SYDNEY
DESALINATION
PLANT
ABN 50 125 935 177

Sydney Desalination Plant Pty Ltd

Suite 19, Level 17, Australia Square
264 George Street,
Sydney NSW 2000

PH: 02 8599 8530
info@sydneydesal.com.au

14 September 2018

Dr Peter Boxall
Independent Pricing and Regulatory Tribunal (IPART)
PO Box K35
Haymarket Post Shop NSW 1240

Review of financeability tests – Response to Draft Report

Dear Dr Boxall,

Thank you for the opportunity to provide Sydney Desalination Plant Pty Limited's (SDP's) views on IPART's Draft Report on its 2018 review of IPART's financeability test.

As SDP submitted in its June 2018 response to the Issues Paper, SDP agrees with IPART that there are benefits to conducting financeability tests when IPART sets regulated prices. Financeability tests provide an important sense check that regulatory pricing decisions would allow businesses to maintain an investment grade credit rating, thus promoting the long-term interests of consumers.

SDP supports most of IPART's Draft Decisions in relation to its approach to financeability tests. However, there are a number of important issues that SDP considers IPART should reconsider, in order to ensure that the financeability tests undertaken by it are capable of assessing the financeability of regulated businesses in a meaningful and reliable way.

SDP's key concerns about IPART's proposed implementation of the financeability tests are:

- The proposed test is not a complete test because it is not capable of detecting financeability problems caused by regulatory errors or as a result of an unreasonable judgement in several important aspects of IPART's pricing decisions – such as opex and capex allowances, the regulatory depreciation allowance, and the cost of equity allowance. SDP submits that IPART should be explicit in the Final Report that it would, as part of its price reset process, consider and take account of any evidence on the financeability impact of IPART's draft decisions in relation to individual building block components submitted by businesses.
- The financial ratio benchmarks proposed by IPART appear (based on the evidence IPART included in the Draft Report) inconsistent with the target credit rating of BBB that it has adopted. Based on the evidence presented in IPART's draft report, they are more consistent with the metrics that would be obtained by a sub-investment-grade regulated water business. The setting of benchmarks in this way would allow firms (including those with genuine financeability problems) to pass the financeability test too readily. This undermines the very purpose of the financeability test, which is to allow an efficient investment grade business to remain financeable during the regulatory period.
- IPART has made certain choices about how some financial metrics are to be computed (e.g., the use of real rather than nominal interest expenses, the exclusion of capital charges when computing the Adjusted Interest Coverage Ratio) that would result in regulated businesses appearing more financeable than they in fact are. This risks masking genuine financeability problems that may need to be addressed.

This submission is structured as follows:

- Attachment 1 sets out SDP's views on the key areas in which we consider IPART's proposed financeability test could be improved.

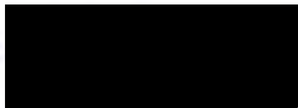
- Attachment 2 is a report from Frontier Economics on some of the key aspects of IPART's proposed financeability test. SDP supports the views contained in the Frontier Economics report.
- Attachment 3 summarises SDP's views on all of the Draft Decisions on which IPART has sought comment.
- Attachment 4 summarises SDP's feedback on the Draft Report building block model circulated to SDP by IPART on 5 September 2018.

SDP looks forward to continuing to engage with and assist IPART during the remainder of this review.

Should you wish to discuss or clarify any aspect of our proposal, SDP would be pleased to assist IPART in any way possible.

Please direct any correspondence regarding our submission to Justin De Lorenzo – Chief Financial Officer (or).

Yours sincerely,



Keith Davies
Chief Executive Officer
Sydney Desalination Plant

Attachment 1 – SDP's views on key matters raised in IPART's Draft Decision

This Attachment sets out SDP's views on the following consultation questions posed in the Issues Paper:

1. Proper diagnosis of financeability concerns;
2. Use of a nominal versus real cost of debt;
3. Financial metrics to be used in the financeability test;
4. Financial metric benchmarks;
5. Remedies;
6. Definition of 'financeable'; and
7. Data to be provided by businesses to IPART for the actual test.

Proper diagnosis of financeability concerns (Draft Decision 20)

IPART concludes in its Draft Report that if it identifies a financeability concern, it would separately test whether this concern is due to:

- Setting the regulatory allowance too low;
- The business taking imprudent or inefficient decisions; and/or
- The timing of cash flows.

SDP agrees in principle with this approach. However, as SDP submitted in its response to the Issues Paper, neither the benchmark test nor the actual test proposed by IPART will identify all possible financeability problems arising from regulatory allowances being set too low.[1]

This is because the main difference between the benchmark and actual tests proposed by IPART lies in the treatment of gearing and cost of debt within those tests. Specifically:[2]

- The benchmark test uses the same gearing and cost of debt used to set the notional revenue requirement;
- The actual test uses the business's actual cost of debt and actual gearing (relative to RAB) of the business; and
- All other aspects of the notional revenue requirement (RAB, cost of equity, opex, capex, depreciation, etc.) remain the same and as per the draft decision.

Hence, neither test will identify whether, for example, IPART has provided in its pricing decisions insufficient allowances for opex, capex, depreciation or the cost of equity. Both tests assume implicitly that the costs that the business (benchmark and actual) will incur over the regulatory period match the cost allowances provided by IPART in its pricing decision. This abstracts away any financeability concerns that could arise from errors or unreasonable judgements in the determination of a number of important inputs to IPART's pricing decisions.

SDP submitted in its response to the Issues Paper that in circumstances where regulated businesses consider that IPART has set ***any*** of the building block components of the notional revenue requirement too low, it should be open to the regulated businesses to present evidence on the impact of the regulatory decision on financeability, and seek allowances to be set in such a way as to address any financeability concerns.

[1] For the avoidance of doubt, SDP considers that regulatory action is warranted only if the cause of any financeability problem relates to the way in which regulatory allowances have been set (i.e., if the allowances have been set too low, or there is a cash flow timing mismatch in relation to the regulatory allowances). SDP supports IPART's view that it need not concern itself with financeability problems arising for any other reasons.
[2] Draft Report, August 2018, Table 4.1.

In response to this submission, IPART stated in the Draft Decision that:[3]

> *IPART would consider any issues raised in a submission made by a regulated business (or any other stakeholder) during its price review.*

SDP is encouraged by this statement. However, SDP requests that in its Final Report on the review of financeability tests, IPART:

- Acknowledge explicitly that neither the benchmark nor the actual test (as specified by IPART) are capable of identifying financeability concerns arising from particular inputs to IPART's pricing decisions—including expenditure allowances, the depreciation allowance and the cost of equity allowance—being set too low.
- State explicitly that when evaluating submissions on individual elements of its pricing decisions, IPART would consider and take account of any evidence on the financeability impact of IPART's draft decisions in relation to individual building block components submitted by businesses as part of the price reset process.

SDP understands that IPART has reservations that if the financeability test were expanded to test the impact of IPART's whole pricing decision, then businesses might seek to use the financeability test to argue for regulatory allowances to be set above the efficient level in order to avoid financeability problems. The report by Frontier Economics in Attachment 2 of this submission addresses this concern.

SDP makes the following points:

- Rating agencies and lenders make their financeability assessments based on the whole pricing decision, not just certain narrow elements. Therefore, IPART's financeability test should also seek to assess the impact of the entire pricing decision on the business, rather than restrict the focus of the test to narrow aspects of the pricing decision.
- Expanding the test to encompass all aspects of the pricing decision would not mean that the test would be used deterministically to reverse-engineer regulatory allowances. Indeed, SDP submitted in its response to the Issues Paper that the financeability test should not be used in that way.[4] SDP's view is that the financeability test should be capable of providing early warning of a financeability problem arising from any aspect of the pricing decision, not just certain very narrow aspects.
- SDP considers that a financeability test that is capable of assessing the financeability impact of the whole pricing decision is both appropriate and important because no regulator has perfect information, and there is often significant uncertainty over the true level of efficient costs. Faced with this uncertainty, it would be prudent for IPART to check that the costs that it proposes to allow would not inadvertently cause a financeability problem that may ultimately be to the detriment of consumers.
- If IPART's financeability test suggests that a business might face a financeability problem under the proposed allowances, then the next step should be to investigate the cause of the potential problem. IPART would only need to consider adjusting the allowance if it were satisfied that the cause of the financeability problem was not inefficient or imprudent decision-making by the business. The finding of a financeability problem (and no clear evidence of inefficient or imprudent decision-making by the business) would be reasonable grounds to re-examine the appropriateness of the proposed regulatory allowances.

Use of nominal versus real cost of debt (Draft Decisions 6 & 7)

Currently, IPART uses a nominal cost of debt in its financeability test. The Draft Report concludes that:

- For the benchmark test, IPART would use the real cost of debt and gearing ratio in the WACC and include the allowance for inflation indexation over the regulatory period (Draft Decision 6).

---

[3] Draft Report, August 2018, p. 52.

[4] SDP response to Issues Paper, June 2018, p. 12.

- For the actual test, as a default IPART would use the business's current debt outstanding, forecast interest expense and dividend payments. If the business's interest expense is on a nominal basis, IPART would not include the inflation indexation component in the interest expense (Draft Decision 7).

SDP agrees with IPART's view that the actual test should be performed using the actual interest costs of the business in question. To the extent that businesses have issued only nominal debt, then the actual test should be implemented using only a nominal cost of debt. However, SDP disagrees with IPART's Draft Decision to utilise a real cost of debt when conducting the benchmark test.

The main reasons IPART provides for deciding to use a real cost of debt when conducting the benchmark test are the following:[5]

- It would be more consistent with IPART's real WACC method, meaning that inflation is not double counted in the financeability test;
- It applies a consistent approach in calculating our financial ratios across regulated businesses;
- The actual mix of real or nominal debt of the business should not influence IPART's pricing decisions and therefore customer bills; and
- Moody's preferred interest coverage ratio for water utilities is the Adjusted Interest Coverage Ratio (AICR).

These arguments are addressed below.

Consistency between setting of allowances and financeability test

IPART argues that adopting a real cost of debt in its financeability tests would ensure consistency with IPART's approach of setting a real WACC allowance. SDP agrees with the general principle that internal consistency within the regulatory framework is desirable. For example, SDP considers that it is appropriate that the benchmark test assumes the same target credit rating used to determine the cost of debt allowance.[6]

However, in this particular context, the pursuit of consistency for its own sake risks defeating the purpose of the financeability test—namely, to identify genuine financeability concerns—by assuming away a potential financeability problem. Whilst IPART sets a real cost of debt allowance, the debt portfolios of the businesses IPART regulates are largely or entirely comprised of nominal debt. As submitted by SDP in response to the Issues Paper, this is because there is no significant market for inflation-indexed corporate bonds in Australia.

The fact that regulated businesses face nominal interest costs, but receive a real cost of debt allowance under IPART's WACC methodology, raises the potential for cash flow mismatches within a regulatory period that may give rise to a financeability problem. IPART notes correctly that its WACC framework compensates businesses for inflation over future periods by adding an inflation adjustment to the Regulatory Asset Base (RAB), which is then recovered gradually through the depreciation allowance. This means that, in expectation, over the life of the regulated assets, investors would recover the real return they require, and compensation for expected inflation. However, as compensation for inflation is capitalised into the RAB and recovered over many decades, businesses may face a mismatch of cash flows within individual regulatory periods.

SDP considers that IPART's financeability tests should be capable of identifying whether any such mismatches give rise to a financeability problem. However, if a real cost of debt allowance is used in the financeability test, as IPART proposes, then any financeability concerns that may arise from the way businesses are compensated for inflation under IPART's regulatory framework are simply assumed away, and therefore would never be detected by the test.

The use of a nominal cost of debt within the financeability test would not result in any double-counting of inflation, as suggested by IPART. In essence, the test would assess whether the cash inflows from a real cost of debt allowance combined with the regulatory compensation for inflation (via the regulatory

[5] Draft Report, August 2018, p. 36.

