we've now included a unit rate and our proposed automatic volume driver that does put flexibility on a level playing field with the alternative of network reinforcement. And more broadly the design of our uncertainty mechanisms is being strengthened. I think responding to some key challenges from the companies in particular. That includes a new mechanism which we're calling the indirect scalar that allows indirect costs to be scaled up in line with direct costs that are funded in period. And we've also put in place an additional reopener since our draft determinations that address concerns that the DNOs, raised about uncertainty in relation to diversion costs. We've also made some technical changes around for example, capitalization rates for the uncertainty mechanisms ensuring these are set at or close to the overall natural capitalization rate that the DNOs provided us with in the business plans and I think Peter again, will cover that in a

bit more detail. So we're just on the face of it that does look like and like we've got a lot of uncertainty mechanisms here. I think when we compare it to what we've got in ED1, or even in the more recent GD2 price controls and that for transmission, we don't think it as materially different and we think that this is the better approach to be able to flex up and respond to changing circumstances rather than the other way about starting high and trying to flex low so that hopefully gives you a good summary of like the totex, the inputs and incentives, and UMs. I'll now hand over to Peter who'll provide an overview of some of the key finance decisions. So over to you now Pete.

Peter Bingham

Right, okay. Hi, everybody. My name is Peter Bingham. I'm the director of analysis and assurance and that as part of my portfolio covers the regulatory finance function that put together the 200 page finance annex for your digestion. So, today, I'm going to set out our final determinations for the ED2 finance package and just right up front from a regulatory finance perspective, there should be very few surprises here for investors. In setting out final determinations, we pay close attention to the additional evidence, consultation responses and further stakeholder engagement that we've received since the draft determinations are published in June and published and adjusted our views were appropriate. Today I'm going to cover first of all the context of the financial package and then step through: cost of equity; cost of debt; the weighted average cost of capital; capitalization rates and some of the other financial parameters; the return on regulatory equity and the return adjustment mechanisms; and finally touch on financeability.

I'm going to particularly focus here on what's changed since our draft determinations. They're highlighted in orange on the slides up there. And our reason for those changes. As Akshay said up front we've allocated an hour for questions. I'll be assisted by our head of Investor Relations, Jamie Tunnicliffe and members of our cost of capital team who are the experts who will be able to answer detailed technical questions.

Okay, so, in terms of context, in setting this control, we've taken a consistent, stable and long term approach to risk and return through each stage of the ED2 price control setting. These final determinations continue the approach that we developed through the original framework

consultation back in 2019, the sector specific methodology and the draft determination stages. And throughout this time, we've taken great care and giving lots of thought to our position. And in particular, we've incorporated the relevant learnings from the gas and transmission price controls and the subsequent CMA appeals. We've considered the specific circumstances for electricity distribution. We've taken careful notes but all the consultation responses and new evidence provided and considered recent market volatility and the macro economic climate that we're currently operating in. I'd also like to note that we did ask questions at draft determinations regarding inflation. We've received a lot of responses to this which led us to conclude that this is an important matter. Worthy of much more thought and consideration—it’s not specifically an ED2 issue. So we're not planning to say anything further about this now, but we intend to take this forward early in 2023.

Okay, so cost of equity. You'll see here that we've set a baseline cost of equity allowance over five years in real CPIH terms of 5.23% for the notional company with 60% gearing and this is up from 4.75% from DDs. We’ve not adjusted our approach on DDs in deriving the cost of equity, which remains consistent in the position that we defended through the CMA appeals. In fact, that calculation, you'll all know is pretty mechanistic. The change in our allowances entirely due to an increase in the risk free rate reflecting the increased yields in government index linked gilts that we've seen over the last few months. Worth also saying that we kind of gone through our three step methodology consistent with what we did at GT and GD/ET in terms of step one, setting the cost of equity through the CAPM model, then doing a range of cross checks and then considering whether or not there's any adjustment required due to sort of expected returns different from those allowed. Worth also saying that the risk free rate will be indexed in October each year in line with market movements, as it is the gas and transmission sectors. In terms of the other parameters making up the return on equity, we've not changed our estimates for total market return or equity beta. We've reviewed lots of additional evidence and consultation responses that we received following draft determinations and didn't see a justification from changing from that position. So in effect, it's just the risk free rate that has impacted in the increase of the return on equity from 4.75% to 5.23% in real CPIH terms.

Okay, cost of debt. So, again, we've carefully considered the consultation responses received following draft determination and kind of market developments in this area. We decided in ED2 to retain our approach that draft determinations of adopting a 17 year trailing average of

the iBoxx, utilities index and setting cost of debt allowances. And we also agreed in ED2 to include a 25 basis point addition to cover the additional cost of borrowing. Now in principle, the debt allowance is designed broadly to match the efficient costs of debt for the notional companies in the sector. However, our analysis indicated that the allowance implied by the index alone, would fall short of meeting this objective due to recent increases in interest rates, the level of debt issuance expected over the price control period, and the kind of general cost of debt embedded in the sector. So, we considered various different ways of addressing this. We decided the best way to deal with this was to add a fixed calibration adjustment of 55 basis points to this 17 year trailing average. And yeah, we looked at various different approaches to this we looked at longer trailing averages, we looked at short trailing averages with a bigger calibration. We found that this represented the right balance really in trying to match the efficient costs of the notional companies in the sector. As we did with gas and transmission sectors, we've also provided a six basis point allowance for infrequent issuers and the threshold for this has been increased from 150 to 250 million. So this all results in a cost of debt allowance of 3.01% CPIH real for the frequent issuers and 3.07% for the infrequent issuers. And with cost of equity, the cost of debt will be indexed in each year in October, as in effect, the trailing average moves forward.

