

Independent Pricing and Regulatory Tribunal
New South Wales

Assessing Green Square Water Pty Ltd's and Flow Systems Pty Ltd's licence variation applications

**Prepared in accordance with the
*Water Industry Competition Act 2006 (NSW)***

Report to the Minister for
Water, Property and Housing

July 2020

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1 Executive Summary

We recommend that the Minister for Water, Property and Housing¹ (Minister) grants Green Square Water Pty Ltd (GSW) a varied Network Operator Licence and Flow Systems Pty Ltd (Flow Systems) a varied Retail Supplier Licence.²

GSW currently treats stormwater from the Shea's Creek stormwater culvert that runs through the development precinct of Green Square Town Centre (GSTC). Flow Systems supplies the treated (recycled) non-potable water to residents and businesses within the GSTC for authorised end-uses. The development is located in Zetland in the City of Sydney Local Government Area.

The proposed variation to the Network Operator Licence will allow GSW to extend the non-potable water network across Joynton Avenue to supply non-potable water to the Gunyama Park and Recreation Centre (GPARC) for the six currently authorised end-uses. It will also allow recycled water to be used for four additional new end-uses at both the GSTC and the GPARC.

The variation to Flow Systems' Retail Supplier Licence would authorise Flow Systems to supply the non-potable water to the GSTC for the four additional new end-uses and to the GPARC for the current and new authorised end-uses (total ten end-uses).

Further detail of the variation to both licences is set out in section 2.4 of this report.

In assessing GSW's application for a varied Network Operator Licence (Network Operator Licence Application) and Flow Systems' application for a varied Retail Supplier Licence (Retail Supplier Licence Application), we considered the licensing criteria set out in sections 10(3) and (4) of the *Water Industry Competition Act 2006* (WIC Act), and had regard to the licensing principles in section 7(1) of the WIC Act.

We recommend licence conditions for the Minister to consider when granting the varied licences in section 4.3, and include a draft varied Network Operator Licence and draft varied Retail Supplier Licence in **Appendix A** of this report.

¹ The Minister for Water, Property and Housing administers the *Water Industry Competition Act 2006* (NSW).

² Where this report refers to a *varied* licence, it is referring to a *new* licence granted by the Minister that replaces the previous licence.

2 Recommendation

We recommend that the Minister for Water, Property and Housing:

- 1 Grants a varied Network Operator Licence to Green Square Water Pty Ltd (licence number 15_031), subject to the conditions as set out in the attached draft licence.
- 2 Grants a varied Retail Supplier Licence to Flow Systems (licence 13_001R), subject to the conditions as set out in the attached draft licence.

The Minister must consider, but is not bound to accept, any advice or recommendation in this report in determining the licence applications. The Minister may, if circumstances so require, seek further advice from us in relation to the licence applications.³

The Minister is required to provide us with a notice of the decision for each licence and the reasons for the decisions when deciding whether or not to grant the licences.⁴ We then publish the notices on our website, in accordance with the requirements of the WIC Act.⁵

2.1 The applicants and parent organisation

GSW has no employees and relies on the full support of Flow Systems to provide technical, financial and organisational capacity, under a Corporate Services Agreement. Flow Systems is the parent company of the Flow Systems group of companies. It has eight subsidiaries (including GSW) that hold ten Network Operator Licences. The proposed Network Operator Licence names Flow Systems as an Authorised Person to construct, operate and maintain non-potable water infrastructure, consistent with the existing Network Operator Licence.

Flow Systems' parent entity, Sustainable Communities Infrastructure Pty Ltd (SCI) is a special purpose vehicle with three shareholders, the New Zealand Superannuation Fund, the Commonwealth Superannuation Corporation (CSC) and MGIF SCIT PV Pty Ltd.

Under the proposed structure HRL Morrison & Co (Australia) Pty Ltd (Morrison & Co) will manage SCI and the Sustainable Communities Infrastructure Trust (SCIT) on behalf of SCI's shareholders. Morrison & Co is an investment management fund, founded in 1988.

Flow Systems has adequate resources to support GSW to undertake the activities it seeks in the Network Operator Licence Application. Flow Systems also has the resources to undertake the activities it seeks in the Retail Supplier Licence Application without relying on third parties.

We have provided a diagram illustrating Flow Systems ownership structure and related licence holders in Appendix C.

³ WIC Act, section 10(2).

⁴ WIC Act, section 10(5).

⁵ WIC Act, section 10(6).

2.2 The Green Square scheme

GSTC is a residential development located in Zetland in the City of Sydney Local Government Area. City of Sydney Council (Council) engaged GSW to construct, operate and maintain the recycled water infrastructure and provide retail services under a Design, Construct and Services contract. Council owns the infrastructure.

GSW has constructed, and currently operates and maintains, the recycled water infrastructure at the GSTC (the area of operations in the existing Network Operator Licence 15_031). The licensed infrastructure includes a non-potable water treatment plant, and non-potable water reticulation infrastructure. GSW collects stormwater from a source within the GSTC, and treats it for recycling within the town centre.

GSW uses drinking water from Sydney Water to top-up the non-potable water network as required.

2.3 Existing licences

GSW holds a Network Operator Licence (licence number 15_031) which authorises it to construct, operate and maintain non-potable water infrastructure at the GSTC in Zetland (the area of operations). It does this with the full support of Flow Systems who is an authorised person on the licence. Council is also an authorised person on the licence as the owner of the infrastructure.

The Minister administering the WIC Act granted GSW's Network Operator Licence (15_031) on 25 September 2015⁶ and on 15 June 2016 approved the commercial operation of an interim scheme which supplied drinking water through the recycled water network. GSW commenced operation of the interim scheme in June 2016 but was not approved to supply (retail) the recycled water produced to customers until 17 May 2018. GSW commenced commercial operation of the current scheme in August 2018.

Flow Systems holds a corresponding Retail Supplier Licence (licence number 13_001R) granted by the Minister administering the WIC Act on 17 April 2013. The Retail Supplier Licence authorises Flow Systems to provide retail services at various Flow Systems' schemes, including Green Square and eight other schemes (detailed in Appendix C).⁷ The area of operations for retail activities does not currently extend to the GPARC. It also does not include the four additional end-uses that GSW is seeking in the Network Operator Licence Application.

The licences currently authorise the supply of non-potable water for six end uses: toilet flushing, washing machines (cold water tap), cooling tower make-up, irrigation, water features and street cleaning.

GSW will seek to service up to 4,320 residential apartments (where small retail customers, as defined in the WIC Act, will reside) as well as commercial and retail customers.

⁶ The then Minister for Lands and Water was the Minister administering the WIC Act when the licence was granted.

⁷ Pitt Town, Discovery Point, Wyee, North Cooranbong, Huntlee, Green Square, Central Park, Box Hill North and Shepherds Bay.

2.4 The variation applications seek to use non-potable water for four new end-uses at the GSTC and supply non-potable water to the GPARC for all end-uses

The Network Operator Licence Application⁸ seeks to:

- ▼ Expand the currently licensed area of operations for non-potable water industry infrastructure. This would allow GSW to construct, operate and maintain non-potable water industry infrastructure to extend the existing network at the GSTC to connect to the GPARC. It will also include a new (second) stormwater source to supplement the non-potable water demand.⁹ GSW has advised that it will likely not need to use stormwater from the second source until 2025.
- ▼ Add four new end-uses for non-potable water to the licence (general wash-down (for use on hard surfaces), car washing, dust suppression for construction activities, and process water at the non-potable water treatment plant) for use at the GSTC.
- ▼ Allow all of the proposed end-uses (both the six currently licensed uses and the four additional uses GSW is seeking above) for the non-potable water at the GPARC.

The Retail Supplier Licence Application seeks to extend the supply of non-potable water services to the GPARC, as proposed in the Network Operator Licence Application and to add the four new end-uses to their retail supply licence. This would allow Flow Systems to supply non-potable water for a total of ten end-uses within the GSTC and GPARC.¹⁰

⁸ We received GSW's application to vary the Network Operator Licence (15_031) and Flow System's application to vary the Retail Supplier Licence (13_001R) for the Green Square scheme on 23 July 2019.

⁹ The Council granted the development consent D/2012/1175 covering the recycled water infrastructure at the GSTC and the proposed infrastructure across Joynton Avenue to supply water from the treatment plant to the GPARC. Council also granted D/2016/824 covering the GPARC footprint including the recycled water infrastructure servicing it within the footprint. It also covers the proposed second stormwater source which is within the GPARC footprint. On 25 February 2020, Council advised that the existing development consents cover the proposed extension to the recycled water network at the scheme and no further development consent was required.

¹⁰ This is contingent on the Minister granting Flow Systems a variation to its Retail Supplier Licence (13_001R).

3 Consultation

On 5 November 2019, we provided the Network Operator Licence Application and Retail Supplier Licence Application to, and invited submissions from, the following Ministers and their relevant departments:

- ▼ Minister administering the WIC Act and Chapter 2 of *Water Management Act 2000* (NSW) (Minister for Water, Property and Housing)
- ▼ Minister administering the *Public Health Act 2010* (NSW) (Minister for Health and Medical Research)
- ▼ Minister administering the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act) (Minister for Energy and Environment), and
- ▼ Minister administering the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) (Minister for Planning and Open Spaces).¹¹

At the same time, we also provided copies of the licence applications to Sydney Water and Council. Council is the relevant consent authority under the EP&A Act and the appropriate regulatory authority under the POEO Act. Further, Council is the landholder and owner of the non-potable water infrastructure at the scheme.