[6] This issue is discussed in further detail below, in relation to IPART's choice of financial ratio benchmarks.

depreciation allowance of an inflation-indexed RAB) would be sufficient to service a regulated business's nominal interest expenses. This would be a fair test of whether IPART's approach to providing compensation to businesses for expected inflation would give rise to a financeability problem.

For the avoidance of doubt, SDP is not arguing that IPART should change the way it compensates businesses for expected inflation. SDP simply proposes that, in some periods, IPART's real WACC framework may potentially cause financeability concerns that its financeability test ought to be a capable of identifying. Any remedies in response to a confirmed financeability problem of that nature would be targeted and temporary—to address that particular financeability concern—rather than requiring a wholesale change to IPART's regulatory treatment of inflation.

Consistency of approach across businesses

IPART argues that it is important to adopt a consistent approach to calculating the financial ratios across all businesses, and that using a consistent approach across all businesses by using a real cost of debt for both tests ensures that IPART's pricing decisions are not influenced by the financing strategies of individual businesses.[7]

In this regard, IPART notes that:

- WaterNSW has arranged low coupon financing to match a real cost of debt framework; and.
- Sydney Water has a mix of nominal and real debt funding.

IPART also notes that WaterNSW has submitted that businesses can manage the inflation compensation timing mismatch through the use of financial instruments such as inflation swaps and low-coupon bonds.

SDP makes a number of observations in response to IPART's stated reasoning:

- As the Draft Report notes, only one stakeholder (WaterNSW) submitted in response to the Issues Paper that businesses can manage the inflation compensation timing mismatch. The overwhelming response from stakeholders—including from SDP, NSW Treasury, Sydney Water and Hunter Water—was that this cash flow timing mismatch was difficult or not feasible to manage effectively, and that "nominal bond debt funding is the most common and liquid source of debt in Australia."[8]
- Whilst inflation swaps may in principle be used to manage this cash flow timing issue, these financial instruments are not costless to issue. SDP notes that IPART's regulatory framework does not provide any compensation for the transactions costs related to the execution of inflation swaps.
- IPART provides no assessment of the extent to which WaterNSW has been able to effectively manage the cash flow mismatch problem using low-coupon financing.
- Only a limited portion of Sydney Water's debt portfolio reflects real debt funding. For example, Sydney Water's 2016-17 annual report shows that as at 30 June 2017, Sydney Water had total debt of $7.2 billion; 61% of this total debt was fixed-rate nominal debt, while the remaining 39% was inflation-indexed debt.[9, 10] The fact that only a minority of Sydney Water's debt is inflation-indexed suggests that Sydney Water has not been able to eliminate the cash flow mismatch arising from the way IPART provides compensation for inflation.
- Publicly-owned water businesses like WaterNSW and Sydney Water may have some ability to manage the risk of cash flow mismatches arising from IPART's method for compensating businesses for inflation—for example, by issuing low-coupon debt or inflation-indexed bonds—because these businesses arrange their debt financing through TCorp, which enjoys a AAA rating as a borrower. It is neither efficient nor feasible for smaller, privately-owned businesses with an amortising debt structure,

[7] Draft Report, August 2018, p. 38.

[8] Draft Report, August 2018, p. 25.

[9] Sydney Water Annual Report 2016-17, p. 82.

[10] Other publicly-owned water businesses hold significantly less inflation-linked debt than does Sydney Water. For example, WaterNSW's 2017 annual report (p. 84) suggests that only 0.6% of WaterNSW's fixed rate debt (approximately ($666 million) comprised inflation-indexed debt.

such as SDP, to undertake the same approach. IPART should not, in its pursuit for consistency across businesses, overlook the fact that SDP's circumstances are fundamentally different from those of other businesses regulated by IPART. Therefore, a one-size-fits all approach is not appropriate in this instance.

- IPART has proposed that the actual test would use each business's actual cost of debt. If IPART is correct that the mix of nominal and real debt varies between businesses, so too would the way in which IPART must compute the financial metrics for the actual test: IPART would need to use a pure nominal rate for businesses that have raised only nominal debt, and a blended nominal/real rate for businesses with a mix of nominal and real debt. So, IPART already envisages an inconsistent treatment across businesses when implementing the actual test.
- If IPART favours an approach to financeability that is completely consistent across all businesses, then the benchmark financeability test should reflect a debt management strategy that is feasible for all businesses to implement, not just some. All businesses regulated by IPART can feasibly issue nominal, coupon-paying debt. However, only some businesses can raise inflation-indexed and/or low-coupon debt in order to manage cash flow mismatches. A benchmark financeability test that reflects a debt management approach that all businesses can feasibly implement would entail use of a nominal, rather than a real, cost of debt.

Moody's preferred interest coverage ratio for water utilities is the AICR

Another reason IPART gives for its Draft Decision to use a real cost of debt in the benchmark test is that Moody's preferred metric for assessing interest coverage is the AICR, which is computed using real rather than nominal interest expenses. SDP supports the principle that the way IPART computes the relevant financial metrics used in its financeability test should be consistent with the way these metrics are computed by rating agencies. However, SDP submits that IPART is mistaken in its understanding of Moody's approach to rating Australian water utilities.

IPART is correct that Moody's global Rating Methodology identifies the AICR as its preferred measure of interest coverage. However, SDP understands that Moody's does not use the AICR when rating water utilities in Australia. Rather, Moody's uses the Funds From Operations (FFO) interest coverage ratio to assess the interest coverage of Australian water utilities. This can be seen in Table 1 and Table 2 below, which present the key financial metrics that Moody's had regard to in its October 2017 rating opinion for Sydney Water and in its January 2018 rating opinion for Hunter Water, respectively.

Table 1: Key financial metrics used by Moody's to rate Sydney Water

	6/30/2014	6/30/2015	6/30/2016
FFO Interest Coverage	2.2x	2.5x	2.4x
Net Debt/ Regulated Asset Base	53.1%	51.6%	57.7%
FFO/ Net Debt	8.1%	9.6%	7.8%
RCF/ Net Debt	4.2%	6.3%	0.7%

Source: Moody's Credit Opinion, Sydney Water Corporation, October 2017, Exhibit 2, p. 3.

Table 2: Key financial metrics used by Moody's to rate Hunter Water

	FY15	FY16	FY17
FFO Interest Coverage	1.9x	2.2x	2.3x
Net Debt/ Regulated Asset Base	52.1%	52.3%	50.7%
FFO/Net Debt	5.3%	6.8%	7.3%
RCF/ Net Debt	2.2%	5.0%	4.2%

Source: Moody's Credit Opinion, Hunter Water Corporation, January 2018, Exhibit 2, p. 2.

As IPART acknowledges in its Draft Report, the FFO interest coverage ratio assumes a notional interest expense.[11] SDP submits that IPART's financeability tests should be consistent with the metrics Moody's

[11] Draft Report, August 2018, p. 37.

uses to rate Australian utilities.[12] This would entail using nominal, rather than real, interest expenses when conducting both the benchmark and actual tests.

Financial metrics to be used in the financeability test (Draft Decisions 15 & 16)

IPART proposes in the Draft Report to:

- Use the AICR, adjusted FFO/Debt ratio and the gearing ratio as the relevant financial metrics to implement the benchmark and actual tests (Draft Decision 15); and
- Calculate the FFO interest coverage ratio and the FFO/Debt ratio for the actual test as diagnostic tools only (Draft Decision 16).

IPART also states in the Draft Report that it does not support the use of other ratios, including the Debt Service Coverage Ratio (DSCR) proposed by SDP and NSW Treasury in response to the Issues Paper.

SDP submits that IPART should:

- Use the FFO interest coverage ratio instead of the AICR;
- Use the FFO/Debt ratio rather than the adjusted FFO/Debt ratio; and
- Permit businesses to propose additional financial metrics for IPART's consideration, such as the DSCR, during the price reset process—provided the businesses can justify that their inherent characteristics mean consideration of additional metrics are warranted.

Adjusted Interest Coverage Ratio

IPART proposes in the Draft Report to replace its existing measure of the interest cover ratio—the FFO interest coverage ratio—with the AICR, because the AICR utilises a real cost of debt, whereas the FFO interest coverage ratio utilises a nominal cost of debt.

For the reasons explained above, SDP considers that IPART should use a nominal cost of debt, rather than a real cost of debt, when conducting financeability tests. This implies that IPART should use the FFO interest coverage ratio in place of the AICR, when conducting financeability tests. In other words, the FFO interest cover ratio should not be used merely as a diagnostic tool (as proposed in Draft Decision 16).

A key reason for IPART's adoption of the AICR in the Draft Report is that Moody's uses the AICR as its preferred measure of interest coverage in its global Ratings Methodology. As discussed above, Moody's uses the FFO interest coverage ratio to rate Australian water utilities because these firms' debt portfolios are largely or entirely comprised of nominal debt.

SDP also notes that the version of the AICR that IPART proposes in the Draft Report differs from the AICR adopted by Moody's in its global Rating Methodology. Moody's specifies the AICR as follows:[13]

$$\frac{\text{FFO} + (\text{Interest Expense} - \text{Inflation Accretion}^{13}) - \text{Capital Charges}}{(\text{Interest Expense} - \text{Inflation Accretion})}$$

By contrast, IPART defines the AICR as:

$$AICR_t = \frac{FFO_t + [r_t + inf(d)_t] - inf(d)_t}{[r_t + inf(d)_t] - inf(d)_t} = \frac{FFO_t + [r_t]}{[r_t]}$$

---

[12] SDP's submission in response to the Issues Paper noted that aspects of Moody's global Rating Methodology have limited relevance to regulated water utilities in Australia. Moody's uses the FFO interest coverage ratio when rating water utilities in Australia, while its global Rating Methodology specifies the AICR as Moody's preferred measure of interest coverage, is an example of this.

[13] Moody's, Rating Methodology – Water Utilities, June 2018, p. 19.

These two versions of the AICR differ in one respect: IPART's version assumes that capital charges (which enters as a term in the numerator of Moody's version) is zero.[14] The Draft Report provides no explanation as to why IPART proposes to assume zero capital charges when computing the AICR.

Moody's explains that capital charges are subtracted from the numerator of its version of the AICR in order to recognise that regulated businesses require some cash flow in order to replenish their RABs:[15]

> *The Capital Charges represent the portion of revenues (and thus FFO) that is needed to replenish the regulated asset base. The maintenance of a stable asset base ensures that the earned return does not fall due to a decline in the asset base.*

Regulators in the in the UK, such as Ofgem and Ofwat, use the AICR when conducting financeability assessments.[16] These regulators do not assume (as IPART proposes to do) that capital charges are zero. Rather, when calculating the AICR, Ofgem and Ofwat set capital charges equal to the value of the regulatory depreciation allowance (or the equivalent in those regulatory regimes).[17]

IPART's assumption that capital charges are zero, when computing the AICR, is problematic because such an AICR would be inconsistent with the AICR benchmark proposed by IPART. This is because the AICR benchmark that IPART proposes to adopt in its financeability tests (1.8x) is derived using the AICR ranges presented in Moody's global Rating Methodology, which take account of capital charges. By contrast, IPART's measure of the AICR assumes that capital charges are zero. As a result, the AICR that would be computed by IPART would be overstated, relative to the AICR benchmark derived from Moody's global Rating Methodology.[18] This would tend to bias the results of the financeability tests in favour of being easier to pass, by making the interest coverage of the business appear stronger than is in fact the case.

SDP considers that if IPART decides to use the AICR in its financeability tests, the version of the AICR used should be consistent with the AICR benchmarks adopted. This means that IPART should not assume that capital charges are zero. Rather, IPART should follow the approach used by UK regulators by setting capital charges (in the Moody's version of the AICR) equal to depreciation.

Adjusted Funds From Operations / Debt

IPART has proposed to use an adjusted FFO/Debt ratio, rather than the standard FFO/Debt ratio. The difference between these ratios is that the former uses the real cost of debt by stripping out inflation, whereas the latter uses the nominal cost of debt.