Okay, so that's the cost of debt. In terms of cost of capital note in the slide speaks for itself really when we plug in the cost of equity, plugging the cost of debt and the notional gearing of 60%, you see the cost of capital coming out at 3.9% and 3.93% for the infrequent issuers. And this is a 64 basis point increase from our draft determination position. And it's worth noting that the final bullet there that we've also applied annual indexation to the cost of capital for the three of the sectors that we regulate.

Okay, so, next area is the capitalization rates. On cap rates, we retain the key principle that we set in our draft determinations there are two distinct buckets with each with a different rate applied. Bucket one determines the rate for ex ante allowances, which is applied to baseline expenditure. This varies by company between 65% and 79%, reflecting the natural capitalization rate of those companies. Bucket two determines the rate for ex post expenditure covering uncertainty mechanisms and reopeners. We concluded that common rate is appropriate to all companies, we assumed 98% at DDs but we received more evidence from the companies and undertook more analysis that has led us to setting a common capitalization rate of 85% for all of the companies.

Next slide on other financial parameters, we have sought to balance the interests of current and future consumers and therefore we retained an assumption of a 45 year straight line depreciation for all new additions to the round. And we also confirm our position on setting national gearing of 60% for ED2, which is a reduction from the 65% at ED1.

In terms of the equity returns and the RAMs. You can see here that a company can earn an equity or a return higher or lower than the allowed sort of baseline allowance by over spending on totex or through its performance through the various output delivery incentives. And the graph there on the right shows the kind of ranges that come into play. Consistent with our RIIO-2 price controls we'll implement the Returns Adjustment Mechanism, which is there as effectively a backstop to protect consumers and investors on extreme outturns. As we flagged at DDs, we've chosen to set the same trigger levels and associated sharing factors as we have done for GD&T. However, we don't expect that the outturns will be anything like the extremes and so we don't expect the RAMs to be triggered.

And finally, on financeability, we've updated our financeability system assessment for FDs and made our determinations in a manner that is consistent with our financeability duties. We consider financeability in the round. We don't target any particular ratio or credit rating methodology. And as part of our assessment, we've considered both the base case and a high totex scenario. We judge that based on our notional gearing assumptions and decisions on capitalisation and depreciation that the notional companies are financeable under our proposals with notional licensees broadly achieving comfortable investment grade credit ratings, the reasonable headroom above the minimum. However, we do acknowledge that this is tighter than for the ED2 price control compared to Gas and Transmission. And this is due to higher debt costs and the level of issuance of new debt throughout the price control. As part of our assessment, we've also considered plausible downside scenarios of 200 basis points on RoRE as a result of totex overspend and poor performance under the Output Delivery Incentives. We found that the notional company was still financeable against this downside, and that gives us comfort that the package is robust.

So summing up we're putting in place a price control which for electricity distribution with a 5.23% CPIH real customer equity allowance, 3.10 or 3.07 real cost of debt allowance at 60% gearing 45 year depreciation on new assets with natural capitalization rates, the package is

financeable and we believe strikes a fair balance between consumers and investors. Thank you very much.

Q&A

Akshay Kaul

That's great, thanks Steve and Peter for that concise summary of the key points from the price control announcement this morning.
I think let's now go into questions. So just to remind everybody, if you want to ask a question, please use the hand raise function in teams if you're on the team's call. So just to remind everybody, if you want to ask a question, please use the hand raise function in Teams if you're on the team's call. If you're joining via phone, please type star five on your keypad to raise your hand and when it's your turn, your microphone will be activated, but you will need to unmute yourself. If you're joining via phone, please type star five on your keypad to raise your hand and when it's your turn, your microphone will be activated, but you will need to unmute yourself, and to unmute yourself, please type star six on your keypad.
It would be great if before you ask your question if you could just say your name and your institution for record keeping purposes that would be extremely helpful. So with that, let me open the questioning to our first participant and that is Mark Freshney. Mark, please go ahead.

Mark Freshney (Credit Suisse)

Thank you Aksay, my question is for Peter on the 55 basis points uplift to the cost of debt allowance. I mean, the fact that this late into a price review process you're having to make what look like round sub allowances to get the formula to work kind of tells me that the formula didn't work in the first place.
I accept that it's a tried and trusted method to use this rolling average. But I just wonder, you know why you're not reviewing the way the debt allowances are calculated? How you think that may stand up in a CMA appeal? And if you're making an adjustment to the cost of debt allowance, why you would not be making an adjustment to the cost of equity allowance for example, aiming up because I mean, debt and equity often moves in lockstep as we've seen this year? And if you're having to make adjustments, the debt allowance then why not why not cost of equity?

Peter Bingham

Okay, well, thank you.
I guess in terms of your second question there, the cost of equity was indexed up in line with increased borrowing costs through the risk free rate.
In terms of the cost of debt, calibration adjustment, we looked at all sorts of ways of doing it. Of course, you know, the kind of yields on corporate bonds were sort of peaking in October given this sort of macro financial situation and we felt the need to ensure that the efficient sort of borrowing costs of the company is going forward would be covered by the methodology that we adopted. What I'm going to do is I'm going to bring in one of our experts, Nick Hodges, who may be able to add some more colour to my answer, you're available Nick?

Nick Hodges

Yeah I am here, can you hear me okay?

