INDEPENDENT PRICING AND REGULATORY TRIBUNAL

REVIEW OF SYDNEY WATER'S MAXIMUM PRICES FOR WATER, SEWERAGE AND RELATED SERVICES AND WATERNSW'S MAXIMUM FOR BULK WATER SERVICES IN GREATER SYDNEY FORM 1 JULY 2020

Tribunal Members

Ms Deborah Cope, Acting Chair
Mr Ed Willett, Tribunal Member
Ms Anna Brakey, Tribunal Member

Members of the Secretariat

Ms Liz Livingstone, Mr Matthew Edgerton,
Mr Matt Mansell, Mr Anthony Rush,
Ms Letitia Watson-Ley, Ms Sarah Holdsworth,
Ms Shirley Lam, Ms Maricar Horbino,
Ms Chirine Dada, and Mr Ian Dehlsen

At

SMC Conference and Function Centre, 66 Goulburn Street, Sydney

On Tuesday, 26 November 2019, at 10.15am

PART A: WATERNSW - GREATER SYDNEY PRICING PROPOSAL

Opening Remarks

THE ACTING CHAIR: Good morning, everyone. It looks like everyone is in here now, so we would like to get started. I would like to begin by acknowledging that we are meeting on the Gadigal land of the Eora people and wish to pay my respect to the traditional owners both past and present.

Please excuse the mood lighting we have here at the moment. Apparently the storm last night affected the power board in the building so the overhead lighting is not working at the moment.

I also want to let people know that we have some members of the media in attendance today. If anybody does not want to be recorded on the media, then please let us know.

I would also like to welcome you all to this public hearing. It is to inform our reviews of:

The maximum prices WaterNSW can charge for the bulk water service it provides customers in the Greater Sydney area including Sydney Water; and

The maximum prices that Sydney Water can charge to its customers for its water, wastewater, stormwater and other services from 1 July 2020.

It will also inform our review of dishonoured and declined payment fees for Sydney Water.

I am Deborah Cope I am the Acting Chair of the Independent Pricing and Regulatory Tribunal - IPART, and I am joined today by my fellow tribunal members, Ed Willett and Anna Brakey. Assisting the tribunal today are members of IPART's secretariat, Liz Livingstone, who is IPART's chief executive officer, Matt Edgerton, Matt Mansell, Anthony Rush, and members of their teams.

Also, I would like to thank those who have provided feedback to our issues paper which we released in September.

Our issues paper sets out the key issues that will be considered as part of our reviews. It also summarises

Water NSW's and Sydney Water's pricing proposals, which were submitted to IPART in 1 July 2019, and sets out our preliminary views on some pricing issues. For both reviews the pricing proposals, issues papers and submissions to our issues paper are available on our website. On 12 November, we received an update of Sydney Water's pricing proposal, which can also be found on our website.

This public hearing is a very important part of our process for both these reviews. In addition to the views expressed in the feedback to the issues paper, we will consider the views that are presented here today when we are forming our final decisions.

Today, we have extended our usual public hearing process to include an afternoon drop-in session from 4 to 6pm, which provides customers and stakeholders an opportunity to have their say and talk directly to IPART'S staff in an informal setting. It also provides an opportunity for those who can't attend the public hearing to have their say.

Following the public hearing, we will release draft determinations and a draft report for public comment in March 2020. People then have about four weeks to make further written submissions for our consideration before we make our final decision. Our final reports and determination will be released in June 2020, which will contain maximum prices to apply from 1 July 2020.

In general, our price reviews will seek to determine:

What are Sydney Water's efficient costs of providing water, wastewater and stormwater services while complying with its environmental and other regulatory requirements;

What are WaterNSW's efficient costs for delivering safe, reliable and sustainable bulk water to its various customers in the Greater Sydney area; and

How will these costs be recovered through prices, taking into account important considerations such as what customers can afford to pay and the impact of drought on future water supply?

We seek your views on these questions.

Before we commence the proceedings today, I'll briefly

outline the process for the hearings. This public hearing is split into two parts. Part A will focus on the review of WaterNSW's prices in the Greater Sydney area; Part B will focus on Sydney Water's prices. Both parts of the public hearing will commence with a presentation from the relevant utility outlining its pricing proposal. Each part will then be divided into focused sessions and a final open session to address any further questions you may have that have not been addressed in the earlier session. Further details and information on the sessions for each part of the public hearing can be found in the handouts that were distributed by IPART staff earlier.

A member of the tribunal will introduce each session, and the IPART secretariat will give a brief presentation on the issues and questions to be covered in the session. The tribunal member will then invite participants at the table to provide responses to and comment on those topics, and then comments will be invited from the audience.

Throughout all sessions, we will request responses from those at the table and invite questions from the floor. If you have any questions but don't wish to present them personally, you can post your questions on slido.com. You can also upload questions on Slido. We will seek to address the questions from Slido in the appropriate sessions during the hearing. To upload a question, please log on to the Slido website and enter the code G848 for WaterNSW and F950 for Sydney Water. These codes are also on the first page of the handout, if you need them later on.

Today's hearing is being recorded by a transcriber. To assist the transcriber, when you are asking your questions, please identify yourself and, where appropriate, the organisation you are from. We also ask you that speak loudly and clearly.

A copy of the transcript will be available on our website soon after the public hearing.

We commence today with Part A of the public hearing and Water NSW's presentation for the Greater Sydney pricing proposal.

Based on the submissions we received, we have identified two key focus areas for the pricing review.

Session 1 will be introduced by the tribunal member, Ed Willett, and will focus on efficient expenditure, cost allocation and prices. In general, these issues represent the bread and butter of our pricing review.

Then session 2 will be introduced by tribunal member, Anna Brakey, and will focus on risk allocation between WaterNSW and its customers for unforeseen costs and uncertain projects. Session 2 will also discuss options to address revenue risks that have been identified by WaterNSW. Most of submissions we received in the price review related to these issues, so I suspect there will be a lot of discussion.

To begin the session, I ask David Harris, the CEO of WaterNSW, to please come forward, thank you.

WaterNSW's presentation

MR HARRIS: Thanks very much, Deborah, and thank you all for your attendance today.

We welcome the opportunity to speak to our pricing submission and answer any questions that you, or indeed the tribunal, may have of us today.

We have broken up this hopefully quick presentation into two parts - a bit of an overview of our pricing submission, and then a response to the issues paper. I'll speak to the first set of slides and then our economic reg manager, Michael Martinson, will speak to the second group of slides.

I am very pleased to give you an overview of our Greater Sydney pricing submission. I will certainly not read all the words on all of these screens and will just draw out the key points to communicate them.

Our pricing proposal as at 2 July 2019 would see the price of raw water to Greater Sydney customers decrease by 1 per cent. We do note that when the determination is made next year and IPART updates its current market parameters, we expect prices to fall below that. I will speak to that in more detail on a subsequent slide.

What we have managed to do in our pricing submission is to combine our drive for efficiency, and indeed

capturing the lower interest rate environment that we are operating in, with our ability to invest to increase the resilience of our network and proposing prices to customers that fall in real time. We have managed to tick all of those boxes. These decreases are proposed despite plans to deliver a significantly larger Greater Sydney capital investment program over the next four years that I will speak to on subsequent slides.

A very important element of our current context both if I may say in Greater Sydney and in regional areas - we operate in both - is obviously the continuing drought. The bottom line to that continuing drought, particularly in the case of Greater Sydney, is that that it requires investment.

Our pricing proposal contains capital projects such as Avon Dam deep water access and also preliminary planning expenditure for contingent drought projects to ensure ongoing water supply for Greater Sydney. To put it very simply, we, as the utility are accountable for the supply of bulk water to Sydney, simply must be doing this planning in the current drought context. We, as an organisation, continue to devote considerable resources to securing the state's water security in light of the ongoing effects of drought, as I say, both in Greater Sydney and in regional areas.

This slide really summarises the essence of our pricing submission in terms of some recommendations around the regulatory framework. We have sought a four-year determination period. We have proposed a cost pass through framework that addresses the costs associated with unanticipated external events - drought, for example - such as regulatory, legislative and tax changes and catastrophic events.

We have proposed a contingent projects mechanism to address the financial risk of major projects that may be required to address drought and other significant events that may be triggered, where it is not practicable or possible to include definitive numbers in the determination due to cost, timing or scope uncertainty at this time.

We have sought the continuation of the current cost pass through for Shoalhaven pumping transfers. We have sought a demand volatility adjustment mechanism to manage

potentially significant volume risks associated with the drought. We have also sought the continuation of the existing formula-based arrangements for adjusting our prices for the operating modes of the Sydney Desalination Plant.

In relation to Shoalhaven transfers, the current arrangement is for a cost pass through. However, as we have identified in our pricing submission, the current arrangements do not include all relevant charges relating to the retailing of electricity, resulting in the allowed cost of electricity being below our efficient and actual costs. We propose that IPART amend its charging formula to include network poles and wires costs, to include environmental costs and to include retailer and residual administration costs we incur from our retailer.

Putting it simply, under the current mechanism, we are not fully reimbursed for our prudent and efficient costs of Shoalhaven transfers. We also seek to recover the revenue shortfall over the current determination period.

Our capital expenditure program is $682 million over the determination period, which is a 110 per cent increase on the capex spend in the current determination period of $326 million. This includes projects to improve the resilience of our network when facing pressures associated with drought, to renew assets and to minimise the footprint of our operations on the environment.

We are, as an organisation, very focused on maintaining asset reliability and asset renewals. We are spending more on renewing and maintaining our assets than has been done in the past and we - both our board and our management team - have a very strong view that that expenditure is absolutely required so that our assets are of a reliability and availability standard and brought up to that standard where necessary.

A major component of our capex spend over the determination period is a cost of over $200 million for the Avon Dam deep water access. Put simply, that project buys two years of water for the Illawarra that it otherwise would not have. I might point out the Illawarra is the node in Sydney which is going to fail first in the current drought. So that project is absolutely critical to the ongoing availability of water in the Illawarra node, the

Illawarra region.

We also have, by way of example, $100 million in our capex program for Warragamba E flow construction to minimise environmental impacts of our operations.

Our operating expenditure is a different story in that our operating expenditure continues to decrease. I might just point out that in the 2016 pricing determination, we proposed a very large step reduction in our opex, and we are again today, in our pricing submission, recommending a further reduction - a prudent reduction - in our operating costs. In fact, in the first year under our pricing submission, we are recommending a 6 per cent decrease from IPART's 2016 determination, and I talked earlier about the probable effects of the low interest rate environment that we are in at the moment.

Our opex spending ensures that we are able to meet our legislative obligations and, as I said earlier, maintain our assets at long-term sustainable levels. Additional savings to date have been achieved through improvements in asset management, strong financial governance and procurement savings. We have included an efficiency dividend of 1 per cent of total opex to place additional downward pressure on water prices.

I want to emphasise the point I made before. Since our inception as WaterNSW in 2015, we have taken leadership in needing to drive continuous improvement and efficiency. We proposed a significant decrease in opex in 2016, and this efficiency dividend that we ourselves have proposed in our pricing determination this year is genuinely all that this organisation can bear at the moment, while prudently maintaining our physical assets, our IT assets, our necessary human resources and, indeed, delivering on the expectations of our customers and stakeholders during this unprecedented drought.

The revenue requirement under our pricing submission is $890 million. As I've said before, average customer prices will reduce by 1 per cent in real terms over four years and, based on our pricing proposal, if the WACC continues to fall, it would result in an approximate $10 reduction to a Sydney Water end customer's bill in 2020-2021, on the basis that our costs represent approximately 8 per cent of Sydney Water's total costs.

That was a quick run over the target and overview. I'll now ask Michael Martinson to come forward and present a few slides to respond to the matters mentioned in the IPART issues paper, thanks.

MR MARTINSON: Thanks, David. Welcome everyone.

I have a few slides that will touch on a few specific issues primarily in response to matters that were raised in the issues paper. I will be very brief in talking to these slides, because a lot of the matters will be picked up in subsequent discussions this morning.

With regard to matters that were raised in the issues paper, IPART supported many of the proposals that were in the issues paper, but there were a handful of areas where they either didn't support our position or that further information was to be provided.

Some of those relate to the Shoalhaven transfers, which were touched on earlier. I think there was general consensus in the issues paper and in subsequent responses based on if there is an error in the formula for Shoalhaven transfers, then it appears like the sensible thing to do is to review to make sure that the formula is cost reflective moving forward. We think that is a sensible approach.

IPART did not support our proposal to carry forward the recovery of the revenue shortfall in the current period into the next period. We don't agree with that view, on the basis that we think that the formula itself had an intended bias in it. It doesn't allow revenue upside to offset any reductions in the current period. We think on that basis that it is sensible for us to be able to recover that cost moving forward.

I'll also touch on contingent projects, cost pass throughs - which will again be the subject of discussions for later this morning - the cost of maintaining recreational areas, and prices for Sydney Water.

The framework that we have put forward to manage uncertainty really draws heavily on IPART's current framework for managing risk. The addition to the framework that we are proposing is a mechanism that is common in other jurisdictions, including the ACCC, the ESCV in

Victoria, the AER for electricity, and a number of other regimes that we have previously responded to.

We believe this framework is one that is appropriate for large projects that are material in terms of the proportion of our regulatory asset base. There is cost uncertainty and timing uncertainty. We think having a separate mechanism that allows us to address this risk during the regulatory period would be a very useful and beneficial addition to the current framework.

IPART's framework to date includes cost pass through arrangements, which we support. We are looking at expanding that to include a cost pass through for regulatory events and catastrophic events. We also think a very useful component of managing investment uncertainty is including expenditures in the regulatory asset base which then gets reflected in the subsequent regulatory period.

There are some benefits of that, and that was the approach that IPART adopted in its decision for the Broken Hill pipeline. Some of the shortfalls of that is it does not provide for any revenues during the current financial period, so it certainly impacts the financeability of the organisation within a regulatory period.

We think that the current set-up with investing in the RAB is that there is a loss of a certain element of revenue that could potentially provide a disincentive in a future period, but we can certainly discuss that more in a session later this morning.

I guess the last element of the framework for managing uncertainty is that there is this ultimate, I guess, last resort once other mechanisms have been exhausted, which is to really seek an early review, basically to open up the entire determination to address the costs of a large investment. We think that really should be considered only as a last resort because it is potentially a fairly significant mechanism that would impose costs on ourselves, customers and IPART when there are other mechanisms that we think could deal with that risk.

I will also just quickly touch on this. In terms of cost pass throughs, and this has been touched on previously, we are seeking to expand the framework to include regulatory events and unexpected catastrophic

events. Again it is something that is quite prevalent in other jurisdictions. We think it is a useful mechanism that IPART currently has as part of its suite of tools. We think that could be expanded to help deal with some of the risks that we are facing moving forward.

One of the areas that was touched on the issues paper is that - we currently operate a number of recreational areas that we believe provide the monopoly services and that the costs should be provided in our determination. There is some question, I guess, as to whether or not the costs relating to recreational areas should be included in our determination. We wanted to highlight the fact that in Greater Sydney, the recreational areas we manage receive about half a million customers a year. The visitors experience is site-specific, as an example in Woronora, Upper Nepean dams, there are barbecues, picnic areas, picnic tables in bushland settings. There is fishing in some areas. We think that is something that is beneficial to the community and the areas themselves are intrinsically linked to the dam or the infrastructure and related to heritage.

If these costs were to be removed or the services were to be removed from the determination, there would be an initial and ongoing expenditure in order to make safe the areas and to provide appropriate security to the sites if its not considered a monopoly service.

Effectively, the management of recreational areas is driven by catchment management and protection requirements. So we restrict access within special areas to protect water quality. Restricting access within a catchment area is a recognised measure to protect quality and public health. We think this is an important element of the determination and something where we seek for the costs to remain in our determination.

The last item I would like to touch on is that we propose effectively maintaining the current split of fixed and variable charges to Sydney Water. In the issues paper, IPART suggested that a possible view would be maybe moving to 100 per cent fixed charges. I guess our initial view on that is that from our perspective not all of the costs of our business are fixed, therefore, we think maintaining a variable component of charges is likely to send more efficient usage signals to customers. We think having at

least some proportion of variable charges within our pricing structure is an appropriate aim.

If we are moving away from the 80 per cent fixed 20 per cent variable, perhaps a 90 per cent fixed 10 per cent variable may be a better split. In any case, if there is any proportion of our tariffs that is variable, we still think that there is a need for a demand volatility adjustment mechanism, the current approach to SDP pricing, and a pass through of the costs to the Shoalhaven transfers. That is it. Thank you everyone.

THE ACTING CHAIR: Thank you very much. We will now move to questions from the table and then the audience and Slido.

Sydney Water? No. Are there any questions from the department?

MR BENTLEY: No, thank you.

THE ACTING CHAIR: Anyone from the audience?

MS CULLIS: My name is Sharyn Cullis. I am here representing the Georges River Environmental Alliance today.

My question is to David, respectfully. I would be really disturbed, as would my organisation, if your pricing proposal, which involves a reduction in the cost of bulk water, means a lower level of protection of catchment values. I have actually been part of groups that have been permitted to inspect the catchment in the past and I know the marvelous job that your rangers do on the ground. I have heard recently of quite sophisticated systems that you have in place now for things like fire - fire management. I am rather interested to hear that you really only concentrated on drought as the major risk, where I see there are all sorts of potential risks within the catchment that needs to be managed and managed through a very high level of surveillance on the ground.

MR HARRIS: Sharyn, thanks very much for your question, and for the observation that you make there in terms of the priority that we put as an organisation into our catchment protection activities.

I would suggest that in the last couple of years we have actually done the best job we have done for a long period of time in terms of protecting the catchment. You referred to bushfires. We now have a much better arrangement in place with RFS for them to provide us with a rapid response capability in respect of bushfires because that is one of the key risks obviously for water quality within the catchment.

We are renegotiating as well our arrangements with National Parks so that our funding that goes to National Parks is much better directed to water quality outcomes than, if you like, general land management practices, as has been the case in the past.

We have been spending more and more in our catchment protection areas. Actually I should highlight as well another key thing. If you have been on trips into the area with our staff, you will know the emphasis we are putting on at the moment - very successfully actually - in relation to long-wall mining within the catchment which has received quite a lot of publicity recently. Indeed, the Independent Expert Panel has adopted all of the recommendations that WaterNSW made to it, in its most recent report. That's why I say I think actually we have been doing the best we have been doing recently in terms of our catchment protection function.

I indicated in my opening remarks that our cost savings in particular were not coming from that area. They were coming from more efficient project - major project - and capital spend savings in our procurement area. So we are not proposing at all to reduce our expenditures in the whole area of catchment protection, and I might add, in my view, the related area of provision of community amenity around our storages.

As Michael has also said, I see the provision of those land facilities to the community as a quid pro quo for the fact that we do lock up our catchments. We do not allow access into our catchments and I see that expenditure coming through that lens. Certainly, we are not taking a backward step at all. I am very proud of what we have been doing recently in catchment protection. We are not proposing cost reductions in that area. We are obtaining our efficiency reduction in other areas.