As explained above, SDP's position is that IPART should use only the nominal cost of debt in its financeability tests. Therefore, SDP proposes that IPART should use the standard FFO/Debt ratio rather than the adjusted FFO/Debt ratio in its financeability tests. In other words, the FFO/Debt ratio should not be used merely as a diagnostic tool (as proposed in Draft Decision 16).

SDP recommends that IPART engages directly with Moody's to clarify Moody's use of credit metrics, in particular the use of real and nominal credit metrics, when rating water and other utilities in Australia.

Debt Service Coverage Ratio

SDP submitted in its response to the Issues Paper that businesses should be permitted to propose (through the price reset process) any additional financial metrics that reflect their particular circumstances (and the circumstances of an efficient business with the same risk characteristics). SDP explained that:

---

[14] IPART acknowledges this explicitly in footnote 46 of the Draft Report.

[15] Moody's, Rating Methodology – Water Utilities, June 2018, p. 19.

[16] Regulated businesses in the UK can and do issue large quantities of inflation-indexed debt because the UK has a relatively deep market for inflation-indexed corporate bonds.

[17] Ofgem, RIIO-ED1: Draft determinations for the slow-track electricity distribution companies Financial Issues, 30 July 2014, p. 38; Ofwat, Delivering Water 2020: Our final methodology for the 2019 price review, December 2017, p. 197.

[18] Put another way, if Moody's had assumed, like IPART, that capital charges were zero, the AICR ranges in the global Rating Methodology would have been higher, and the AICR benchmark adopted by IPART would presumably be higher too.

- The Debt Service Coverage Ratio (DSCR) measures the ability of businesses to repay principal as well as interest. It is therefore a key metric considered by lenders to any firm operating under a limited term concession because such firms must repay all debt obligations (i.e., interest and principal) within the term of the concession;
- SDP operates under a limited term concession, and the DSCR is a key metric monitored by SDP's financiers; and
- The DSCR is an appropriate financial metric for IPART to consider for any business in SDP's circumstances.

NSW Treasury also submitted that IPART should consider the DSCR, noting that:[19]

> *DSCR is a measure of available cash flow to pay all current obligations, both interest and principal. Used in conjunction with an interest coverage test, the DSCR would highlight when an entity's funding is concentrated on current debt. DSCRs are included in many syndicated loan packages and are almost always seen in project finance debt.*

SDP agrees with all of these points made by NSW Treasury.

IPART concludes in the Draft Report that it does not support the inclusion of additional ratios because:[20]

- It considers that the ratios proposed in the Draft Report—particularly the AICR and the FFO/Debt ratio—are sufficient to assess the impact of IPART's pricing decisions on the businesses' financeability;
- Whether regulated businesses decide to use the cash flows generated by IPART's pricing decisions "to fund dividend payments, pay down debt or build capital reserves, is outside the scope of the financeability test."
- To the extent that additional ratios proposed by businesses are not used by rating agencies in their methodologies, it would be difficult to establish a target ratio that a BBB rated business would need to meet. IPART states explicitly that it does not have the information required to compute a target DSCR.
- In practice, the depreciation allowance in the building block approach should provide an allowance that meets principal repayments.

SDP makes the following points in response:

- SDP does not have a choice over whether it uses the cash flows generated by IPART's pricing decisions to repay its debt—this is a binding condition of SDP's limited term concession, and is a matter that is beyond SDP's control. As SDP has noted, this requirement is not peculiar to SDP. Any business in SDP's circumstances (i.e., operating under a limited term concession) would similarly face this constraint. As SDP noted in its response to the Issues Paper, the requirement on SDP to repay its debt obligations in full within the concession term is an immutable characteristic of SDP that would be shared by a benchmark efficient entity in the circumstances of, and with a similar degree of risk as is faced by SDP. The binding requirement on SDP to repay interest and principal within the term of the concession should be distinguished from other choices (e.g., dividend policy or reserves policy) that are genuinely within the control of businesses.
- SDP notes that rating agencies—including Moody's, Standard & Poor's and Fitch—do in fact use the DSCR as the primary financial indicator when rating Public-Private Partnership (PPP) and Project Finance Initiative (PFI) projects.[21] Whilst SDP does not operate under a PPP or a PFI arrangement, SDP does share an important feature with these structures. Specifically, SDP operates under a fixed term concession, and nearly all PPP and PFI agreements operate under a fixed term. This means that, as in SDP's case, any debt raised to finance PPP and PFI projects must be repaid in full within the

[19] NSW Treasury response to Issues Paper, 1 June 2018, p. 3.
[20] Draft Report, August 2018, p. 42.
[21] Moody's, Rating Methodology – Generic Project Finance, April 2018; Standard & Poor's, Project Finance Operations Methodology, September 2014; Fitch, Rating Criteria for Infrastructure and Project Finance – Master Criteria, July 2018.

term of the agreement (because the borrower would have no way of servicing its debt beyond the term of the PPP or PFI agreement). This is known as an amortising debt profile. As SDP shares this characteristic with PPP/PFI projects, it is reasonable that any financeability tests undertaken by IPART in relation to SDP also include the DSCR, alongside other metrics appropriate for regulated water utilities.

This requirement to repay in full all debt obligations over the lifetime of the PPP/PFI project means that rating agencies focus on the DSCR to assess the debt coverage of such projects. SDP notes that the major rating agencies' published methodologies for PPPs and PFIs do provide data on DSCR benchmarks. For example, Table 3 below presents the DSCR benchmarks set out in Moody's global Rating Methodology for generic project finance with fully amortising debt profiles. As these are global benchmarks, it may be more appropriate for IPART to examine Moody's actual rating decisions for Australian PPP/PFI projects to derive benchmarks appropriate to Australia. It may also be appropriate for IPART to engage with Moody's and other rating agencies to understand how those benchmarks may differ (if at all) if they were to be used to rate a regulated water business in Australia under a limited term concession. These data could then be used by IPART to develop appropriate DSCR benchmarks for use in its financeability tests.

Table 3: DSCR benchmarks used by Moody's in its global Rating Methodology for Generic Project Finance with amortising debt profile

Sub-factor	Sub-factor Weighting	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
					Amortizing Debt Profile				
DSCR	**30%**								
DSCR (Cost Recovery)					Score DSCR at the level of off-taker rating				
DSCR (Low) *2		≥ 5x	3.5x - 5x	2x - 3.5x	1.4x - 2x	1.15x - 1.4x	1.05x - 1.15x	1x - 1.05x	< 1x
DSCR (Medium) *3		≥ 7x	5x - 7x	3.5x - 5x	2x - 3.5x	1.4x - 2x	1.2x - 1.4x	1.1x - 1.2x	< 1.1x
DSCR (High) *4		≥ 10	7x - 10x	5x - 7x	3.5x - 5x	2 - 3.5x	1.4x - 2x	1.2x - 1.4x	< 1.2x

Source: Moody's, Rating Methodology – Generic Project Finance, 25 April 2018, p. 22.

- IPART suggests that the depreciation allowance in the building block approach should provide an allowance that meets principal repayments. However, this is an assumption by IPART. It is true that the depreciation allowance provides a return of capital (i.e., the RAB), a portion of which relates to the debt capital of the business. The question the financeability test ought to test is whether this stream of cash flow is sufficient to repay the business's debt principal as well as interest costs. The speed of cash flow, via the depreciation allowance, depends on choices that IPART will make about the lifetime of regulated assets. If assumed asset lives are too long, then the regulatory depreciation allowance may not be adequate to repay principal and interest. Simply assuming that the depreciation allowance is sufficient assumes away the possibility that those allowances may be inadequate. The DSCR provides a way to test this, without the need to make assumptions about the sufficiency of cash flows.

Financial metric benchmarks (Draft Decision 18)

IPART has proposed to replace its previous approach of using financial metric benchmark bands, which were sometimes difficult to interpret, with clear thresholds. SDP supports this approach and considers that this would improve the transparency of IPART's financeability tests—provided the thresholds are set appropriately. Table 4 below summarises the financial metric benchmark thresholds that IPART proposes to adopt in its financeability tests.

Table 4: Financial metric benchmarks proposed by IPART in Draft Report

	Adjusted interest coverage ratio	FFO interest coverage	FFO / debt	Debt / RAB
	Higher is better	*Higher is better*	*Higher is better*	*Lower is better*
IPART (Draft decision)	**>1.8x**	**>1.8x**	**>6%**	**<70%**
IPART (2013)[a]	NA	1.4-2.9x	5-10%	60-100%
Moody's (Baa) – Water[b]	1.5-2.5x	2.5-4.5x	10-15%	55-70%
Moody's (Ba) – Water[b]	1.2-1.5x	1.8-2.5x	6-10%	70-85%
Moody's (Baa) – Energy networks[c]	1.4-2x	2.8-4x	11-18%	60-75%
S&P Global (Significant)[d]	NA	2-3x	9-13%	NA
S&P Global (Aggressive)[d]	NA	1.5-2x	6-9%	NA
Fitch Ratings (BBB)[e]	NA	1.5x	5.5%	70%

Source: Draft Report, Table 5.4, p. 45.

When interpreting the thresholds proposed by IPART in the Table above, it is worth bearing in mind that a computed metric that sits:

- *above* the benchmarks for the AICR, FFO interest coverage ratio and the FFO/Debt ratio indicates that the business is financeable; and
- *below* the benchmark gearing ratio indicates that the business is financeable.

IPART appears to have selected benchmarks that would make passing its financeability test very easy, if compared to the Moody's benchmarks presented in Table 4.[22] For example:

- The benchmark AICR of 1.8x proposed by IPART sits below the midpoint (i.e., 2.0x) of the Moody's benchmark range for Baa-rated regulated water utilities presented in Table 4. We note that the Baa band encompasses the rating notches Baa1, Baa2 and Baa3. The Baa2 notch (the midpoint of the Baa band) corresponds most closely with the target credit rating of BBB (Standard and Poor's methodology) adopted by IPART.
- The benchmark FFO interest coverage ratio of 1.8x proposed by IPART sits at the very bottom end of the Moody's benchmark range for Ba-rated regulated water utilities presented in Table 4. We note that the Ba band encompasses the rating notches Ba1, Ba2 and Ba3—all of which are sub-investment grade. Therefore, a business that just passes IPART's financeability test on the FFO interest coverage ratio (by achieving a ratio just above 1.8x) would have an interest coverage consistent with a sub-investment grade firm, well below IPART's target credit rating of BBB. Such a firm cannot be said to be financeable. Therefore, such a result would objectively represent a false pass of the financeability test.
- Similarly, the benchmark FFO/Debt ratio of 6% proposed by IPART sits at the very bottom end of Moody's benchmark range for Ba-rated regulated water utilities presented in Table 4. Once again, a firm that achieves a bare pass on IPART's financeability test on this metric would, on the information presented in Table 4, likely be viewed by Moody's as sub-investment grade, well below IPART's target credit rating of BBB. Such a business could not be considered truly financeable.
- The benchmark gearing ratio of 70% proposed by IPART is at the top-end of the Moody's benchmark range for Baa-rated utilities presented in Table 4, and the very bottom end of Moody's range for Ba-

[22] SDP notes that the benchmarks proposed by IPART are largely consistent with Fitch's benchmarks. If IPART has given Fitch's thresholds a determinative role in informing its benchmarks, this is neither acknowledged nor explained in the Draft Report. The rationale for attaching such weight to Fitch's thresholds, and virtually none to Moody's thresholds, would be unclear to SDP—particularly since IPART refers very heavily to Moody's methodology in other areas of the Draft Report and to justify a number of its Draft Decisions.

rated utilities. Hence, a business that achieves such a gearing ratio would, on that metric alone, be viewed by Moody's as only borderline investment grade, and therefore possibly below IPART's target credit rating of BBB.