Akshay Kaul

Yes, please go ahead Nick

Nick Hodges

So, I think what we've tried to do is retain the principle that we've set out through the consultation process, which is, as Peter mentioned, earlier, to broadly match the allowed return on debt with expected debt costs over the price control and when we looked at draft determinations, we felt that a 17 year trailing average was appropriate to achieve that objective.
When we looked at that again, for FDs, we felt that we wouldn't be able to achieve our objective through this 17 year trailing average because it would underfund expected industry debt costs.
In doing this, we had different ways in which we could look to achieve that objective and I think that objective has been kind of a long standing one. And, you know, we looked at one option, which was to extend the trailing average with no calibration adjustment, and I think there are some kind of key drawbacks to this approach.

One being that by extending that trailing average, you've reduced the responsiveness of your allowance to changes in spot yields on our iBoxx benchmark. And so what we thought was better to do would be to use a 17 year trailing average and that had some positives in being a continuation of RIIO1. So RIIO ED 1-- it representing a position had been consulted on but in those consultations we had, you know, repeatedly stated that we would revisit the suitability of that calibration exercise. And that meant that we've considered that a 17 year plus the 55 basis point calibration adjustment was appropriate. The 55 basis points shouldn't be seen as an uplift in terms of our approach, and how we come up with that suitable allowance.
Actually, our principles are consistent with GD&T2 just the way in which we've tried to achieve those principles and objectives have been updated in an evolved methodology that is appropriate given the macroeconomic circumstances faced.

Akshay Kaul

That is really helpful. Thank you Peter and Nick. So to summarise, I think what you're saying in response to Mark's question is that there are various ways of doing calibration and they all solve for the same overall sector average debt cost to begin with, but they have different responsiveness to changes in rates during the period and we made a judgement as to a 17 year average with that calibration, being not only matching the sector average debt costs, but also being more responsive to changes in yields during the period.
Mark hopefully that answered your question, but if there's any supplementary please, please go ahead otherwise, I'll move on to other people.

Mark Freshney (Credit Suisse)

Well, it was, I mean, look, let me put it another way, you've put 55 basis points extra in there on the cost of debt. Now, let's say that real yields come back with you know, the new government restoring fiscal credibility. And you've got five years of an extra 55 basis points stuck there. Right. And it just seems to me that, you know, the fact that you're having to make these big adjustments in response to something that's happened, okay, a one in 30 year event kind of kind of tells me that the index is not working in this case.

Akshay Kaul

Okay, I mean, maybe that's something we can take offline Mark and give you more detail on how the index itself has been calibrated. But I think the summary response is that the basic principle of trying to match the sector average debt costs hasn't changed. And the number that we've calculated the starting number will give you what we believe are the industry's expected average debt costs. Let's move on to our next question, which is Deepa Venkateswaran, Deepa please go ahead.

Deepa Venkateswaran (Bernstein)

Thank you. So I had a comment and then a couple of questions. I think on the comment, I would really applaud the fact that Ofgem has reacted quite quickly and added this 55 basis points adjustment in a very short period. So that's definitely appreciated by investors.
My two questions are as follows. So first is to see a breakdown of totex adjustments from the business plan to what you've drafted. I was just wondering whether it's possible to maybe give a breakdown, maybe a different way to see and what I'm trying to understand is, are all the changes basically Ofgem's efficiency challenges or is a part of the industry Totex that might come back as uncertainty mechanisms. So just wanted to get a grasp on that waterfall chart you have on slide 12. And then secondly, on the inflation consultation, that you're going to launch in 2023 -- can you just remind us on the key questions you're going to be focusing on from memory it is cost of debt inflation feeding into the realised ROE but I was just wanted to know whether in the meantime, is there a broader rethink or any kind of comment on what's the exam question you're going to consult on next year? Thank you.

Akshay Kaul

Thanks very much Deepa. Steve, do you want to take the first two questions and then Peter can take the one on inflation.

Steven McMahon

So, in terms of the Totex breakdown, I mean, I can't give you specific figures Deepa. I could go in and send you something separately, but by and large, what we've got is like the modelled adjustments, so the benchmark and adjustments that comes through the totex

analysis, then we've got the application of like the efficiency adjustments for the ongoing efficiency and catch up challenge and the post model and adjustments on load. The other aspect that we've got in here is like the activity level analysis, when we look and we factor in the engineering assessments and whether volumes are justified or not, so that because we take 50% totex and 50%, from our disaggregated level analysis that feeds through into that modelled aspect. In terms of what could come back, yes, there's some elements that can come back and especially I think, on the load side, where we've got that post model adjustment. I think we think it's sensible to start lower, and it's not low because we are doubling the amount of expenditure that's going into network upgrades, but it is an adjustment downwards on what the company submitted plans were. So we've got quite a sophisticated suite of uncertainty mechanisms that can then scale up that investment depending on the needs that we see in the economy. We don't have as precise figure around that but some of that disallowed expenditure could come back conceivably in the price control. Did that cover both aspects of that Deepa?

Deepa Venkateswaran (Bernstein)

Yeah, and then my other question was on inflation.