THE ACTING CHAIR? Douglas?

MR McCLOSKEY: Douglas McCloskey, PIAC.

This is more of a comment because unfortunately we didn't get to submit to the initial process. However, we do have some questions relating to costs and risk and revenue in relation to the fact that a number of the measures to manage risk in relation to the potential requirement to build unforeseen infrastructure or to respond to unforeseen circumstances are essentially a recognition that there is risk that the organisation has to expend more than it may have forecast. That is really shifting risk onto customers and eventually onto consumers.

We are concerned that there is not necessarily a symmetrical relationship in that the revenue risk is cited as a reason for having largely fixed charges. We question whether that is an appropriate balance of risk and revenue. We look at the whole chain of supply and we can see that end consumers are very much interested in having as much control on their costs as possible and having their costs related to their usage.

We think that utilities such as Sydney Water are moving towards that in recognition of the input they have had from their consumers. We are concerned that, as a consumer of bulk water from WaterNSW, Sydney Water is not necessarily supporting a similar relationship as a customer of WaterNSW. We think there definitely should be exploration of having a greater balance of usage-based charges for WaterNSW, reflecting a balance of risk in that they have much more ability to deal with risk with mechanisms that they are proposing or to shift that to consumers and to their customers. We think that an appropriate balance of that would be to have higher usage based charges. If not, that should be considered in the other decisions that are made with regard to cost pass throughs.

It is more of a point rather than a question, but it is certainly something we would like to see discussed more. Thanks.

THE ACTING CHAIR: I think a lot of the discussion, both around pricing and pricing structures, in the next session, and then risk sharing, in the following session, will go

into the details of that.

Are there any general comments that either WaterNSW or Sydney Water may want to make before we --

MR CHEROUX: No, thank you.

MR HARRIS: I am happy to address that during the later session.

THE ACTING CHAIR: Yes, we will pick that one up in the later session.

Are there any other general questions or comments as part of this session? Anything from Slido?

MR MANSELL: Yes. There are a few questions that have come in from Slido. Firstly, from anonymous, the question is:

> How does the government's role in planning for water such as expansion of the desal plant sit alongside WaterNSW's role in planning for new bulk water supply?

MR BENTLEY: Jim Bentley. I am the deputy secretary for water in the DPIE. Thank you for the question.

The department plays the role, alongside Sydney Water and WaterNSW, in all matters of the strategic planning around water and, in the case of Sydney Water, wastewater. So those decisions around what we are doing with desal, what we may be doing with other kinds of assets, are made jointly by those three organisations working together. Hopefully, that addresses the question.

MR MANSELL: The next question is from anonymous:

> Regarding managing uncertainty, can the government cover some of the costs in the short term rather than building them into prices when bulk water planning is currently underway?

MR HARRIS: Could I go first and then hand over to Jim Bentley.

Just to be clear, the approach we have adopted in our pricing submission is that Avon Dam deep water access is a project that is underway now. We have firm costs for that project and we have included that project in our pricing submission.

The other projects are what we describe as contingent projects. They are largely dependent on whether or not the drought continues. So at this point in time, it is not prudent for anyone, ourselves or the government, to make an investment decision in relation to those assets. However, we obviously have to plan those developments so that we are ready to go if the drought continues and if those assets are required. That is just by way of outline of how we have addressed those in our pricing submission.

The only other alternative for us dealing with those contingent projects is to reopen the entire pricing submission if and when any of those projects are required, which we definitely don't want to do as it is an extremely inefficient approach. If I may say from our perspective, with the amount of resources we have to put as an organisation into developing these pricing submissions, it is a very important exercise, but it is taking people away from our core functions in dealing with the drought. I don't want to go through this exercise now and then have to go through it again in a year's time by way of an entire reopening of our pricing submissions.

In proposing that those projects be dealt with as contingent projects, we feel we have struck the right balance, if you like, between prudency and efficiency.

At this point, I might hand over to Jim Bentley, who can answer the part of the question relating to funding, if those decisions are made - that is, funding through customer versus government. Jim?

MR BENTLEY: Certainly, I can't speak for treasury as such, but let me say that the department supports the project David referred to, which is the deep water access project, and the department as well as Sydney Water and WaterNSW have worked closely together on that.

In 2017 the metropolitan water plan signalled a drought option study, which the two organisations produced. I think it would be fair to say that that drought options

study was produced at a moment in time following which the drought has become even more severe and the greater depletion of the dams is probably of even greater concern than we had at that time.

I would not want to see anything that disincentivises WaterNSW or Sydney Water from doing the appropriate level of planning. Clearly if it is not included in their prices, then, one way or another, the government ends up paying, either through a dilution of dividend or through the department finding funding.

I don't think we should underestimate how much work is currently going on by both state-owned corporations and the department, and indeed other parts of government, to ensure that we have the right level of planning in place. I think it is important that we do not disincentivise that work just at a time when we should be ensuring that we are able to move as smoothly as we can through this very severe drought.

THE ACTING CHAIR: Douglas?

MR McCLOSKEY: This raises an interesting point, and it is one we have raised in relation to Hunter Water's and Sydney Water's proposals. We are concerned that there is a kind of perpetuating lens simply of exceptional services for a lot of these decisions, such as cost pass throughs and making decisions in response to exceptional circumstances and citing drought as the key reason for setting in place these investment decisions.

We are concerned that there is not necessarily a link to the fact that there is a change to reality in relation to the performance of catchments, in relation to the value of water in an ongoing sense, and that, rather than assume that things are the way they are is an exceptional circumstance and then we just pass through the cost of the exceptional circumstance, this is the time to consider a pricing structure and an investment structure that might build these sorts of circumstances into business as usual rather than assuming a historic average and then saying, "Oh, now it's drought. Now we have to pass through the extra costs in relation to this."

Again, that is more of a comment than a particular question, but it is something that we have raised in

relation to the pricing proposals of Sydney Water and Hunter Water. We think discussion needs to be had because it impacts not only on pricing but only on investment decision.

MR HARRIS: Douglas, certainly for our part, that is not how we approach our planning at all. We have a long-term capital investment plan. It's actually a joint plan between Sydney Water and WaterNSW. That plan broadly is to support growth in this city or in Greater Sydney. The impact, though, of the current severe critical and prolonged drought is that some of those investments need to be brought forward in a timing sense. We would not otherwise have those investments in our pricing submission. They are there because of the risk that the drought does not break, the risk that, in the short term, the drought continues. I think it is therefore the correct characterisation of those costs to say are for drought. The important point I am trying to make - and Roch may wish to make a comment after me - is that the two utilities absolutely do have a joint long-term plan to support growth. Drought requires some different responses, though.

THE ACTING CHAIR: Do you want to respond?

MR CHEROUX: No, thank you.

MR BENTLEY: Could I make a point, sorry, Chair?

THE ACTING CHAIR: Yes, Jim.

MR BENTLEY: I think your point perhaps was: should we be recognising in pricing structures that these droughts are perhaps not extreme events initial but are normal events? I think that was your point.

Just to speak to that, from the department's point of view, and having had some involvement through a few years with Hunter Water as well, I think IPART has an important balancing role to play between if we were to load what could be, some could say what is now business as usual, but actually if it turned out to be a still more extreme event, you would have some very sharp movements in prices. I think we need to balance how do we get the right incentive for the utility to continue to be efficient to give good and relatively low prices, shall we say, to customers with the ability to invest in these things for

the future.

My personal view, for what it is worth, is whilst I recognise what you are saying, there is uncertainty in whether the extent to which these "extreme" events should be considered as normal events going forward. That's the role I play in balancing those things.

MR CHEROUX: Roch Cheroux, Sydney Water.

In our recent submission in November we have used the term "resilience". There is a very fine balance between what is resilience and what is responding to a drought situation, which is an exceptional situation. That is the balance of the two that we need to get right.

THE ACTING CHAIR: Are there any more questions? Are there any questions on Slido?

MR MANSELL: A question has come on Slido in about contingent projects, but we can save that until session 2.

The last remaining question on Slido for WaterNSW was submitted from Sharyn Cullis, and it is:

> Regarding the Avon deep water access project and the comments that Illawarra will be the first supply to fail, how does the Dendrobium expansion impact on that risk?

MS CULLIS: Do you wish me to explain? I would be happy to.

MR HARRIS: No, I understand.

MS CULLIS: But everyone in the room might not know that it is a long-wall mining project. It is quite aggressive and it certainly affects the catchment of the Avon.

MR HARRIS: You are right; Dendrobium is a mine within that part of the catchment. Correct me if I'm wrong, but, off the top of my head, I think the Independent Expert Panel found that we were losing in the order of 8 megalitres a day out of the supply system through fracturing and other things occurring at the Dendrobium mine, which frankly was the basis on which WaterNSW made

its submission to the Independent Expert Panel.

MS CULLIS: Because you did invite my comment, could I also say that, just recently, Dr Peter Turner, from the National Parks Association, said the estimate was more likely to be about 44 megalitres per day. Whilst he wouldn't be necessarily regarded as having the same status, it was interesting that the Chief Scientist very clearly was uncertain about almost everything except that one estimate. I am just wondering what your attitude would be towards that estimate, given the fact that 8.5 is nowhere near the 44 megs that somebody else estimates.

MR HARRIS: Sure. There are a couple of issues there. Our view would be that that 8 megalitres a day is on the low side. By the way, our calculations are not quite as high as Dr Peter turner's; however, they are a lot higher than the 8 megs a day. The Independent Expert Panel is looking at that.

I think they are doing some very good work. You and us and others are working with them, and that's the way we will continue to work in relation to Dendrobium.

I think the issue, Sharyn, is that the Dendrobium mine has approval to be carrying out some activities. Those approvals were granted before, and there is certainly very little that WaterNSW can do about those, if not anyone else. The issue is whether - and the whole report was whether - an expansion of that mine should be allowed. That expansion would not be occurring under any conceivable time frame within the time of the current drought.

With regard to your specific question with regard to how does our Avon deep water access relate to the loss of water out of Dendrobium, whatever is being lost now is being lost now. Avon will buy us about two years time. On top of whatever is being lost, it will buy us about two years supply to the Illawarra.

The question of whether an expansion of that mine should be allowed, that process will take enough time so that, hopefully, our inflow situation will have turned around before any actual workings are permitted there.

THE ACTING CHAIR: Anyone else from the floor? Any other questions? We might move on to session now. I will hand

over to Ed Willett.

Session 1: Efficient expenditure, cost allocation and prices

MR WILLETT: Thanks, Deborah.

In this session, we will be considering WaterNSW's operating and capital expenditure, as well as its approach to allocating costs between its customers. It will also consider the price structures it sets to recover these costs.

WaterNSW is proposing a significant increase in expenditure over the 2020 determination period, particularly on drought and the growth-related projects. While we have engaged expert consultants to assist us in determining the efficient level of costs it can recover from customers, we are seeking shareholder feedback on its expenditure proposals.

In relation to allocating costs and setting prices, WaterNSW's proposed approach remains largely unchanged from the previous determination period. However, we would like to discuss the merits of changing its price structures to better manage its revenue risk, for example, having a greater proportion of its revenue comes from its fixed charge and less from its volumetric or usage charge as you have just heard.

In order to assist discussion, at the end of the presentation, the IPART secretariat will post some questions for conversation. I'll invite comment on these questions from around the table on each topic. I will then invite comments from the audience, and we will address questions also from Slido relevant to this topic.

I call on Sarah Holdsworth and Letitia Watson-Ley to introduce the discussion on additional expenditure, cost allocation and prices. Thank you, Sarah.

MS HOLDSWORTH: We have engaged expert consultants to review and make recommendations to us on the efficiency WaterNSW's proposed operating expenditure. This includes establishing the efficient level of operating expenditure it requires, as well as considering its historical performance and the potential for further efficiency gains

going forward.

As shown in the chart, WaterNSW underspent relative to its allowance in the first part of the 2016 determination. For this review, we are interested in understanding the extent to which efficiencies from the 2015 merger between the former Sydney Catchment Authority and State Water led to this underspend; alternatively, whether it mainly resulted from WaterNSW temporarily reducing its activities during the merger period, in which case there potentially remains scope for it to achieve greater merger efficiencies.

In the second part of the 2016 determination, WaterNSW changed its capitalisation rules - that is, the rules around what operating expenditure can be converted into capital expenditures. As shown in the bubble in the graph, after adjusting for this change, we found that WaterNSW exceeded its operating allowance.

Moving into the 2020 determination, WaterNSW is proposing a small decrease in expenditure compared with its 2016 operating allowance. Part of its proposal includes applying a 1 per cent annual productivity adjustment to its operating expenditure. We are seeking feedback on whether its efficiency target is sufficient, or if WaterNSW could seek additional savings.

Our expert consultants will also review the efficiency of WaterNSW's past capital expenditure as well as the need for projects proposed for the upcoming 2020 determination, WaterNSW is proposing to invest $682 million in capital expenditure in the upcoming determination, which is over two and a half times the size of its 2016 capital allowance.

We are particularly focused on its capacity to deliver this relatively large suite of projects, especially since it has generally underspent on its capital allowance in the past, The exception being in the last two years of the 2016 determination where WaterNSW reports plans to advance several projects due to the drought.

As we have heard, the drought is a key driver of WaterNSW's capital expenditure program for the 2020 determination, and an example is the Avon deep water access project, at an estimated cost of $236 million. This

project aims to provide drought resilience to the Illawarra by accessing deep water in the reservoir, providing up to an additional two years of supply during prolonged drought conditions.

WaterNSW's proposed capital program also includes environmental projects with around $100 million for construction of the Warragamba environmental flow project to improve the health of the Hawkesbury-Nepean River.

We note that, at present, the cost of WaterNSW's proposed large expenditure is mostly offset by the current low interest rates and if interest rates rise in the future, this could increase WaterNSW's prices given the size of its proposed capital program.

I'll now call on Letitia. Thank you.

MS WATSON-LEY: Thanks, Sarah.

Once we have determined WaterNSW's efficient level of expenditure, we need to examine how those costs should be allocated to its three different customers groups - Sydney Water; the councils; and its raw and unfiltered water customers. We also need to consider the price structures that could be used to recover these costs.

WaterNSW is proposing to largely maintain its existing cost allocation and price structures. That said, it has proposed some changes to council charges. WaterNSW wants to reduce current charges to each council by 1 per cent over the 2020 determination period.

In previous price reviews, we would update those charges to take account of the costs of supplying the councils, as well as each council's share of bulk water sales. Using our approach in the 2020 price review could mean that some councils charges will vary by more than the 1 per cent decrease proposed by WaterNSW.

We are interested in hearing from stakeholders on this potential change to council charges. While it may improve pricing certainty to councils, it could mean that their charges no longer reflect the underlying costs of supplying the councils.

We are also seeking stakeholder comments on WaterNSW's

price structures. As previously mentioned it currently has an 80:20 ratio of fixed charges to volumetric charges for its prices to Sydney Water and the councils. We are looking at whether to move to a greater fixed share, for example, a 90:10 ratio. WaterNSW's costs are largely fixed which means moving to a price structure with greater fixed share could reduce its revenue risk.

In their feedback to the issues paper, most shareholders supported maintaining a predominantly fixed share of charges in WaterNSW's price structure.

MR WILLETT: Thank you, Sarah and Letitia.

We have prepared some questions to focus discussion. As I indicated earlier on, we will start with responses around the table before turning to the audience, and then we will turn to Slido questions. I encourage anyone who has a question, if they don't feel like standing in front of the audience, to put their question to Slido.

I won't read out the first question. I think we can all see it on the screen. David, or anyone from WaterNSW, do you want to start on that?

MR HARRIS: Yes, could I make a few comments in relation to both opex and capex. Firstly, in relation to opex, it is very important to remind people that in our late 2015 early 2016 pricing submission, we cut our opex by in excess of 20 per cent. My recollection was 30. Others around the table are saying mid-20s, but, nonetheless, that was a huge step change in our cost base that we delivered at that time. We are backing that up again this time with further cost decreases, together with a 1 per cent efficiency dividend across our business.

I really want it registered, here as the chief executive officer of this organisation, that we have taken leadership in that. Our executive team aggressively seek efficiencies. We are doing the best we can. I would be very concerned about my organisation if we were to lose anymore opex than that, having regard to what we delivered back in 2016. We need good people. We are a complex business that has a variety of functions that we need to do well for the benefit of not just our customers but our communities.

My genuine position on cost efficiency is we are doing the best we can. We have put our best foot forward, not just in this determination but in the previous one, and I would like our performance to be judged across those time periods.

Sarah mentioned our capacity to achieve capex. We have - and this is detailed in our pricing submission - made a number of changes since our last submission in terms of how we deliver our capex programs. Indeed, I might say on both our general Greater Sydney and our rural determinations, we are forecasting a significant overspend delivered, a deliberate overspend, on capex during the current determination periods. We have fundamentally changed the way that we deliver our maintain capability program which, in essence, is our asset maintenance program. That is fundamentally different from where we sat for 2016.

Next week, we are going out to the market with an expression of interest for a delivery management partner to come in and assist us across all of our capital projects, or at least our major capital projects, to help us push through that capital spend. We had an industry briefing on that matter just last week. The EOI for that is going out next week, as I said. Our ability to achieve is absolutely fundamentally a different place from where we were in the 2015-16 submission.

MR WILLETT: Thank you very much, David. Roch, for Sydney Water's response?

MR CHEROUX: We are in constant discussion with David and his team. We have discussion on costs because we obviously buy services and water from WaterNSW, so cost for us is really an important part of it. We are satisfied with the submission that WaterNSW has presented and the efficiency that they are trying to get out of the business.

MR WILLETT: Thank you. Jim?

MR BENTLEY: No, thanks. It is not a role for the department.

MR WILLETT: Thank you. Anyone from the audience?

MR EDLER: Good morning. I am Mark Edler from Flow

Systems.

Let me start by saying that what we have heard is heartening and we support the department and WaterNSW, particularly in their planning work, in their long-term planning work, and also the efficiencies that WaterNSW has managed to extract from its operations.

We feel for WaterNSW in their dilemma around the disconnect between long-term planning and the pricing cycle. I guess we think that the answer to that is to make sure that we are not really undercutting the good work that WaterNSW is doing, that we are allowing them a sufficient operating and capex budget for that changed set of circumstances that we see in our economy going forward. We agree with the Public Interest Advocacy Centre on that point.

I would ask a question, though, around the balance between usage and fixed charges. We do understand, I guess, that the starting point for the discussion we have had so far is around revenue and revenue security and underpinning the security of WaterNSW. I would be interested to know whether WaterNSW has done any work on understanding the effects of those price signals through the customer chain through Sydney Water to the end consumer, and the value that is placed on bulk water, and whether that balance is appropriate in light of that.

MR HARRIS: The short answer to that strictly is no. We are the wholesaler to Sydney Water. Sydney Water's customers are the end use customers.