SDP notes that Moody's seems to apply different thresholds to those set out in its global Rating Methodology when rating businesses in Australia. SDP understands that when selecting the benchmarks proposed in the Draft Report, IPART may have taken account of the actual thresholds Moody's had applied to downrate or uprate Australian businesses in recent credit opinions. However, the Draft Report does not present any Moody's evidence on rating thresholds for Australian firms. The only Moody's rating thresholds referred to in the Draft Report are those drawn from the Moody's global Rating Methodology, reproduced above in Table 4. Further, when IPART discusses how it selected the proposed benchmarks, it refers explicitly to the thresholds in the global Rating Methodology rather than thresholds used by Moody's to rate Australian businesses.[23]

SDP would support IPART taking account of the thresholds used by Moody's when rating Australian businesses to inform its benchmarks. However, SDP considers that if IPART makes use of such evidence, it should be set out transparently and in detail.[24] Unless IPART publishes this information, stakeholders cannot comment meaningfully on the appropriateness of the evidence IPART has relied on, or on how IPART has interpreted the evidence used to set the benchmarks.

SDP's adviser Titanium Advisory reviewed Moody's benchmarks and this information was included in SDP's pricing submission in 2016. Table 5 below reflects the relevant benchmarks used by Moody's in rating Australian regulated energy networks.

Table 5: Financial metric benchmarks used by Titanium Advisory

	A3	Baa1	Baa2	Baa3	Ba1
FFO interest cover	>2.9x	2.4x-2.9x	1.9x-2.4x	1.5x-1.9x	<1.5x
Debt/RAB[1]	<73%	73%-80%	80%-85%	85%-90%	>90%
FFO/Debt	>12%	9%-12%	7%-9%	5.25%-7%	<5.25%

Source: Titanium Advisory, SDP Financeability Review (Confidential), 10 October 2016.

SDP makes the following observations about the benchmarks proposed by IPART and the benchmarks used by Titanium Advisory:

- Titanium Advisory did not employ the AICR, so IPART's AICR benchmark would not have been informed by Titanium Advisory's analysis.[25]
- IPART's FFO interest coverage benchmark (1.8x) sits below the lower bound of Titanium Advisory's range for the Baa2 rating. Hence, whilst IPART's proposed benchmark would, on Titanium Advisory's analysis be investment grade, it would nevertheless fall below IPART's target rating for the financeability test. In other words, a business that just passed IPART's financeability test on this metric would, under Titanium Advisory's benchmark ranges, be rated below the target credit rating.
- The same is true for IPART's FFO/Debt benchmark (>6%), which is below the range Titanium Advisory recommended for a Baa2 rating.

In SDP's view, it would be inappropriate for the benchmarks used by IPART in its financeability test to be set in a way that is consistent with a credit rating that is below the target credit rating specified by IPART in

[23] Draft Report, August 2018, pp. 45-46.
[24] This detail should include the individual rating opinions that IPART has examined, the rating thresholds set out in those opinions, and any assumptions IPART has applied when interpreting that information.
[25] As Moody's evidently does not use the AICR frequently to rate Australian businesses, SDP presumes that IPART's proposed AICR benchmark was derived using Moody's global Rating Methodology.

its financeability test. Benchmarks set on that basis would render the target credit rating meaningless, and may result in businesses passing the financeability test, when in reality they are not financeable. Such an outcome would be highly undesirable because it would defeat the purpose of the financeability test.

IPART indicates in the Draft Report that it has deliberately "set the cash flow target ratios at a lower level" (i.e., at a level that would favour businesses passing the financeability test) because:[26]

- *It had regard to IPART's recent updates to the cost of debt in the WACC—noting that these updates should represent a material reduction in interest rate risk for the regulated businesses, which means that IPART can set the cash flow target ratios at a lower level.* SDP agrees that the changes IPART made to its cost of debt methodology in 2017 are important improvements. However, it does not follow that the thresholds for passing IPART's financeability tests should be lowered as a consequence of an improvement in IPART's regulatory approach. There are many other potential causes of financeability problems, apart from the cost of debt methodology—such as errors or unreasonable regulatory judgements in other aspects of IPART's pricing decisions, or cash flow timing mismatches. Setting low thresholds for passing the financeability test, in response to an improvement in IPART's regulatory framework in one narrow area, reduces the likelihood of detecting a financeability problem that might stem from other causes. SDP considers that this would be inappropriate.

- *As IPART has elected to set a threshold, rather than a range, it holds that the target ratio set should be at the lower end, rather than the midpoint, of the ranges used by credit rating agencies.* SDP agrees with this approach, SDP, however, does not see how it would be appropriate to set those thresholds below the target credit rating of BBB/Baa2.

In SDP's view, IPART should set its financial metric thresholds such that it is more likely for a financeability problem to be detected than not. This is because IPART's proposed response to the outcome of a financeability test is asymmetric. Under the approach set out in the Draft Report:

- If IPART identifies no financeability problem, it would take no further action. Therefore, if a genuine financeability problem exists, but it is not detected because the thresholds have been set in such a way that tests can be passed too easily, then the chances of failing to remedy a genuine financeability problem would be relatively high.

- If IPART identifies a potential financeability problem, its response would be to investigate further to identify the cause of the problem before deciding what remedy (if any) should be implemented. Hence a positive finding of a potential financeability problem could be followed by no further action upon further investigation by IPART if, for example, IPART found that the financeability problem was caused by imprudent or inefficient decisions by the business.

Given this asymmetry, it would be more desirable for the test to identify potential financeability problems that turn out to require no further action than to overlook genuine financeability problems.

This would require a raising of the FFO interest coverage ratio and FFO/Debt ratio benchmarks,[27] relative to the benchmarks presented in Table 5.4 of the Draft Report.

SDP submits that if IPART elects to maintain the benchmarks proposed in the Draft Report, then the way it interprets a pass or failure of the financeability test requires modification. In particular, failure of a financeability test that is relatively easy to pass should be viewed by IPART as a matter of concern, even if that failure occurs in isolated years, as this could be symptomatic of a more serious, undiagnosed financeability problem. In such circumstances, IPART should be more inclined to take steps to address the financeability problem, provided that the source of the problem is not imprudent or inefficient decisions taken by the business.

---

[26] Draft Report, August 2018, pp. 45-46.

[27] If IPART determined to retain the AICR, it would need to raise the AICR benchmark as well. However, SDP considers that the AICR should not be used by IPART as nominal rather than real interest expenses should be used, and because Moody's uses nominal interest costs when rating regulated water businesses in Australia.

Remedies (Draft Decisions 21, 22, 23 and 24)

IPART has decided in the Draft Report that:[28]

- If the source of a concern is due to regulatory error, IPART would correct the regulatory error by reassessing our pricing decision.
- If the source of a concern is due to imprudent or inefficient business decisions, IPART would alert the business's owners to the potential need to inject more equity, accept a lower rate of return on equity, or both.
- If the source of a concern is due to temporary cash flow problems, the Tribunal could consider an NPV-neutral adjustment to prices.

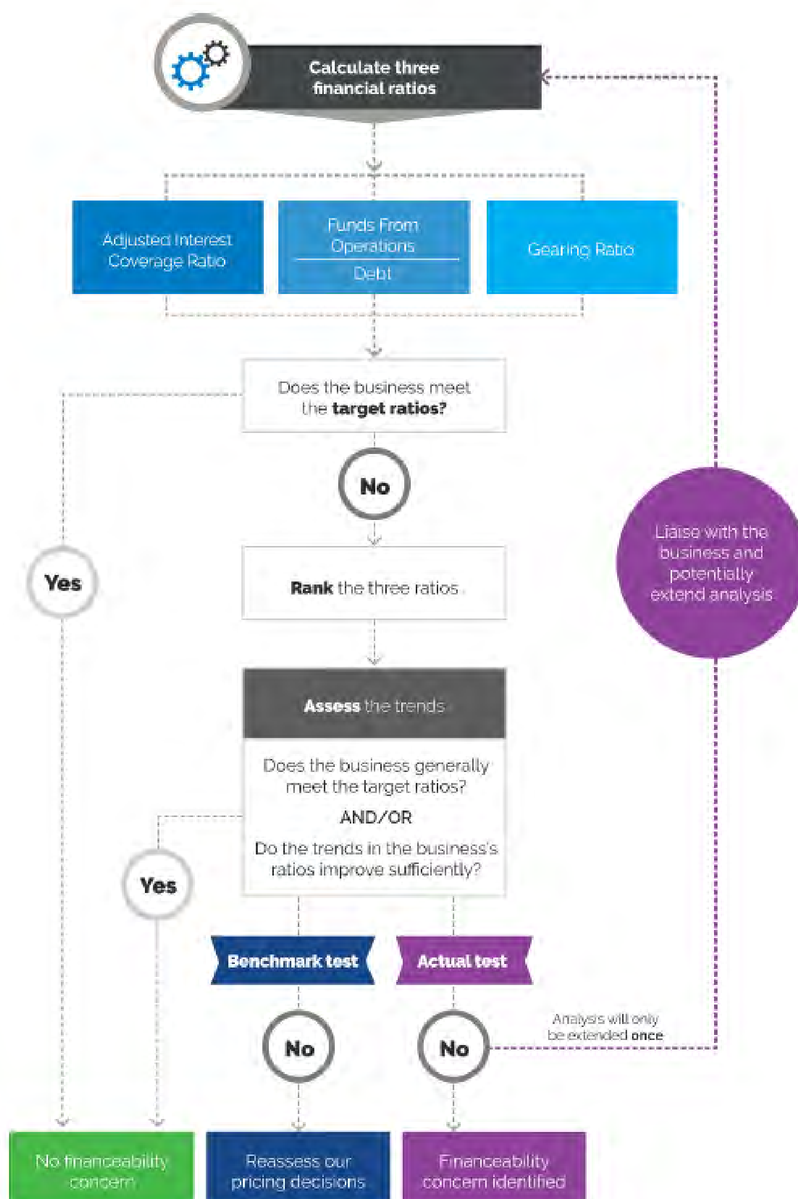
SDP agrees in principle with these potential remedies. However, as explained below, SDP considers that some further clarification of these potential remedies would be desirable in order to avoid future ambiguity.

Remedy for regulatory error or an unreasonable regulatory judgement

SDP agrees that the appropriate remedy for a financeability problem caused by a regulatory error is for IPART to reassess and correct its pricing decision. SDP submits that it would be helpful if IPART's Final Report were to state explicitly that the correction of aspects of IPART's pricing decision may entail a NPV-positive adjustment to the notional revenue requirement.Figure 1 below reproduces from the Draft Report the process IPART proposes to follow to identify potential financeability concerns. The decision process relating to the actual test suggests that there is no pathway for IPART to reassess its pricing decision, even if a genuine financeability problem is identified under the actual test. The diagram indicates that IPART's response to a failure of the actual test would be for IPART to liaise with the business and potentially extend its financeability analysis. This fails to recognise that one potential reason a business might fail the actual test is because of an error or an unreasonable regulatory judgement in the pricing decision—the appropriate response to which would be a reassessment of the pricing decision and correction of the problem.

[28] Draft Report, August 2018, p. 53.