Aksay Kaul

Yeah. So let me let me start on that and Peter, then I'll bring you in on the on the detail of it. So Deepa, the basic problem that we are going to consult on next year is whether the way in which we treat inflation in the calculation particularly of the cost of debt allowances for the notional company is still fit for purpose, in the sense that what we notice is that the effect of inflation on the notional company is to increase the equity return because the notional company does not have all of its liabilities in index linked gilts. And similarly, the effect of deflation is exactly the opposite. It is to significantly reduce the real equity returns, because the notional company is not fully financed with inflation indexed debt instruments. And so the question is, is that a problem? And we will be very open in the consultation about you know, the different ways of looking at or trying to answer that question about whether that is a problem or not. If, over the long term, outturn inflation basically tracks close to the Bank of England target, then one could make an argument that over the long term, it isn't a particular problem because these fluctuations will just iron themselves out. Whereas if you think that there is a kind of bias or an asymmetry in the inflation outcomes one way than the other, then

potentially, there is more of an issue there that we would need look at. And even if there is a problem, I think we've got to be quite thoughtful and considerate about how one would go about trying to address it because inflation indexation is a cornerstone of the economic regulation regime and provides a very stable and predictable environment and framework for investors. And we want to retain that and want to avoid any unintended consequences that come out of making changes. And so we're going to do it quite slowly and quite thoughtfully. But that's the basic underlying issue that we're going to try and tackle next year when we when we open the consultation. Peter, do you want to come in with more colour on any of the specifics?

Peter Bingham

I think you've covered it admirably, Akshay. I don't have anything to add. The team once we complete on this ED2 process, the team will focus on engaging with the industry and considering this, this topic. So again, watch this space.

Deepa Venkateswaran (Bernstein)

Thank you. So you will consider longer term inflation trends, not just a knee jerk reaction to what we're seeing right now.

Peter Bingham

Absolutely. Everything we do is based on a long, a long term view. We don't react to the short term issues. Thank you.

Akshay Kaul

Thanks, Deepa. Let's go next to Martin Young, formerly of this parish. Welcome.

Martin Young (Investec)

Yeah, thank you. Good afternoon to everybody. And if we can just pick up again on that, the uncertainty mechanisms and the inflation and I got one additional question over and above that. If my memory serves me correctly, you know, at the time that you set out the final determinations for electricity transmission you put in sort of some upside scenarios as to how

you felt some of the uncertainty mechanisms could play out in terms of the totex that could be deployed. Just wondered if you've done that in the suite of documents that's been publish today and if so, please, could you point me in the right direction? On the, on the inflation issue, yeah I totally get where you're going with this but if I contrast with the stance that Ofwat has hitherto adopted, it's somewhat along the lines of either use it to get your gearing into a better place, probably less of an issue in Electricity Distribution, or use it to deploy in the spend that is going to be needed in the water sector. I think we all agree that there is considerable spend that is needed in Electricity Distribution, so why not just leave well alone and just let it let it flow, so to speak. And then my other question is, reading the 100 page overview, it's quite clear that you talk a lot about flexibility, flexibility is going to impact at all stages of the value chain. So could you shed some light on how you thought about today's process in the context or the whole value chain? Particularly with reference to the end user and how that links into all the other work that Ofgem is doing particularly around the resilience and remuneration of the electricity supply industry. Thank you.

Akshay Kaul

I think Steve, again, most of these are for you. But perhaps like, I'll pick up the inflation question towards the end. But if you can cover off the others.

Steven McMahon

Yeah, so on the UMs. Yeah, remember what you're talking about? Yeah, I think we said that GD&T that it was a baseline settlement with the potential for an additional 10 billion to come back through uncertainty mechanisms and the innovation program. We haven't produced a similar number for ED2. I think what we have done and it will appeared in terms of the financeability assessments is just look at the various stress tests to make sure that those financeability requirements for the notional company still stood up, but we haven't put any specific scenario around. But what could come back and I think all we've got Martin is just a reflection that we have a very agile set of price controls. We can have the ability to adapt investment up if we need it to adapt up and the areas that we've set out that are uncertain, particularly on the network upgrade space in terms of net zero. But we've also got the ability to like flex that down if need be just in terms of how some of the volume drivers work, so we don't have a specific number on that happy to follow up separately.

Peter Bingham

I would just like to add actually that in the finance annex, I think it's paragraph 2.85. We do summarise the totex scenarios, including the upside scenarios that we use for our financeability testing.

Steve McMahon

Yeah, yeah. So I think that's where it appears Martin.

Akshay Kaul

And the resilience question, Steve, you want to pick that off?

Steve McMahon

So, and flexibility? Yeah, I think that when you're moving away from an energy system that's been based on like fossil fuels, largely, you've got that kind of stability and certainty around it. We're going to something that's like more based on intermittent renewable, low carbon generation. So you need flexibility within that like throughout the system, and we're seeing, like some of the impacts and that would play today just in terms of how people engage with suppliers and how people engage with some of the schemes that have been offered up by the system operator, including for last winter. So that's a real important part of ED2. I think there's this huge value in the chain. I think we've said over time, and flexibility and smart technologies give us the potential to save customers 10 million pounds a year in the short term and the long term. In the short term that buys you time in terms of managing probably the network upgrades that the companies need to deliver. So you cannot get away without having flexibility, I think these very much come hand in hand. What was the specific question just in terms of the value chain?

Martin Young (Investec)

Yeah, just wondered how you were thinking about your networks in the context of the wider value chain and into work that's being done within ofgem that's, you know, outside your direct area of responsibility, but I'm sure you all sit around the table and make sure it all hangs together as a workable system.