Just to put this whole discussion in context, though, we are about 8 per cent of Sydney Water's cost base. I think that is probably a marker that people need to reflect on when they are talking about whether it is 80:20 or 90:10.

I thank Roch for his comments. As you know, we have an 80:20 fixed variable split on our rural valleys. It reflects simply the fixed cost nature of our business. IPART has dropped the thought there about increasing that. I guess I would describe that proposal as lukewarm from us around the 90:10, or whatever. I think this conversation needs to be brought back to the fact that we are just 8 per cent of the Sydney Water cost base.

MR WILLETT: Thank you.

MR EDLER: Thank you, David. I guess my question is more around I think we have an absence of information here. Yes, you are 8 per cent and, yes, you have largely fixed costs, but we have articles in the press around the cost of bulk water that seem to be indicating actually from a whole of market perspective that there is not an understanding of the value of water. We are not talking necessarily a scarcity price, but the longer term value of bulk water does not seem to be playing out in the public discussion as something that is worth investing in. I would have thought it would be incumbent to do a bit of work around asking at that wholesale point what are the impacts of the fixed versus usage charges throughout the whole system. But thank you for your comments.

MS BRAKEY: Perhaps Matt could talk about the way that we set Sydney Water's prices to end use customers, which is a broader concept than the pass through of WaterNSW's costs through to Sydney Water.

MR EDGERTON: Sure. My name is Matt Edgerton. I am the executive director of water pricing at IPART.

Mark, when we are looking at WaterNSW's price structure for Sydney Water, probably what is of most relevance is what incentives that provides to Sydney Water. When we are then looking at Sydney Water's prices to end use customers, we are looking at what incentives they provide to the broader community. I think a lot of what you are talking about in terms of the value that the broader community places on water is particularly pertinent to the question of how should we structure Sydney Water's prices.

Today the way IPART has set Sydney Water's price is basically to set the water usage price with reference to an estimate of the long run marginal cost of water supply. That is basically an estimate of the costs involved over the long term - over 30 to 50 years, for example - of ensuring that supply matches demand, so it does factor in future required augmentation costs so that supply meets demand. To date that is how we have set the usage price for Sydney Water.

We obviously expect that to be a key part of the conversation in a couple of hours when we move on to the Sydney Water public hearing, and that will be one of the key elements of our whole review, because that really does get to the question of what price signal is sent to the broader customer base. Here, I think the key question is what incentives does the price structure provide to Sydney Water and how would they react to a higher usage price versus a higher fixed price; for example, does it have any implications on its leakage water?

MR EDLER: I understand that, and the conversation could go on.

As an alternative provider of water, Flow would like to see more of that discussion at the wholesale level so that the market actually works appropriately at the wholesale level and sends the right market signals to investment at the wholesale level, and that the options around where we get our water from as a city are in a proper price context, and that involves having proper price signalling and valuing bulk water.

MR WILLETT: We will take that on board for the moment. I think you are probably talking more about wholesale prices by Sydney Water than WaterNSW, but I understand the issue. As Matt, said we will be talking about Sydney Water's prices later on this afternoon.

We have been jumping ahead a bit of ourselves, but before I leave the first question, is there anything else from the floor on operational efficiencies? Anything from Slido on that? Yes, sorry?

MR McCLOSKEY: I wanted to follow up on that point, just to be on record. We share the perspective that the whole supply chain needs to do the job. It is not enough to try and make retail prices do the whole job of reflecting costs and changing usage behaviour to reflect the value of the resource.

It is probably worth citing the example in our electricity system. You try to have each element of that chain operate efficiently and provide the correct incentives. We are concerned that having such a high level of fixed cost at the bulk level does not provide those strong incentive structures that can feed through and do

the job at the bulk water level that is then being asked to be taken up at the retail level, particularly when you factor in the ability for providers such as Flow and others to do so.

Again, obviously a discussion will be had more in the Sydney Water section, but we think that this is a key element. We are very concerned, and far from moving towards 90 per cent or 100 per cent fixed, we would like it to be going into another direction.

MR WILLETT: We certainly hear that and I think there will be agreement.

MR PIZZINGA: Joe Pizzinga, WaterNSW.

I might comment that I think electricity is well ahead with of water. The dilemma we have is that there is no market price for water. Even if you said to WaterNSW, "Move more to variable", WaterNSW would then become a price setter for water, and I don't necessarily think that is appropriate. There should be a market mechanism that sets that. Unfortunately, the water industry just does not have that mechanism to allow for that at the moment.

MR EDLER: It is a barrier to that.

MR WILLETT: Thanks for that.

Are there any further questions from the floor on operational efficiency? Do we have anything from Slido?

MR MANSELL: We do. A number of questions have been covered in that discussion, but there is one additional question to WaterNSW, from anonymous, which is:

> How does WaterNSW's assumption of growth and demand as a driver of increased expenditure relate to the level 2 water restrictions which will be in place next month?

MR GEORGE: Andrew George, WaterNSW.

The lens we look at together, with Sydney Water and the department obviously, is demand and drought response are two very different things. With drought being very

acute and the government's response with Sydney Water introducing level 2 water restrictions that is seen as, I guess, simplistically different from the planning that is done for long term growth, other than to note that for drought we may bring forward long-term growth options to address the acute drought situation.

MR WILLETT: Matt, are there any other questions??

MR MANSELL: Yes, an additional question came up as a follow-up:

> There is a lot of discussion regarding capex and augmentation. The government are embracing opportunities relating to reuse. What does this do to WaterNSW's plans?

MR HARRIS: I think that actually goes to that earlier question. The long-term capital plans of both the organisations see revenues ramping up and, indeed, having the simple effect, if you like, of pushing out a number of our long-term projects, pushing them further out, with Sydney Water bringing forward its investments in recycling, and we support that.

The drought, though, as Andrew has just indicated, is an acute water availability issue, not a supply and support growth issue. So the time frames of those two things are very different. Did I answer the question?

MR MANSELL: Yes.

MR WILLETT: I am sure we will get a follow-up if you haven't.

Matt, is there anything else?

MR MANSELL: No.

MR WILLETT: We have jumped around a bit on these questions. I will go through them to make sure that we don't miss out on someone who has saved up for a particular question. We have touched on appropriate allowance for the drought and growth. Is there any further comment on that area that people want to make?

MR BENTLEY: Could I make a comment. There was a question

before and David talked about what the government is looking at in terms of recycling. It is true we are looking at what the role of recycling should be going forward. Whilst there is the potential for recycling to be used to augment supply potable water, we are not at that point yet.

There are many needs for water beyond the potable purpose. There is a piece of work that we are embarking on just now to ask: what is the role of recycled water going forward? There is nothing in WaterNSW's or Sydney Water's current plans that prevents us from moving to any of those options should we choose to. I think people should have confidence that the policy work around recycling will not be tripped up by the work of either of the SOCs or vice versa.

MR WILLETT: I think that is the way we have seen it as well, so thank you for that.

Drought and growth? Accommodation? No. Pricing to councils? Does anyone have a comment or want to ask anything in relation to that? Anything from the floor? No.

Matt, nothing from Slido?

MR MANSELL: No.

MR WILLETT: I think we have already spoken at length about the pricing structure, but one last chance if anyone wants to raise anything in relation to the question of the current 80:20 pricing structure.

Thank you very much for everyone's participation in that. That was a useful discussion. I will now turn over to my colleague Anna.

Session 2: How best to share risk between WaterNSW and its customers

MS BRAKEY: Thank you, Ed.

WaterNSW considers that a well-functioning regulatory framework needs to ensure a reasonable sharing of risk so that a business can recover its efficient costs, meet customer obligations and remain financially viable. We

have just talked about the efficient costs and how those costs are allocated between customers.

In this session we want to focus on unforeseen and unexpected costs and risk that might arise during the regulatory period that are not already included in the prices proposed. This is a key focus of WaterNSW's pricing proposal.

WaterNSW's pricing proposal includes other risk and incentive mechanisms, such as those listed on the slide. However, for the purpose of this discussion now, we want to focus on three key areas, which is to look at WaterNSW's proposal to expand its cost pass through mechanism to manage risks associated with regulatory change events and catastrophic events; to discuss its proposal to establish mechanisms to address other unforeseen major projects; and, lastly, to discuss the proposal to demand voluntary adjustments.

I will now invite Shirley Lam and Maricar Horbino to provide a presentation.

MS LAM: Thank you, Anna.

Before we move on from this slide, I would like to point out that we have a cost pass through framework and criteria which we use to assess proposed cost pass through mechanisms. These are outlined in the box to the right.

We consider that our criteria is designed to ensure the cost pass throughs are limited to situations where it is more efficient to pass the risk on to customers and where prices become more cost reflective to provide that assistance to customers.

We are open to exploring further about whether our framework is meeting, or could better meet, these objectives of creating the right incentive to manage the cost risk arising from unexpected events.

In its pricing proposal, WaterNSW indicated that prices we set do not factor in unforeseen costs from regulatory change, service standards or tax events and/or catastrophic events from terrorism or natural disasters.

To manage these cost risks, WaterNSW proposes to

establish new cost pass through mechanisms for these two events, which will include a 2.5 percent materiality threshold of the annual revenue requirement, which is approximately $5 million, and is symmetric in that it applies to both positive and negative cost events.

So what feedback did we receive on the proposal? We received two submissions that were concerned about this. In particular, Sydney Water indicated that the new cost pass through mechanisms can inefficiently shift risks to end use customers. Meanwhile, Flow Systems indicated that having a cost pass through mechanism for these types of events may result in WaterNSW not having the right incentive to plan for, or engage with, potential regulatory change or plan for catastrophic events. They also noted that the proposed threshold may increase barrier to entry of alternative water sources.

So how does the current regulatory framework address this? As discussed in the previous slide, we assess WaterNSW's pricing proposal against our cost pass through framework. If WaterNSW considers the impact arising from uncertain or unforeseen events materially affects its operating environment and financial position such that it requires price adjustments immediately, our framework allows WaterNSW to apply for an early price determination.

We acknowledge that this option is not preferred by WaterNSW. We also acknowledge WaterNSW's concerns that our current cost pass through criteria may not help them address these types of cost risks.

However, we consider our criteria adequately achieves the objectives of only passing through cost risks to customers if it is efficient to do so and if it provides better signals to customers. We would like to explore this in the discussion shortly. Thank you.

MS HORBINO: In session 1, we talked about WaterNSW's capex proposal of $682 million. WaterNSW has excluded a number of drought-related projects that it is investigating due to uncertainty around the scope, timing or costs. Therefore, it is exposed to the risk of any of these projects proceeding during this determination period and not being able to adjust its revenue requirements and prices.

WaterNSW is proposing three approaches to address this

risk:

From its preferred approach of having mechanisms that will adjust prices during determination if a project proceeds;

Then, to have a pre-approval process to incur costs during the period and being able to recover these costs at the next price review; and,

Lastly, to seek an early determination.

Some stakeholders are concerned about WaterNSW's preferred approach due to the high level of uncertainty that may result in significant price and bill increases. Instead, they agree with our preliminary view to use existing mechanisms which range from WaterNSW reprioritising its capex to WaterNSW seeking an early determination.

A shorter determination period could also be an option. However, when setting the length of the determination period, we would consider a number of factors, not just project risk.

We are interested in hearing your views on whether the existing mechanisms adequately address the project risk or if there is merit in WaterNSW's preferred approach.

When setting prices, WaterNSW is exposed to risk when demand for water is volatile. To address this, WaterNSW is proposing to have a demand volatility adjustment mechanism that would deal if there is a material change in water demand over the period.

To date, we have received two submissions on this proposal:

Firstly, WaterNSW maintains its position to have a demand volatility mechanism even if we make the price structure more reflective of its cost structure.

Then, we received a submission from Sydney Water, which does not support WaterNSW having a demand volatility mechanism.

We are interested in hearing your views on this matter, whether WaterNSW needs a demand volatility mechanism or if it should retain some risk, noting that risk exposure is mitigated by having 80 per cent of its

revenues from fixed charges. That's it from the secretariat. Thank you.

MS BRAKEY: Thanks, Shirley and Maricar.

There are questions on the screen which we will leave on the screen and anybody can come back and look at those at any time.

Could I invite WaterNSW to respond to any of the issues raised.

MR MARTINSON: Thank you. Yes, we certainly have comments on each of the questions. The first one in terms of affecting the incentives to manage the risks of unexpected events, I'll answer in terms of the presentation that was just put up as well, which was sort of separating out the approach to cost pass through and then our approach for contingent and contingent projects.

The difficulty we are facing with the current framework is that the types of projects that we are looking at phasing in and investing in over the next few years are uncertain in terms of cost and timing. What we are seeking is that IPART's current cost pass through framework works very well if you have cost certainty and you can set a price prior to the period, and the only thing that is really uncertain is the timing of whether or not the event will happen during the period. If that is the case, you can set a price to begin with and customers have visibility of that price. If the event were to happen through that period, it would be triggered and customers would then be charged that price.

From our perspective, we see that the world that we are facing does not really operate quite that neatly. The cost of some of the projects we are looking at really does not blend itself very well, certainly for the larger investments, to a cost pass through framework.

If there is uncertainty over the timing of when it will happen, the materiality of a project we think is the better framework to be looking at - the contingent projects regime.

A contingent projects regime is commonplace in many other regulatory jurisdictions. It is a key component of

the ACCC's regulation of the water sector; it is a key element and the Australian Energy Regulator's approach to regulating electricity networks; transmission businesses within electricity it is a core element of what happens within the framework. OfGem applies an approach where it looks at certain projects during a regulatory period.

I think the feeling we are kind of left with here is the fact that in regimes where the treatment of uncertainty has been revisited and reviewed, most of those frameworks have come up with some view that would say an adjustment within a regulatory period is a reasonable thing to be looking at. It effectively manages risk, which is not just solely in the interest of businesses, but if it is providing a disincentive to invest in a project that is needed during a period, that is not in the long-term interest of customers. We believe that a mechanism that does allow you to deal with significant projects during a regulatory period is certainly a valuable thing for customers and their long-term interests.

MS BRAKEY: Can I talk about that for a moment. You have spoken about the other industries where that applies, and I think there is good reason that those sorts of approaches apply, but we do need to recognise our legislative constraints as well. Our legislative framework is different from all of those examples that you have just provided. This means that while we might be able to look at a contingent project, we might need to look at it in a different way from those other frameworks that you have spoken about. We need to recognise that because we don't have a clean sheet of paper to start from here. We actually have a framework that we need to be bound by.

MR MARTINSON: I certainly understand that. The shorter term and the longer term, I guess, reply to that is if there is a view that the current framework for regulation under the IPART Act does not allow a mechanism that will allow for a reasonable management of uncertainty similar to what does happen in other jurisdictions, then I think that is probably a longer term issue.

MS BRAKEY: I think we can manage it; it is just the way that we manage it might not be exactly the same as the way it has developed in other circumstances.

MR MARTINSON: From a shorter term perspective, I think

there are examples where IPART has effectively adjusted a determination within a regulatory period for uncertainty. There are examples of electricity costs that are in Sydney Water's determination from the Sydney Desalination Plant. It relied on a decision made after the IPART decision for that entity that has changed the outcome within a period.

IPART has been able to update a determination within a period, and I guess our view is that the legislation does not strictly prohibit IPART from looking at this. There have been examples where decisions have been made by another regulator. In the instance of SDP, where the Australian Energy Regulator makes a decision for electricity once the decision was made, SDP's subsequent determination was updated for that outcome.

If we look at contingent projects in a similar light that says they could be reviewed within the current framework and a subsequent decision made by IPART on that project, there could be a mechanism that could allow IPART to make an adjustment within the period.

MS BRAKEY: There is such a mechanism, but you talked about the certainty earlier. The example that you gave was, in effect, that we were passing through something that we did not need to decide during the period because it was, in effect, a certain pass through from somebody else. To the extent that we can do something like that, we can operate here. Where we actually need to make a decision and apply discretion during the regulatory period, that is where we come across a constraint.

MR MARTINSON: Again, a couple of examples were provided in our response to the issues paper. We think that there could be some ground where discretion could be applied within the period. That is something that we would like to explore with IPART over the next few months. We think it is possible.

Again the IPART Act is not as clear as probably anyone would like it to be in terms of how to deal with these issues. It does not necessarily move away from our view to say that we think the approach of contingent projects is the right one. We think this is a good mechanism for a large projects, that are of significance, to be able to be addressed within a period. Again, we think that is on the basis of the long-term interest of customers and, yes, we

would like to work with IPART to see if there is a way to address that during the period.

I have a comment on question number 3 or would you like to deal with it later?

MS BRAKEY: Would you like to deal with question 1 first or --

MR McCLOSKEY: Just in response to that discussion, a number of the frameworks that you cite have a framework for regulatory investment tests that often relate to those contingent projects. Something to consider, if we are going to move down the road of having contingent projects where a lot of it is related to timing, is that that framework, particularly in the energy system, whether it is operating smoothly or not, is intended to provide some transparency and ability to assess the nature of those projects and their timing alongside the regulatory period.

I know that is probably not something that will be able to be considered through this process, but if IPART does move down the road of considering a framework for contingent projects, then we would certainly want to see some sort of investment test framework that would be alongside it.

MS BRAKEY: We would agree entirely that that is a key part of a contingent project regime.

MR MARTINSON: Can I respond to Douglas.

Thanks you for your comments, Douglas. One example of contingent projects is in the electricity sector, where there is the regulatory investment test that you mentioned. However there are other regimes where that is not necessarily the case, though.

If we look at the recent legislative changes to the water charge infrastructure rule, that has brought in for the regulation by the ACCC of water utilities, not only regulatory events, but also contingent projects where there is not a separate regulatory investment test. I think the ESC, in Victoria, has flagged that there is a mechanism for addressing contingent projects within a period.

During a recent review, the Essential Services Commission of South Australia has recently identified that there need to be an intra-period review of projects in order to support investment that needs to happen during that period. I gave the previous example of OfGem, which does not specifically use contingent projects but has a reopener provision, which reflected that there is a need within a period to examine these projects.

I guess I am flagging that this is something which we think is a very useful mechanism in order to address uncertainty. It is a mechanism that has been used. It has widespread use within regulatory jurisdictions and industry. From that perspective, it something that we think really is suited for the type of uncertainty that we are facing with our investment moving forward. Obviously we would like to work with stakeholders and IPART to identify a way that that mechanism could be given effect during the upcoming determination.

MR CHEROUX: Can I give a piece of feedback on what was presented before. It was said that Sydney Water was not supportive of the pass through principle and the demand adjustment principle. Actually, that is not correct. We are absolutely supportive of these two principles. The discussion that we wanted to put in our submission was more about the mechanism, and this is exactly what we have just discussed.

We are supportive of WaterNSW's proposal. The discussion is more the mechanism, how we address the cost pass through and what are the mechanisms that we would use to do that, and it is the same for the demand adjustments, but the principles, we are absolutely supportive of them.