We notified Sydney Water of the licence applications because GSW uses Sydney Water's drinking water to top up its non-potable water supply.¹² GSW/Flow Systems can access Council's connection to Sydney Water's 'water industry infrastructure' as defined in the WIC Act.

We also called for submissions on the applications from the public.¹³ The closing date for submissions was 3 December 2019.

We considered all submissions

We received five submissions in total from Council, NSW Department of Planning, Industry and Environment (DPIE), NSW Environment Protection Authority (EPA), NSW Health and Sydney Water.

We considered all submissions against the relevant licensing principles and criteria as part of our assessment of the application. Where necessary, we sought more information from GSW to satisfy ourselves that it will address the issues raised in the submissions. We also propose that the Minister impose conditions on the licence to address some of the issues raised.

We have presented a summary of all the submissions we received in Appendix D (Table D.1).

Our recommended licence conditions are summarised in section 4.

¹¹ As required under section 9(1)(b) of the WIC Act and clause 17(1) of the *Water Industry Competition (General) Regulation 2008* (WIC Regulation).

¹² WIC Act, section 9(1)(b)(iii) and WIC Regulation, clause 17(2).

¹³ WIC Act, section 9(1)(c).

We requested information from Flow Systems after its sale

Subsequent to receiving the licence variation applications, the Flow Systems group was sold and now has new owners (ie, New Zealand Superannuation, Commonwealth Superannuation Corporation, MGIF SCIT PV Pty Ltd). We have therefore assessed the technical, organisational and financial capacity of the applicants under the new ownership structure.

We sought further information to understand the impact of the sale on Flow Systems and GSW's capacity to undertake activities that the licences would authorise. The information that we sought included:

- ▼ Details of the sale, new ownership structure, changes to directors and management.
- ▼ Copies of agreements between the shareholders and the Flow Systems group, and relevant trust deeds and details of facilities or arrangements for funding.
- ▼ Financial information including budgeting and financial forecasts.

4 Assessment of application

The WIC Act sets out licensing principles which the Minister must have regard to in considering whether or not to grant a licence.¹⁴ The WIC Act also prohibits a licence from being granted to a disqualified corporation or related entity¹⁵ and requires the Minister to be satisfied that the applicant meets specific criteria set out in the WIC Act or the regulations in order to grant a licence.¹⁶ The Minister can consider other relevant matters, having regard to the public interest.¹⁷

This section of our report contains our assessment of the Network Operator Licence Application and the Retail Supplier Licence Application against:

- ▼ The eligibility of the applicant (section 4.1)
- ▼ The licensing principles (section 4.2), and
- ▼ The licensing criteria (section 4.3).

This section also includes reasons for our recommendations. In addition to our assessment, we have updated the licence format and Schedule B of the Network Operator Licence, the standard ministerially imposed licence conditions, which are applicable to all network operators. In this report we have only discussed substantial changes to licence conditions. We have not discussed minor changes, such as editorial or numbering changes.

4.1 The applicants are eligible for a licence

We consider that GSW and Flow Systems are not disqualified corporations or corporations that are a related entity of a relevant disqualified corporation.

We relied on the following information:

- ▼ We undertook ASIC checks and determined that the applicants, directors, persons concerned in the management, or related parent entities (SCIT) of GSW and Flow Systems are not disqualified individuals or corporations.¹⁸
- ▼ Information provided by GSW and Flow Systems regarding details of the:
 - Relevant related parent entities¹⁹

¹⁴ WIC Act, section 7.

¹⁵ WIC Act, section 10(3).

¹⁶ WIC Act, section 10(4)(a) to 10(4)(e).

¹⁷ WIC Act, section 10(4)(f).

¹⁸ We completed the relevant searches on 26 June 2020. A related entity is one that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence authorises: WIC Act, section 10(3)(b).

¹⁹ GSW identified Sustainable Communities Infrastructure Pty Limited as trustee for the Sustainable Communities Infrastructure Trust (ACN 633 957 918) as a relevant related entity.

- Names of the Directors, Chief Financial Officer and Chief Executive Officer for each of Flow Systems and GSW's relevant related entities (subsidiary companies and holding companies within Australia).

4.2 The applications are consistent with the licensing principles

In considering whether or not to recommend that the Minister grants the varied licences, and the conditions to which the new licences should be subject (if granted), we had regard to the licensing principles set out in the WIC Act (refer Box 4.1).

Box 4.1 Licensing principles under section 7(1) of the WIC Act

In considering whether or not a licence is to be granted under this Part and what conditions are to be imposed on such a licence, regard is to be had to the following principles:

- a) the protection of public health, the environment, public safety and consumers generally,
- b) the encouragement of competition in the supply of water and the provision of sewerage services,
- c) the ensuring of sustainability of water resources,
- d) the promotion of production and use of recycled water,
- e) the promotion of policies set out in any prescribed water policy document,
- f) the potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence,
- g) the promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security.

4.2.1 The Network Operator Licence Application is consistent with licensing principles

We consider that the application for the proposed new activities, to construct, maintain and operate non-potable water industry infrastructure in the expanded area of operations and to add four new end-uses is consistent with the licensing principles set out in section 7 of the WIC Act.

We analysed the information in the Network Operator Licence Application, and considered our assessment undertaken for the original network operator licence application in 2015. We consider that there have not been any material changes to how licensing principles (b) and (d)-(g) apply. The analysis contained in the report provided to the Minister in 2015, in which we recommended that GSW be granted a network operator licence, continues to apply.²⁰

Our analysis of the new activities against licensing principle (a) and (c) are set out below.

²⁰ A copy of this report can be accessed at https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/report_to_the_minister_-_assessment_of_green_square_waters_network_operators_licence_application_-_august_2015.pdf.

Protection of public health, the environment, public safety and consumers generally (licensing principle (a))

We had regard to GSW's capacity to undertake the proposed new activities in a manner that does not present a risk to public health, the environment, public safety and consumers generally.

Protection of public health

We assessed GSW's capacity to manage the key risks posed to public health by the new activities to be licensed, having regard to the protection of public health in section 4.3 of this report.

Protection of the environment

We relied on the analysis contained in the 2015 report to the Minister as the impacts on the environment and the mitigation measures to protect the environment apply equally to the Network Operator Licence Application.

In addition, we have had regard to the development approvals covering the proposed new infrastructure. Before the non-potable water treatment plant and non-potable water reticulation infrastructure was constructed at the GSTC, Council issued development approvals under Parts 4 and 5 of the EP&A Act. Council subsequently granted a development consent for construction of the GPARC.²¹ The GPARC development consent covers construction of the second stormwater source and the proposed recycled water reticulation infrastructure at the GPARC. Council considered the environmental impacts of constructing the GPARC, which includes the proposed non-potable water infrastructure, before granting the development consent.

On 25 February 2020, Council confirmed that these development consents cover the extension to the non-potable water network, proposed in the Network Operator Licence Application, to service the GPARC.²²

We considered GSW's history of compliance with its legislative obligations to protect the environment. In its submission on the Network Operator Licence Application, DPIE stated that it found no record of enforcement action undertaken or carried out against GSW, Flow Systems or Council (as owner of the infrastructure operated by GSW), under the EP&A Act.²³ Similarly, the EPA stated that it was not aware of any breaches of the POEO Act by these entities and it had not taken any actions against them.²⁴ Council, as the relevant regulatory authority, confirmed that there were no breaches of the POEO Act by any of these entities for this scheme.²⁵

²¹ Council granted the development consent D/2012/1175 covering the recycled water infrastructure at the GSTC and the proposed infrastructure across Joynton Avenue to supply water from the treatment plant to the GPARC. Council also granted D/2016/824 covering the GPARC footprint including the recycled water infrastructure servicing it within the footprint. D/2016/824 covers the proposed second stormwater source which is within the GPARC footprint.

²² Email to IPART from Council, 25 February 2020.

²³ Submission from DPIE, 4 December 2019.

²⁴ Submission from the EPA, 4 December 2019.

²⁵ Email to IPART from Council, 17 June 2020.

Protection of public safety

We assessed GSW's capacity to manage key risks with regard to public health specifically and public safety in general in section 4.3 of this report.

Protection of consumers generally

We considered whether any consumers would be disadvantaged as a result of a decision by the Minister to grant GSW a varied licence.

We also assessed the financial capacity of the applicant and the viability of the scheme (as varied) over the next 10 years. We consider consumers will remain protected against loss of essential services (see section 4.3).

If the Minister grants the varied Network Operator Licence, we consider that consumers generally will continue to be protected in relation to the activities licensed.

Ensuring the sustainability of water resources (licensing principle (c))

We had regard to GSW's ability to reduce demand on Sydney Water's drinking water network by sourcing stormwater to produce non-potable water that will replace drinking water.

We also had regard to the reliability of stormwater source availability at the GSTC and at the second source within the GPARC, to be able to meet the recycled water demand at both the GSTC and, if the varied Network Operator Licence is granted, at the GPARC (see our discussion under the heading *Matters of public interest (licensing principle (f))* in section 4.3.1).