Figure 1: IPART's proposed process for identifying a financeability concern

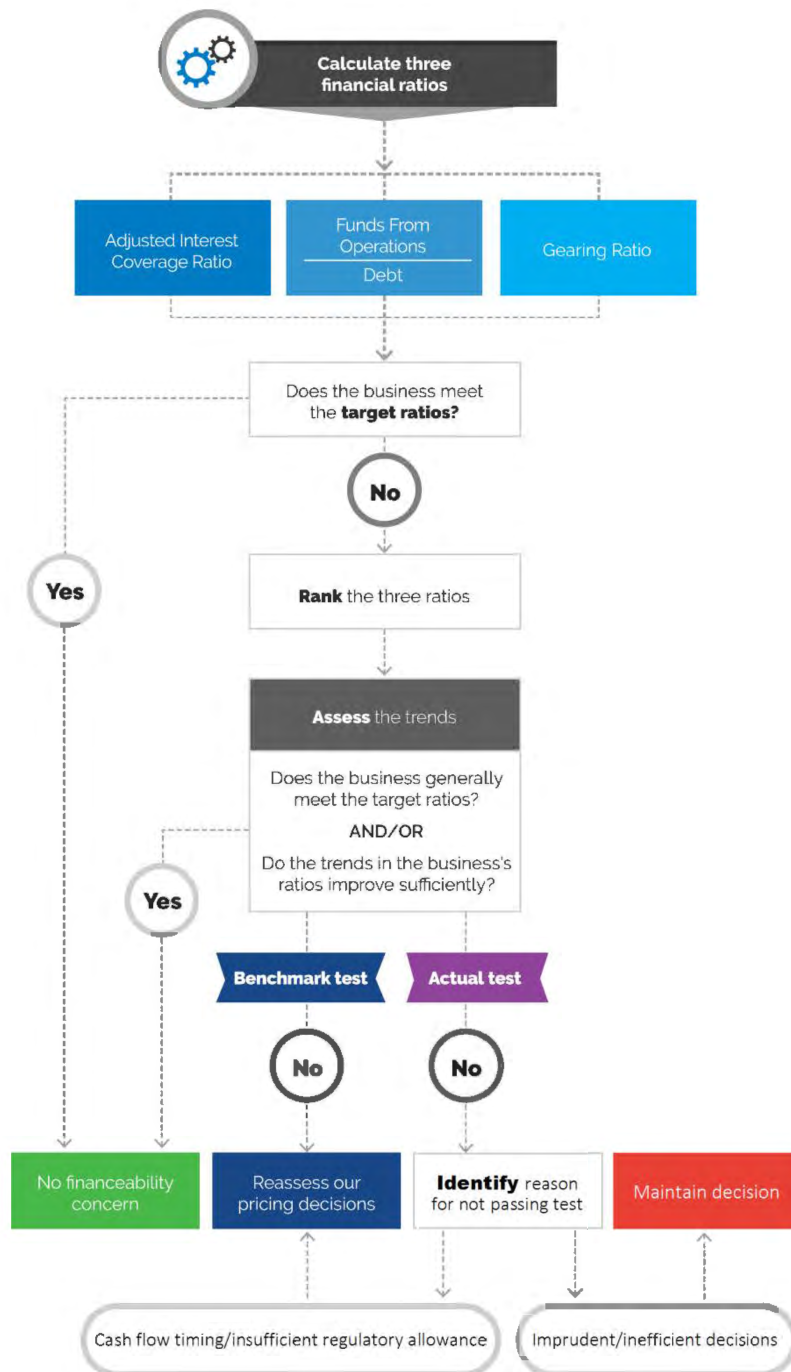


Source: Draft Report, August 2018, Figure 5.1, p. 48

Therefore, SDP recommends that the process for identifying potential financeability concerns should be modified along the lines of the diagram in Figure 2.[29]

[29] For the avoid avoidance of doubt, the use of the AICR in Figure 2 below or the omission of the DSCR does not imply acceptance of the financial ratios proposed by IPART. SDP's views on the appropriate financial ratios for use in the financeability test are set out above in this submission.

Figure 2: SDP's proposed process for identifying a financeability concern



Source: SDP modifications of Figure 5.1 in the Draft Report.

This revised process shows that:

- If a business fails the actual test, the first response should be for IPART to investigate and identify the reason for the failure. This should involve further engagement with the business, and may potentially also involve further data collection, extension of the analysis using more years of information, and giving consideration to whether there are other factors unaccounted for in the previous analysis that should be included within the financeability assessment.
- Having undertaken these further investigations, if the source of the concern is found to be imprudent or inefficient decisions by the business, then it should be left to shareholders to address the consequences of the financeability problem. SDP considers that IPART should provide the business

with detailed reasons for any preliminary findings of this nature, and an opportunity to respond, before IPART finalises its analysis.

- If, however, the source of the financeability concern for the actual business is a cash flow timing problem, a regulatory error, or an unreasonable regulatory judgement, IPART should reassess its pricing decision—either to implement a NPV-neutral revenue adjustment to address the temporary cash flow problem, or to correct the regulatory error.

Remedy for imprudent or inefficient business decisions

SDP agrees with IPART's view that if the cause of the financeability problem is inefficient or imprudent decision taken by the business, then shareholders rather than consumers should address the concern. However, SDP submits that IPART should only judge whether past decisions taken by businesses were efficient or prudent on the basis of information available to businesses at the time, rather than with the benefit of hindsight. This is a key principle underpinning ex ante incentive-based systems of regulation.

Further, as noted above, if IPART suspects that the source of a financeability problem is an imprudent or inefficient decision made by the business, it should consult with businesses and provide an appropriate opportunity for businesses to respond before making a finding either way on the matter.

Remedy for temporary cash flow problems

SDP agrees with IPART that if the source of the financeability problem is a temporary cash flow mismatch, then the appropriate solution would be a NPV-neutral adjustment.

In discussing how it might implement NPV-neutral adjustments, IPART states that:

- First, it would consider whether the adjustment could be implemented over the regulatory period under review. The difficulty with this approach is that a very large reprofiling of revenues within a single period (in the event of a very severe financeability problem) could create significant price volatility for consumers. SDP agrees that such an outcome would be undesirable for consumers. SDP also noted in its response to the Issues Paper that restricting a large NPV-neutral reprofiling of revenues to a single regulatory period may alleviate a financeability problem in some years, but if the adjustment were sufficiently large, it could actually create a new financeability problem (by creating a cash flow shortfall) in other years of the regulatory period. For these reasons, SDP considers that IPART should avoid restricting NPV-neutral adjustments to a single regulatory period, unless those adjustments are relatively modest.
- If a NPV-neutral adjustment within a single period would create excessive price volatility, IPART proposes to either:
- Make an ad hoc adjustment to the notional revenue requirement over the next regulatory period. This would be implemented by IPART publishing the value of the future adjustment, in present value terms, thus allowing a future Tribunal to "consider the adjustment in future periods." This, in SDP's view, would be the least desirable option. This is because (as SDP noted in its response to the Issues Paper) there would be no practical way for a current Tribunal to commit a future Tribunal to making such an adjustment. Simply publishing the present value of any future, hoped-for revenue adjustment would not guarantee that such an adjustment would actually be implemented in the next period. Such a decision would be at the discretion of the Tribunal conducting the next price reset. This would create significant uncertainty for consumers and for businesses. For this reason, SDP disagrees strongly with this approach.
- Increase the regulatory depreciation allowance (and, therefore, prices) in the forthcoming regulatory period. This would result in lower revenue allowances and prices in future periods (all else remaining equal). Such an adjustment would be NPV-neutral over the lifetime of the assets. This is a standard approach adopted by regulators in other jurisdictions for making NPV-neutral adjustments for financeability problems, and is SDP's preferred option.

IPART suggests that:[30]

[30] Draft Report, August 2018, p. 56.

If the Tribunal decided that an NPV-neutral adjustment is not feasible, we would reclassify the financeability concern as a problem that required the owners of the business to resolve it; for example, by accepting a lower return on equity in some periods of the determination (potentially offset by higher returns in others).

SDP disagrees strongly with this proposed approach. Any financeability problem that was not caused by imprudent or inefficient decisions by the business ought to be addressed through either a NPV-neutral adjustment or a NPV-positive adjustment to the notional revenue requirement. A NPV-neutral adjustment that IPART considers cannot be implemented:

- Must, by definition, have been caused by a cash flow timing problem and not imprudent or inefficient management decisions (since, under IPART's proposed approach, NPV-neutral adjustments are reserved as a remedy for cash flow timing mismatches); and
- Must relate to a very serious financial problem.

For these reasons, it would be inappropriate for the burden of resolving such a financeability problem to fall on shareholders.

In SDP's view, almost any cash flow timing problem could probably be addressed feasibly through an adjustment to regulatory depreciation. This is because regulated assets are typically so long-lived that the cash flow adjustment required to address even a large financeability problem could be spread over a fairly long period of time, thus ensuring the price impacts on individual regulatory periods is relatively modest.

Definition of 'financeable' (Draft Decision 2)

IPART has proposed in the Draft Report the following objectives for the financeability tests:

- ensure our pricing decisions would allow an efficient investment-grade rated business to raise finance and remain financeable during the regulatory period (benchmark test), and
- assess whether the actual business would be financeable during the regulatory period (actual test).

SDP accepts these objectives for the financeability test. However, SDP considers that, for the avoidance of any future doubt, IPART should define clearly in the Final Report the meaning of the word "financeable."

The word "financeable" is not defined precisely in the Draft Report. This leaves open the possibility that the meaning of this word is reinterpreted incorrectly in future, when the test is actually applied. SDP notes that concept of "financeable" is used loosely and synonymously in the Draft Report with the term "financially sustainable", which itself is vague and ill-defined.

Further, when discussing the rationale for a financeability test in the Draft Report, IPART states the following:[31]

Our view is that our financeability test is effective, and the potential cost of a regulated business failing is very high compared to the relatively small regulatory cost of conducting the test.

In this statement IPART implies (perhaps inadvertently, but nevertheless incorrectly) that the role of the financeability tests is to ensure that regulated businesses do not fail. Insolvency (or financial failure) is a very different (and much more severe) outcome than non-financeability (i.e., the inability to maintain an investment grade credit rating and, therefore, to raise debt finance at all or on reasonable terms).[32] It is very unlikely that any business regulated by IPART would face insolvency. Hence, if the term 'financeable'

---

[31] Draft Report, August 2018, p. 13.

[32] Regulators have been known to confuse the concepts of "financeability" and "insolvency", resulting in poor regulatory outcomes. For example, in 2014 the Australian Energy Regulator (AER) published a draft decision for Ausgrid, an electricity distribution business, that reduced Ausgrid's opex allowances very materially. Ausgrid presented analysis to the AER that showed that the regulator's decision would have a material adverse impact on the business's financeability. In response to that analysis, the AER argued that Ausgrid had been unclear what it means by financeability, so the AER conducted its own analysis that checked if the business was at risk of insolvency. Not surprisingly, the AER found that the risk of insolvency was very low so maintained its opex decision. This decision was overturned on appeal by the Australian Competition Tribunal. For details, see: AER, Ausgrid distribution determination 2015−16 to 2018−19, Final Decision, Attachment 20; Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1.

is misinterpreted by IPART as the ability of a firm to avoid insolvency, then it is very unlikely that any business regulated by IPART would ever be found to be non-financeable—in which case, the financeability test would be redundant.

SDP suggests that IPART maintain the wording of the objectives of the financeability test, as set out in the Draft Report, but should clarify that the word "financeable" means to "maintain the BBB (Standard and Poor's methodology) credit rating set by IPART in its pricing decisions."

Data to be provided by businesses to IPART for the actual test (Draft Decision 7)

IPART states in the Draft Decision that in order to implement the actual test, it would collect data from businesses on current debt outstanding, forecast interest expense and dividend payments.[33] IPART would use this information to forecast the debt balance for the business in question for each year of the forthcoming regulatory period.

SDP considers that businesses could provide IPART with direct forecasts of debt levels for each year of the regulatory period, thus obviating the need to provide IPART with sensitive forecasts of dividends, and avoiding the need for IPART to derive estimates of future debt levels that may not actually match the levels of debt that the business intends to raise over the regulatory period.

[33] Draft Report, August 2018, p. 25.

frontier economics

ATTACHMENT 2

5 September 2018

Justin De Lorenzo
Chief Financial Officer
Sydney Desalination Plant
Suite 19, Level 17, Australia Square
264 George St
Sydney NSW 2000

Dear Justin,

Re: Opinion on IPART's Draft Decision on 2018 review of financeability tests

Sydney Desalination Plant Pty Limited (SDP) has asked Frontier Economics to provide an expert opinion on IPART's Draft Decision on its 2018 review of its approach to conducting financeability tests.[34]

Principles that should guide a regulator's implementation of financeability tests

Financeability tests are an important tool for assessing whether a regulatory pricing decision would likely allow an efficient firm to maintain over the forthcoming regulatory period the target, investment-grade credit rating assumed by the regulator when determining the firm's notional revenue requirement.