MS BRAKEY: Thank you, Roch. Mark?

MR EDLER: Thank you. I think I should start by just helping the tribunal understand a little bit with regard to what Flow's submission was, given that we have been quoted this morning.

Our submission was limited to the regulatory event and catastrophic event pass throughs, which is different from the contingent infrastructure projects.

Also our point was that we would not want to see

WaterNSW forced into a corner, if you like, and not allowed sufficient revenue in order to do prudent planning for those types of events and be forced into a pass through mechanism. It has quite a different weight than I think was probably inadvertently given this morning in the presentation.

When we are talking about those extreme event pass throughs, I would ask the question: why have they been pulled out now as cost pass throughs where they are the kinds of risks that are always around? It does not seem to be a particular reason for them to be pulled out right now as a pass through. Is there any thinking behind that?

MR MARTINSON: Thank you for your question on that. In terms of pulling it out of our puzzle, the way we looked at was given that we are, I guess, as part of a four-year determination project and we do have to put forward our expenditure, our revenue proposal for the period, we do have to make an assessment in terms of the underlying capital and operating costs that are part of the framework moving forward.

The difficulty that we faced was that there were some potentially significantly large investments - drought related - that did have significant construction costs associated with them. How do you deal with that and how do you incorporate that as part of your regulatory determination? One option that has been used in other companies and other jurisdictions was to say, "Well, let's say maybe this project might go ahead and we think there is a 10 per cent chance of that so we will include some costs in our proposal", or something of that ilk.

The difficulty with doing that, when you are talking about large projects, is that if those projects go ahead, then we have incorporated costs within our determination that have resulted in prices that are higher for customers than they would otherwise be.

Under the circumstances, and with the types of projects we are dealing with, we thought it was a more appropriate framework for those specifically large projects - not all the projects that we are facing, but the ones that are a significant portion of our RAB - we thought it was it was a better approach to deal with those as a contingent project, where the only costs that we included

in our proposal were some preliminary planning costs, but the actual detailed design and construction costs have not been included and therefore are not in the prices we put forward. That was the rationale behind why we did it.

MR EDLER: Thank you, Michael. I have been unclear again obviously. I guess my question was directed to the regulatory and catastrophic event pass throughs, not the contingent projects.

MR MARTINSON: I am happy to talk to that one as well.

In terms of the cost pass throughs, we are looking at things such as tax events, regulatory events, if there is a new change in regulation that would apply to us that would increase costs of providing services. Again it's a common feature in most regulatory frameworks, including IPART, to have a mechanism to deal with those types of events.

If there is a change in regulation with increased costs during the period, I guess from our perspective, we think an organisation should have the ability to recover its efficient costs during the regulatory period. Having a framework where you need cost certainty up-front on a matter that might change during the regulatory period, even if we are talking about tax changes or regulatory event type changes, is problematic and virtually impossible at the start of the period because you don't know what that change might be during the period.

If we are looking at costs that are in the order of 1 to 3 per cent of regulatory revenue, those types of projects that are up to the $5 million kind of range, as the minimum of the threshold, the current approach of saying, "Let's have an early determination", and having everything reviewed, like we are doing now, for a change that could cost anything from $5 million to $20 million seems inefficient to us. It introduces a range of administration and a regulatory burden on customers, on ourselves and on IPART. We think having the mechanism that allows us to deal with costs that might arise during the period is a sensible way to go forward.

It also gets back to the view that IPART's current cost pass through approach effectively requires you to have cost certainty of an event before it happens. You will cost that out and price it. If that event is triggered

during the period, then you can charge that price. The difficulty is, again, if we could foresee all these things we may be doing something different from what we are doing.

I am just flagging the fact that cost certainty is something that really does not exist. It would be great if it did exist and we had perfect clarity and certainty of costs, but we are not operating in that framework. That was really the basis behind our view of why we say a regulatory event and a catastrophic event cost pass through was an acceptable mechanism.

MR EDLER: Thank you for that answer. I agree that they are not predictable. I guess my question was more why now and not last pricing period?

MR MARTINSON: I can't answer that, other than the review of the fact that we are looking at managing uncertainty holistically through the regulatory framework to make sure that it does facilitate efficient investment. We have taken a look at it, managing risk through that lens, and one of those areas, I guess, was managing cost uncertainty.

MS BRAKEY: Are there any other questions from the audience?

MR EDLER: Anna, sorry, just for the record could I clarify also in relation to the pricing, which was session 1, I was referring to bulk water prices not to wholesale water prices charged by Sydney Water to WICA Act licensees.

THE ACTING CHAIR: There have been two themes with the level of prices that have come through - one is that, particularly in an environment where there is a water shortage, then there should be prices that reflect the value of the water and the cost of supplying that water. Then there is usually another general theme that we should not put any additional cost into water prices unnecessarily and that those costs should get adequate scrutiny because we want to make sure that we are not overcharging people and that water is still affordable.

The debate that we are having at the moment around contingent projects kind of has an impact on those. It is very hard to get things absolutely correct all the time. So you can err on the side of putting the costs in up-front

and therefore having the full cost of drought built into the prices. You can err on the side of being careful not to put too many costs in so that you are making sure that the prices are not too high. Getting things absolutely correct is always very difficult.

What are people's views on that balance between where we need to be? What is the important balance to get right there? Douglas?

MR McCLOSKEY: I think it is a really valid question and it is a discussion that needs to be had and one we are keen to have.

As we mentioned before, we want to see the whole system working towards the most efficient valuing of the resource of water and the appropriate valuing of the resource and the most efficient use of it in a sustainable way.

We feel that part of the problem in the way that we treat it now is we don't reflect the full cost of the resource until we don't have secure access to it. That does not provide the long-term signals, one, for its conservation; two, for its efficient use; and, three, for investors, and it lacks third party access to allow the utilities to be able to put in place a system that may treat it in a way that is more sustainable.

We would like to have a discussion about what that balance is and about whether it is appropriate to reflect more of those scarce price signals permanently in reflection of two things which have been raised, and are generally agreed:

One, we are responding to a growth future where, even were there to be no change to the access to the resource, the number of people who will be drawing upon that resource has an impact upon its sustainability; and,

Two, overlaid with that framework is the fact that that resource is not guaranteed and that there is increasing uncertainty, not just through specific drought events, but through increasing frequency of those drought events and through increasing severity of those drought events and the other impacts that that has.

We think it is appropriate to reflect those two things

more permanently in the price of the resource and we feel that the current framework does not necessarily do that. As a consumer representative, we are very much in a position of wanting to ensure that it is sustainably as affordable and cheap as possible, but we think that it does no consumers any favours if we underprice the resource as business as usual to the point that we make it unsustainable and that we don't make the investments and the behavioural decisions that put that resource on a sustainable footing.

That is not necessarily an answer to the question, but increasingly we are leaning to the fact that we want a system that reflects more of those long-term realities in a permanent price structure.

MS BRAKEY: Thank you. Were there any other comments from the audience at this stage or anybody at the roundtable? We might move to Slido then. Sorry, Sharyn?

MS CULLIS: At the risk of bringing this down to a very basic level, because this discussion is very high level, you have asked a question that I think requires that some commonsense be brought into the discussion. I would say a couple of things, and this is not the position of my organisation; this is the person who walks in and sits down and find themselves perhaps in the wrong forum. But I would say that I actually got some training in economics a long time ago. I believe that it is really important to some degree to let the market determine the value of a resource.

It is quite expensive for me relatively to buy bottled water, yet basically our whole system seems to undervalue the value of our water, and we should, I believe, be paying more for it, if that can be done in a way that is socially equitable because that is also a consideration. I am actually saying that I think, rather than the selfish response, the commonsense response has to be, "We do not pay enough for water", and we do not plan enough for catastrophic long-term scenarios that might involve something like within our protected catchment areas.

For example, I've actually heard people suggest the scenario that, in the future, we could reach an ecological tipping point in the metropolitan catchments if there is continued damage to things like upland swamps which keep

base flows in our streams that supply our drinking water dams. I think we all need to be considering those sorts of issues. Thank you. Is that a response that you're looking for?

MS BRAKEY: We are looking for all responses.

Do we have some questions from Slido?

MR MANSELL: We do. Firstly a question from anonymous:

> If there is no transparency about the value for the contingent projects, how do we know that the uncertain cost is efficient if it is just going to be passed through into prices?

MR PIZZINGA: I think somebody mentioned earlier that there needs to be a mechanism, and the devil is in the detail. Our view would be that, should there be need for a contingent project, we would engage with IPART and we would engage with customers on that project. There would be full disclosure, an opportunity for IPART to do a prudency and efficiency test. Anything that is contingent generally is urgent. All we are really saying is we need that customer engagement, that disclosure and that prudency efficiency test done in a shorter time frame. How we do that and the mechanism to do that, we need to work through, and definitely without reopening the whole thing.

MS BRAKEY: We would agree that there does need to be some test.

MR MANSELL: There is another question from Slido, which is another question for WaterNSW:

> A demand volatility mechanism for bulk water supply which is highly fixed, as in the cost is highly fixed, does not make sense. Please explain the rationale for this.

MR MARTINSON: Yes, I'm happy to discuss that. Effectively our view on the demand volatility adjustment mechanism is - and as outlined in our proposal - that we are proposing a mechanism substantially similar to the one that is currently in place for Sydney Water and Hunter

Water. Effectively what it is saying is that the best laid plans are at the time of the determination when there is a forecast of volume sales and usage during the period. However, if there is a significant variation to those volumes from what was forecast, whether that's higher or lower than what was forecast, we think there is a reasonable bound that we should operate within. If the volumes are, as an example, plus or minus 5 per cent from what has been forecast, which is the level that is included in the Sydney Water and Hunter Water determination, and if our actual sales are outside of that band, then we think it is beyond a reasonable sharing space.

It is effectively saying even though we do have a fairly high fixed component of our tariff, there still is a volume component. If volumes effectively are significantly higher than that or lower than that, which would have significantly higher or lower revenue implications, we think there needs to be a mechanism to adjust for that. Again, it is really what is a reasonable sharing of risk between the business and customers. We think that a demand volatility adjustment similar to what is in place for the other organisations is really appropriate for us.

MR WILLETT: Could I follow up on that, because it is a question that I had too.

If we were to restructure prices so that they, as accurately as possible, reflected costs incurred, whether they are fixed or variable, such that the variable charge reflected accurately variable costs, why would we need a volatility mechanism? Whether your demand forecast was right or wrong, the costs of supply would still be reflected in pricing.

MR MARTINSON: My response to that would be that, at the time of the determination, I guess that the prices are set on that basis, assuming that, with the best knowledge and information at that time, we are setting prices to recover our forecast of efficient costs during the period.

I guess what we are saying is that if volumes are different than what was assumed, then we think that it is reasonable to put that in place. Back to your point - if you get it exactly right in terms of your variable cost, then do you need a mechanism? I guess that is a wider question beyond our determination. We think it is the same

rationale that applies elsewhere. We think it is reasonable to say if we are not able to strike that balance 100 per cent correctly at the beginning, we think there needs to be a mechanism during the period that provides a reasonable sharing of risk between us and our customer.

MS BRAKEY: Yes?

MR MELLOR: My name is Graeme Mellor, from Wingecarribee Shire Council.

May I ask a very localised question relating to the Shoalhaven transfers. Where we geographically sit is part of a chain of dams which obviously supply Sydney. With costs passing on for power consumption for the pumping, what are the thoughts on how those costs will be applied and whether, for a small council like ourselves - just through geographical location - that will be a cost passed on to us just because we are part of the chain of transfer irrespective of whether - I suppose, we get the benefit by default where we are, but not necessarily being driven by us.

MR HARRIS: Could I perhaps take that on notice. Just around here, we think that cost is only levied on Sydney Water and not on our other council customers. But I need to take that on notice. I am not 100 per cent sure that is right, unless someone else knows that for sure, but I am happy to come back to you on that.

MR MANSELL: That characterisation is correct.

MS BRAKEY: Thank you. Are there any other questions from the floor? We might go back to Slido then.

MR MANSELL: We have another question from Slido:

> Is self-insurance not available for demand variability in extreme events? If so, wouldn't it be more efficient for WaterNSW to self-insure these risks?

MR HARRIS: Excuse the smile on my face, but this is one of the big issues that we went through in our last rural pricing determination where, in fact, we have led the way. In respect of our rural prices, we do have an insurance product with the market. If I may say, we are not fully

recovered for the cost of that through our IPART rural price determination, but, yes, we it was us who demonstrated that the market is prepared to provide instruments such as that.

MR PIZZINGA: We have been fortunate enough to actually make a claim on that policy, but it is fair to say that when we negotiate that policy next time round, the market will have priced the costs of that policy to the insurance market, so with the volatility adjustment versus going to the insurance market - I don't know, because we have not gone to the market - given the experience for rural values, I suspect the insurance market may price us out potentially.

MR MANSELL: There is a comment, which is basically saying:

> Can the distinction between the short-run cost of supply, which is cost neutral, versus a scarcity demand supply balance, which isn't cost neutral, be made?

And there is one more question about the demand volatility mechanism, which says:

> Isn't the volatility mechanism there to incentivise demand forecasting, given that WaterNSW doesn't forecast 99 per cent of its demand, which is Sydney Water's domain, why not just have a back-to-back (??) with Sydney Water?

MR MARTINSON: There are potentially a number of ways to deal with the volatility. I guess I would question that while an element of the intent of having a volatility adjustment mechanism is to incentivise forecasts to improve the accuracy of forecasts, I think the main feature of a volatility allowance is - again, best laid plans and best forecasting - at the time to really manage the outturn risk of actual volumes.

So it is the combination of, yes, incentivise the actual forecast, in the first instance, but have a mechanism in place to deal with the fact that volumes may change - the world changes and volume may change rather than what was forecast - and to have a mechanism that will

allow a reasonable sharing of that between the business and customers, we think is the importance of the value of having a volatility mechanism.

MS BRAKEY: Douglas, do you have a question?

MR McCLOSKEY: It is more to reiterate a previous point at the appropriate juncture, just to go to the third question and to reiterate the point about the relationship between the pricing structures and things like the demand volatility and the sharing of risk. We are relatively sanguine about the demand volatility adjustment.

It is interesting that you raised the point with regard to Sydney Water and Hunter Water. They have significantly more risk in their pricing structures, where particularly Hunter Water, I believe is up near 85 per cent usage charges. We would quite like to see a structure that operates similar to that.

In relation to the question about costs being fixed, that is largely why we are not particularly happy with using cost of access to the water and the resource as being the basis for paying for the resource that doesn't necessarily value the resource itself - the water - at its appropriate level. It does go to Joe's point about there not necessarily being a price for water or a market for water, but we think putting in place a structure at the bulk level, at the catchment level, for trying to make a move towards that at this juncture is appropriate.

We would be happy to consider something like demand volatility adjustment. I raise these points with the acceptance that it is a fundamental shift in the pricing structure and the way that the business operates. It is unlikely to happen at this stage, but it is something where we could lead to a re-balancing as a first move in that direction, which is something that we would be keen to see.

MS BRAKEY: Thank you. Zoran,

MR PEROSKI: Zoran Peroski, Sydney Water.

On scarcity or short-run pricing, it is probably worth noting that it should be symmetric. If we are going to advocate for this, it needs to be very well thought through because when dams are spilling, the value of that water

could be negative. It could zero. Is that something we want to face? I think we need to be very careful about advocating for that. We really need to think through the methodology and have a review on the appropriate parameters for this, rather than bandying it about so easily, because it is quite a serious issue.

I am pretty sure WaterNSW wouldn't want to be giving away their water for free when they have such large fixed costs. Where the right balance is at the right time, long run versus short run, really needs to be looked at very, very carefully. That is more of a comment than a question.

MS BRAKEY: We are approaching the end of this session. Are there any more general questions? Any final comments?

MR HARRIS: No, thank you.

THE ACTING CHAIR: We have had a reasonably wide-ranging discussion so far. I am not sure whether there are any final questions before we close the morning session. Does anybody have anything else that they want to raise before we close up for the WaterNSW session?

Okay, I'll now close Part A of the hearing.

Closing Remarks

THE ACTING CHAIR: On behalf of IPART, I would like to thank you all very much for your participation today. It has been a great benefit to us to hear your views. We really appreciate the effort and contributions made by everyone here today.

IPART's presentations and transcript of today's proceedings will be available on our website in a few days. We will consider all that we have heard today and we will feed it into our decision that will go into the draft and then the final report.

As previously mentioned, we plan to make the draft report public in March 2020. People will then have about four weeks to make written submissions and we will post those submissions online. We will also consider them in making our final decision on WaterNSW's prices.

The final determination will be released in June 2020,

and the maximum prices will be set from 1 July 2020.

Finally, I would encourage you to monitor IPART's website for updates and further information on our timetable, including the release of the draft report and the dates for when submissions and responses will be due on that report.

While this part of the hearing is concluded, please feel free to stay around. We will have a break for lunch now and then we will start Part B, which will be on Sydney Water's prices, thank you.

LUNCHEON ADJOURNMENT

PART B - SYDNEY WATER'S PRICING PROPOSAL

Opening Remarks

THE ACTING CHAIR: Thank you. We will now start the second part of today's hearing, which is on Sydney Water's prices for water, sewerage and stormwater services in the Sydney region.

For those of you who have just joined us, I welcome you. Thank you very much for coming today. I will just do a short recap on the process.

We will commence with a presentation from Sydney Water outlining their pricing proposal. The proceedings will then be divided into three focus sessions, and then we will have a final open session to address any other questions that have not been addressed already.

There are many challenges Sydney Water must manage in terms of asset maintenance and upgrades in response to various demands, as we will hear from Sydney Water shortly.

In IPART's view of Sydney Water's pricing proposal, we are cognisant of the need to balance investing in the future with an immediate need to improve drought resilience, all the while being sensitive to bill impacts and how that affects customers.

In this regard, we are seeking public feedback in our review of Sydney Water's proposal, and in today's

presentation, we will focus on our review of Sydney Water's expenditure plans in response to drought and environmental performance, serving long-term population growth, and what impact this has on prices to customers over the determination period.

Further details and information on the sessions in each part of this hearing can be found in the handouts that were provided by IPART staff earlier.

A member of the tribunal will introduce each session. The IPART secretariat will give a brief presentation on the issues and questions to be covered in the session. The tribunal member will then invite participants at the table to provide responses and any comments. Then further questions will be invited from the room, and then on Slido.

For those of you who were not here before, you can log on to Slido, put in the code "F950" and it will load up your questions. We will deal with those questions throughout the session where relevant.

Today's hearing is being recorded by a transcriber; therefore, to assist the transcriber, would you please identify yourself, and where relevant your organisation, before speaking and please speak loudly and clearly.

A copy of the transcript will be available on our website soon after the public hearing.

We will commence the second part of the public hearing with Sydney Water's presentation on its pricing proposal. I might ask Roch Cheroux, the managing director of Sydney Water, to please come forward.