4.2.2 The Retail Supplier Licence Application is consistent with the licensing principles

We consider that the proposed extension of Flow Systems' area of operations to include the GPARC for the retail supply of non-potable water and for four new end-uses is consistent with each of the licensing principles set out in the WIC Act.

We analysed the information in the Retail Supplier Licence Application, and considered our assessment undertaken for the original retail supplier licence application in 2015. We consider that there have not been any material changes to how licensing principles (a)-(g) apply, and that our analysis contained in the report provided to the Minister in 2015, in which we recommended that Flow Systems be granted a retail supplier licence for the scheme, continues to apply.²⁶

4.3 The applicants would continue to meet the licensing criteria

In making our recommendation that the Minister grant the varied licences, and the conditions to which these licences should be subject (if granted), we considered the licensing criteria set out in the WIC Act.

²⁶ IPART, *Assessment of Flow Systems Pty Ltd's application to vary its retail supplier's licence no.13_001R - Report to the Minister*, August 2015.

Box 4.2 Licensing criteria under section 10(4) of the WIC Act

A licence may not be granted unless the Minister is satisfied as to each of the following:

- a) that the applicant has, and will continue to have, the capacity (including technical, financial and organisational capacity) to carry out the activities that the licence (if granted) would authorise,
- b) that the applicant has the capacity to carry out those activities in a manner that does not present a risk to public health,
- c) that the applicant has made, and will continue to maintain, appropriate arrangements with respect to insurance,
- d) in the case of an application for a licence to supply water, that, if such a licence is granted, sufficient quantities of the water supplied by the licensee will have been obtained otherwise than from a public water utility,
- e) such matters as are prescribed by the regulations,
- f) such other matters as the Minister considers relevant, having regard to the public interest.

4.3.1 GSW meets the licensing criteria for a Network Operator Licence

We consider that the proposed extension of the scheme to provide non-potable water at the GPARC, and the addition of four new end-uses for recycled water, satisfies the licensing criteria set out in the WIC Act.

Our analysis of the new activities against licensing criteria (a), (b), (c),²⁷ and (f) is set out below. We consider that licensing criteria (d) relates to the supply of water which is an activity authorised under a retail supply licence and we have not considered it in the context of the current Network Operator Licence Application.

For the remainder of the licensing criteria, we analysed the information in the Network Operator Licence Application, and considered our assessment undertaken for the original Network Operator Licence application in 2015. We conclude that there have not been any material changes to how licensing criterion (e) applies.

Technical capacity (licensing criterion (a))

We are satisfied that GSW has the technical capacity to undertake the proposed new activities.

GSW relies on the full support of Flow Systems staff and its systems for its technical capacity. Flow Systems provides technical services to GSW under a Corporate Services Agreement²⁸ between the parties. Therefore, we consider that Flow Systems' expertise is critical to GSW's technical capacity. Where necessary, we have considered information and evidence relevant to both Flow Systems and GSW for the purpose of establishing GSW's technical capacity. We note that Flow Systems will remain named as an Authorised Person on the varied licence. Council will also remain as an Authorised Person as the owner of the non-potable water infrastructure.

²⁷ Except in relation to the protection of the environment.

²⁸ Executed as an agreement on 9 March 2015.

Evidence of technical capacity

GSW demonstrated its technical capacity by providing plans (including a recycled water quality plan) and documents²⁹ developed by Flow Systems for the scheme which show an understanding of design, operation and maintenance of non-potable water infrastructure.

Before commencing commercial operation of the new infrastructure, GSW will require the approval of the Minister.³⁰ The Minister cannot grant that approval without first receiving an audit report indicating, amongst other matters, that the infrastructure is capable of complying with its Water Quality Plan.³¹ GSW would need to update its Water Quality Plan to include the proposed new (non-potable water) infrastructure reticulating to the GPARC and also to include all of the licensed end-uses for the non-potable water.³² As this would, in our view, constitute a significant amendment to the Plan, GSW would need to audit the adequacy of the amended Plan and provide this audit report to us.³³ This is our standard process before a licensee can commence commercial operation of new infrastructure.

The Water Quality Plan audit would check the adequacy and compliance of the Water Quality Plan against the requirements of the *Australian Guidelines for Water Recycling*. We would check implementation with the Water Quality Plan at the next operational audit.

We also considered GSW's relevant experience and compliance history to inform our assessment of technical capacity and provide detail in the sections below. We have included more detail of GSW's technical capacity assessment in Appendix B.

Relevant experience

GSW, supported by Flow Systems, operates infrastructure at the scheme under its Network Operator Licence. Flow Systems will continue to provide sufficient technical capacity to GSW to operate under a varied licence. We assessed position descriptions and professional experience of specific personnel nominated in the application. We consider that the expertise required by GSW/Flow Systems' personnel under a varied licence is no different to the expertise required under its current licence.

Compliance history

GSW has demonstrated its capacity to construct, operate and maintain non-potable water industry infrastructure at the scheme since it was licensed in September 2015.

An audit report in 2019 for the scheme identified one material and three non-material non-compliances. The auditor identified the material non-compliance in relation to GSW's obligation to implement licence plans. The auditor identified the three non-material non-compliances in relation to GSW's obligations to ensure safe and reliable networks, ensure customer connection compliance with the plumbing code, and comply with the requirements of NSW Health.

²⁹ Notwithstanding a broader review of Flow Systems' scheme licence plans in progress, GSW's Water Quality Plan is structured in line with the *Australian Guidelines for Water Recycled (AGWR)*.

³⁰ WIC Regulation, Schedule 1, clause 2(1).

³¹ WIC Regulation, Schedule 1, clause 7(2)(b).

³² WIC Regulation, Schedule 1, clause 7(1).

³³ WIC Regulation, Schedule 1, clause 7(5)(a). GWS would also have to provide the amended Water Quality Plan to IPART at the same time it provided it to the auditor under licence condition clause 9.1 of Schedule B of its network operator's licence.

While the non-compliances indicate that improvement is required, they did not result in a failure of treatment processes or adversely impact on public health and safety.

We have also considered similar non-compliances identified for other Flow Systems subsidiary licensees as relevant to Flow Systems' ability to provide technical capacity to GSW. IPART has investigated these non-compliances and continues to monitor follow-up action required by Flow Systems and the relevant subsidiary licensees to address outstanding issues.

On balance, we consider that the ongoing operation of the scheme demonstrates GSW's capacity to safely and reliably design, construct, operate and maintain water industry infrastructure, when supported by additional licence conditions. We have recommended three additional licence conditions to mitigate the risk of further non-compliances on the implementation of licence plans.³⁴ We will undertake further audits to monitor ongoing compliance. The proposed new licence conditions are summarised in Table 4.1.

Table 4.1 Recommended new licence conditions for technical capacity

Clause number	Condition
Schedule A, clause 2.1	The Licensee must ensure that its Water Quality Plan is a single, cohesive and structured scheme-specific document which specifies the actions the licensee must take to implement the 12 elements of the framework for recycled water quality management and use set out in the Australian Guidelines for Water Recycling.
Schedule A, clause 3.1	The Licensee must develop and document, consistent with element 4 of the Australian Guidelines for Water Recycling, the following Operational Procedures: <ol style="list-style-type: none"> a) Monitoring protocols for operational performance of the recycled water supply system, including the selection of operational parameters and criteria, and the routine analysis of results; b) Procedures for corrective action where operational parameters are not met; c) Procedures for rapid communication systems to deal with unexpected events; and d) Programs for regular inspection and maintenance of all equipment, including monitoring equipment.
Schedule A, clause 3.2	The Licensee must: <ol style="list-style-type: none"> a) fully implement the Operational Procedures; b) ensure that all of its activities are carried out in accordance with the Operational Procedures; and c) keep records to demonstrate the extent to which the Operational Procedures have been implemented and complied with.

Note: Schedule A contains special licence conditions.

Financial capacity (licensing criterion (a))

We are satisfied that GSW has the financial capacity to undertake the proposed new activities.

GSW currently relies on the support of Flow Systems for financial capacity as it does not have financial capacity as a stand-alone entity. In November 2019, the sale of the Flow Systems group to a consortium of investors (Shareholders), was completed.

³⁴ Schedule A, clause 1.1 and clause 2.1 of the proposed network operator's licence.

We therefore re-assessed the financial capacity of the applicants under the new ownership structure and have concluded that the sale has not materially impacted Flow Systems or GSW's financial capacity.

With support from the Shareholders, GSW and Flow Systems have adequate levels of solvency and liquidity to undertake licensed activities under the Network Operator Licence.

We have included more detail of Flow Systems' financial capacity assessment in Appendix B.

We note that our financial assessment represents financial capacity at a point in time. Our recommendation to grant GSW a varied licence should not be viewed as an endorsement of its future, ongoing viability of GSW or Flow Systems. The assessment is based on a combination of information sources, none of which is to be regarded as individually determinative. We undertake this assessment for our own purposes and for the Minister's purposes in making a determination on the application. Our conclusion is not to be relied upon for any other purpose or by any other person.

We recommend no additional licence conditions on financial capacity, should the Minister grant GSW a varied licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages risks related to financial capacity.

Organisational capacity (licensing criterion (a))

We are satisfied that GSW has the organisational capacity to undertake the proposed new activities.