If a regulated business's credit rating falls below such a level, then it may only be able to raise new debt or refinance existing debt at a price that exceeds the allowed cost of debt. Consumers would ultimately bear the consequences of these additional borrowing costs, either through a higher cost of debt allowance in the future that raises prices, or (if the regulatory allowance is not adjusted upwards) through less investment by the firm, resulting in a lower quality of service to consumers. In any event, a reduction in the financeability of regulated businesses would not promote the long-term interests of consumers.

Clearly, if the objective of a financeability test is to prevent such outcomes from occurring, then the financeability test must be capable of identifying genuine financeability problems. In order to do this, the financeability test:

- Must be capable of assessing whether the pricing decision as a whole would give rise to a financeability problem. The application of a narrow test that is able to identify financeability problems arising from only some limited aspects of the regulator's pricing decision risks financeability concerns caused by regulatory errors, judgements or assumptions in other parts of the pricing decision going undiagnosed. Such a test would be a partial one only, and would in our view be incompatible with promoting the long-term interests of consumers.
- Must align as closely as possible with the approaches used by rating agencies when conducting rating assessments of firms that are comparable to (i.e., that face similar circumstances to) the

[34] IPART, *Review of our financeability test*, Draft Report, August 2018.

regulated businesses in question.[35] This is because the opinions of rating agencies inform very strongly the future borrowing costs of businesses by signalling to the financial markets at large the likely credit quality of the firms they rate. In our view, a regulator should align its financeability test with the approaches used by rating agencies in the following ways:

  - The regulator should use the same key financial indicators and metrics as is adopted by rating agencies in their rating assessments.
  - The regulator should be cognisant that rating agencies may use different financial metrics, or may compute metrics in different ways, to rate firms in different countries to reflect differing local circumstances. For example, we understand that when assessing the interest coverage of regulated water companies in the UK, Moody's employs real interest expenses since it is common for infrastructure firms in the UK to issue inflation-indexed debt. This reflects the relatively deep market for inflation-linked corporate debt in the UK. By contrast, we are advised that Moody's uses nominal interest costs when assessing the interest coverage of regulated water businesses in Australia. Moody's appears to have used nominal rather than real interest costs in recent credit opinions for Sydney Water (October 2017) and Hunter Water (January 2018). In those opinions Moody's used the FFO interest coverage ratio (which is calculated using nominal interest costs) rather than the Adjusted Interest Coverage Ratio (which is calculated using real interest costs).[36] The market for inflation-linked corporate debt in Australia is very thin, as shown by the data presented in Attachment 2 of SDP's June 2018 response to IPART's Issues Paper.

- Must use financial metric benchmarks that are consistent with the target credit rating used in its pricing decisions. If the regulator adopts benchmarks that are consistent with a weaker credit rating, a business that barely passes the financeability test may in fact be non-financeable, but this would not be diagnosed as such by the test. Tests that permit 'false passes' would not promote the long-term interests of consumers.

Key limitations of IPART's Draft Decision

We agree with most aspects of IPART's Draft Decision and consider that many of the changes proposed by IPART to its financeability test represent important improvements and advance regulatory best practice. However, we have identified a number of aspects of IPART's proposed financeability test that, in our view, are serious shortcomings that could undermine the ability of the test to diagnose genuine financeability problems.

[35] For the avoidance of doubt, we do not suggest that regulators should seek to replicate the rating processes of rating agencies. This is because rating agencies employ many judgments and qualitative considerations that would be impossible for a regulator to replicate. Further, most rating agencies take account of the quality of the regulatory environment when conducting their assessments. It would clearly be inappropriate and meaningless for regulators to opine (via the financeability test) on their own regulatory approaches. We simply mean that regulators should follow as closely as possible the quantitative techniques used by rating agencies when conducting rating assessments. The quantitative considerations (relating to the use of key financial metrics and indicators) typically play a significant role in rating agencies' rating opinions.

[36] Moody's Credit Opinion, Sydney Water Corporation, 10 October 2017, Exhibit 2, p. 3; Moody's Credit Opinion, Hunter Water Corporation, 31 January 2018, Exhibit 2, p. 2.

frontier economics

Completeness of financeability test

Firstly, neither IPART's benchmark test nor its actual test, as they are currently constituted, would be capable of identifying financeability problems arising from errors, judgments or assumptions in many important parts of IPART's pricing decisions, such as:

- Opex allowances;
- Capex allowances;
- Regulatory depreciation allowances; or
- Cost of equity allowances.

This is because both the benchmark test and the actual test assume, for each of these components of the pricing decision, that the efficient or actual costs equal the building block allowance.[37] In effect, this assumes that IPART has set the allowance for each of these components of the notional revenue requirement at the appropriate level. Hence, any error in the setting of these aspects of the pricing decision, which typically comprise the vast bulk of the notional revenue requirement, could not be detected by either the proposed benchmark test or the proposed actual test.

This means that the financial test proposed by IPART is partial only, because a firm may pass the tests specified by IPART, but may in fact face a genuine and serious financeability problem that ought to be addressed by means of a reassessment of the pricing decision. In our view, the financeability test must be capable of assessing whether the pricing decision as a whole would give rise to a financeability problem.

One concern that IPART may have in extending the financeability test to other aspects of the pricing decision is the risk that the financeability test could be used as a gaming device by regulated businesses—to challenge IPART's assessment of efficient building block allowances that make up the notional revenue requirement. Our view is that the financeability test should not be used deterministically to 'back-solve' for the appropriate level of allowances. Rather, the financeability test should be used to provide an early warning if some aspect of the regulatory decision might cause a financeability problem for regulated businesses.

This is important because, whilst IPART needs to decide on a particular level of allowance that it considers would be commensurate with the costs of an efficient benchmark business, in practice there can be a high degree of uncertainty about what constitutes efficient cost levels, and there may be a wide range of possible outcomes for IPART to select from. Faced with this uncertainty, it would be prudent for IPART to check that the allowances it proposes to set would not inadvertently cause a financeability problem for the firm, the consequences of which may be borne by consumers. If IPART were to conduct its test and find no evidence of a financeability problem arising from any of the major elements of its pricing decision, then that would be an indication that the allowances are appropriate. However, if the test indicates that there could be a problem, then the appropriate course of action for IPART would be to investigate further to understand whether in fact a genuine financeability problem would occur and, if so, what might be driving that problem. This is consistent with the approach to diagnosing financeability problems that IPART has proposed—except that it would apply to apply to all aspects of IPART's pricing decision, rather than narrow elements.

[37] Draft Decision, Table 4.1, p. 22.

Suppose, for instance, the financeability test indicated that an opex allowance proposed by IPART may cause a financeability problem. The next step would be for IPART to investigate what precisely is driving the financeability concern.

- If, following these investigations, IPART determines that the cause of the problem is an inefficient or imprudent decision by the business, then it would be appropriate for shareholders to deal with the opex shortfall and to address the associated deterioration in financeability. The process of investigation itself would facilitate a productive conversation between IPART and the business about the efficient level of opex and provide IPART with a valuable opportunity to learn more about the operation of the business.
- If, however, there is no evidence of imprudent or efficient decisions by the business, and there are a range of possibilities for the efficient level of opex (including, for example, the opex level proposed by the business), and adopting one of these alternative opex allowance scenarios would address the financeability problem, then IPART should consider reassessing its pricing decision.

Under such an approach, the test would not be used to set the level of allowances—only to indicate if a financeability problem could potentially occur.

Use of real rather than nominal interest costs

IPART has proposed to use in its financeability tests ratios (i.e., the Adjusted Interest Coverage Ratio and the Adjusted FFO/Debt ratio) computed using real rather than nominal interest costs.[38] As SDP has pointed out in a previous submission to IPART, the vast majority of debt issued by corporates in Australia (including by businesses regulated by IPART) is nominal rather than real debt. This is because the market for inflation-indexed corporate bonds of any tenor in Australia is extremely thin, as demonstrated by the data presented in Attachment 2 of SDP's June 2018 response to IPART's Issues Paper. IPART's main motivation for proposing to use real rather than nominal interest costs in its financeability calculations is because its real WACC framework provides businesses with a real cost of debt allowance and compensation for inflation via gradual recovery (through regulatory depreciation) an indexed RAB. IPART is concerned that given that businesses are compensated for inflation under its regulatory framework, use of nominal rather than real interest costs when computing the relevant financial ratios could overstate financeability concerns.

In our view, the method that IPART uses to compensate businesses could potentially cause financeability problems, if businesses are principally raising nominal debt (which appears to be the case), and if the slow recovery of compensation for inflation in addition to the allowed real cost of debt is insufficient to meet nominal interest costs. Use of nominal interest expenses in the test would expose any such financeability problems. That is, the financeability test should consider the ability of a business to service the sort of nominal debt that is actually issued by such businesses in Australia. By contrast, use of real interest expenses would mask any such problem by assuming (at least in the benchmark test) close alignment between business's cash interest costs and the real allowed cost of debt.

IPART suggests that regulated businesses could manage such financeability concerns by issuing inflation-indexed debt or by other means (e.g., the use of low-coupon bonds). However, the

[38] IPART proposes to use the Unadjusted Interest Coverage Ratio and Unadjusted FFO/Debt ratio as diagnostic tools only. See Draft Decision, p. 34.

businesses that IPART cites as actually using these methods to align their actual costs to the regulatory allowance all receive debt raising support from TCorp. If such a debt management approach would be infeasible for a smaller, privately-owned business operating without support from TCorp—such as SDP—then it would, in our view, be inappropriate for the financeability test to assume such an approach could be implemented by all businesses regulated by IPART. If IPART wishes to apply the same test to all businesses, then the test should assume a debt management approach that can be implemented by all businesses (e.g., the issuance of only nominal coupon debt).

Rejection of Debt Service Coverage Ratio for particular circumstances

Thirdly, IPART has proposed to use in its financeability test only those financial metrics used by Moody's in its 2018 Global Rating Methodology for regulated water utilities.[39] IPART states in the Draft Decision that it does not support the inclusion of other ratios proposed by stakeholders.[40] We note that SDP is in favour of the financeability test taking account of the Debt Service Coverage Ratio (DSCR) in addition to the metrics proposed in the Draft Decision in SDP's case, because SDP is subject to a limited term concession, a condition of which is that SDP must repay in full its debt principal and interest within the term of SDP's lease. The DSCR is a standard metric used to assess the cash flow headroom available to a firm to meet such an obligation. In our view, it would be appropriate for the financeability test to take account of the DSCR in SDP's case, given that:

- The obligation faced by SDP to repay its debt obligations in full within the term of its lease is unavoidable and beyond SDP's control (e.g., SDP does not have the ability to extend the repayment of its debt obligations beyond the life of its lease, if it has insufficient cash flow to meet those obligations within or beyond the concession period).
- The DSCR is a key metric that rating agencies such as Moody's focus on when rating businesses operating under a fixed term, and with obligations to repay interest and principal within that term (e.g., Project Finance Initiatives and Public-Private Partnerships).[41]

IPART's reluctance to accept additional metrics proposed by stakeholders, including the DSCR proposed by SDP, may reflect a desire to apply as consistent an approach across all businesses as possible. Our view is that consistency is generally desirable, but IPART should not constrain itself to apply a one-size-fits-all approach if there are genuine and fundamental differences between businesses that would justify different treatments. Application of the DSCR when evaluating SDP's financeability would not in any way amount to giving SDP special treatment. This is because the DSCR would be a relevant metric for ***any*** business operating under a limited term concession—as evidenced by the approach that Moody's and other rating agencies take when producing rating opinions for such businesses. That SDP happens to be the only business that IPART regulates facing these circumstances at the present time does not diminish the relevance of the DSCR, and should not, in our view, be a relevant reason for IPART to dismiss the DSCR.

Any firm operating under a finite concession term would be considered non-financeable by rating agencies and lenders if such a firm had insufficient cash flow to repay its debt obligations in full within the concession period. The DSCR is the key metric used by rating agencies and lenders to assess the financeability of such firms. It follows, therefore, that a financeability test that excludes

[39] Moody's, Rating Methodology – Regulated Water Utilities, 8 June 2018.
[40] Draft Decision, p. 42.
[41] Moody's, Rating Methodology – Generic Project Finance, 25 April 2018.

the DSCR for such firms would not be fit-for-purpose, because the test would be incapable of identifying a genuine source of financeability concerns relevant to such firms. We reiterate our principal point that a good financeability test must be capable of identifying such problems.