Steven McMahon

Yeah, very much, and I've got you now, and very much so I think we're absolutely clear that we've got a sector that is increasingly decentralised. We've got more like low carbon power that's connecting directly onto these grids, and we need better system planning and better network planning at the local level. We've got the review the institutional arrangements, and obviously, we've got the strategic plan in terms of FSO development work. We think that we need better local planning, we've not settled on what that particular form of institutional arrangements or governance arrangements will look like over time, but it's definitely going to be the situation that people will interact, communities and local stakeholders will interact with the energy system in a very different way. And ED2 has to facilitate that. So it's very much interlinked with the changes that we're expecting to see in terms of how people like buy their energy on the retail side, the investment and data and digital that we're making in ED2 allows us to navigate to the sort of system that we need to orchestrate and it be more real time like balancing the supply and demand at that local level. So it's a transition, it will take us time to get there. But ED2 gives us the platform to do that. And I think we're making the investment that will allow that to happen.

Akshay Kaul

Thanks, Steve, and Martin, on your question on inflation. So you're right. I mean, one of the options that we will consider next year when we look at this is indeed a kind of do nothing option where we ask the network companies to potentially use the increase in RAVs in a, in a constructive way. But we didn't want to jump to that as a conclusion without actually giving some thought as to the underlying problem and what are the different ways of addressing it? So I think it'll definitely be one of the things that we consider as options. And it'd be great to have, you know, wide engagement on that because it's it is quite an important policy question for the future. Let's go next to Dominic Nash. Dominic over to you.

Dominic Nash (Barclays)

Hi there, I have a couple of questions from me, please. The first one is on totex and probably a sort of follow up question from Martin and second one's going to be on cost of equity. So on the first question, the upside uncertainty mechanisms, and I think you haven't given us the NZ1, NZ2, but you've given us a stress number, and I'm just going through it looks like it's

like an extra, what 20% that you've put through on totex. Is that a sort of realistic, all it is number or do you think that there's a potential for much higher? And then how that then flows through so I understand that on your base case, we're looking at the industry, RAV rising by 3.7% compound annual growth rate every year for five years real? But the uncertainty mechanisms, I think, are capitalised at 85%? What would be the impact on an acceleration on net zero and further capex on sort of like the RAV growth in the sector. And the second one on the cost of equity I took notice that you're, you've pretty much just done a mechanical sort of risk free up. You've kept the total market return, and the beta is absolutely identical over the last couple of years now. Is that actually realistic? So I presume you're using the OBR inflation expectations, I can't actually find the number that you're using, but if it was a couple of percent CPIH, do you think it's realistic that the total market return in the UK at the moment is really sort of like 8.5% nominal? And it's being cheeky sorry because the answer to Martin's questions was quite interesting, and I think Deepa's went up as well. Is it a possibility there's going to be some sort of windfall tax or cap or something in place for the very high inflation numbers that we're going to be seeing in the regulated networks, not just in distribution, but say in transmission as well? Thank you.

Akshay Kaul

Thanks, let me see if we can just separate out the questions. So I think Peter the first question was one about the totex stress tests and whether the 20% is like.

Dominic Nash (Barclays)

It was more like. I don't know. I mean, maybe I'm being hard to please but it doesn't feel like a particularly high uplift on your baseline. Is that actually realistic?

Akshay Kaul

So, I think that's a clear, that's very clear. So Peter, we want to start with that and then we'll go through question two and three in sequence.

Peter Bingham

I was gonna defer to Steve for that.

Steven McMahon

I mean, on the scenarios, I think if you look at it, I think it's in maybe appendix six, of the reg finance annex, Dominic, I think somewhere that the back 184 I think one of the teams tell me, we certainly the three cases, we don't model the financeability tests on the most extreme totex case. I mean, obviously, we've got submitted costs from the networks that were in excess of 25 billion, and there is like uncertain spend, they wouldn't have included in those baselines. I don't think we necessarily believe that. We've designed ED2 that it can adapt. Like we think that the best approach that we can take is setting baseline allowances as we have done today ex ante allowances as we have done today. And then using the uncertainty mechanisms to flex up. The extent to which that flex happens, whether it's 10%, 20%, 30% in period. I think we don't put a precise number on it. What we have done is just model those scenarios to test financeability. If you had a situation where you were getting that totex coming through then clearly impacts on the RAV, like in any normal way.

Aksay Kaul

And Steve, do you want to just highlight for Dom's benefit there is a difference in ED2 right and that the baseline is on system transformation. So there's already quite a lot of expenditure there is increasing relative to ED1.

Steven McMahon

Yeah, exactly that I mean, we talked about it, system transformation that is as if we've been really unambitious but at the end of the day, we're still doubling the baseline ex ante investment on network upgrades. And we've done that by using some of the parameters that are consistent with the LCT volumes from system transformation, because it gives us more certainty on the pathway. So we believe it's resilient to a number of different pathways, but you've got the ability to flex up to any net zero compliant pathway. Like should that be the like the direction that the country takes and we think that's really important to avoid the network becoming a barrier to net zero.

Aksay Kaul

And Dom then your second question, I think was about the TMR and in fact I've lost track now of the second do you want to just repeat the second question?

Peter Bingham

The second question is about TMR. And I'm going to bring in PJ from the cost of capital team to address that question for Dominic.

PJ McCloskey

Yep, Thanks, Dominic. Yeah, you're quite right that we have retained the TMR of 6.5%. And that's been the case for a number of years now. Your question whether that seems realistic, I think it's related to the wider inflation question. In terms of are we talking about short run inflation or long run inflation and obviously short run inflation, it has been higher than long run. And so the answer to your question does hinge on that Dominic but think of something that Peter Bingham just mentioned earlier was that we take a long run approach to a lot if not all parts of our settlement. So the long run inflation as reflected in the settlement and the long run TMR of 6.5% real is reflected in this month, and that's been long held policy as well. Thanks, Dominic.