We note that GSW has no employees and relies on the full support of Flow Systems to provide it with organisational capacity.

Flow Systems underwent a period of administration and a subsequent sale during the assessment of this application. We consider that despite the associated changes to the organisational structure, GSW and Flow Systems' organisational capacity remains largely unchanged.

We received no submissions in relation to GSW's organisational capacity.

Our detailed assessment of GSW's organisational capacity is in Appendix B.

We consider that the existing condition in Schedule B, clause 1.1 adequately manages risks related to organisational capacity.

Capacity to carry out those activities in a manner that does not present a risk to public health (licensing criterion (b))

We are satisfied that GSW has the capacity to undertake the proposed new activities in a manner that does not present a risk to public health.

We assessed GSW's capacity to manage key risks to public health posed by the:

- ▼ Construction, operation and maintenance of non-potable water infrastructure connecting the existing non-potable water reticulation network to the GPARC.

- ▼ Use of non-potable water for four new end-uses at the GSTC: general wash-down (for use on hard surfaces), car washing, dust suppression for construction activities, and process water at the non-potable water treatment plant.
- ▼ Use of non-potable water at the GPARC for all ten end uses: toilet flushing, washing machines (cold water tap), cooling tower make-up, irrigation, water features, street cleaning, general wash-down (for use on hard surfaces), car washing, dust suppression for construction activities, and process water at the non-potable water treatment plant.

We considered a range of information and evidence to establish GSW's capacity. Our detailed assessment is in Appendix B.

NSW Health raised concerns regarding GSW's application

We received one submission from NSW Health regarding GSW's capacity to protect public health. The submission is available on our website and discussed in the summary of submissions in Appendix D. NSW Health advised that a detailed risk assessment with relevant stakeholders is required to ensure that the treatment is appropriate for all intended end-uses and the public health risks are managed.³⁵

Under Schedule B, clause 4.1 of the current licence, GSW must carry out the activities in compliance with any requirements of NSW Health that IPART has agreed to and notified in writing. One such requirement is a requirement to "consult with NSW Health during the detailed risk assessments for drinking and recycled water".³⁶ GSW has advised that it will address any remaining issues with the risk assessment and controls in consultation with NSW Health before commencing commercial operation.³⁷

The Network Operator Licence Application seeks to include four new end-uses for non-potable water including general wash-down (for use on hard surfaces), car washing, dust suppression for construction activities, and process water at the non-potable water treatment plant. GSW must update its Water Quality Plan to address the risks associated with the new proposed end-uses prior to supplying non-potable water for those purposes. This will include finalising the detailed risk assessment and identifying appropriate controls. This significant change to the Plan will require an audit to assess the adequacy of the revised plan under Schedule 1, clause 7(5)(a) of the *Water Industry Competition (General) Regulation (NSW) 2008* (WIC Regulation).

We are able to direct GSW and other licensees to undertake further consultation with NSW Health regarding their risk assessment.³⁸ We will continue to work with NSW Health to address this issue as required.

On balance, we consider that GSW has the capacity to continue to protect public health under a varied licence when supported by a combination of the regulatory measures outlined above and additional licence conditions. We recommend that GSW should be subject to the standard

³⁵ Submission from NSW Health, 21 November 2019.

³⁶ Letter to Green Square Water Pty Ltd, Notification of NSW Health requirements under licence clause B4, 7 December 2017.

³⁷ Email to IPART from Flow Systems, 12 December 2019.

³⁸ This arrangement is set out in clause B4.1 of the current GWS network operator's licence (clause B3.1 of the proposed new licence).

licence conditions in Schedule B of the licence (refer to Attachment A for the proposed licence) in relation to its capacity to protect public health, if the Minister grants a varied licence.

We have restricted one of the end-uses for non-potable water

We consider that the risk mitigation measures that GSW has proposed, in its risk register, are adequate to demonstrate GSW's technical capacity to undertake the current and proposed new end-uses. However, this is not an endorsement of GSW's current risk register by IPART, which should be further developed with NSW Health prior to supplying non-potable water for the new end-uses or commencing commercial operation of the new infrastructure at the GPARC.

The existing licence authorises GSW to supply non-potable water for "water features" generally. We consider that it is appropriate to limit this end-use to "ornamental water features" only, consistent with our recommendation for other network operator licence applications for Flow Systems' schemes. We consider that the public health risks posed by authorising the use of non-potable water in water features is high. This is because water features can include splash park type features or shallow pools, as may be present at the GPARC, with which children or adults may interact resulting in a high likelihood of ingesting non-potable water.

Therefore, we propose to limit this end-use by defining it in the Network Operator Licence as follows:

Ornamental water features means water features that:

- (a) are provided primarily for aesthetic or beautification purposes, and
- (b) do not, by their design or accessibility, encourage interaction with the water.³⁹

Appropriate arrangements with respect to insurance (licensing criterion (c))

We are satisfied that GSW has made, and will continue to maintain, appropriate insurance arrangements for the scheme.

We requested advice from Insurance and Care NSW (icare) on the adequacy of GSW's insurance arrangements. As a result of its review, icare concluded that GSW's insurance arrangements are sufficient for the existing and proposed activities under the Network Operator Licence Application.⁴⁰ Based on the advice from icare, and our assessment of the Insurance Expert's Report⁴¹ that GSW provided, we consider that GSW has demonstrated that it has made, and will continue to maintain, appropriate insurance arrangements for the scheme.

Further details of our assessment of GSW's insurance arrangements are in Appendix B.

We received no submissions regarding GSW's insurance arrangements.

³⁹ In Table 1.3 of the proposed network operator's licence in Attachment A.

⁴⁰ Emails to IPART from icare, 3 December 2019 and 10 February 2020.

⁴¹ *Insurance Expert Report – Green Square*, Arthur J. Gallagher & Co. (Aus) Limited, 9 July 2019.

We recommend no additional licence conditions related to insurance arrangements, should the Minister grant GSW a varied licence. We consider that the existing conditions in Schedule B, clause 2 adequately manage risks related to insurances.

Matters of public interest (licensing principle (f))

Despite the probability that in some years the scheme may require greater potable water top-up than is expected, we consider that the scheme is beneficial as it provides recycled water, ultimately reducing the total potable water demand.

In its submission, Sydney Water stated that demand in extended dry periods typically exceeds the available supply requiring significant volumes of drinking water top-up (from Sydney Water). In light of this risk, we had regard to the availability of source stormwater and recycled water produced at the scheme, particularly given the recent drought and the probability of recurrence of such events in the future.

GSW demonstrated that there would be enough water to meet demand at most times. GSW designed the infrastructure for this scheme using stormwater availability data during a period of relatively low rainfall. GSW is able to meet the current and future expected demand at the scheme without relying excessively on drinking water top-up supply. The scheme has adequate redundancy to accommodate any fluctuations in source water availability.

GSW will continue to take stormwater from the source in the GSTC, and it can also take stormwater from a second source (culvert) in the GPARC as required. GSW expects that it will not require stormwater from the second culvert until 2025. The demand from the GPARC is expected to increase the current demand (at the GSTC) by around 2%. GSW's water balance shows that the existing stormwater culvert can provide sufficient source water to meet this small extra demand.

4.3.2 Flow Systems meets the licensing criteria for a Retail Supplier Licence

We consider that the proposed extension of Flow Systems' area of operation to include the GPARC as a customer for the supply of non-potable water satisfies each of the licensing criteria set out in the WIC Act. We analysed the information in the Retail Supplier Licence Application, and considered our assessment undertaken for the original retail supplier licence application in 2015. We conclude that there have not been any material changes to our assessment on licensing criteria (e) and(f), and that our analysis contained in the report provided to the Minister in 2015, in which we recommended that Flow Systems be granted a retail supplier licence for the Green Square scheme, continue to apply.⁴²

We have undertaken further analysis of the Retail Supplier Licence Application in relation to licensing criteria (a)-(d) as described below.

Technical capacity (licensing criterion (a))

We are satisfied that Flow Systems has the technical capacity to undertake the proposed new activities.

⁴² IPART, *Assessment of Flow Systems Pty Ltd's application to vary it retail supplier's licence no.13_001R*, - Report to the Minister, August 2015.

Flow Systems proposes to use the same systems, procedures and resources to supply its customers at the GPARC, as it uses to supply the existing GSTC.⁴³

Flow Systems has demonstrated its technical capacity as a retail supplier of non-potable water through the provision of plans, codes of practice and policies that show its understanding of retail supply of non-potable water supply to customers.

We have included more detail of Flow Systems' technical capacity assessment in Appendix B.

We received no submissions regarding Flow Systems' technical capacity.

We recommend no additional licence conditions related to Flow Systems' technical capacity, should the Minister grant Flow Systems the variation to its licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages risks related to technical capacity.

Financial and organisational capacity (licensing criterion (a))

We are satisfied that Flow Systems has the financial and organisational capacity to undertake the proposed new activities.

With support from the Shareholders, Flow Systems has adequate levels of solvency and liquidity to undertake licensed activities under the Retail Supplier Licence.

We note that our financial assessment represents financial capacity at a point in time. Our recommendation to grant Flow Systems a varied licence should not be viewed as an endorsement of the future, ongoing viability of Flow Systems. The assessment is based on a combination of information sources, none of which is to be regarded as individually determinative. We undertake this assessment for our own purposes and for the Minister's purposes in making a determination on the application. Our conclusion is not to be relied upon for any other purpose or by any other person.