Setting of benchmarks

When specifying the benchmarks against which the financial metrics used in its test are to be compared, IPART appears to have consistently set the benchmarks in a way that would make the financeability test easy to pass—as indicated by **Table 6** below.

Table 6: Financial metric benchmarks proposed by IPART

	Adjusted interest coverage ratio	FFO interest coverage	FFO / debt	Debt / RAB
	Higher is better	*Higher is better*	*Higher is better*	*Lower is better*
IPART (Draft decision)	**>1.8x**	**>1.8x**	**>6%**	**<70%**
IPART (2013)[a]	NA	1.4-2.9x	5-10%	60-100%
Moody's (Baa) – Water[b]	1.5-2.5x	2.5-4.5x	10-15%	55-70%
Moody's (Ba) – Water[b]	1.2-1.5x	1.8-2.5x	6-10%	70-85%
Moody's (Baa) – Energy networks[c]	1.4-2x	2.8-4x	11-18%	60-75%
S&P Global (Significant)[d]	NA	2-3x	9-13%	NA
S&P Global (Aggressive)[d]	NA	1.5-2x	6-9%	NA
Fitch Ratings (BBB)[e]	NA	1.5x	5.5%	70%

Source: Draft Decision, Table 5.4, p. 45.

We note that:

- In the case of the FFO Interest Coverage Ratio and the FFO/Debt ratio, IPART appears to have set the benchmarks consistent with the lower bound of Moody's range for Ba-rated water utilities. A Ba rating would be sub-investment grade. Such benchmarks could give rise to perverse outcomes. For instance, a water utility that barely passed IPART's financeability test on those two metrics may be assessed by Moody's to be sub-investment grade. This, in our view, would be a serious weakness in relation to the way IPART has set the benchmarks for those two metrics.
- IPART has set the benchmark or the AICR below the midpoint of the Moody's range for Baa water utilities. The broad Baa band encompasses Baa1, Baa2 and Baa3 ratings. Therefore, it is possible that a water utility that just passed IPART's test in relation to the AICR could be assessed by Moody's as having a lower rating than IPART's target rating of BBB/Baa2.
- The benchmark for the Debt/RAB ratio adopted by IPART, 70%, lies at the lower bound of the range for Baa-rated water utilities, so could potentially be considered consistent with a sub-investment grade level of gearing by Moody's.

These observations, and the information published in the Draft Decision, suggest that the benchmarks selected by IPART are not consistent with a water business with a target credit rating of

BBB. This would be an inconsistency within IPART's proposed financeability test that potentially risks some firms with true financeability problems not being diagnosed as such.

We understand that IPART may have had regard to the uprating/downrating thresholds used by Moody's in recent rating opinions for Australian firms when developing its proposed benchmarks. However, that evidence was not presented or explained in the Draft Decision. Therefore, we are unable to comment on the appropriateness of that information, or on the way in which IPART may have interpreted any such information when setting the proposed benchmarks.

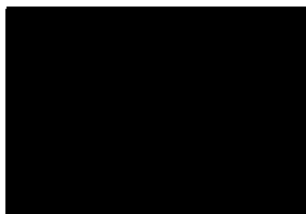
The Draft Decision indicates that IPART has deliberately "set the cash flow target ratios at a lower level" because aspects of IPART's regulatory framework (e.g., recent changes to the approach to setting the cost of debt allowance) materially reduce the businesses' interest rate risk. We do not consider this an appropriate reason to deliberately lower the hurdles for passing the financeability test, relative to the thresholds that rating agencies use. Indeed, there are good reasons to raise the hurdles for passing the financeability test. This is because, under IPART's proposed process for diagnosing financeability problems, the response to the results of a financeability test are asymmetric:

- If IPART identifies no financeability problem, it would take no further action. Therefore, if a genuine financeability problem exists, but it is not detected because the thresholds have been set in such a way that the test can be passed too easily, then the chances of failing to remedy a genuine financeability problem would be relatively high.
- If IPART identifies a potential financeability problem, its response would be to investigate further to identify the cause of the problem before deciding what remedy (if any) should be implemented. Hence a positive finding of a potential financeability problem could be followed by no further action upon further investigation by IPART if, for example, IPART found that the financeability problem was caused by imprudent or inefficient decisions by the business.

Given this asymmetry, it would in our opinion be desirable for the test to be set up so that it is more likely to identify potential financeability problems that turn out to require no further action than to overlook genuine financeability problems.

In our opinion, IPART's financeability test would be improved significantly if the shortcomings identified above are addressed.

Yours sincerely,



Professor Stephen Gray

Chairman, Frontier Economic

Attachment 3 – SDP's responses to Draft Decisions

	Draft decision	SDP position
1	That we would continue to conduct financeability tests.	Agree.
2	That the objectives of the 2018 financeability test are to: • ensure our pricing decisions would allow an efficient investment-grade rated business to raise finance and remain financeable during the regulatory period (benchmark test), and • assess whether the actual business would be financeable during the regulatory period (actual test).	Agree. However, "financeable" should be defined explicitly to mean to "maintain the BBB credit rating set by IPART in its pricing decisions."
3	That we would continue to use the criteria in the 2013 test and conduct a financeability test if: • the prices we regulate determine the revenues of the service provider, and • the provider is established as, or part of, an entity with a distinct capital structure.	Agree.
4	That we would continue to use quantitative data to assess a business's financeability.	Agree.
5	That we would conduct separate financeability tests, using the inputs for a benchmark efficient business and for the actual business.	Agree.
6	For the benchmark test, we would use the real cost of debt and gearing ratio in the WACC and include the allowance for inflation indexation over the regulatory period.	Disagree. IPART's position assumes that businesses can raise inflation-indexed debt to manage any cash flow mismatch risk arising from raising nominal debt by receiving a real cost of debt allowance. In practice, there is no inflation-indexed corporate bond market in Australia, so the assumption about businesses' ability to manage this cash flow mismatch risk is incorrect.
7	For the actual test, as a default we would use the business's current debt outstanding, forecast interest expense and dividend payments. If the business's interest expense is on a nominal basis, we would not include the inflation indexation component in the interest expense.	Agree that if interest is on a nominal basis then inflation indexation should not be included. However, SDP disagrees with the requirement to disclose forecast dividend payments.
8	That we would use the tax allowance from the building block as the tax expense for the benchmark test.	Agree.
9	That we would calculate the tax expense for the actual test using the process outlined in Table 4.3.	Agree.
10	That we would make adjustments for operating lease expense, superannuation net liabilities and	The Draft Report does not provide a rationale for this Draft Decision. SDP considers that IPART should provide its reasons for restricting these

	Draft decision	SDP position
	inflation accretion in the actual test only.	adjustments to only the actual test.
11	That, as a default, we would conduct both financeability tests on the portion of the business for which we are setting prices.	Agree.
12	That we would consider on a case-by-case basis whether to conduct the actual test using financial data for the whole business.	Agree.
13	That we would assess a business's financeability over the upcoming regulatory period unless a financeability concern arises.	Agree.
14	That we would continue to use a BBB target credit rating across all industries.	Agree
15	That we would calculate the following ratios for the benchmark and actual tests: • The Adjusted Interest Coverage Ratio (AICR). • An adjusted Funds From Operations (FFO) divided by Debt ratio. • The Debt divided by RAB, or Gearing, ratio (which is fixed for the benchmark test).	Disagree with the use of the AICR due to an inability to secure inflation-indexed debt. SDP prefers the FFO Interest Coverage Ratio. Note that Moody's in does not use the AICR to rate regulated businesses in Australia. Similarly, the FFO to debt ratio should not be adjusted for inflation. SDP also considers that businesses should be allowed to propose additional metrics such as DSCR if a strong case could be made for the relevance of those metrics to firms that share similar, relevant characteristics to the business in question.
16	That we would calculate the Interest Coverage Ratio (ICR) and the (unadjusted) FFO/Debt for the actual test as a diagnostic tool only.	Disagree. The FFO interest coverage ratio and FFO/Debt should replace the adjusted versions of these metrics, and should not be limited to diagnostic purposes.
17	That we would rank the financial metrics to place more weight on the AICR and adjusted FFO/Debt ratios, and to place less emphasis on the Gearing ratio.	Agree. IPART has adopted the same ranking of financial ratios as in Moody's latest rating methodology. There is no need for IPART to apply explicit numerical weights to different financial ratios.
18	That we would adopt the following target ratios: • An Adjusted Interest Coverage Ratio and an Interest Coverage Ratio of greater than 1.8 times. • A FFO over debt ratio greater than 6%. • A debt to RAB gearing ratio less than 70%.	Disagree. SDP considers the target ratios to be inappropriate, increasing the likelihood of incorrectly concluding no financeability concern.
19	That we would adopt the process in Figure 5.1 to identify whether a financeability concern exists.	Disagree. SDP considers that the process for diagnosing a financeability problem under the actual test should be modified to ensure that the possible remedies for any financeability problem identified includes reassessment of the pricing decision, if that is appropriate.
20	That, if we identify a financeability concern, we would separately test whether this concern is due to:	Agree. However, any finding that the business has made imprudent/inefficient decisions should be based only on the information available, and

	Draft decision	SDP position
	• setting the regulatory allowance too low • the business is taking imprudent or inefficient decisions, and/or • the timing of cash flows.	constraints faced, at the time of the business decision, rather than with the benefit of hindsight.
21	That, if the source of a concern is due to regulatory error, we would correct the regulatory error by reassessing our pricing decision.	Agree. However, IPART should make explicit (as in its Issues Paper) that a reassessment of the pricing decision may require NPV-positive adjustments to revenue allowances.
22	That, if the source of a concern is due to imprudent or inefficient business decisions, we would alert the business's owners to the potential need to inject more equity, accept a lower rate of return on equity, or both.	Agree.
23	That, if the source of a concern is due to temporary cash flow problems, the Tribunal could consider an NPV-neutral adjustment to prices.	Agree.

24	That, if the Tribunal considers an NPV-neutral adjustment is appropriate:
	• First, it would consider whether it is appropriate to implement this adjustment over the regulatory period under review.
	• Second, if it does not consider this adjustment should be restricted to the regulatory period under review, it could consider:
	    • whether it is appropriate to implement an adjustment by allowing a higher depreciation allowance in the period under review in order to increase prices in the next regulatory period, or
	    • an explicit adjustment to the pricing path over the next regulatory period. If it made such an adjustment, we would publish the value of this adjustment in present value terms. This would allow a future Tribunal to consider this adjustment in a future regulatory period.
		SDP considers that IPART cannot commit future Tribunals to resolving a financeability problem beyond the forthcoming regulatory period. Therefore, any attempt to create an explicit adjustment to the pricing path of future regulatory periods would create significant uncertainty for stakeholders and would not be supported by SDP.
		
		SDP's preference is for any NPV-neutral adjustment to be implemented through an adjustment to the depreciation allowance. This is the standard approach adopted by regulators in other jurisdictions.

Attachment 4 – Views on Draft Report building block model

On 5 September 2018 IPART published a Draft Report building block model (the model) to help stakeholders understand better how it intends to implement the financeability test framework proposed in the Draft Report, and sought submissions from interested parties on this additional information. Upon review of the model, SDP has identified a number of issues relating to the proposed implementation of the financeability test framework that would warrant further consideration by IPART before the financeability test methodology is finalised. This Attachment summarises these issues. SDP would be pleased to assist IPART by engaging further in relation to these issues, if that would be useful.

Sensitivity of financial metrics to assumed proportion of nominal debt

Under the actual test, the model allows for the possibility that some proportion of the business's debt is nominal rather than real. The assumed proportion of nominal debt can be varied between 0% and 100%.