Presentation by Sydney Water

MR CHEROUX: Before I start, I want to acknowledge the traditional custodian of the lands and pay my respect to the traditional owners. They have been managing the land and the water on the land for 60,000 years and it is important that we show our respect.

So my name is Roch. I am the managing director of Sydney Water. I will say a few more words about Sydney Water, but I am pretty sure you know everything about us.

One thing that very few people know is the fact that, under the ground, we have something like 25,000 kilometres of sewer pipe and 22,000 kilometres of water pipe. If you think about it, that is enough to go around the world. That is just to give you an idea of the size of parts of assets we have in Sydney to provide services to our about 2 million customers, and it is really critical that we are clear that this is where we start; as an organisation, we exist because we have customers.

We have been preparing the submission to IPART in a challenging environment and challenging for a number of reasons. We have a few of them here on the slide. Growth is, and continues to be, very significant in Sydney, in the Greater Sydney area. Obviously this has an impact on the existing asset because we're talking about infill, so changing the landscape inside the city. But we are also talking about growth in the outer region, and this is in the case of new development.

We have ageing assets as the assets of Sydney Water has been operated for about 130 years. Some of our assets have done their time. This is a constant activity that we need to have to manage our assets properly and to replace some of our assets that are coming to the end of their life.

Responding to services challenge is also an important part of our story. Our customers' expectations are changing. We need to be able to listen to what our customers are saying and we need to adjust the levels of service that we are providing to our customers exactly based on what they are asking from us.

The three cities vision, I mentioned briefly in terms of growth. This is an important part of Sydney's story and we are supporting the development of the three cities.

Business transformation and efficiency has been, continues to be, and will be in the future, a big part of our story as well. Our customers are asking us to be efficient. They are asking us to deliver value for money. This is something that we have worked on. We have delivered efficiency from the business and we will continue to do that in the future. That goes with our operating costs as well.

To prepare our submission we had a very large piece of engagement with our customers, more than 10,000 interactions with our customers. We have listened to what they wanted from us. We have also asked our customers about the sorts of solutions that they wanted us to implement. We have tested different sorts of solutions and tried to identify what was expected of us from our customers. We have put all of this into our submission.

Here on the screen are three examples of the projects that have been generated by our customers. I will just talk about the last one, which is the Waterway Health Improvement Program. This is a program where, when we asked our customers, "Do you want to us operate our stormwater system in a different way, they said, "Yes."

If you think about the stormwater system, in some places in the city, we have canals that have been concreted over time and that is where the stormwater is collected and transported. We asked our customers if they wanted us to do something differently and they said "Yes." We asked our customers, "Are you prepared to pay for it?" Some of our customers said "Yes"; some of our customers said "No" as well. But we got a good feedback from our customers about what they wanted us to do and how much they wanted us to spend on this because that's what they were prepared to pay.

As a result, there are some places in Sydney where we have transformed the concrete canals into a nice piece of river that the community can use for recreation. That is the sort of win-win situation that we can have by engaging and discussing with our customers.

The drought and the weather conditions are definitely in the background, even today; apparently we will get some water from the sky but probably not much. Not only does this put a lot of pressure on the bulk water supply, as we have seen this morning with WaterNSW, it also puts a lot of pressure on our existing assets.

Existing assets, why? If you think about the wastewater network, when the trees don't find the water in the ground, they go to find water inside the pipes. Their roots are getting inside the wastewater network, not only creating cracks in the wastewater pipes but also blocking

the wastewater pipes. That means that we have a lot more operation to do on our network, making sure that we understand where the roots are going and also cleaning out the roots so that there is no overflow from our network.

On the water side, it's the same story. Sydney is built on an area with very high reactive clay. When it does not rain, the soil moisture is obviously very low and what the clay does is it cracks. When the clay cracks, it also cracks our pipes, and this is what you can see in the graph here. Sorry, this one is about the chokes in the wastewater networks, but if you look at a graph where you would see the drought situation and the number of breaks that we have from the water network, that's the same.

What does that mean for us? It means a lot more operating activity for us to repair the pipes or to replace the pipes. So drought has a significant impact on our operation.

Growth is another large part of our submission. There is significant growth that is planned in the Greater Sydney. Western Sydney is part of it. You can see that this is a very large area and there is not much actually currently in this area. It means thinking about all new infrastructure, but it also means thinking about a different way to build this infrastructure, because this is a greenfield area and there are various possibilities to look at the way we do water in a different way. This definitely is a big part of our story. You will see that we have included more than $2 billion of investment just for growth in our proposal.

Essential services for our customers - you have a few numbers here, and they are significant. The capital expenditure is a significant part of our story, more than $5 billion of capital expenditure over four years. This is a large amount of money. This is split between capital expenditure for growth and also capital expenditure for replacing or renewing the existing assets. Again, all this has been designed in a way that we maintain our service to our customers at the same level and, at the same time for the growth area, we are able to provide the same levels of service to our new customers in this new development area.

Operating expenditure is about also the same level. Here, we have also listened to our customers and tried to

understand what we needed to do differently, what we needed to do but we didn't do before, and also what we needed to stop doing because our customers were not interested. The operating expenditure that we have included in our program is very, very tightly controlled, so that the value for money that we are providing to our customers is the right level, exactly what they are expecting from us.

When you look at the overall revenue that we need to operate and invest into the business over the next four years, the next regulatory period, we are talking about $11.4 billion. I will come back to the increase and what it means exactly for our customers.

This is the capital expenditure slide. You can see on this slide that there is a significant increase in terms of overall programs starting from 2021. We have managed capital expenditure programs that were around $800 million per year, which is obviously a very significant number, but here for the next regulatory period, we are talking about capital programs that are about a billion dollars every year. It is a consequent increase.

When you look at the different colours that you can see on the screen, you will see that the growth, which is the orange colour, is a significant part of the increase in capital expenditure that we need to do during the next four years. If you look at the blue colour, which is the capital expenditure that we need to do to maintain the existing levels of service for our customers, you have something that is slightly higher because of the expectations of our customers, but also because of some regulatory changes that have happened. So it is slightly higher because of that.

Moving on to operating cost, what you can see here is that the operating cost is very much staying at the same level. If you look at 2019-2020, you have the baseline opex, which is basically what we are doing every day, plus, in orange, the money that we are spending this year on managing the drought.

If we move to the next regulatory period, we have an operating expenditure that is very much at the same level. We wanted to make sure that we were efficient in our operating expenditure, and that's why we have put a challenge on us, which is to reduce the operating

expenditure over the four years.

What you can see on the graph is that the blue line, or the blue blocks, is reducing between 2020 and 2024. That is because we have committed to find an additional $89 million of efficiency inside the business. This is a significant commitment from the business to contribute to the drought situation that we have in Sydney.

In terms of revenue, one of the critical elements when we look at our revenue is the volume of water that we sell to our customers. We had many discussions internally about what was the right level of water sales or water revenue that we could get. In terms of forecasts and demand forecast, we had a number of discussions about the best way to forecast the demand for our customers.

What we have included in our proposal is an average demand. It is not based on historic consumption, it is based on updated consumption, but we decided not to take into account the impact of drought and the impact of restriction.

The reason why we decided to put this suggestion or proposal on the table is because it is extremely difficult to forecast what will be the customers' behaviours in a drought or restriction situation. What we have proposed is to start with this adjusted forecast, then to have a discussion every year and to readjust the forecast every year. In that sense, it is a more flexible way and it does not put a higher price from the beginning of the period on our customers. That was what we thought was the best way for our customers. Obviously you understand that if we were to reduce the forecast, the consequence is that the unit price would increase; therefore, that would put pressure on our customers. We decided not to do it that way. We decided to take the risk and then to have the possibility to review the forecast every year.

In November - the beginning of this month, actually, because we are still in November - we updated the proposal that we submitted in July. The reason why we did that was because, when we submitted in July, we submitted a proposal that was based on February numbers. The reason it was based on February numbers was simply because of the time it takes to prepare a submission like this one. As you can understand, when you're talking about an $11 billion

submission, this is a really big exercise.

We have seen what happened during June, July and August. We have had a very, very dry winter. We saw what the forecast from the Bureau of Meteorology was confirming, meaning that the drought is here to stay for a longer term, and on this basis, we decided to submit to IPART a revised submission in November.

Part of this revised submission is bringing forward a number of investments that were in our plans, but we were not thinking initially of doing them between 2020 and 2024, but they were going to come after that. There is also some operating expenditure.

With the capital expenditure that we have added in this additional submission, the main one is related to one pipe that would be going from north of the city, from Prospect, to the south of the city, to Macarthur. This would give us the possibility to transport water between the different systems that we have in Sydney.

At this stage, we do not have the possibility to transport large volumes of water between the different parts of Sydney. As you know, it may be raining in Warragamba and not be raining down in the south, or it could be the opposite. At this stage, if one of the systems is in a bad situation, we do not have the possibility to compensate with another system. That is why we have decided to propose to do this investment, which is very much a resilience investment, in the short term.

There is also some additional expenditure in terms of opex. That expenditure is very much drought related. It is about encouraging our customers to save water. That could be the advertising campaign that you see in the press, but there are also a lot of education programs. That is also the additional resource that we need to manage our water and wastewater assets in case of drought when it is very dry and we have this impact on our assets.

What we are proposing in this additional submission is that the capital expenditure - because there is resilience expenditure; these are resilience investments - would be on service charge, but the operating expenditure would be on the usage charge and would be contingent actually to the drought continuing or not continuing, meaning that in case

the drought were to stop tomorrow, then we would be able to stop this operating expenditure straight away and therefore save money for our customers.

In terms of impact on our customers, the submission that we actually put in November does not make any change to our customers' bill compared to now. You can see the details of the prices here. The reason why it does not make any change - and I need to be clear here that this is without the impact of drought - is because of two things: the first one is the additional efficiency that we have decided to find inside the business. I was talking about $89 million of additional efficiency that we have committed to finding inside the business, plus other additional efficiencies that were included in the first submission. So that's one part of the explanation why the bills are at exactly the same level.

The second part of the explanation is because of the very favourable market positions that have an impact on the weighted average cost of capital that is used to calculate our revenue. These two factors put together give us the possibility actually to propose additional expenditure but not to increase the bills of our customers.

To be clear, this is without considering the drought situation. If we look at the situation with drought, as you know, when we are in that sort of situation, the desalination plant will be running and there will be an additional cost on our customers for that.

We also have the additional expenditure that we have said would be contingent to drought - operating expenditure that could be coming if the drought continues. In that case, the increase for our customers would be around 2.5 per cent. This is what you can see here, the $2.24 per kilolitre, and the service charge will increase to $156.

So this is the same story. In case the drought continues, then our customers will see their bill increase by about 2.5 per cent, which is about $30.

In the future, if the drought continues even more and if the desalination plant needs to be expanded, then additional cost would be added to this 2.5 per cent. But at this stage, this is not something that we know and that

we can estimate.

The story is that we do encourage our customers to use water really carefully. You would have seen the campaigns that we have run during the last few months. The impact has been really good. We started the campaign in July and since July we have had about a 7.4 per cent reduction in consumption, which is a really good number. Last month - October - we had a 10 per cent reduction in terms of consumption, which is again a very, very good number. So all the activity that we have with our customers is really producing a very good result. This is what we are saying to our customers: reducing consumption by about 20 per cent would give a discount of about $100, which is significant.

To conclude, we continue to work with the government and our colleagues at WaterNSW to provide the best service that our customers deserve. Again we have had this very long period of engagement with all our customers and we have learned a lot. We have been able to understand a lot better what they are expecting from us. This is how we have built our submission, including for some of our customers who are in the most difficult situations there are a number of measures in terms of in terms of facilities for payment, et cetera. Thank you. That is a very brief summary of our submission.

THE ACTING CHAIR: Thank you, Roch. I will now invite questions first from the table. Then we will move to the audience and Slido. Before you speak, as I said, could you state your name on the organisation before you speak.

Are there any questions from the table at the moment. Would you like to start? Sue?

MS BURTON: Yes, I am happy to start. My name is Sue Burton. I am the executive officer of the Cooks River Alliance.

Our submission to IPART was on behalf of catchment groups across Sydney, so that's the Georges Riverkeeper, Parramatta Riverkeeper, Sydney Coastal Councils Group and Cooks River Alliance. Together we represent many of the councils across Sydney.

My question is to Sydney Water and also to IPART. The condition of Sydney's waterways is quite critical. I was

really pleased to hear that customer service and customer expectations is key driver.

Customers and the communities around Sydney look to their rivers. If I take the Cooks River as an example, what they see is the volume, the speed and the quality of the stormwater, hitting the Cooks River in particular, is phenomenal. The communities want clean waterways and stormwater is a major issue which is stopping that. With the stormwater issue, if you like, our rivers are at the end of the pipe, so why are we getting so much stormwater hitting our waterways? It is because we don't value the water in the streams as much. At the top of the pipe, we need to look at how we are capturing water before it hits our waterways and make sure that it is slow and it is clean. That is what the community expects.

The Waterway Health Improvement Program is excellent, because it enables waterways to move from a concrete channel to a river that looks like a river. Certainly the Cooks River has benefited from that and we have really started to value it. However, those programs are discretionary by IPART, but for us they are actually essential. The Waterway Health Improvement Program and stormwater should be essential programs if we are to meet the community expectations of healthy waterways.

The second part is how are we enabling a rapid transition to a water-sensitive approach when we look at a drought response, climate change response, urban heat response? We need to think about how are we dealing with our water where it falls and how we value water. I am interested in how your pricing proposal will identify that. I do note that Sydney Water has identified that it wants to move towards a total urban water management approach by 2040 and to lead Sydney in getting there. I am interested in hearing how this proposal would do that.

MR CHEROUX: I think what you have said at the end is absolutely our commitment. We want to look at water in a different way because this is what our customers are expecting from us. It means stormwater, but probably not only stormwater; it means the complete water cycle. Stormwater, as you know, is something that is a shared endeavour with a number of councils. Because stormwater responsibility is shared between a number of councils and Sydney Water, there are so many different actors in this

play that progressing here takes some time.

The outcome is really good for the community, and we have seen some really good examples of benefit to the community in terms of river improvement and stormwater channel improvement.

Our commitment is very much to making it happen by engaging the community to come with us on the journey. We are not here to impose things on the community. We are here to listen to what the community is expecting and then to translate that into action. So when we are talking about integrated water cycle management, it means that we need to get the community on board and we need to get the community support in the sort of new ideas that we could promote in terms of managing the water cycle differently, using stormwater differently, using wastewater differently, using reused water differently.

MS BURTON: Thank you.

MR EDGERTON: My name is Matt Edgerton. I am the executive director of water pricing at IPART.

From IPART's perspective in terms of our role here, there are two key parts to this: firstly, when we set Sydney Water's price, we generally set prices so that Sydney Water has enough revenue to officially deliver its services while complying with its environmental regulatory requirements and other regulatory requirements.

To the extent that the EPA, or another environmental regulator, imposes a requirement on Sydney Water in terms of waterway health or environmental objectives, then that becomes non-discretionary expenditure, and we will set prices so Sydney Water recovers enough revenue to achieve those environmental outcomes that it needs to achieve, as per regulatory requirements. That is the first point.

I guess related to that, a lot of it then comes back to what are the standards that the environmental regulators set? To the extent they set higher standards, then ultimately Sydney Water is required to meet those higher standards and through prices we will ensure they are getting enough revenue to achieve those high standards.

Another point is we will set prices to give Sydney

Water enough revenue to go above and beyond those regulatory requirements if Sydney Water can show us evidence that its customers are willing to pay.

When we are talking about outcomes above and beyond those mandated by environmental regulators, that's when we talk about discretionary expenditure, because it is a discretionary outcome for Sydney Water because it is not mandated through environmental regulation. In that case, for us to have a licence to include any prices to be recovered from all customers, we need evidence from Sydney Water that its customers are willing to pay to achieve those outcomes.

MS BRAKEY: If you like, it is also a way of the community groups coming to Sydney Water and saying, "This is really important to us," and having a mechanism for it to come through into prices. It allows the regulator to be a little bit more progressive. Where there is a need, a genuine need, from the community, even though there might not be a regulatory obligation, it allows us to include it.

MS BURTON: I think there is a disconnect in the community's mind between a healthy waterway and IPART's pricing for Sydney Water. A bit of learning is needed there for the community to understand that IPART has the ability to make the change.

MR EDGERTON: Could I suggest as well that if there is a perception that the environmental outcomes are not sufficient, part of that is then a potential reflection back on the environmental regulatory requirements themselves.

THE ACTING CHAIR: To take your point, this is actually relatively new. The pricing was a lot more rigid in the past, and this is the first year we have looked at this community-driven expenditure. So, yes, I totally take your point. Sydney Water's processes for engaging with the community are just pushing into that direction. Our processes have just moving in that direction, but we felt that it was important to actually start that process, for the sorts of reasons we've actually just talked about.

Yes?

MR DAVID SPARKE: If I may, David, is my name, from

OneWater.

I am a bit disturbed on hearing that presentation from Sydney Water. I have a long-term involvement in the water industry, including with Sydney Water and on industry social committees. There has been some reference to what the customer will pay. In fact the Water Act 2006 says that the government actually owns all this stormwater that touches the ground. This is a resource that Sydney Water perhaps has not delved into. Notwithstanding that, Sydney Water has often said, through its people, "We don't have the expertise for stormwater. We do water reticulation. We do sewerage treatment services." Now they are pitching for stormwater, which has been relatively neglected for quite a period of time.

I think it was two to three years ago, prior to the last election, that Sydney Water had an allocation for stormwater asset maintenance of something like $130 million. Subsequent to the election, $30 million or thereabouts, was taken from that amount to give back $50 to the customers of Sydney Water. There was a hue and cry about the maintenance not being kept up for stormwater.

If we look at some of the projects Sydney Water has done in relation to stormwater improvements of assets, there is a creek that runs into Homebush Bay. They have converted a concrete sort of culvert into an environmental sort of arrangement. This is notwithstanding that, in that bay, the remediation work that has been conducted there for the contamination in Sydney Harbour is quite significant, Sydney Water has done this project and beautified the channel, but it has not done anything in terms of improving the water quality of the discharge per se.

If we look at wastewater treatment plants, which are spotted around Sydney, it is Sydney Water in fact that is surrounding Sydney with the discharges from these sewerage treatment plants. You have Eastern Creek and some other areas, and the Nepean River, and it comes all the way around Sydney. You have secondary treatment plants like Warriewood that discharge partially treated water. You have the three ocean outlets where only primary treatment is done.

With regard to Sydney Water's commentary about reactive clays and the like, and breaking pipes - the

standards for pipe-laying have been in place for 40 to 50 years - I am sorry, but I take that as a misrepresentation of the basis on which you claiming costs for leakage and that sort of thing for Sydney Water.