Akshay Kaul

Thanks. Thanks, PJ. And then I think your third point Dom was about the inflation effect on RAVs. And I think you were asking whether the...

Dominic Nash (Barclays)

No, my third point is me being cheeky with in one sense, but it feels to me that if you're going to be in answer to some of Martin's questions, putting through extra spending is not a possibility of sort of a windfall tax here coming or should you not be thinking about windfall tax for these and transmission.

Akshay Kaul

So, windfall tax because there's increased spending by the networks?

Domini Nash (Barclays)

No higher inflation.

Akshay Kaul

Yeah, so that's what I was getting at. Your third question was about the inflation effect, wasn't it on the RAVs, and whether there would be a windfall tax because of that inflation windfall, essentially. Is that correct?

Dominic Nash (Barclays)

Yes it is, yeah

Akshay Kaul

Okay, good. So yes, that takes us back to the first question about you know, how we're going to try and take account of this inflation effect. We've deliberately not done that in the ED2 final determinations because this is not a principally or even mainly really an ED2 specific issue. This is something generic to all of the price controls, because it relates to the way in which the RAV is indexed to inflation versus the cost of debt calculation for the notional company, which produces the slightly unexpected effect that when you have periods of high inflation you get you get high gains for shareholders. And similarly, when you have periods of deflation, you get high losses for shareholders, even if they match the notional company's financing arrangements. So the short answer is that we're going to consult on this topic. I think we're going to set out the problem statement as clearly as we can. We're going to take it quite slowly and consult quite widely work through the different options that are available, and see if there is a way of addressing the problem that retains all the things that we like about the current regulatory regime, which is the stable, predictable, consistent nature of it for investors, but also ensures that consumers don't end up overpaying because of some quirk in the way that the numbers are calculated. It's not a straightforward question to answer and that's why I think we're going to do it quite carefully and quite methodically. Peter, I think there isn't any more to say on that inflation point is there? It’s not really for us to comment on windfall taxes and stuff like that. I mean, that is well above our pay grade.

Dominic Nash (Barclays)

But it’s outside the Rams, right? Financing performance isn't included in your RAMs.

Akshay Kaul

It is not no.
All right. Let's go next to James Brand, I think has been waiting very patiently. James, please go ahead.

James Brand (Deutsche Bank)

Thanks for taking my questions. I had just a couple of questions on the debt index, obviously, you know, kind of note the earlier questions around moving a little bit away from the 17 year training average. You commented that the just the principle of using 17 years because it seems like the trading average has got longer and longer. And I think originally when it was put in it was 10 years or 12 years I can't quite remember now, but it was intended to match the duration of the debt of the companies. And I think you mentioned earlier that's still the intention, but and perhaps I'm wrong here but I don't think the average duration of the companies is 17 years. I think it's probably less than that. When you take into account the fact that the companies have a lot of CapEx and raising a lot of new debt. I would imagine that the average duration of debt on a kind of period average basis is probably closer to 10 years. So obviously you've decided on 17 years now, but just in terms of the methodology, would it not make more sense to have a shorter period that actually mimicked the average duration of the debt the companies have, you can then hold them to account against that in terms of their issuance, rather than having a really long one and just trying to rig it up to get to, to the right answer. And I appreciate that things have changed very, very quickly. So it's not it's not always easy to change your methodology in a month just because UK bond deals have gone through the roof but just as a methodology is would that not make more sense? And then secondly, for companies that have a lot of growth, capex is your methodology not penalising them now in the high growth environment because they just have the same duration as other companies, whereas they're having to raise that that's more expensive. Thank you.

Akshay Kaul

That's great. Thanks very much, James. The two very clear questions Peter, the first one again, on the calibration of index, which I assume, Nick, you will come in on. And then the second one about how do we deal with companies that have very high capex growth.

Peter Bingham

Yeah, let's bring in Nick.

Nick Hodges

Ok, perfect. So on that first calibration question, it's a fair point say. So I think in terms of that principle, I think, just to be clear on that we did discuss why I didn't think that what he described as a kind of a conceptual approach that focus purely on the average tenor of debt was the right way to go. Although actually, it's not too dissimilar to a 17 year trailing average, from our calculation in our model. I think one of the challenges with using a shorter trailing average period is reflecting those kind of embedded existing debt costs. And actually, what we find is that by using a shorter training average, like a 10 year you'd need quite a large calibration adjustment to meet that principle. of matching our notional size sector debt cost approach. And so, you know, it was something that we did consider around whether we lengthen or shorten it. I think we ultimately decided that 17 struck the right balance there in terms of what we adopted.

Akshay Kaul

Thanks, Nick. And the second question, Peter, do you want to take that on high growth companies that have high growth, are they unfairly treated?

Peter Bingham

I guess all of the companies are going to have a big capital programme ahead of them. The calibration of the debt index sort of takes account of the projected expenditure; the upside to the base case as well; the high totex case. So in a sense, the indexes and the cost of debt is a set so that you know that they the cost of raising that debt by the notional company will cover

their costs appropriately. So I think it's factored into the allowance that we set, rather than penalising them.

Akshay Kaul

Thank you, Peter. Thank you very much, James. Let's go next to Verity Mitchell, has also been waiting very patiently. Go ahead Verity.

Verity Mitchell (HSBC)

Afternoon. Yeah, I've just got a question about I suppose what I would call structural asymmetry. I mean, I'm struggling a bit with the intellectual consistency particularly on the differential capitalization rates between the natural and then a much higher one which I know you've reduced. So firstly on capitalization rates, but secondly, also on the asymmetry of ODIs and I'm just wondering why there has to be asymmetry in both of those aspects of the price control. Thanks.