Sensitivity analysis shows that all the financial ratios generally improve as the proportion of nominal debt assumed increases (all else remaining equal). This can be seen in Figure 1 below, which shows the impact of increasing the proportion of nominal debt assumed for every year from 2018-19 onwards from 75% (the default setting in the model) to 100%. This improvement occurs for all metrics, regardless of whether they are adjusted for inflation or not.

Figure 1: Impact on financial metrics in actual test of varying proportion of nominal debt

Proportion of nominal debt = 75% (all years from 2018-19 onwards)

Financial year	Target ratios	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1. Adjusted FFO Interest Cover	*Higher is better*												
- ratio (times)	> 1.8	2.494	2.894	2.822	2.734	2.829	2.769	2.763	2.794	2.854	2.933	3.053	3.176
1a. FFO Interest Cover													
- ratio (times)	> 1.8	1.913	1.977	1.940	1.865	1.931	1.888	1.884	1.905	1.947	2.001	2.084	2.168
2. Adjusted FFO / Net Debt	*Higher is better*												
- ratio (%)	> 6.0%	7.1%	7.2%	6.8%	6.9%	6.7%	6.7%	6.7%	6.9%	7.3%	7.6%	8.1%	8.6%
2a. FFO / Net Debt													
- ratio (%)	> 6.0%	5.8%	5.5%	5.2%	5.1%	5.1%	5.0%	5.0%	5.2%	5.6%	5.9%	6.4%	6.9%
3. Adjusted Net Debt / RAB	*Lower is better*												
- ratio (%)	< 70.0%	58%	59%	61%	60%	60%	60%	60%	59%	58%	57%	56%	54%
3a. Net Debt / RAB													
- ratio (%)	< 70.0%	58%	59%	60%	58%	59%	59%	59%	58%	57%	56%	55%	53%

Proportion of nominal debt = 100% (all years)

Financial year	Target ratios	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1. Adjusted FFO Interest Cover	*Higher is better*												
- ratio (times)	> 1.8	2.494	3.422	3.326	3.261	3.386	3.325	3.327	3.375	3.459	3.567	3.728	3.894
1a. FFO Interest Cover													
- ratio (times)	> 1.8	1.913	1.977	1.940	1.871	1.944	1.905	1.908	1.935	1.984	2.047	2.139	2.235
2. Adjusted FFO / Net Debt	*Higher is better*												
- ratio (%)	> 6.0%	7.1%	7.7%	7.4%	7.5%	7.4%	7.4%	7.4%	7.7%	8.1%	8.5%	9.1%	9.6%
2a. FFO / Net Debt													
- ratio (%)	> 6.0%	5.8%	5.5%	5.2%	5.2%	5.2%	5.2%	5.1%	5.4%	5.8%	6.2%	6.8%	7.3%
3. Adjusted Net Debt / RAB	*Lower is better*												
- ratio (%)	< 70.0%	58%	59%	61%	59%	60%	59%	59%	58%	57%	56%	54%	53%
3a. Net Debt / RAB													
- ratio (%)	< 70.0%	58%	59%	59%	58%	58%	58%	58%	57%	56%	54%	53%	51%

Source: Draft Report building block model, Financials actuals tab, Table 5; SDP analysis

This result seems counterintuitive. SDP would have expected the financial ratios to deteriorate (not improve) as the proportion of nominal debt increases. This is because as the proportion of nominal debt increases, the interest repayment burden on the firm increases too (assuming inflation is positive, as is the case in the model).

IPART has suggested that one possible explanation for this counterintuitive result is that the model currently computes FFO by deducting—in the computation of cash flows from operations (CFO)—tax

payable by the actual business (which in turn depends on interest expenses). SDP notes that typically neither CFO nor FFO should be calculated by deducting tax payable, since these two indicators are measures of operational cash flows. However, even if tax payable were removed from the calculation of FFO, it appears that increasing the proportion of nominal debt assumed improves the financial metrics. This can be seen in Figure 2 below, which shows the impact on the financial metrics of varying the assumed proportion of nominal debt from 75% to 100%, once tax payable has been removed from the FFO calculation.

Figure 2: Impact on financial metrics in actual test of varying proportion of nominal debt – tax payable removed from FFO calculation

Proportion of nominal debt = 75% (all years from 2018-19 onwards)

Financial year	Target ratios	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1. Adjusted FFO Interest Cover	*Higher is better*												
- ratio (times)	> 1.8	2.641	3.097	3.022	2.951	3.089	3.004	3.057	3.101	3.206	3.390	3.598	3.839
1a. FFO Interest Cover													
- ratio (times)	> 1.8	2.026	2.116	2.077	2.013	2.108	2.048	2.085	2.115	2.187	2.313	2.455	2.620
2. Adjusted FFO / Net Debt	*Higher is better*												
- ratio (%)	> 6.0%	7.8%	8.0%	7.6%	7.8%	7.7%	7.7%	7.8%	8.2%	8.8%	9.6%	10.4%	11.5%
2a. FFO / Net Debt													
- ratio (%)	> 6.0%	6.5%	6.3%	6.0%	6.0%	6.1%	6.0%	6.2%	6.5%	7.1%	7.8%	8.7%	9.8%
3. Adjusted Net Debt / RAB	*Lower is better*												
- ratio (%)	< 70.0%	58%	59%	60%	59%	59%	58%	58%	57%	55%	53%	51%	49%
3a. Net Debt / RAB													
- ratio (%)	< 70.0%	58%	59%	59%	58%	58%	57%	57%	56%	54%	52%	50%	48%

Proportion of nominal debt = 100% (all years)

Financial year	Target ratios	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1. Adjusted FFO Interest Cover	*Higher is better*												
- ratio (times)	> 1.8	2.641	3.662	3.562	3.522	3.703	3.615	3.693	3.761	3.905	4.149	4.428	4.752
1a. FFO Interest Cover													
- ratio (times)	> 1.8	2.026	2.116	2.077	2.020	2.125	2.072	2.118	2.156	2.239	2.380	2.540	2.727
2. Adjusted FFO / Net Debt	*Higher is better*												
- ratio (%)	> 6.0%	7.8%	8.5%	8.2%	8.4%	8.4%	8.4%	8.6%	9.0%	9.7%	10.6%	11.6%	12.7%
2a. FFO / Net Debt													
- ratio (%)	> 6.0%	6.5%	6.3%	6.1%	6.1%	6.2%	6.1%	6.4%	6.7%	7.4%	8.3%	9.3%	10.5%
3. Adjusted Net Debt / RAB	*Lower is better*												
- ratio (%)	< 70.0%	58%	59%	60%	59%	58%	58%	57%	56%	54%	52%	50%	47%
3a. Net Debt / RAB													
- ratio (%)	< 70.0%	58%	59%	59%	57%	57%	56%	56%	54%	52%	50%	48%	46%

Source: Draft Report building block model, Financials actuals tab, Table 5; SDP analysis

This suggests that there remains some other cause for the anomaly identified above.

Due to the short timeframes available to review the model, SDP has not been able to investigate fully the reasons for this counterintuitive result. SDP submits that this issue needs further investigation. As a business that issues only nominal debt, it would be concerning to SDP if IPART's financeability test were to inadvertently overstate the financial metrics for a business that issues 100% nominal debt.

Gearing fixed at 60% in benchmark test

Under the benchmark test, the model holds gearing fixed at 60% in every year of the regulatory period. Equity is assumed to adjust to maintain a benchmark gearing of 60% as debt changes. This renders the gearing metric redundant under the benchmark test as it contributes no information about the financeability of the business over the regulatory period. Any financeability problem that the benchmark business might face due to increasing gearing (e.g., in order to finance new investment over the period) is assumed away.

SDP's understanding is that UK regulators (who perform a benchmark test) do not fix gearing at the benchmark level in all years. The gearing of the benchmark business is assumed equal to the benchmark level of gearing in the first year of the regulatory period, and then is allowed to evolve over the period as

debt changes.[42] Consequently, IPART's application of the benchmark test in respect of the gearing ratio differs from the approach taken by UK regulators.

Use of inflation-adjusted FFO

IPART adds inflation indexation to FFO when calculating the AICR and the adjusted FFO/Debt metrics.[43] The rationale for this is unclear. FFO is a measure of cash flow, whereas inflation indexation is not a cash flow – it represents returns that are capitalised into the RAB. FFO will include the regulatory depreciation allowance, which incorporates gradual recovery of inflation capitalised into the RAB. Adding to this a non-cash flow measure of inflation indexation will overstate cash flows and double-count compensation for inflation.[44] This would make the business appear more financeable than it actually is and potentially mask a genuine financeability problem.

It does not appear (based on the AICR formula presented in the global Moody's Rating Methodology) that Moody's adds back inflation in the way IPART proposes, when computing the AICR. IPART has derived the AICR benchmark from the target ranges reported by Moody's. It would be inconsistent if the computed ratios and the benchmarks against which these are assessed are not derived on a common basis.

The overstatement of cash flows via the inflation adjustment discussed above, and the use of a benchmark that has not been similarly adjusted upwards for inflation, would result in a financeability test that businesses may pass too easily.

New financial metric added to the actual test

The Draft Report states that IPART will consider five financial metrics as part of the actual test (of which the last two are to be used as 'diagnostic tools' only):

- AICR;
- Adjusted FFO/Debt ratio;
- Net Debt/RAB;
- FFO interest coverage ratio; and
- FFO/Debt ratio.

However, the model includes a sixth metric, the 'adjusted Net Debt/RAB', which adds to net debt (the numerator of the ratio) the assumed inflation growth of debt. This ratio is not proposed in the Draft Report, and no rationale for its inclusion in the test has been provided by IPART.

Benchmarks for actual test

In the model, three of the metrics in the actual test are 'adjusted' for inflation (i.e., the AICR, adjusted FFO/Debt and adjusted Net debt/RAB).

The Draft Report presents a benchmark for only one of these, the AICR. However, the model includes benchmarks for all three metrics. The benchmarks for the adjusted FFO/Debt and adjusted Net debt/RAB ratios are equivalent to the benchmarks for the non-adjusted versions of these ratios. In other words, IPART proposes to compare ratios computed using real interest expenses to benchmarks underpinned by nominal interest expenses. SDP considers that as a result the test will be too easy to pass on these particular metrics.

No adjustment for operating leases and/or defined benefit schemes in benchmark test

---

[42] This can be seen, for example, in the model used by Ofgem for the DPCR5 price control period (2010-2015), where the gearing level for each business at the start of the regulatory period is assumed equal to the benchmark level of gearing of 65%, and then is allowed to change thereafter. See row 65 in the results tabs for each of the individual networks in the following file published by Ofgem: https://www.ofgem.gov.uk/ofgem-publications/46764/financial-issues-dpcr5-20091204-final-proposals-dnosxls.

[43] Draft Report, August 2018, p. 40.

[44] As is evident from the model, the inflation adjustment to FFO results in the numerators of the AICR and the FFO interest coverage ratio (and likewise the adjusted FFO/Debt and non-adjusted FFO/Debt) being identical.

The Draft Report (section 4.4.2, Draft Decision 10) proposes to only make adjustments for operating leases and/or defined benefit schemes in the actual test only; no such adjustments would be made in the benchmark test. The model published by IPART is consistent with that Draft Decision. IPART provides no explanation in the Draft Report for its Draft Decision to not make adjustments for operating leases. SDP considers that IPART's reasoning should be set out.

SDP notes that to the extent that rating agencies such as Moody's make such adjustments, it is appropriate for IPART to do so also when implementing its financeability tests.

One challenge that could arise when seeking to make such adjustments for use within the benchmark test is that IPART would need to assess the level of operating lease and defined benefit scheme obligations faced by a hypothetical benchmark efficient entity. SDP proposes that this should be assessed on a case by case basis in the context of individual pricing decisions, and the information used to make these adjustments for the benchmark test should reflect any allowances IPART has made in the revenue building block model for operating lease costs and/or defined benefit scheme costs. These are legitimate costs that efficient businesses would face. Therefore, they should not be excluded from IPART's benchmark financeability test without good reason.