Notwithstanding, that if you look at a project such as the light rail system here, stormwater was the poor cousin of the implementation of that project. What I am saying is that Sydney Water is completely without legs. It is lost. It had no position with the Greater Sydney Commission in terms of planning for Sydney. Sydney Water has been struggling to try to be relevant in that process where water was perhaps the seventh or eighth priority in the Greater Sydney Commission planning stage for the three cities.

I am sorry to say that I do not agree with that representation from Sydney Water which it claims is relatively a 2.5 increase in what it is looking for for its charges. Going from 2.11 kilolitres to 2.24 is actually 6 per cent. I think you represented that as 2.5 per cent.

Sydney Water basically has out-let all its planning for the next 10 years. We have two prime one contractors, like Arup and AECOM, I think they are, who have taken the contract with Sydney Water for the next 10 years for all of Sydney Water's planning. You have contracts for all the maintenance of Sydney Water assets, new assets being implemented through I think it is Lendlease or John Holland, or one of these tier one contractors. Sydney Water has really outsourced everything that it actually does, and perhaps the relevance of Sydney Water now is restricted to regulation and collecting money.

From IPART's perspective, if you wouldn't mind, I think the environmental issue that was raised in relation to cost already has a $25 environmental levy for stormwater, yet here's Sydney Water asking for another $25 for that same levy.

In terms of customers willingness to pay, I have to ask you which customers are you talking to? As a former industry representative, I can say that Sydney Water has relatively hijacked the industry association and controls all of that. The water industry and the cost to the customer is not being properly considered and I ask you people that make those sorts of decisions to take into

account a lot more of these factors, please.

MR CHEROUX: I think a lot of very aggressive positioning was put out here. I am not going to answer to all of that. All the things that are in our submissions are supported by evidence, and I would be happy to have a discussion offline and put out all the evidence and explain to you that what we are proposing is reality.

THE ACTING CHAIR: Going around the table, are there any other comments that anyone would like to make? Mustafa?

MR AGHA: Mustafa Agha, from the Western Sydney Business Chamber. I have some comments on the capital expenditure program. I am not sure if this is the right --

THE ACTING CHAIR: Okay, so we will leave those till later.

MR EDLER: I'll comment later, too.

THE ACTING CHAIR: EPA, Giselle?

MS HOWARD: Giselle Howard, regional director for EPA.

I am interested, Roch, in what you described in terms of the deepening drought and, with the choke from the roots getting in, how you're seeing the change compared with when we look at 12 months ago or two years ago as the drought has deepened. What is that doing in terms of preventative maintenance, just getting into smaller pipes, compared to being able to get around the network and do preventative work? Just a small capture of that would be very helpful.

MR CHEROUX: We have significantly increased the level of maintenance that we are doing on pipes and that includes a number of things. That includes preventative measures in making sure that we do a lot more pipe inspection - and we do. We have done about 15,000 kilometres this year, which is a significant number. So pipe inspection is one.

The number of crews that we have to maintain the network is also significantly higher. We have spent an additional $30 million this year on pipe maintenance. That is again preventive and reactive.

We have also implemented a lot of new technology, what

we call smart technology, and use the IOT - the internet of things. There are a number of sensors that we have on our network that will give us very preventative measures on what is going to happen in the future. Based on this information, we can forecast that something will happen. So we can do the preventative maintenance action before we have an overflow or before a pipe breaks or before a pipe is full of tree roots. There are a number of different operational activities, investment activities, using more technology that we are implementing to respond to this and we intend to continue that in the future.

THE ACTING CHAIR: Jim, did you have anything?

MR BENTLEY: If I could just briefly, thanks.

I will leave it to Roch to deal with the gentleman's comments in detail. I do want to say one thing, though. Sydney Water has been heavily involved with the Greater Sydney Commission and with Infrastructure NSW, particularly in the planning for Western Sydney. I think it is important to put that on the record.

Western Sydney is being designed heavily around the retention of water in the environment, and Sydney Water's work has been instrumental in doing that. The suggestion that they are not interested in stormwater, not interested in reuse, and not involved with the Greater Sydney Commission, needs balancing up with that which I know for a fact from the work that I do with both the Greater Sydney Commission and Infrastructure NSW.

THE ACTING CHAIR: Douglas, did you wish to say something?

MR McCLOSKEY: I will probably leave my comments to the relevant section. I suppose I will flag the issue, with the understanding that it is not necessarily within the purview of this particular process.

Desalination and the extension thereof is a bit of a given in a lot of these proposals. I know that it is related to the current metropolitan water plan, but I think that something that needs to be flagged for the future with regards to those sorts of processes. We were discussing with WaterNSW previously that it has big investments that are essentially continued, which desal is, and they should be subject to regulatory investment tests,

which can test the variety of different options and efficiency and the appropriateness of them. I note that that has not been done with desal.

I am very aware that they are subject to a lot of different political reports, but I think that with these sorts of processes and Sydney Water, particularly considering that they act on behalf of customers who are paying for this when they don't necessarily have any choice, should be flagging that we think there is a better way of doing this. At the very least, there is a better way of publicly making these decisions. Again, I leave that as a comment, understanding that it is not necessarily something that within the purview of this process, but I think it is an important part of the conversation that should be had.

THE ACTING CHAIR: Thank you. That's noted. Yes?

MS CULLIS: Can everyone hear me? I'll be nice and loud.

Thank you very much, Sue, for highlighting the problem with wastewater and urban rivers. I would say for the Georges River, Sydney Water is not responsible for the stormwater issue because there are eight councils who are responsible for stormwater within the Georges River catchment so I am not going to ask about stormwater, except that there is a big issue with wastewater, point source pollution coming from the sewer overflow points, and from accidents and leakage from the STPs within the Georges River catchment.

I, on behalf of the alliance, wrote to the minister about these, and I got a response, not from the water minister but from the planning minister. Rob Stokes said to me:

> Sydney Water's Upper Georges River strategy and, more recently, the dry and wet weather overflow abatement programs have reduced the occurrence of overflows across the Georges River.

Might I say since 2012, we have been in drought, so I think you have been very fortunate insofar as the lack of rain probably makes it easier to manage overflows because there is no ingress of rainwater into your sewer system, so

you have been fortunate in that regard.

The other thing is I went looking for evidence via the internet - I am not wonderful at that - of the improvement in our program. I found basically lack of transparency because I could not find anything. In regards to the Upper Georges River strategy, I am not going to ask you specifically what you have done, but I am going to ask you why couldn't I find any evidence of what you have done?

In terms of the dry and wet weather overflow abatement program, similarly I can't see any evidence written up anywhere in a publicly accessible form that would encourage people like me and my alliance to trust Sydney Water. The figures are not there.

Years and years ago, basically Sydney Water was much more transparent. They used to publish a lot of documents about their performance, about the number of overflows and where those overflows were. I don't see that anymore. I also have a stack of bits and pieces that I have collected on both wet weather and dry weather overflows very recently. I would specifically mention, of course, the disastrous overflow, at the northern side of Botany Bay, that resulted in you having a huge fine issued by the Land and Environment Court. But I am also aware that with Still Creek, which runs into the Woronora River, which then runs into the Georges, you have been fined for overflows and poor performance.

I also wonder why the EPA has not fined you for other incidents. I am hoping they are just under investigation, and I am speaking specifically about the continuous accidents and overflows into Myles Dunphy reserve at Oatley. A lot of people who know what I know believe the Malabar system is at capacity. Just recently, in January this year, there was a shocking incident in Prospect Creek, and that was at Tawarra (?) Park. My mother lives very close to that park. The only reason I found out about it was I saw the Corflute sign. I did not see anything anywhere else.

There is a sewage treatment at the Orphan School River plant and in one month there have been two dry weather overflows from that particular point source, which suggests to me that the system in dry weather can't cope. In the Macarthur growth area which is upstream of that system

there are plans for another 40,000 dwellings, so I am just really concerned for the future of the Georges River in terms of water quality. I would like a response - transparency and water quality.

MR CHEROUX: I will address the transparency question. Thank you for your feedback. We're happy to share all the information that we have. I think by having this feedback, there are more documents that we can put on our website or make available. There is no problem in doing that. It is just a question of when we get a request from customers to make documents available about this project or that project - and we do. There is no problem at all in doing that.

Thank you for your feedback. That is definitely something that we will take into account and implement.

On the capacity of the system, we know that our system has overflowed, or overflows from time to time, and we don't like it. We don't like it because it impacts on the environment and it impacts on the communities and our customers. There is a team of people - Sydney Water and all our parties from the private sector - working hard, 24/7 to make sure that it does not happen. It is not always perfect, sometimes it does happen because sometimes the overflow is a wet weather overflow and if the rain is too much, then it overflows.

We have had a number of discussions with the EPA. The EPA is monitoring closely what we are doing. If we are not complying with what we should be doing, they will fine us, and that's that. There is no argument about the fact that if we fail to do something, we should be fined for that.

I can assure you that we accept the fact that we're not perfect. We are working hard to make sure that this does not happen. Thank you.

THE ACTING CHAIR: Are there any other general questions? Were there any general questions on Slido?

MR RUSH: Yes, there are a few questions from Slido here. In the interests of time and the ordering of the sessions, there are two questions for us that we can talk about now. The first one is on discretionary expenditure and the question is:

> If IPART sets higher prices for Sydney Water or another utility to deliver outcomes outside the regulatory requirements, who will ensure that Sydney Water actually delivers these outcomes?

I am happy to answer that, if you're not, Matt. It is not mine, but this is an excellent question.

It is a really important point for us to consider in how we assess any proposals to go above and beyond regulatory standards on how achievable they are and in what time frame they are achievable and also how we actually have set a framework to ensure that Sydney Water delivers these requirements in the least cost manner. There are a few mechanisms that we are thinking about. These include around transparency and publishing information, for example, through the output measures that we set to ensure that a utility is held accountable for the services that it actually delivers.

Another important point is the regulatory process itself that we undertake every few years. If we accept Sydney Water's proposal to set prices for four years, in four years time we will be then reviewing what Sydney Water actually delivered over the past four years. If it is the case that Sydney Water did not deliver on a discretionary project that we accepted, we could take that into account and ensure that customers do not pay unfairly for things they do not receive.

THE ACTING CHAIR: Are there any other questions? .

MR RUSH: Yes. The second question is on the approach Sydney Water took to estimating the forecasting especially as the drought has become worse. The question here is:

> Is the right answer to assume average demand for the next four years? What about estimating lower than the average demand, the same as to be symmetric with your additional drought expenditure.

Perhaps to put it another way, the difference between average demand over the long term versus expected demand over the next four years.

MR CHEROUX: Again this is a proposal that we have put in our submission, because that is the data that we know and we have available. There are multiple ways to look at demand. We are happy to listen to the comments from the public and from IPART and have a discussion about it.

THE ACTING CHAIR: There will be plenty of other opportunities for questions as we go through the session, and I think we should probably move on so that we have time to get through.

The next session is around drought and environment and expenditure. The drought response is something that we anticipated would be an issue in this price review. We welcome Sydney Water's update of its pricing proposal which focuses on water security and network resilience in an ongoing drought.

For everyone's information, we received a number of submissions in response to our issues paper, including 21 formal submissions and six online comments through our customer feedback form. The key topics raised included price and drought resilience, as well as recycled water, environmental performance and the Sydney water developer direct issue. We welcome comments on these topics, most of which will be covered in today's session.

Where a topic is not covered, then we will have an opportunity to cover it at the end, but also, as I said at the beginning of the session, we will have a drop-in session later if anybody has any further questions. .

We will now move on to Anthony Rush to introduce the next session.

Session 1: Drought, environment and expenditure

MR RUSH: Thank you very much, Deborah.

I will give a short presentation that looks at the impact of drought and the environment on Sydney Water's proposed expenditures. The next session will look at the impact of growth - growth in demand and growth in customers and Sydney Water's expenditure. The final session will look at Sydney Water's proposed prices and the mechanisms, including things like water usage prices, to manage demand

in the context of ongoing drought.

As you can see in this slide to set the scene, dam levels in Greater Sydney have fallen to below 50 per cent in recent months with recent trends resembling quite closely the millennium drought. If this continues, IPART recognises that additional drought measures may be needed. We appreciate Sydney Water's efforts in planning for Greater Sydney's water security and resilience should drought continue.

We also understand that the drier weather in recent years has affected the condition and performance of some of Sydney Water's assets which has, in turn, affected their environmental performance and Sydney Water's proposed expenditure for the next determination period. As highlighted in Sydney Water's presentation, its November update includes additional spending for water security and water conservation measures if drought persists. These measures are in addition to Sydney Water's base capital expenditure which was presented in their original July proposal.

Altogether, Sydney Water has proposed up to $11.4 billion of expenditure over the next four years if drought continues. This is $1.4 billion more expenditure than was included in its original July proposal. We have engaged expert consultants to help us assess the scope and efficiency of the proposed investments that Sydney Water has put on the table both in July and through its November update.

Some of the key investments in Sydney Water's November update include an additional $370 million for Sydney Water to upgrade its network should the capacity of the Sydney Desalination Plant be expanded. Note that this excludes the capital costs of expanding the plant itself. In August the New South Wales government announced that it has commenced preliminary planning for a Sydney Desalination Plant expansion.

Sydney Water has also put on the table an additional $480 million to construct a pipeline to connect the Prospect Reservoir to the Macarthur water system and an additional $50 million of investment to reduce wet water overflows to meet EPA standards.

Sydney Water's additional operating expenditure is focused on reducing and managing water demand through implementing water savings programs and asset management. However, we think that Sydney Water's update does not clearly identify specific investments to reduce leakage or manage water pressure, which is an area where we are keen to hear more from Sydney Water and stakeholders.

Finally, this slide summarises other key expenditure that Sydney Water has proposed on drought and the environment. Sydney Water has recognised that the performance of its water and wastewater assets has been affected by drier weather conditions, as these conditions have increased wastewater blockages and leakages from the water network. This has led to an increased number of incidents of dry weather wastewater overflow events and breaches in EPA standards.

In their July proposal, Sydney Water indicated that they would spend $2.5 billion over the next four years to maintain and manage their existing assets. They proposed an additional $170 million in their November update.

We have asked our consultants to specifically consider whether Sydney Water's recent performance has been affected by Sydney Water's program of inspections and maintenance in the past and its impact on future prices. Sydney Water has also proposed discretionary expenditure to improve environmental outcomes above regulatory standards, as we discussed. This includes, in particular, about $60 million to divert untreated wastewater that flows into Sydney Harbour at Vaucluse/Diamond Bay, into its Bondi treatment plant,

Finally the economic level of water conservation - or ELWC - is a framework developed by Sydney Water to determine the efficient level of expenditure to conserve water, reduce leakage, promote water savings efficiency initiatives and recycling. It was developed as part of Sydney Water's operating license and, over the next determination period, Sydney Water proposes that its expenditure on water conservation will vary quite a lot depending on the drought. If drought passes, Sydney Water proposes to spend about $10 million per year on water conservation, but if drought continues it proposes to spend up to about $240 million per year on water conservation.

I will now hand back to Deborah, who will moderate the

discussion.

THE ACTING CHAIR: Thank you, Anthony.

Sydney Water, did you have any comments that you wanted to make?

MR CHEROUX: No, not specifically, except on the last point, the $239 million is over four years not per year.

THE ACTING CHAIR: Thank you.

Are there any other questions or comments around the table? Yes, Mark?

MR EDLER: Thank you, Chair, and thank you Sydney Water for your presentation and your efforts to build a more resilient water system for the community of Sydney.

It is heartening to see that you are seeking to take into account the ongoing impact of climate change in some of your planning. We think there is more that can be done, particularly when we look at some of the costs that will now be incurred to counteract or defer the effect of the drought.

I guess I would ask this question: if we'd known the drought was going to happen, what ought we have done differently in the current pricing period so that we are not now burdened with these massive capex increases?

MR CHEROUX: There are probably a number of things here. When we're talking about the Prospect and Macarthur pipeline, for example, this was in our plan, and this was in our plan mainly for growth. Now, there is an opportunity to bring forward the expenditure because it gives us the possibility to make the system more resilient.

In answer to your question, maybe we could have done the construction of this link between Prospect and Macarthur a few years ago. The reason why we didn't do it was simply because we thought that it was not efficient and we did not want to engage in the expenditure in too long a time before it was needed, so that we would protect the bills of our customers.

If you look at the situation with our pipes, for

example, there is nothing much that you can do on clay. Clay is clay and it behaves as it behaves, so you can't really do things differently. This is a reactive activity that you have to do when the network is under pressure. This is also why we are saying this is a contingent cost. This is not a forever cost; this is a cost that we have to make in the drought and one that we would stop once we get back to normal conditions. Those are the two aspects between the reactive activities that we need to do because we are in the drought situation and the cost that we are proposing to bring forward to make the system more resilient in the current situation, but also for the future.

THE ACTING CHAIR? Mark, anything further?

MR EDLER: No, thank you. That's all from me.

THE ACTING CHAIR: Giselle, did you have anything you wanted to raise?

MS HOWARD: This is more of a comment. The EPA, in this price path, we put forward the three planks in our submission. While the context of drought is there, these are very much the things that we continue to push through. They are: wet weather overflow, and others have raised that in their questioning; the change in approach to a risk-based approach and modernising, which is a very important component for us; nutrient management in the drought context with the growth of Sydney becomes even more top of mind for us because the remaining flows that are there have increased pressures with increased nutrients into the river system, so that becomes the second very key point; and dry weather overflow as well, has been raised, quite a range of regulatory interaction has been happening.

In that component, from the EPA point of view, we look at the full regulatory toolkit - that is, things like, in an IPART price path, how we can educate, influence and try to explain what is needed for the system and the environmental impact, and then at the most pointy end, the environmental policing end. But we use all the things in our toolkit, including our pollution reduction program dialogue and a range of things with Sydney Water that we have been doing for some time in trying to address that and bring that in so it is not just the big stick end with

regard to wastewater.

THE ACTING CHAIR: Are there any other questions or comments around the table?

MR BENTLEY: Chair, could I make one comment in response to the question from Mark from Flow?

I think your question was about if you had known this was coming, what could have you done in the last price period. I think, frankly, when you're dealing with a city of Sydney's age and complexity, it is not really just what you did in the last price period. When you're talking about the brownfield area, you have generations of approaches to investment that you cannot just rip out and start again.

What Sydney Water has done in the greenfields planning, which Roch referred to earlier, is that they have been pretty innovative in the work they are doing with other parts of government about planning for those greenfield expansion areas.

I am also heartened to hear what Roch explained earlier in terms of the provision that has been made in their submission for responding to triggers from the economic level of water conservation and so on. I think we should be fairly heartened with the more innovative approach that we are now seeing that perhaps was not in place decades ago when what was known now wasn't known then, as it were. I think to look back over the past four years and ask whether you could have avoided all this investment would be a big ask.

THE ACTING CHAIR: Anything else around the table? We can move to the audience. Are there other comments or questions from the audience? Anything on Slido?

MR RUSH: There are a few questions on Slido to sustain the discussion. I might go from the easiest to the most difficult, although there are no easy questions.