Akshay Kaul

Thanks, Verity. So I think if I understand your first question, and it's why there are different capitalization rates between the baseline and the uncertainty mechanisms. Yeah, Steve so you're probably best off taking that one.

Steven McMahon

Sorry, on the cap rates.

Akshay Kaul

Yeah. So why are there different capitalization rates for baseline expenditure versus uncertainty mechanism expenditure?

Steven McMahon

I think it's just reflecting the difference between the variant and nonvariant rates. I don't know if there's someone in the Reg Finance team that wants to give a more sophisticated

answer. But yeah, I think you're right, Verity, in the sense that there was a lot of debate around the variant rate of 98%. I think we have tried to set that so that that that follow the natural rate. I think on reflection and based on the evidence that we've had from the companies, we've set that now at 85% whereas the non variant rate, there's a bit of a range, I think across the different companies. I don't know if anyone else wants to come in and give a bit more detail behind that.

Peter Bingham

I think you've captured it Steve. In terms of in terms of bucket 1, you know, that's kind of baseline expenditures and expenditure that we know and understand. It's quite clear, and the companies have provided lots of evidence as to why what the capitalization rates of those should be. Whereas in bucket 2 the uncertainty mechanism, there's less clarity on sort of what was, what those elements of expenditure might be, and therefore, it's more, you know, we've come up with a more general rule there rather than anything specific.

Akshay Kaul

And Peter is the intuition that there is more capex basically in the uncertainty mechanisms than there is at the baseline. And that's why there is a higher natural capitalization rate. So that's that the intuition? Yeah. And the second question Verity asked was about asymmetry in the incentive ranges. I guess, just worth saying Verity that there isn't, there's no hard and fast rule in any of the Ofgem settlements, that there should be a complete symmetry in the boundaries of the incentive mechanisms. I think we'll be trying to look at is to make sure that there is no intrinsic bias in the way that the price control operates. And when you look at the probability weightings, you know looking back at how companies have actually performed, we are fairly confident that there isn't any inherent structural asymmetry in how the incentive mechanisms operate. But Steve, you've been thinking quite a bit between draft and final determinations on the ranges themselves. Do you want to comment on how we've thought about that question of the upside versus the downside?

Steven McMahon

And I think that I mean, is you see look, asymmetric incentive ranges, I think it's similar in ED1. I think the difference that you've got now is obviously the lower like equity buffer that

probably sits in between. We don't think a lot about that. I think the companies raised it as an issue that they believe translated through to, for example, conversations around the equity beta. I think we dispute that. I think we have increased the upside because of the changes that we've made around the DSO incentive, the 20 basis points on that and putting the 50 basis points back into the IIS. So we’ve not restored that full symmetry, but as you say Akshay, on that probability basis, we do believe that, the lower end RoRE to be significantly above 0%, and we still expect that the notional company to be able to outperform and we made some calibration changes, I think around like the target certain methodology on the IIS that I think better fits with that assumption as well. So relative to what we had, provisionally say when we published our sector methodology decision a couple of years ago so all in all, we think it's a fair package overall. And as I said, we would still expect the upside opportunity to significantly outweigh the downside performance, it would require quite a significant deterioration to be in penalty territory.

Verity Mitchell (HSBC)

Okay, thanks. I still want to come back on natural capitalization plus reopeners because surely if it's justified and clearly explained and there's clarity, there's no reason why should receive a different capitalization rate? Intellectually, I just can't, I can't square that, I'm afraid.

Akshay Kaul

Are you saying that's not obvious why there's more capex in the uncertainty mechanisms than there is in the baseline.

Verity Mitchell (HSBC)

Why the rate if the uncertainty at some point will become certain, and therefore the companies will provide robust justification for reopeners? If they do that I still don't see why they need a different capitalization rate. It's either allowed and therefore it should have a natural capitalization rate or there's some uncertainty as to whether it should be done or not. In which case that that would be a robust discussion.

Akshay Kaul

Yeah, that's true. But in a sense, if you think about it, it's a very, it's a very, it's a very fair question. When you think about it, what we mean by a natural capitalization rate is that it's the ratio of capex to totex, you know, across the control period. And I think what Stephen & Peter was saying there is, we know exactly that ratio for the baseline expenditure because we know what capex is and we know what totex is. We think that the uncertainty mechanisms largely have capex in them. So as you add more through the uncertainty mechanisms, that ratio will move in favour of capex and therefore an overall increase in the in the capitalization rate. But to your point Verity, we could make it a moving rate so that we keep updating the capitalization rate once every uncertainty mechanism proposal is approved because we would know exactly the balance of expenditure then. But I think there's a trade off here between the simplicity of the price control and the extreme accuracy of it. And I think the team has tried to essentially have something that reflects the intuition that it's broadly the ratio of capex to totex without making a very complicated mechanism, but Peter or Steve, just come in if any of that is off-piste.

Peter Bingham

It does let you lean itself towards simplicity because if you had a different capitalization rate for every new reopener and project that came along through the uncertainty mechanisms, yes, that might reflect you know, a more accurate capitalization rate but, you know, becomes harder to administer. What we've sought to do here is to come up with something that is a kind of an average of kind of projects and reopens that we expect to come through these mechanisms.

Akshay Kaul

That’s great, thank you Verity. Back to Mark Freshney. Mark, please go ahead.