We received no submissions regarding Flow Systems' financial or organisational capacity.

We recommend no additional licence conditions related to Flow Systems' financial and organisational capacity, should the Minister grant Flow Systems the varied licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages risks related to financial and organisational capacity.

Our detailed assessment of Flow Systems' financial and organisational capacity is in Appendix B.

Capacity to carry out those activities in a manner that does not present a risk to public health (licensing criterion (b))

We are satisfied that Flow Systems has the capacity to undertake the proposed new activities in a manner that does not present a risk to public health.

⁴³ The RSMP, codes and compliance procedures are standard documents that apply across all of Flow Systems' schemes.

Our detailed assessment of Flow Systems' capacity to undertake licensed retail activities in a manner that does not pose a risk to public health is in Appendix B.

As Flow Systems will retail the water produced by GSW at the non-potable water treatment plant, we consider the management of public health risks by GSW as outlined in section 4.2 to be relevant.

NSW Health commented on Flow Systems' application

NSW Health recommended that Flow Systems' customers and other end users of recycled water are made aware of, and agree to, any requirements to manage any remaining risks with the supply of non-potable water.⁴⁴ Under Schedule 2, clause 9 of the WIC Regulation, Flow Systems must inform customers of the authorised purposes of non-potable water and must not supply non-potable water for any other purpose.

If the Minister grants the licence variation, we propose to write to Flow Systems highlighting this requirement.

We recommend no additional licence conditions related to this matter, should the Minister grant Flow Systems the varied Retail Supplier Licence. We consider that the existing condition in Schedule B, clause 4.1⁴⁵ adequately manages risks related to public health.

Appropriate arrangements with respect to insurance (licensing criterion (c))

We are satisfied that Flow Systems has made, and will continue to maintain, appropriate insurance arrangements for the scheme.

We have previously assessed Flow Systems' insurance as adequate for the retail supply activities undertaken under the Retail Supplier Licence, which covers a number of schemes including the scheme.⁴⁶ The insurance arrangements set out in the Retail Supplier Licence Application have not materially changed from Flow Systems' existing insurance arrangements. We consider that Flow Systems insurance arrangements with respect to the activities undertaken under the Retail Supplier Licence are sufficient to cover the GPARC as an additional customer for the scheme.

Sufficient quantities of water (licencing criterion (d))


We are satisfied that if the licence variation is granted, sufficient quantities of water supplied by Flow Systems will have been obtained otherwise than from a public water utility.

We have had regard to this criterion in assessing the Retail Supplier Licence Application in light of the recent drought. We consider that by supplying an alternate source of water that reduces the drinking water demand from Sydney Water, Flow Systems satisfies this licence criterion.

⁴⁴ Submission from NSW Health, 21 November 2019.

⁴⁵ Schedule B, clause 3.1 of the proposed varied Network Operator Licence.

⁴⁶ See IPART, *Assessment of Flow Systems Pty Ltd's application to vary its retail supplier's licence no. 13_001R Prepared under the Water Industry Competition Act 2006 (NSW)*, August 2017.



We received no submissions regarding this matter in relation to Flow Systems' Retail Supplier Licence Application.

We recommend no new licence conditions related to this matter, should the Minister grant Flow Systems a varied licence.



Appendices



A Draft Network Operator Licence and Retail Supplier Licence

B Detailed capacity analysis of GSW's and Flow Systems' applications

We considered the following as part of our assessment:

Evidence of technical capacity with respect to the Network Operator Licence Application

From our assessment, we consider that GSW, with the support of Flow Systems, has the relevant technical capacity to carry out the activities that the varied licence (if granted) would authorise.

- ▼ **Compliance history and understanding of relevant legislative frameworks:** GSW holds a Network Operator Licence under the WIC Act. A compliance audit in 2019 of GSW's operations found non-compliances that included the implementation of its Water Quality Plan and safe operation of the plant and equipment. However the non-compliances did not result in a failure of treatment processes and GSW is working to fix these issues.
- ▼ **Risk assessment for the non-potable water infrastructure:**⁴⁷ The draft risk assessment identifies hazards and risks related to the scheme's non-potable water infrastructure and business systems, and identifies control measures to manage these risks. GSW is working with NSW Health to further develop the risk assessment to address shortcomings identified by NSW Health.⁴⁸ We expect this to be completed to NSW Health's satisfaction before GSW commences commercial operation. For the purposes of holding a licence, we consider that the current draft risk assessment demonstrates GSW's technical capacity to understand and implement the AGWR.
- ▼ **Flow Systems recycled water quality plan (WQP):**⁴⁹ The WQP describes how the operation and maintenance of infrastructure for Flow Systems schemes (including at Green Square) would be consistent with the AGWR. The WQP is a generic document intended to cover all of Flow Systems' schemes. Scheme specific information is included in the Scheme Management Plan. The WQP demonstrates GSW's capacity in developing appropriate documentation to supply recycled water at the scheme.
- ▼ **Flow Systems infrastructure operating plan (IOP):**⁵⁰ The IOP describes the asset lifecycle planning, system redundancy and condition monitoring for water industry infrastructure, amongst other infrastructure management considerations. The IOP is a generic document intended to cover all of Flow Systems' schemes. Scheme specific information is included in the Scheme Management Plan. The IOP demonstrates GSW's capacity in developing appropriate documentation to operate and maintain the recycled water infrastructure at the scheme.

⁴⁷ *Green Square Scheme Risk Register (GP-WAT-NSW-RG-OPS-2649)*, Flow Systems, 2 June 2016.

⁴⁸ Email to IPART from Flow Systems, 12 December 2019.

⁴⁹ *Recycled Water Quality Plan (FS-WAT-AUS-PL-OPS-1311)*, Flow Systems, revision 13, 10 July 2019.

⁵⁰ *Infrastructure Operating Plan (FS-WAT-AUS-PL-OPS-1279)*, Flow Systems, revision 12, 30 December 2018.

- ▼ **Green Square Water Scheme Management Plan (SMP):**⁵¹ The SMP describes the framework for the management of the (existing) scheme. The SMP is intended to supplement the WQP, IOP, asset management plan, and incident management plan with scheme specific information. It includes scheme-specific details from relevant Flow System’s plans (eg, WQP and IOP) for the scheme non-potable water infrastructure. It also addresses the requirements of Element 2 of the AGWR for the scheme specifically. The SMP does not cover the extension of the scheme to include the GPARC, but this is not yet necessary. The SMP demonstrates GSW’s capacity in developing appropriate documentation to manage the scheme.
- ▼ **2020 updated water balance report:**⁵² The 2020 water balance report considers the recycled water demand for each of the end-uses GSW seeks. The water balance demonstrates that for most of the time, there will be adequate stormwater available to meet this demand from the two culverts (sources). The water balance analyses the impacts of rainfall data on the estimated demand, particularly for irrigation. GSW designed the infrastructure for this scheme using stormwater availability data during a period of relatively low rainfall. GSW is able to meet the current and future expected demand at the scheme without relying excessively on drinking water top-up supply. (The water balance demonstrates that including the GPARC in the scheme increases the total recycled water demand by approximately 2%.) GSW has considered ‘extreme weather conditions’ when designing the non-potable water network with adequate redundancy to accommodate fluctuations in source water availability.
- ▼ **Recycled water servicing strategy letter:**⁵³ The strategy outlines the design of the non-potable water infrastructure required for the expanded scheme when supplying water to the GPARC. The report includes forecasting details for non-potable water demand at the GPARC and provides assurance that extending the scheme will not reduce reliability of supply, partly because the demand at the GPARC is expected to be minimal. The strategy letter considers the end-uses proposed at the GPARC and has modelled irrigation to occur four hours after midnight.
- ▼ **Process Flow Diagram:**⁵⁴ The process flow diagram confirms the construction and operation of the extension of the scheme, with stormwater harvested from two sources, treated and supplied to the existing GSTC and also to the proposed GPARC. Recycled water is stored in storage tanks to balance variations in supply and demand. Waste streams from the recycled water treatment plant are pumped into Sydney Water’s sewer network by means of a trade waste agreement with Sydney Water.
- ▼ **Sydney Water Drinking Water Connection Approval:**⁵⁵ **Flow systems** is able to access sufficient drinking water for top-up of recycled water through Council’s connection to the Sydney Water infrastructure. GSW, as a wholly owned subsidiary of Flow Systems, is also able to access the water.

⁵¹ *Green Square Scheme Management Plan (GS-WAT-NSW-PL-OPS-1791)*, Green Square Water, revision 6, 30 December 2018.

⁵² *Green Square Water Water Balance Report*, prepared by Kinesis for Flow Systems, 5 May 2020.

⁵³ Letter to Flow Systems from CMP Consulting Group, *Proposed Extension of Recycled Water Reticulation Feasibility Analysis*, 27 April 2016.

⁵⁴ Green Square Water, *Process Flow Diagram Recycled Water (GS-WAT-NSW-DR-PRD-2837)*, revision A1, 3 October 2019.

⁵⁵ Letter to Flow Systems from Sydney Water, *Water connection application*, 10 August 2015.