The first one here is on leakage. It is not so much a question but also a comment that maybe Sydney Water could do more to manage and prevent its leakage and that doing more to prevent leakage might be in the best interests of managing a scarce resource and reducing long-term costs.

I guess maybe we could have a bit of a discussion on what you are doing to prevent leakage and particularly under the scenario if the drought continues.

MR CHEROUX: There is a lot of activity on leakage. Just to put it back in context, the level of leakage in Sydney is about 9 per cent. If you look at world standards, this 9 per cent is actually a very good standard. In most capital cities, you would find probably between 14 to 20 per cent around the world. Even if it is a good level, we do not think it is good enough, so we continue to work hard on it.

There are different ways to do it. I mentioned the network inspection that we are doing. During the last few months we have significantly increased the level of network inspection that we do. We are using very innovative technology to do that. We use acoustic technologies, et cetera. So we don't miss anything, and we have identified a number of leakages because of new technology that we are using.

We have sort of increased also the management of the information coming from our networks, so all the meters that are on our network. They may be customers' meters but they may be also what we call district meters that are now on our network and that gives us a lot of information. If we dive into it, we can actually find a lot of resources in it. This is also information that we are using.

Finally, we have also increased the number of crews that we have on the ground to repair leakage in a quicker way.

MR RUSH: If I might be able to be so bold as to ask a question on this topic: have you thought about setting any targets and communicating any targets on improvement?

MR CHEROUX: We are working on it.

MR RUSH: The next question from Slido is a biggie. It is around recycled water, and it is:

> Will potable recycled water be considered in the next few years to enhance water security and resilience?

MR CHEROUX: This is a discussion that we have with DPIE. From a Sydney Water point of view, we very much want to look at the integrated water cycle, which is basically using all the different sorts of water that are available. It can be stormwater, it can be recycled water. We are having this discussion with the government at the moment and there are things that are definitely there that we can look into.

MR BENTLEY: We have just embarked on a piece of work with Sydney Water and WaterNSW, and it will involve others as well, to say, "Let's take a whole of system view of this. Let us not look at the individual players in this thing but stand back, look at the whole thing, and ask what are the right contributions we should make to achieving the amount of water we need into supply from further leakage reduction, from further demand management, from more desalination, and also from better reuse of wastewater? That has environmental as well as other benefits to it.

That piece of work is underway. Sydney Water has done a lot of conceptual planning around that, but clearly there are very significant community issues that would need to be well understood as well as the science behind this thing. The work is underway. What is really important is that we are taking a whole of system view on it and not looking at it from one player's point.

THE ACTING CHAIR: Any other questions. Yes, Douglas?

MR McCLOSKEY: This relates not just to what we were discussing there but also to some of the issues in the questions on the screen.

Increasingly when you are looking at reactive and proactive costs related to drought and to scarcity - I think it goes to Mark Edler's point as well about what you can predict - while it may be the case that instances like we are currently facing at the moment are particularly exceptional, and it is difficult to predict when they will particularly strike and how extreme they will be, in a sense - and I hate to use the Rumsfeld quote - they are a "known unknown". We know that they are coming, and they will, in frequency, probably occur at least once every two determination periods and that the type of costs incurred are better predicted in advance than they are waiting to react and then having to build another billion dollar plus

desalination plant.

I think that goes to the question of considering the efficiency of the way we use water. It is ridiculous that we have a resource that we flush out into the ocean after using it once. It is fantastic that we are having a holistic discussion about where recycling and management can fit into the larger picture. This is something that has to start happening within these sorts of pricing proposals. That goes not just to consideration of investments but it also go to the constructions that we put in place. Again that is not necessarily a question, per se; it is more a comment to encourage that sort of exploration in relation to the way that we treat these costs.

MR BENTLEY: Chair, could I add one comment to that?

THE ACTING CHAIR: Yes.

MR BENTLEY: I think the Western Sydney work that Sydney Water and the department and others have contributed to very much looks at keeping water in the environment. It is a lot easier to do that planning in a greenfield rather than a brownfield environment. From that point of view that is very positive, but from the point of view of the existing system, shall we say, we are not walking away from that challenge. We accept the environmental and other challenges associated with that.

The question as to how much you build into each pricing proposal, as I think we said this morning, is a very difficult thing that IPART has to balance between not putting prices through the roof for something that we don't know when it will occur and making sure that we are being prudent in both senses in terms of both sides of the equation. I do not envy IPART their role in some senses in trying to get that balance right, but we have a responsibility on the planning side to provide the right information for that as well. But in general direction, I agree with your tone, and I think Sydney Water would join with that.

THE ACTING CHAIR: We have a question from the floor here..

MR SPARKE: I applaud the comments about water

conservation. A number of years ago, in the middle of 2005-2006, New South Wales implemented water and energy conservation through the BASIX scheme, which is largely one of the greatest bits of legislation that we have had in terms of water and energy.

Conservation can relatively reduce demand by up to 42 per cent, by using rainwater harvesting systems, by surface water capture, and contaminate reduction processes, which alleviates a lot of this waste treatment that ultimately comes downstream that we then have to address.

You talk about new technologies, but what I am hearing from you is what your problems are. We have not actually heard from you as to what proposals there are to improve the situation. Sydney Water has relatively no engineers to design anything. They are loaded with planners that are counting numbers and heads. Fundamentally Sydney Water needs to come back to being the entity for which it was designed to do - that is, to create the water infrastructure that we need.

Water is our primary resource, but nature is also one of the critical aspects of water. If Sydney Water does not have ultimate regard for the way in which we treat nature with our water discharges, we will never catch up.

THE ACTING CHAIR: Is there another Slido question?

MR RUSH: Yes, we have one more Slido question here. It is on the Western Parkland city and it relates to the previous discussions we had tangentially around discretionary expenditure. The question is:

> In Western Sydney the lowest cost solution may not be the best outcome for society overall. How can Sydney Water recover the costs of the best outcome for society?

I think it is a question for us as much as it is for Sydney Water.

MR EDGERTON: It is probably a good point in time here just to give a bit of an overview of IPART's framework in terms of recycled water - that is, the framework we have established whereby public water utilities such as Sydney Water can recover the cost of recycled schemes from their

customers.

I guess the starting point for us is that, in looking at how Sydney Water services its customers, we want to make sure that Sydney Water is looking at all viable options, that it is casting the net as far as possible and is doing robust options analysis and then putting forward the best outcome to us - that is, the proposal that will deliver services at least cost or greater benefit to its customers.

The framework we have for recycled water is that if a recycled water scheme is the least cost option to deliver water and/or sewerage services while complying with all regulatory requirements, then it is straight in the general cost base and its costs are recovered from all customers, which makes it a quite straightforward exercise for Sydney Water.

There is scope, however, for the costs of a recycled water scheme to be recovered from the broader customer base even if it is not the least cost solution. There are two ways that can happen - first of all, if the recycled water scheme results in net avoided costs, so if the recycled water scheme avoids any water supply augmentation costs or sewerage treatment costs, the value of those avoided costs can be recovered from the broader customer base.

Secondly, and this comes back to the discretionary expenditure point, if Sydney Water can show that its customers are willing to pay for the recycled water scheme, then the value they are willing to pay gets recovered through the broader customer base.

To the extent it is not a least cost solution, any residual costs to the recycled water scheme - that is, the cost of the scheme less the avoided costs and less the external benefit to the broader customer base - are then recovered from the specific recycled water customer.

What this framework does is it basically ensures that a recycled water scheme is viable where the benefits exceed its cost. That is our framework for ensuring that Sydney Water can recover its costs of recycled water schemes where they generate net benefit.

THE ACTING CHAIR: I think we have started to touch on the

next section, which is around growth and expenditure, so I might hand over to Ed now to move into that area.

Session 2: Growth and expenditure

MR WILLETT: Thanks, Deborah.

Now to the session on the implications of growth. We have heard about the work of the Greater Sydney Commission, and the implications for its work for growth in the provision of Sydney Water's services, particularly in Western Sydney. We know this infrastructure is expensive, particularly in providing wastewater treatment services. We also are aware - very much aware - that the government since 2008 has had a policy of not charging developers for wastewater and stormwater infrastructure. Those charges have been set to zero, and that means that this investment needs to be borne by the broader customer base through Sydney Water prices.

Having made those introductory remarks, I am going to hand over to Chirine Dada to introduce this session. Then we will move to the question and discussion section. I am very conscious that we are running short of time, so I will ask people to be as succinct as they can in any contributions they make. So Chirine.

MS DADA: Thank you, Ed.

I'll start by discussion the longer term trend for growth and set the scene. The last time we undertook a review of Sydney Water's prices was in 2015, where the population of Greater Sydney was around 5 million. By 2029, it is expected to reach around 6 million and, by 2056, around 8 million.

As the population grows, Sydney Water's area of operations will continue to expand as development spreads into greenfields areas. This requires Sydney Water to build and operate new water, wastewater and stormwater infrastructure. It will also incur additional costs as it augments its existing network to cope with increased density in established areas.

Sydney Water plans to spend around $1.6 billion on servicing new properties, which represents an increase of about 64 per cent from 2016 to 2020. Supplying water,

wastewater and stormwater services plus other infrastructure for this level of growth will create some challenges. Some of the longer term growth is density driven and some is location different.

We will review the 2020-2024 investment forecast put forward by Sydney Water, including the volume, location and certainty of longer term growth, particularly where this could influence treatment plant capacity decisions today. Due to continuing development in the western parts of Sydney and the limited additional capacity for wastewater treatment there, the growth portfolio makes up the largest part of the growth forecast, accounting for around $1 billion in infrastructure over the period. This will be a key area of focus.

In 2008, the New South Wales government set water, wastewater and stormwater development charges for Sydney Water and Hunter Water to zero. This was facilitated by a direction from the treasurer to Sydney Water and Hunter Water under section 18(2) of the IPART Act. This policy is currently still in place.

As a result of this decision, since 2008 the prudent and efficient growth expenditure incurred to service new development has been added to Sydney Water's revenue requirement and has been recovered from the broader customer base through prices over time.

As property growth occurs, the costs of funding growth will accumulate. With the expected growth in Sydney in future, setting developer charges to zero will place upward pressure on prices over time. In Sydney Water's proposal before us today, a large reduction in interest rates has allowed Sydney Water to service additional growth without increasing customer bills. However, as the costs of servicing new developments accumulates, even if interest rates remain at an all-time low, there will be upward pressure on water prices which will impact on customer affordability over time.

We will review Sydney Water's proposed costs and have engaged expert consultants to review Sydney Water's growth projections and forecast water sales, especially where they relate to capital and operating expenditure for growth.

Our consultants will also review Sydney Water's

proposed capital expenditure in total. They will provide advice on Sydney Water's longer term capital development strategy and will assess whether the processes supporting its strategy, including options analysis, are best practice and, therefore likely to result in efficient investment decisions.

Our consultants work with us in determining the efficient capital and operating costs of delivering Sydney Water's services. This includes an assessment of the efficiency gains which could be achieved over the period. When making our decisions, we will consider our consultants' recommendations, the information we receive from Sydney Water and stakeholder feedback, including from yourselves today.

I will now hand back to the convener.

MR WILLETT: Thank you, Chirine. We have some questions as usual and we will start with comments from the table. To my left, any questions or comments? Yes, Mustafa?

MR AGHA: We represent 115 different leading organisations in Western Sydney and we have been pretty pleased with the leadership that Sydney Water has shown in terms of the Parkland City. We have been very active in advocating and pursuing the aerotropolis as a priority for our members, and our members themselves are pursuing it.

Our members have been really keen on seeing essentially the Parkland City achieve its outcome, but unfortunately they are limited by the infrastructure that is out there at the moment and it is very little. It is the leadership of Sydney Water and the infrastructure that will go there that will support it.

The question is really about what can be achieved out there if Sydney Water is not able to implement all the infrastructure for the area and also infrastructure that is efficient for outcomes for the area in terms of having a future proof system. We have seen some outcomes in other parts of Western Sydney that have not been ideal in terms of the urban heat effect and other factors out there. We are optimistic with what we are seeing, but there is also the question as to what will happen if the capital expenditure program is not at 100 per cent?

MR WILLETT: Sydney Water?

MR CHEROUX: We are really committed to making this happen in Western Sydney, as we are for not only the three cities but also the Greater Sydney area where we operate. We have this commitment with a number of different parties.

Just focusing on Western Sydney, Western Sydney is a fantastic opportunity to look at water in a completely different way. This is what we have been working on with a number of different organisations in the past and what we have included in our plan. It is very much about looking at the water and looking at all the aspects of an integrated water cycle so that water is not only considered for drinking water or wastewater, but it is also about including water in the environment and water for amenities for the public so that they can really enjoy the place where they live.

MR AGHA: To follow up on that, what do you see is the possible downside, though, if IPART doesn't allow you to pursue the full capital expenditure program for the Western Sydney area?

MR WILLETT: I am wondering whether this is called a Dorothy Dixer, I think, just for our benefit. Yes, Roch?

MR CHEROUX: I think it is always a question of discussion. We are having this discussion at the moment with you and with IPART, and I think it is about having a discussion and understanding what is the impact of the decisions that will be made.

MR AGHA: Thank you.

MR RUSH: I would add that, in general, our regulatory framework is around incentive-based regulation. What we try to do through our decision is provide a utility with what I would describe as a bucket of money for it to meet it's regulatory and other obligations rather than approve specific projects. Definitely as things progress and things change, a utility will need to redirect its efforts over time as well. We do not try and approve specific projects like this pipe, this stormwater drain, et cetera.

MR WILLETT: Thanks, Anthony. Yes, Mark?

MR EDLER: Thank you. There has been a lot of talk about recycled water and integrated water cycle management as being new things. There are lots of people out there who have been thinking about it for a long time. If you would excuse me Flow has been thinking about it for the last 10 years and implementing those projects successfully. We are all about keeping water in the community.

I guess where that leaves us today is that I would like to hear from Sydney Water about what it is doing to actually tap into that existing store of expertise in the alternate recycled water industry to help meet some of the challenges around servicing Western Sydney or other growth infill areas and also moderating and looking for opportunities to access avoidable costs in your capital program.

MR CHEROUX: We are clearly open to discussion with anyone. 80 per cent of our activity is actually outside Sydney Water. 80 per cent of our activity is with the private sector and we are very proud of that. The story for us is very much about having the discussion with different people, different companies that have expertise that we don't have, that have good technologies that are available and that are really best of breed that we can use and then we can implement the best solution for our customers.

We are not in a mind of doing everything by ourselves. We are very much in the mind of partnering with the people who will be able to help us to offer the best solution for our customers.

MR EDLER: And what steps are you taking in this coming regulatory period to do that?

MR CHEROUX: That is something that we have been doing for quite some time, partnering with different organisations and the private sector.

MR EDLER: To deliver your infrastructure, yes, but to open the market to let other people deliver infrastructure for customers?

MR CHEROUX: That is the discussion that we have. There is always discussion, especially in community developments, with the developers about the best solutions to provide the

services that they need, and sometimes we recognise that someone else can do it.

MR McCLOSKEY: Speaking of new developments - this something of a reverse Dorothy Dixer, because I am aware that, again, it is something that is not necessarily within the purview of this process - the continuation of zero developer charges is becoming untenable, particularly with the scale of growth, which is a direct government policy.

I think that it is good that Sydney Water has put this issue in its proposal and also that IPART has highlighted the division between the impact of where the lack of developer charges is flowing through to consumers. I think it has been somewhat coloured by the fortunate lowering in the WACC, which has meant that it has not had the impact upon bills that it could have or that it may very well have in the future.

That is unfortunate in the sense that it is probably allowing the issue to go unaddressed, but we think it should be raised as part of this process. Sydney Water does act on behalf of its customers and we think that it is not enough simply just to raise the question that, "This is the impact of zero developers charges"; it should be, "This is the impact and we think that these costs should be more fairly shared."

I think there is also the issue as to the way the zero developer charges have a perverse incentive on the types of development and solutions that developers undertake. It does give an incentive towards more traditional solutions rather than the kinds of management solutions which we all want to see.

For all of those reasons and the fact that this issue is going to become more pointed as that growth expands, we do really need to have this conversation - that is, that it has become untenable and we need to do something about. Again, I accept that this is a question which goes beyond the scope of this particular process.

MR WILLETT: I think we will leave that as a comment at this stage, unless anyone wants to speak to it. No? Thank you for the comment and we will take it on board, but we will leave there at this stage, I think.

MS CULLIS: I promise that is my last question today. With regard to the Parkland City, the western greenfield site and wastewater, thank you very much for all of that blue-sky thinking and those promises about the plans and the discussions you're having and the fact that it has to be a coordinated approach to wastewater. It looks as though recycling is really important within that mix and water-sensitive development design, of course. However, the reality is you have kind of missed the boat because the rate of development in that part of Sydney is moving ahead of you well and truly. With respect, to give just one example, the "For sale" signs are out at Mount Gilead. Whilst you're planning some future strategy for dealing with wastewater, between Appin and Mount Gilead it is starting to happen already. It is also starting to happen at Menangle Park.

The situation is I believe the Malabar system, as I said earlier, is probably nearing capacity. There is probably not a lot of scope for all of that extra wastewater, in terms of sewerage wastewater, to find its way, into the Malabar system. So what are the new plants that you have planned for the Nepean because there must be some, STPs along the Nepean River.

MR CHEROUX: The planning is not about blue sky; it's about concrete solutions that are being discussed currently with a number of developers. So things are happening at the moment.

MS CULLIS: With respect, though, the development is happening. With respect, I am just asking whether you can talk about potential sites for the STPs because it is very important. I have heard of one STP being proposed alongside Menangle Creek, which is not within a development footprint but within an endangered ecological community. Can you see that there is a lot of talk happening out there and it would be really good to have some plans that were basically unveiled by Sydney Water.

MR CHEROUX: I understand and I will take the question I am not able to give you the specific position of the different plants at this stage. There is still a number of coordinating planning that is happening with different parties.

MR ED WILLETT: We have a question here.

MS JOHNSON: Hello, my name is Sue. I am from out Wilton way, which is the new city that is going to be planned. That is two hours and 37 minutes from here if you want to go by train, by the way.

I have a question stemming from the previous question. Why did Sydney Water and WaterNSW not take a stronger hand at protecting the water supply of the drought-prone area of Wilton and surrounds and Greater Macarthur at the strategic planning stage? What advice did it give planning and when? In other words why has this not been master-planned with the growth centre SEPP up-front and the revenue raised earlier?

MR CHEROUX: Can we take that on notice because we need probably a bit more information about exactly what it is. We have planning and long-term planning for all of the areas. So can we have a discussion on those?

MS JOHNSON: I think the purpose of my coming here today was for the tribunal to understand some of the environmental impacts and concerns around that particular proposal, the $570 million, and the $77 million, which is part of the 12 November proposal. That, I believe, is directly related to the Wilton planning and the Greater Macarthur planning. I have a lot of questions here, so I am happy to talk later about it, but essentially --

MR WILLETT: Can I suggest this?