Mark Freshney (Credit Suisse)

Thank you. I have a couple of follow up questions. The first one is for Steven. Can you talk through the real price effects and the efficiency that's built into the totex and whether there's a true up within though I know that within for example, the Ofwat ones and I think some of

the Ofgem ones in the past, there has been a specific mechanism, but can you remind us of, you know, any mechanism there that will chew up for a difference between their inflation and RPI sorry CPIH? And a question for Peter or his team. I haven't looked at the models yet. I'm not sure if they're available. But is there an equity issuance tracker within this distribution model? And is it envisaged that any companies would get that equity issuance premium, which is a form of financeability under either the base case or if you know, off the top of your head? I think the capex upside case. Thank you.

Akshay Kaul

Thanks, Mark. Steve, do you want to kick off and then Peter can answer the equity issuance.

Steven McMahon

On RPEs I may have to come back to you Mark because we don't specifically set the value that we've attached to RPEs. We set the methodology and approach this within I think chapter seven of the core document. We have index like for RPEs that we apply across the board. We have a forecast value for them, but it's just a forecast. So that adjusts over time in relation to like, what the actual index is ,how they track. So was there something more specific that you wanted to look at?

Mark Freshney (Credit Suisse)

Yep. So what you're saying is that there is a tracker for the real price effects as different input inflation costs move. There is an automatic mechanism that trues up the totex allowance versus CPIH.

Steven McMahon

Exactly. There will always be an argument between us probably and the companies on whether that's efficient or not to track, what tracker we actually use, but I think we're confident, I think in the one so the answer to that question is yes, absolutely. It's an automatic true up between the difference between our selected indices and CPIH.

Peter Bingham

And Mark on the second question, there's no tracker as such. But in terms of our finance annex, we include tables, the models are available that show how we considered equity issuance. And also there's the 5% allowance for cost of issuing new equity as part of the proposals.

Mark Freshney (Credit Suisse)

So perfect. So that's what I mean, in the event that companies breach a threshold, they do get an extra allowance, as is very, very visible in Scottish transmission, for instance, that would allow them to that, and I guess that helps in some of the credit ratio modelling at the back.

Peter Bingham

Yeah, yeah, we certainly included that allowance.

Akshay Kaul

Thank you, Mark. Next up is Peter O'Flaherty. Peter, please go ahead.
Peter, you might have to unmute yourself.

Peter O'Flaherty (Equitix)

There we go. Can you hear me sorry?

Akshay Kaul

Yep. Loud and clear, please go ahead.

Peter O'Flaherty (Equitix)

Good afternoon. Can you confirm your RAMs are pre financing and pre tax? And if so, returns to investors are generally post tax and post servicing of finance. And you've set a sector average debt cost. So one single course of debt so therefore, we will have winners and losers on financing cost. So why are the RAMs not kicking in post tax and post financing?

Akshay Kaul

Thanks Peter. This is quite a, it's been a question that is has been thought about for a considerable period of time, but Peter I think the main reason is a reason to do with simplicity, isn't it? That when in theory one could include financing costs in the RAM calculations, but I think we will then need to get involved in actually trying to measure the actual cost of debt for a lot of companies and the actual tax liabilities of a lot of companies which is a fairly arduous task. Peter do you want to come in on that on the rationale for why the RAMs are exclusive and financing and tax rather than inclusive of it.

Peter Bingham

You are quite correct, they don't include the sort of financing wins or losses in a sense. I was gonna ask if PJ would come in on this it. PJ may be able to offer some colour to the picture.

PJ McCloskey

Yeah I think if you go back through the consultations over the years, what you'll see on this, Peter, is that we did consider what should be included in RAMs: whether tax should be included; whether financing costs should be included. For example, debt costs. But we concluded that that would expose customers to those costs and expose customers to companies’ financing decisions and tax positions, which would be a change to long standing policy that those are issues for companies and their shareholders. And those are not issues that should be paid for by consumers. So that's why tax financing from memory are excluded. But it is in the consultations if you go back far enough, Peter you'll see that in the written consultations.

Peter O'Flaherty (Equitix)

Thanks very much.

Akshay Kaul

I can't see any more hands up on the screen. And I hope that everybody who joined by phone was able to participate by doing the star five to raise your hand. I’ll just give it a minute or so

in case people still want to gather their thoughts and ask any further questions. We still have about 10 or 15 minutes time in the call. So there's tearing rush and if not then we will move to close

Okay, I think I think that's the end of all the questioning. So a big thank you once again to everybody who's taking part in the call and for all of your engagement with Steve and Peter and the team to date has been incredibly helpful. This is not the end of the process. Today was the publication of the final determination will then have a consultation on the licence changes to give effect to these final determinations on 14th of December. These licence modifications will be published on the third of February following that consultation. And then an appeals window will begin from the 3rd of February, which closes on the 3rd of March 2023. So if any of the companies do want to appeal any aspects of these price controls, they can raise those appeals in that window between the 3rd of February and the 3rd of March. And if not, then RIIO-ED2 will start on track on the first of April 2023.

So once again, a huge thank you to everybody who's taking part in the call. If you have any further questions, or any topics that you wanted to explore that we haven't covered on the call. I'm sure that Steve and Peter and the team will be more than happy. And please do get in touch via Jamie Tunnicliffe, the head of Investor Relations, and we'll be more than happy to cover those questions offline or send you any material that you're looking for but haven't been able to find. So let me end with a big thank you to our speakers, Steve and to Peter and members of the team who have participated in the call today. And once again a very big thank you to everybody in the audience who took part and has engaged with the process to date. Have a lovely, lovely week ahead to. Thank you, everybody.