In 2015, Sydney Water confirmed that Flow Systems was able to connect to its drinking water infrastructure in Joynton Ave, to withdraw drinking water potable top-up supply at a maximum rate of 10L/s. This connection is owned by Council, as the owner of all of the water infrastructure for the scheme. Flow Systems is able to access this connection and currently supplies drinking water top-up through it for the existing scheme. Flow Systems intends to use the same to top-up the extended network, if the licence variations are granted.

Evidence of technical capacity with respect to the Retail Supplier Licence Application

From our assessment, we consider that Flow Systems has the relevant technical capacity to carry out the activities that the varied licence (if granted) would authorise.

- ▼ **Retail Supply Management Plan (RSMP):**⁵⁶ The RSMP describes the retailing activities to supply drinking water and non-potable water and provide sewerage services.
- ▼ **Code of practice for customer complaints:**⁵⁷ The Code of Practice describes the processes Flow Systems uses to respond to complaints (includes handling, resolution, escalation, compliance and continuous improvement) by customers (including owners, tenants and customers) in relation to the services provided. Flow Systems has developed its code of practice for customer complaints to be consistent with the Australian Standard AS ISO 10002-2006 and addresses complaints handling, including complaint definition, contact details to make a complaint, tracking of complaints, assessment of complaints, response to complaints and escalation of complaints to the Energy and Water Ombudsman NSW.
- ▼ **Missed Payments Policy:**⁵⁸ The policy outlines how Flow Systems responds when customers (eg, tenants or businesses) have missed one or more payments, and outlines Flow Systems' approach to customers who are having difficulty paying or are concerned about not being able to pay on time. In situations of financial hardship, (ie where a customer does not pay its water bill), we understand that GSW would continue to provide non-potable water at a reasonable flow for basic health and hygiene purposes. Flow Systems, as the retail supplier, would give reasonable notice to its customers if GSW intended to restrict supply.
- ▼ **Incident Management Plan:**⁵⁹ The plan addresses continuity of service during interruptions due to incidents or operational problems, including interruptions to non-potable water supply and disruptions to the customer centre.
- ▼ **Customer contract:**⁶⁰ The contract provides the standard terms under which Flow Systems would supply water and describes Flow Systems' responsibilities and its customers' responsibilities in relation administration of accounts, disputes and levels of service.

⁵⁶ Flow Systems, *Retail Supply Management Plan (FS-WAT-AUS-PL-RET-1322-4)*, revision 4, 11 February 2016.

⁵⁷ Flow Systems, *Complaints and Dispute Resolution Policy (FS-ALL-AUS-PO-RET-1249)*, revision 4, 14 March 2018.

⁵⁸ Flow Systems, *Missed Payments Policy, (FS-WAT-AUS-PO-RET-1286-1)*.

⁵⁹ Flow Systems, *Incident Management Plan (FS-WAT-AUS-PL-INC-1266)*, revision 8, 30 December 2018.

⁶⁰ Flow Systems, *Customer Contract*, 30 October 2015, see <http://flowsystems.com.au/governance/CustomerContract.pdf>.

- ▼ **Compliance management procedure:**⁶¹ The procedure describes at a high level the compliance management within Flow Systems' organisation.
- ▼ **Technical performance and previous retail experience:** Information in the application details Flow Systems' experience in the Australian water industry in preparing and implementing required retail systems and procedures at existing operational schemes⁶² and nominates specific personnel with this experience. Flow Systems proposes to use the same systems, procedures and resources to supply its intended customers under a varied licence at the scheme.⁶³
- ▼ **Compliance history:** Flow Systems' RSMP was last audited in August 2016. The audit report on the RSMP did not find any non-compliances or any opportunities for improvement.⁶⁴

Evidence of financial capacity with respect to the Network Operator and Retail Supplier Licence applications

From our assessment, we consider that both GSW and Flow Systems have the relevant financial capacity to carry out the activities that the varied licences (if granted) would authorise.

We have reviewed information provided by Flow Systems regarding the ownership structure for the Flow Systems group.⁶⁵ We conclude that, on balance, GSW (the applicant for the network operator licence) and Flow Systems (the applicant for the retail supplier licence) have, and will continue to have, financial capacity to carry out the activities that would be carried out under the respective licences for the scheme through the new ownership structure. We considered:

- ▼ The Flow Systems group's owners include large superannuation and sovereign wealth funds that injected equity into the Flow Systems business and imposed increased financial reporting on Flow Systems.
- ▼ An agreement facilitating the funding of the day-to-day operations of GSW and Flow Systems.
- ▼ The Flow Systems group has improving levels of solvency (ie, Net Assets) and working capital.
- ▼ Flow Systems' financial forecasts indicate profitability for the Flow Systems group and individual schemes.

Further confidential information relating to financial capacity of the licensees is included in the Briefing to the Minister accompanying this report.

⁶¹ Flow Systems' Compliance Management Procedure, (FS-ALL-AUS-PO-GOV-1366), revision 3, 29 August 2017.

⁶² Existing operational schemes are Box Hill North, Central Park, Discovery Point, Green Square, Huntlee, North Cooranbong, Pitt Town, and Shepherds Bay schemes.

⁶³ The RSMP, codes and compliance procedures are standard documents that apply across all of Flow Systems' schemes.

⁶⁴ Water Futures, *Report on the Retail Supply Management Plan Audit of Flow Systems: Retail Supplier's Licence No. 13_001R* (Flow Systems), 5 August 2016.

⁶⁵ Information provided includes copies of a Security holders Agreement, Subscription Agreement, and a Trust Deed for the applicant's holding company, A Directors' Declaration, replies to our formal requests for information and informal correspondence with the applicant.

Evidence of organisational capacity with respect to the Network Operator and Retail Supplier Licence applications

From our assessment, we consider that both GSW and Flow Systems have the relevant organisational capacity to carry out the activities that the varied licences (if granted) would authorise.

- ▼ **Organisational structure:**⁶⁶ Flow Systems manages its subsidiaries, including GSW. GSW and Flow Systems manage third parties to deliver the proposed works based on contractual arrangements and agreements.
- ▼ **Organisational chart:**⁶⁷ key personnel for areas such as business development, project delivery, operations, retail, finance technology, legal, risk and compliance are shared across the subsidiaries as required.
- ▼ **An outline of the experience of key personnel (short form biographies and position descriptions):** namely for the Chief Executive Officer, Chief Operating Officer, Executive Manager Project Delivery and Executive Manager Utility Operations.
- ▼ **Key personnel curricula vitae:** which outlines relevant experience in the water industry and specific personnel nominated to the scheme.

Capacity to carry out those activities in a manner that does not present a risk to public health with respect to the Network Operator and Retail Supplier Licence applications

From our assessment, we consider that both GSW and Flow Systems have the capacity to carry out the activities that the varied licences (if granted) would authorise in a manner that does not present a risk to public health.

- ▼ **Risk management method:** we reviewed GSW/Flow Systems' risk assessment⁶⁸ and consider that GSW and Flow Systems have demonstrated capacity to identify and manage key hazards and risks related to supplying non-potable water, to acceptable levels of risk, and would have in place reasonable control and mitigation measures as discussed in section 4.3 of this report.
- ▼ **Source water quality:** GSW will continue to source non-potable water from the licensed Green Square recycled water treatment plant. GSW will continue to source drinking water top-up for the non-potable water network from Sydney Water.

Currently Flow Systems (and consequently GSW) is able to take up to 10L/s of drinking water top-up supply from Sydney Water.⁶⁹ Flow Systems is able to access the connection to draw drinking water to top-up the recycled water supply to the scheme, under the Major Services Agreement between Council (as owner of the connection to Sydney Water's network) and Flow Systems.⁷⁰ This arrangement will continue after GPARC is included in the area of operations, if the Minister grants GSW's application to vary the Network Operator Licence.

⁶⁶ Flow Systems Organisational Structure, as provided on 23 July and 4 October 2019.

⁶⁷ Flow Systems Operations Ownership Structure, Organisation Chart, FS-ALL-AUS-PO-HRT-2055, as at May 2019.

⁶⁸ *Green Square Scheme Risk Register (GP-WAT-NSW-RG-OPS-2649)*, Flow Systems, 2 June 2016.

⁶⁹ Letter to Flow Systems from Sydney Water, *Water connection application*, 10 August 2015.

⁷⁰ Email to IPART from Flow Systems, Response to request for information, 4 October 2019.

- ▼ **Fit for purpose non-potable water quality:** GSW operates non-potable water infrastructure at the scheme under its existing licence and has demonstrated its capacity to treat stormwater and provide fit for purpose non-potable water, consistent with the requirements of the AGWR. GSW has indicated that it is committed to working with NSW Health to amend its risk assessment for the scheme (amongst its other schemes). GSW has advised that any remaining issues with the risk assessment and controls will be addressed in consultation with NSW Health before commencing commercial operation.⁷¹
- ▼ **Cross connection mitigation measures:** GSW has identified appropriate controls to ensure the risks of cross connections are minimised. In addition, GSW will continue to conduct quality assurance inspections of non-potable water connections prior to commercial operation of the new infrastructure and would follow a specific notification protocol in the case of possible cross connection incidents.
- ▼ **Non-potable water supply interruption:** Any interruption to the provision of non-potable water would pose a limited risk to public health. Drinking water top up for recycled water is available from Council's connection to the Sydney Water drinking water network in Joynton Ave, which Flow Systems can access. This is the current arrangement for the existing scheme. In situations of financial hardship, (ie, where a customer does not pay its water bill), we understand that GSW would continue to provide non-potable water at a reasonable flow for basic health and hygiene purposes. Flow Systems, as the retail supplier, would give reasonable notice to its customers if GSW intends to restrict supply.