MS JOHNSON: Yes.

MR WILLETT: What you have said so far is already on record before us. If you could put your questions to us in writing, we will certainly take those on board. Sydney Water has undertaken to take the question on notice and get back to at least us.

MS BRAKEY: We also have the drop-in session.

MR CHEROUX: We are happy to have the discussion after. Paul here has some answers, so we can have a discussion immediately afterwards.

MS JOHNSON: I have another for discussion, which I am sure has not been covered. The growth centre SEPP exempts

Wilton from having a recycled water plant - and you are aware of that. Was that through the influence of IPART or Sydney Water that those developers were exempt from having recycled water in an area where it is required, due to its impact on the Nepean River system, in the only pristine section of the river system? Do we know why they were exempt, in other words?

MR EDGERTON: No. IPART was not involved in that decision.

MR CHEROUX: And Sydney Water was not involved either.

MS JOHNSON: Okay, thank you.

MR WILLETT: Thank you.

We will have one last question before we move on. If you could keep it short, please.

MR SPARKE: Okay. I'm sorry I've taken a bit of time, thank you.

I have to suggest that the economic argument from Sydney Water does not stack up. To offer Sydney Water another 2.5 per cent to maintain the status quo is irresponsible.

In Industrial Revolution 4.0, which we are approaching in terms of technology and performance, there are a huge number of opportunities which Sydney Water could put in place to mitigate costs and to provide greater services to the community. I reject out of hand that they need 2.5 per cent to maintain the status quo with the performance that they have demonstrated over a long period of time.

MR WILLETT: Thank you. Anthony, do we have anything pressing from Slido?

MR RUSH: No pressing question from Slido. There are a couple of questions from Slido, but they are not related to this issue. I think we can cover them at the end if there is time

MR WILLETT: Thank you very much, everyone for that session. I will hand over to Anna.

Session 3: Prices and form of regulation

MS BRAKEY: Thank you, Ed. In the interests of keeping it brief I will make very quick remarks and get Ian to present.

This is our final session for today and we will be talking about Sydney Water's proposed prices and the form of regulation. This session highlights how the costs of drought and growth discussed earlier today impact on your prices. So, Ian, would you like to make your presentation.

MR DEHLSEN: Thank you, Anna.

I will begin today by outlining two price structure changes that Sydney Water has proposed due to the risks of drought, which are:

Additional cost pass throughs to manage uncertain additional costs related to drought; and

A change to the demand volatility adjustment mechanisms to address potential revenue shortfalls on an annual basis in times of drought.

I will then address the impact of these changes on prices and summarise stakeholder feedback on scarcity pricing as a way to manage these additional costs. Finally, I will address Sydney Water's proposed late, declined and dishonoured payment fees.

In November, Sydney Water updated its 1 July pricing proposal to reflect the deteriorating drought outlook and minimal rain over the winter period. A key part of this was to include a cost pass through mechanism for additional drought-related operating and capital costs.

In general terms, cost pass throughs allow Sydney Water to pass through additional costs from events which are unexpected or uncontrollable. The effect is to reduce financial risks for Sydney Water by allowing prices to be updated during the determination period.

Sydney Water has proposed a number of new cost pass throughs in its November proposal:

Firstly, if the New South Wales government decides to

expand the capacity of the Sydney Desalination Plant, Sydney Water proposes to pass through the costs of upgrading its existing networks to accommodate additional water from the plant.

Secondly, Sydney Water plans to expand its water conservation program as dam levels fall; and,

Finally, Sydney Water proposed to pass through additional costs for advertising and implementation cost of water restrictions and drought management.

This slide outlines the effect that this should have on prices.

Another form of regulation change Sydney Water has included in its November proposal is an annual demand volatility adjustment for when water restrictions are in place. Because we calculate prices by dividing Sydney Water's costs by a demand forecast, our reduction in demand would see Sydney Water under-recover its efficient costs and vice versa.

Currently we manage this risk by comparing actual demand with forecast demand over a whole determination period and adjusting prices in the next period to prevent net over or under-recovery over the medium term.

In its updated proposal, Sydney Water's forecast water sales and prices are based on long-term average consumption levels. This means they do not reflect the impact water restriction may have on demand.

Due to additional uncertainty from water restrictions, Sydney Water has proposed that if its annual demand is more than 5 per cent different from its forecast demand, then prices would be adjusted in the following year rather than at the end of the determination period.

This table shows the impact of Sydney Water's proposed cost pass-throughs on price. The first column is the current prices, so for the 2019-20 financial year. The middle column details Sydney Water's updated prices for baseline expenditure should drought conditions ease. This includes additional expenditure for the Prospect to Macarthur link and increased operational response dues to recent dry weather, but does not include the drought cost pass throughs discussed earlier.

The far right column details Sydney Water's proposed prices if drought continues and incorporates the proposed drought cost pass throughs into the fixed water service charge.

Please also note the 13 cent per kilolitre increase in the water usage charge due to the Sydney Desalination Plant uplift, which is also in the current determination. Sewerage and stormwater prices won't change because of the update.

The drought scenario is based on the assumption that:

Dam levels are between 30 and 40 per cent, so Sydney Water must increase its water conservation projects by between $51 million and $62 million per year in line with its operating licence conditions; and

SDP expansion has been announced and Sydney Water must include additional costs because of network upgrades.

Note that these prices do not take into account Sydney Water's proposed changes to the demand volatility adjustment mechanism. If water restrictions remain in force and demand is much lower than forecast, service prices could be significantly higher still. They do not include any capital costs from the expanded Sydney Desalination Plant or the cost pass throughs proposed by WaterNSW.

As shown on the previous slide, Sydney Water's amended proposal includes increases to the water service charge to pass through drought expenditure.

Stakeholders have raised in their submissions to our issues paper that price structures should reflect water scarcity to send signals to customers about their level of consumption. For customers to respond to dynamic water availability, we would need to adjust the water usage charge rather than the service charge.

Theoretically, scarcity pricing could be used to better manage water demand in times of drought. Currently, we fix water prices for three to five years, so there are no signals to users to conserve water when drought develops. Instead we rely on water restrictions to manage demand.

We are interested in your views today on whether and how scarcity pricing could be utilised. We will consider the benefits and costs of adopting water scarcity pricing to signal to consumers the limited short term supply and value of water through this review. One option for scarcity pricing is to set a menu of usage prices that increases as dam level decrease.

Finally, since 2016, we have regulated the fees Sydney Water can charge for late payments and declined and dishonoured payments under section 12A of the IPART Act, which is separate to how we set normal prices.

Sydney Water has proposed small increases in the prices to reflect an increased allocation of corporate costs and inflation.

Fees compensate Sydney Water for administration and funding costs that arise from an overdue account or declined of dishonoured payment. If the interest accrued on the overdue balance is greater than the determined late fee, Sydney Water can also charge the amount of interest accrued instead of the late fee. Back to you, Anna.

MS BRAKEY: Thanks, Ian.

We might start with any comments around the table. Do you have anything you would like to talk about, Douglas?

MR McCLOSKEY: I do, and I could probably take up the next hour and a half doing it, which I don't want to do.

I do want to say that we have a lot of problems with the consideration of, one, the way that Sydney Water has proposed to handle additional costs related to the drought and loading them onto fixed charges. We would certainly prefer that for any cost pass-through to be put onto the usage charge that consumers still have the ability to control it as much as possible.

With the discussion on scarcity prices we have an issue with that. Essentially we see them as a form of penalty which does not provide long-term behaviour signals that treats water as a resource to be conserved permanently, other than wait till you don't have any and then hit people with a charge for doing what you have allowed them to do over the previous period of time.

I know that, from an economic perspective, there is a lot of argument for the efficiency of scarcity prices and the dynamics of scarcity pricing, but we do not think it accords with the way the community understands water, nor do we think that it is because of the way people behave, particularly in relation to an essential service. We would much rather see prices that build in a transparent structure that encourages people to conserve the resource and value it accordingly and give long-term transparency, both to consumers and to others, to provide the investments and undertake the behaviour which treats water in a way that does use it efficiently rather than waiting till we don't have any, or waiting till its scarce and then hitting people with the cost. That is essentially a short-term penalty that they cannot react to. That is my very brief response.

MS BRAKEY: Thank you. Mark?

MR EDLER: From Flow's perspective, we support the call to properly value or properly price the value of water in the long term. We are probably a little bit different in that we accept that scarcity pricing is probably needed now to moderate some behaviours. But longer term we would like to see the pricing reflecting the value of water as a long-term resource.

I think there was some discussion in the papers around the way that IPART is looking at changing the value of wastewater services, but it has not really come up today. Suffice to say that we support that work that IPART is doing to understand at least what the costs are on a system-by-system basis. Accepting that usage charges for wastewater is not practical, but at least understanding what those long run marginal costs are is something we would support and we support that investigatory work. Thank you.

MS BRAKEY: Mustafa did you have any comments, or Sue?

MR AGHA: No.

MS BURTON: No.

MS BRAKEY: Sydney Water did you want to make any comments on anything that we have presented?

MS MURAS: Hi, I am Heidi Muras, from Sydney Water.

I just wanted to put on record too that Sydney Water is proposing to keep the same terms and conditions for the late payment fee, so we would still have the same exemptions that we currently have for customers who are facing payment difficulty or on payment plans that the fee would be exempt from those types of customers.

MS BRAKEY: Thank you. Do we have questions from the audience? Yes?

MS JOHNSON: Hello again. I am concerned about the unfair playing field that is driving the costs up in regard to this drought proposal - and I am specifically talking about the $570 million and the $77 million - for moving water from Warragamba back through to Prospect, back to Macarthur. I do not see that as drought management at all.

The issue is that Sydney Water has engaged with some developers through a funded agreement and come up with some options. Those options have been held in secret until now. We have heard the amount that it is going to cost to service these areas, though we don't know the detail. We do not know if it is meeting any of the environmental outcomes.

It is interesting that in the report it says there have been no new WICA licences for greenfield developments, but neighbouring one of the approved developments is a WICA licence style for Lendlease. They are being treated as: "Demonstrate your costs for recycled water and wastewater independently of Sydney Water." So why have Bradcorp and Walker been given the opportunity to be exempt from developer charges which means that Sydney Water prices will be driven upwards for everyone?

That is one part of the unfair playing field. I don't know if it is unfair, but I think it is an issue that needs to be looked at.

The other issue is that the government decided, on the last day of caretaker mode, to prevent all rural landowners around existing infrastructure from submitting planning proposals unless they have access to water. How they could demonstrate that, I don't know, but in the case of the

growth centres they are exempt from that. They don't have to prove in any planning proposal that access to water is an issue. I think that is quite unfair and it is driving our prices up.

The other thing is that we have very low dam levels. We are an isolated system and we get morphed into a statewide average. Currently, Cataract is at 30 per cent. It supplies our region and it has been offline for potable water for some months. I have a question around that and I know WaterNSW are probably not here and I am late, but is it going to come back online and does it have an infrastructure failure? These things need to be taken into account in this $570 million.

Can anyone answer the question before I move on, as to whether Cataract Dam has an infrastructure failure and whether it is mining that is causing it?

MS BRAKEY: There are some people from WaterNSW that we will ask to stay back after this session and talk to you about that.

MS JOHNSON: The reason I ask that is because no matter what rain event we have - and we are in a drought-prone area so we are not getting the same rain as the Sydney Basin - the dam level is not going up. We think that it has a failure, and that's the community concern. That needs to be part of this proposal. It is not about shifting water around; it is about how do you create new water? Wilton is exempt from creating new water or reusing water. How does this play out to be fair?

MS BRAKEY: Did Sydney Water want to respond whether this is a resilience or a drought-response measure?

MR CHEROUX: On the pipe from Prospect to Macarthur?

MS BRAKEY: Yes.

MR CHEROUX: We see it very much as a resilience investment because that gives us the possibility to move water around. I accept the fact that this is not a drought response, because we need to have water to move it around. This is very much a resilience piece of investment.

MS BRAKEY: And your comments on the developer charges

I think were aligned with Douglas's comments on developer charges earlier, as well.

MS JOHNSON: Yes, and I believe, because these are market-led and state-led investments, that they should take a different course of action. They either get funded by the revenues, the dividends of Sydney Water, by developer contribution or by stamp duty, because the winners are not the community and the losses are pretty big in our community with these proposals. It needs to establish what are the alternatives, who are the winners and losers?

I have been on this journey since 2018, early 2018, and Sydney Water were not going to support Wilton initially. That was their public submission. Then, after $900,000 or so was handed over to the corporation business side to come up with some option studies, we did not see any options until the first DA was approved, which was a month ago. Now we are seeing a new proposal, one month later, for $570 million, so I was just concerned about that.

MS BRAKEY: We might try and engage with you after the session. We have another question.

MS SAPPANY: Hi, I am Radhini Sappany from the Department of Premier and Cabinet. I may have missed this before, but I was wondering whether there has been any work to model the effect of the annual demand volatility adjustment. I guess I am just wondering whether it is likely to result in some big price swings for customers.

MR HIGHAM: Paul Higham, head of service planning at Sydney Water.

It is actually fairly simple. The way it will work is that any demand in the year that is more than 5 per cent below forecast, we would seek to recover in the following year, after adjusting for any costs that we save by having to distribute less water to our customers. So it's not extra revenue; it is revenue that would the normally be expected in the demand forecast, below that 5 per cent limit, either side of it. If it is below, we would seek to recover that in the following year. It is a time shift, if you like, in the revenue recovery, if it is required

MS BRAKEY: I see that Fire and Rescue is in the audience,

did you want to raise any issues?

MR MARK PORTER (Fire and Rescue NSW): Probably not. We are just taking it all in, I think. We are being politically savvy, I guess.

MS BRAKEY: Are there other questions from the general audience? Yes?

MR COMITO: Good afternoon. My name is Peter Comito. I came to this country 1951. I worked for Anthony Squires in St Marys and on the weekend I used to work for Frank Lowy, in Blacktown, in a little delicatessen. I am still living in Blacktown. I ran my greengrocery for 45 years in Blacktown. I invested in a little commercial property in South Windsor. There is one meter, one service which I have been paying till 2012, one service charge.

In 2012 everything changed. I am paying now 900 per cent more. I cannot understand how it has come about. Still it is one metre service. Okay, I have nine tenants, but it is one metre reading. How do they justify it? I have been negotiating with the Water Board, with IPART and with the Ombudsman, but unsuccessfully. How do we justify it? They claim my property is mixed development. Mixed development! But with the Water Board, originally back in the 1980s, it was classified as industrial. In the middle of a commercial zone, there are about a hundred shops, and my property is the only one claimed as a mixed development. That is number one.

Number two, you can't build shops if it is not commercial. It is commercial. There are a hundred shops there. There are six shops there, six service charges, and further down there are the kinds of shops with 10 and three shops and five shops and they have one meter. I also have one meter. I feel discriminated for that.

And another thing, if it is commercial you charge your service charge according to the size of the meter and how many meters you have. That is how it should be. How can we charge 10 service charges for six shops and four units above, which originally were built as commercial back in 1980. I could not have a tenant commercially upstairs, so with the council, we changed the zoning and we put four residential units above. Mind you, it's a small property. It is 322 square metres. I am paying 10 service charges

for a 25 kilolitre meter. I am paying 10 service charges, but they only read one meter.

MS BRAKEY: Is that something you would like to respond to now?

MR CHEROUX: I think we need to take it on notice. We are happy to have a discussion about this.

MR COMITO: If they say it is commercial, then it should be commercial, because you can't build shops in a residential area, or in an industrial area.

MR CHEROUX: I am not aware of the details of the case, but we should have a discussion about that.

MR COMITO: I feel with this terrible case very discriminated, because the Westfield, they have thousands of shops and yet only pay the service charge according on how many meters and the size of the meters, which is how I think that should be.

MS BRAKEY: We might deal with this at the session after this, the drop-in session, because it is so specific.

MR COMITO: Thank you.

MS BRAKEY: There is one last question, so this will be last question for the days, thank you.

MS JOHNSON: The 12 November proposal includes $77 million that was to be spent this financial year, and I believe it is on the Prospect to Macarthur system. Can you explain exactly what that will contribute to and whether the $540 million will complete the requirements of the growth area, which will continue beyond its review period of 2024? In other words, do we expect the project costs for servicing the growth centres to go beyond the $540 million and the $77 million, and what is the $77 million for this year?

MR HIGHAM: Just to be clear, the investment in Pro-Mac is accelerated investment to service the growth for the whole of the south-west corridor. So it is from just north of Campbell downwards as we go, but it is servicing population growth in the whole area. We have basically brought investment forward approximately five years to service the

population growth that is coming in as part of the ability to make our system more. It is not specifically related to the servicing of Wilton, for example. It is are for the whole of the region, it is subregional servicing.

$77 million is the planning of that work in this current period in order to transition the delivery of that work into the next few years to bring that work forward in order to invest in a resilient water supply for a range of population growth in that region.

MS JOHNSON: So the $77 million in planning, that will be an environmental impact assessment and so on in consultation with the community?

MR HIGHAM: All that works, yes, planning --

MS JOHNSON: My question is why that was not done before the DA was supported by Sydney Water?

MR HIGHAM: Just to be clear, this piece of infrastructure is not specifically for the Wilton growth area; it is for servicing population growth in the south-west corridor, Wilton is serviced, and was always intended to be serviced, from the Macarthur treatment system, which already exists and has capacity to service the Wilton region.

MS JOHNSON: That is stage one?

MR HIGHAM: Yes.

MS JOHNSON: But not the rest?

MR HIGHAM: Yes.

MS JOHNSON: So it will have the 200,000 homes in the Greater Macarthur-Wilton area, and there will be no further funding required after that?

MR HIGHAM: No, there may be further funding required for investment of infrastructure just in line with our other population code requirements. It depends on the density of those areas.

Closing Remarks

THE ACTING CHAIR: There will be refreshments outside and

we will be here till 6 o'clock this evening so that there will be time for further questions. But given our commitments to timing of the hearing, and there are likely to be some people that need to be somewhere else, probably with their families, we will bring things to a close now.

If there were any questions on Slido that didn't get answered, please come and see us and we can talk about those.

On behalf of IPART, I would like to thank you all very much for participating in today's proceedings. It has been very helpful to hear your views first-hand. We do appreciate that people take time out of their schedules to come to these sorts of hearings, so thank you very much for that.

We also say thank you very much to the presenters today from the utilities for presenting and to the contributors from the general public.

A transcript of today's proceedings will be available on our website in a few days. We will consider all that we have heard today in addition to submissions that we have received when we are forming our final views.

As previously mentioned, we will release the draft report, again for further public comment, in March next year. There will be about four weeks then to make further written submissions. Then we will make our final decision, and the final report will be released in June 2020, and the prices will apply from 1 July 2020.

Thank you very much again. We really appreciate your time.

AT 3.25PM THE TRIBUNAL WAS ADJOURNED ACCORDINGLY