Appropriate arrangements with respect to insurance for the Network Operator and Retail Supplier Licence applications

From our assessment, we consider that both GSW and Flow Systems have appropriate insurance arrangements.

- ▼ **Insurance information for Flow Systems and all subsidiaries (including GSW) was provided:**
 - Insurance certificates of currency - GSW and Flow Systems are named on each relevant insurance certificate
 - Contract works and legal liability insurance policy
 - Industrial special risk insurance policy
 - Insurance expert report detailing the following insurances:
 - Workers compensation
 - Contractors pollution liability
 - Industrial special risks
 - Combined public and products liability and professional indemnity
 - Contract works
 - Cyber risk
 - General business
 - Management liability
 - Portable equipment property

⁷¹ Email to IPART from Flow Systems, 12 December 2019.

We note that Flow Systems also holds other insurances including construction insurance, contractors' pollution insurance, equipment insurance and cyber enterprise risk management insurance.

- ▼ **icare review:** We sought advice from the NSW government owned insurance provider icare which concluded that GSW and Flow Systems have appropriate and adequate insurance cover for the proposed licenced activities. As part of its review, icare examined:
 - GSW's and Flow System's proposal under the varied licences
 - The scheme risk assessment
 - Insurance coverage details, certificates of currency and the insurance policies listed above
 - A Deed of Guarantee and Indemnity between GSW and its Guarantor, Flow Systems⁷²
 - Insurance expert report.⁷³

⁷² Dated 19 December 2013.

⁷³ *Insurance Expert Report – Green Square*, Arthur J. Gallagher & Co. (Aus) Limited, 9 July 2019.

C Green Square Water and Flow Systems ownership structure and related licensees

Table C.1 Flow Systems' subsidiaries and their licensed schemes

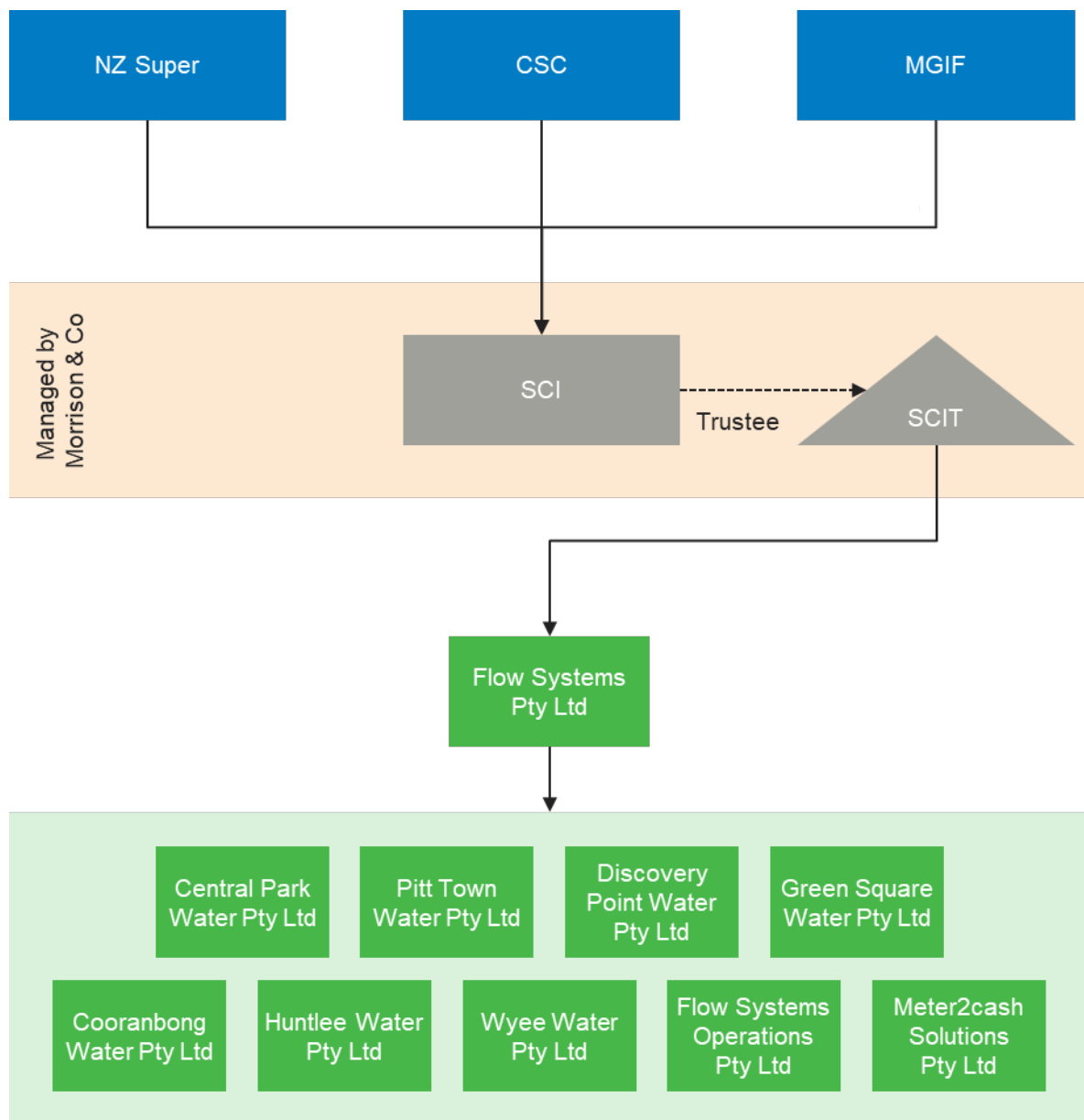
Subsidiary	Scheme	Network Operator Licence	Licensed for		
			DW ^a	NP ^b	S ^c
Pitt Town Water Pty Ltd	Pitt Town scheme, Pitt Town, Sydney	10_014		✓	✓
Central Park Water Factory Pty Ltd	Central Park development, Chippendale, Sydney	12_022	✓	✓	✓
Discovery Point Water Pty Ltd	Discovery Point development, Wollie Creek, Sydney	13_025	✓	✓	✓
Wyee Water Pty Ltd	Wyee residential scheme, Wyee, Lake Macquarie	14_026	✓	✓	✓
Huntlee Water Pty Ltd	Huntlee residential scheme, North Rothbury, Hunter Valley	15_030	✓	✓	✓
Green Square Water Pty Ltd	Green Square Town Centre, Sydney	15_031		✓	
Cooranbong Water Pty Ltd	Cooranbong residential development, Cooranbong, Lake Macquarie	15_033	✓	✓	✓
Flow Systems Operations Pty Ltd	Box Hill North residential development, Hills Shire Council	16_037		✓	✓
Flow Systems Operations Pty Ltd	Shepherds Bay development, Meadowbank, City of Ryde Council	17_042	✓	✓	✓

^a Drinking water infrastructure

^b Non-potable water infrastructure

^c Sewerage infrastructure

Figure C.1 Flow Systems group ownership structure



Legend:
 NZ Super = New Zealand Superannuation Fund
 CSC = Commonwealth Superannuation Corporation

MGIF = MGIF SCIT PV Pty Ltd
 SCI = Sustainable Communities Infrastructure Pty Ltd
 SCIT = Sustainable Communities Infrastructure Trust

Note: As Trustee Corporation SCI has direct control over SCIT.

Data source: Letters from Flow Systems to IPART, 6 August 2019 and 28 January 2020.

D Summary of submissions

Table D.1 Summary of submissions for GSW's and Flow Systems' applications to vary their Network Operator and Retail Supplier Licences for the scheme.

Agency	Summary of submission	Our response
NSW Health		
1.	<p>NSW Health noted the additional proposed end-uses (car washing, general wash down on hard surfaces, street cleaning and recycled water treatment plant process water). NSW Health requested that Flow Systems confirm how the water is intended to be used and how these uses will be controlled.</p> <p>NSW Health noted that swimming pools and interactive water features such as water splash parks are subject to requirements under the <i>Public Health Act 2010 (NSW)</i>. Flow Systems must not encourage, via its website or other means, any non-approved end-use such as recreational use of water features.</p>	<p>GSW has considered the various end-uses and their appropriate controls in its risk register which forms part of Network Operator Licence variation application. GSW has advised that any remaining issues with the risk assessment and controls will be addressed in consultation with NSW Health before commencing commercial operation.⁷⁴</p> <p>We propose to restrict the corresponding GSW Network Operator Licence which currently authorises “water features” generally to “ornamental water features” only. GSW has agreed with this approach. Restricting to “ornamental water features” only will mitigate risks associated with inadvertent non-approved use of recycled water such as recreational use of water features. We made a similar recommendation for the Central Park licence variation.</p>
2.	<p>NSW Health requested that all new end-uses are subject to a risk assessment to ensure that risks are appropriately managed. NSW Health noted that “an exposure assessment is necessary” to determine log reduction values for end-uses that are not considered in the AGWR.</p> <p>NSW Health also noted that Flow Systems' should update its risk methodology prior to conducting new risk workshops related to the scheme. The updates should address NSW Health's and IPART's feedback on previous risk assessments.</p>	<p>GSW is committed to working with NSW Health to amend its risk assessment for the scheme (amongst its other schemes). GSW has advised that any remaining issues with the risk assessment and controls will be addressed in consultation with NSW Health before commencing commercial operation.⁷⁵</p>

⁷⁴ Email to IPART from Flow Systems, 12 December 2019.

⁷⁵ Email to IPART from Flow Systems, 12 December 2019.

Agency	Summary of submission	Our response
3.	NSW Health recommended that Flow Systems' customers and other end users of recycled water are made aware of, and agree to, any requirements to manage the risk.	<p>Under Schedule 2, clause 9 of the WIC Regulation, Flow Systems must inform customers of the authorised purposes of non-potable water and must not supply non-potable water for any other purpose.</p> <p>If the Minister grants the licence variation, we propose to write to Flow Systems, highlighting this requirement.</p>
4.	NSW Health requested that Flow Systems review the risk assessments in consultation with relevant stakeholders including NSW Health, IPART and EPA. NSW Health expects an invitation to attend risk assessments. NSW Health requests that the management plans and incident notification protocols for drinking water and recycled water are updated if details of the scheme change.	<p>Our current practices would ensure that GSW consult with NSW Health and the EPA as relevant stakeholders at various stages during the development and auditing of GSW's management plans and incident notification protocols.</p> <p>Standard licence condition (Schedule B, clause 4.1)⁷⁶ requires GSW to comply with requirements of NSW Health. The existing direction from NSW Health requires GSW to consult with NSW Health during the development of all documents identified.⁷⁷</p>

⁷⁶ Schedule B, clause 3.1 of the proposed Network Operator Licence.

⁷⁷ Letter to WIC Act licensees from IPART, Notification of NSW Health Requirements under Licence Clause B4, 7 December 2018.

Agency	Summary of submission	Our response
5.	NSW Health considers that IPART's audit process would confirm adequacy and compliance of the recycled water management plan against the <i>Australian Guidelines for Water Recycling</i> .	<p>For the proposed new non-potable water infrastructure: GSW would be required to undertake a Licence Plans Audit and New Infrastructure Audit for new infrastructure licensed as part of this variation. These audits would check the adequacy and compliance of licence plans against requirements in relevant guidelines.</p> <p>For already licensed infrastructure with the proposed new end-uses: GSW must notify us of its proposal to supply non-potable water for new end-uses at least three months before commencing such operation (Schedule B, clause 11.1 of the existing Network Operator Licence⁷⁸).</p> <p>GSW is required to update its Water Quality Plan and associated risk assessment to adequately identify risks and controls related to the new end-uses. We consider that the Plan will need to be audited for adequacy, as this is a significant change to the Plan. Implementation of the updated Plan will be audited as part of operational audits of the scheme.</p>
6.	NSW Health noted that a licence under the WIC Act does not automatically exempt GSW from the requirement to develop and adhere to a drinking water management system under the <i>Public Health Act 2010</i> and <i>Public Health Regulation 2012</i> .	Drinking water is not being supplied by GSW. However, we note that GSW may be subject to additional requirements under legislation administered by NSW Health. We expect GSW to liaise with NSW Health to understand its obligations.

⁷⁸ Schedule B, clause 9.1 of the proposed Network Operator Licence.

City of Sydney Council (Council)

7. Council supports the variation applications so that water can be made available to the GPARC which is currently under construction and will be open to the public in early 2020. Noted.

Council noted that without the proposed changes, the GPARC would not be able to be provided with recycled water from the scheme, despite its proximity to the recycling plant. Which would be unfortunate as it will increase the local water demand without recycled water in a time when potable water resources are under pressure.

Council also noted that expanding the customer base for the scheme will improve its financial viability.

8. Council confirmed that no further approval is required for the construction and operation of (extension to the) non-potable water reticulation network connecting to the GPARC (including an additional stormwater source connection). Noted.

Department of Planning, Industry and Environment (DPIE)

9. DPIE confirmed that it found no record of enforcement action undertaken or carried out against GSW, Flow Systems or Council, under the EP&A Act. Noted.

10. DPIE noted that Council is the appropriate consent authority responsible for granting these development consents and therefore recommended that IPART should consult with Council to seek any advice on statutory planning pathways for development of the recycled water scheme. Noted.

DPIE did not comment on the potential for the variation to impose additional environmental risks and did not recommend additional licence conditions. We have not included any additional licence conditions related to the protection of the environment.

Environment Protection Agency (EPA)

11.	EPA is not aware of any breaches of the <i>Protection of Environment Operations Act 1997</i> (POEO Act) and has not taken any regulatory action against GSW or Flow Systems. Further, the EPA is not aware of the City of Sydney Council having breached the POEO Act in relation to these activities.	Noted.
12.	GSW does not require an environment protection licence (EPL) under the POEO Act, on the understanding that the proposed variations do not alter current waste disposal methods at the scheme to include discharge to waters or lands. Therefore the current situation remains unchanged and EPLs are not required.	Noted. EPA did not recommend any conditions relating to the environment to be included in the NOL. We have not included any additional licence conditions related to the protection of the environment.
13.	EPA noted that it is the responsibility of the proponent to ensure that all relevant environmental legislation is complied with.	Noted.
14.	EPA noted that IPART should not duplicate legislated environmental requirements.	Noted.

Sydney Water

15. Sydney Water supports measures that help to reduce the demand for drinking water, subject to:
- ▼ Conditions may be needed to assure public health, safety and environmental outcomes (as determined by NSW Health, WorkCover and the Environment Protection Authority).
 - ▼ Consistent definitions being used across licences for the same permitted uses.
 - ▼ An assessment of impacts on the overall water balance for each scheme, including changes to the supply of drinking water for top-up.
- Noted.
- We consider that no additional licence conditions are required. NSW Health, in its submission, did not recommend additional licence conditions.
- Conditions for network operators licences prescribed in the *Water Industry Competition (General) Regulation 2008* address issues of a safe and reliable network, environmental protection and require that water quality plans consistent with Australian guidelines be developed and implemented.
- The GSW licence has a condition requiring it to comply with NSW Health's requirements that IPART has agreed to and are notified to the Licensee.
- We consider consistency across licences whenever we receive a licence variation application. We have attempted to ensure that the definitions used across Flow Systems' subsidiary licences are consistent. Eg, the licences refer to "ornamental water features" rather than simply "water features" to reduce ambiguity about recycled water use.
- We have had regard to GSW's water balance for stormwater availability and the adequacy of the source water to meet demand at the GPARC. There is adequate source water available to meet the demand at most times and the scheme has adequate redundancy to accommodate any fluctuations in source water availability. GSW designed the infrastructure for this scheme using stormwater availability data during a period of relatively low rainfall. GSW is able to meet the current and future expected demand at the scheme without relying excessively on drinking water top-up supply.

16.	<p>Sydney Water has stated its strong preference that all WIC Act Licence holders be required to develop a Code of Conduct (CoC) with any other utility that provides services to or within their area of operations, regardless of whether there is a direct interconnection of infrastructure. As a minimum, the CoC should cover matters such as:</p> <ul style="list-style-type: none"> ▼ Data sharing (for example, water quality) ▼ Incident management ▼ Customer communication and complaint protocols ▼ How the risk of cross connections will be managed/mitigated. 	<p>Noted.</p> <p>GSW is required to establish a CoC in accordance with Schedule B, clause 10 of its current Network Operator Licence⁷⁹ for interconnections, if the Minister has not already established a CoC under clause 25 of the <i>Water Industry Competition (General) Regulation 2008</i> (WIC Regulation). There is no requirement for a CoC where services are provided within the area of operations but there is no interconnection.</p> <p>As this raises a broader issue that affects all licences and is not related to the variation being sought, we have not sought to address this issue through the licence variation process. We will however consider this issue as part of the next re-make of the WIC Regulation. We intend to consult further with Sydney Water and WICA licensees on the issues raised as part of that process.</p>
17.	<p>Sydney Water would welcome the opportunity to work with Flow Systems to ensure the safety of customers is prioritised, including better understanding Flow Systems' approach to communicating with recycled water customers during drought.</p> <p>Sydney Water noted that while historically recycled water has been exempted from water restrictions, demand for recycled water in extended dry periods typically exceeds the available supply requiring significant volumes of drinking water top-up. This may compromise pressure and flow in Sydney Water's drinking water system which may lead to poor service outcomes for customers and could also present public safety risk to the community during incidents (for example, during bushfires).</p>	<p>Noted.</p> <p>Flow Systems has a contract with Sydney Water for the supply of drinking water top-up supply. Flow Systems (and consequently GSW) is able to access Council's connection to Sydney Water's infrastructure to access the drinking water. We encourage Sydney Water to discuss the terms of provision of top-up potable water supply, during extended dry periods, under this contract.</p> <p>If necessary, the Minister has the capacity to impose restrictions on recycled water use. We consider that this is a more appropriate and flexible mechanism than specific licence clauses which are not able to be updated dynamically in response to wet/dry periods.</p>

⁷⁹ Schedule B, clause 8 of the proposed Network Operator Licence.

