



# Adelaide Desalination Project

## Procurement process and documentation - Fact Sheet

South Australian Water Corporation

November 2011

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# 1. Introduction

This document summarises the principal features of the “**Adelaide Desalination Project**” or “**ADP**” – which involves the design, construction, operation and maintenance of a seawater desalination plant, marine intake and outfall structures, including seawater conduits and associated infrastructure. A new pipeline and pump station is also being constructed and commissioned to connect the desalination plant to existing mains water infrastructure at Happy Valley. In addition, an electricity connection and supply of accredited renewable energy are to be supplied for the operation of the desalination plant.

In particular, this document provides information on:

- the reverse osmosis desalination plant which is being constructed at Port Stanvac, and will be operated, on behalf of the SA Water Corporation (a statutory State-owned corporation established by the South Australian Water Corporation Act 1994 (SA)) (**SA Water**);
- the project investigation, approval and procurement process for the ADP; and
- the principal features of the main contracts for the ADP (**ADP Contracts**).

This document is intended to provide a general guide to the ADP. Further information in respect of the ADP may be downloaded from [www.sawater.com.au/sawater/](http://www.sawater.com.au/sawater/).

Under the ADP contracts, the contract parties are obliged to keep the contracts confidential. Consequently, the contracts will not be publicly disclosed.

As the ADP contracts are not to be disclosed, this document is necessarily a summary and overview only and should be understood on that basis.

This document has been prepared by SA Water with the consent of the relevant contracting parties undertaking the ADP.

## 2. Background

### 2.1. Water security

Traditionally South Australia has always relied on the River Murray for much of its water. On average 40% of Adelaide’s water supply comes from the River Murray, but in a drought year as much as 90% of the supply may come from this one finite resource. Secure supply from the River Murray is under serious threat. Population growth over the next few decades will place even further strain on water supplies.

In recognition of these issues, on 30 June 2009, the South Australian Government launched the Water for Good plan and set the goal of South Australia becoming an internationally recognised “Water-sensitive State” by 2015. Adelaide’s desalination plant is being constructed to secure long-term and climate independent sustainable water supplies for South Australia, and to reduce the State’s reliance on the River Murray and other rain-dependent sources.

The construction of the desalination plant at Port Stanvac as part of the ADP was approved by the South Australian Government in December 2007 and is now recognised as a Major Development project by the State of South Australia.

### 2.2. The desalination project

The desalination project is made up of three major components:

- the design, construction, operation and maintenance of a reverse osmosis desalination plant with the capacity to produce 100 gigalitres of drinking water each year;

- the design, construction and commissioning of a pump station and transfer pipeline system that will pump desalinated water from the desalination plant in Port Stanvac through to the Happy Valley Water System, where it will be treated and mixed with other water from the treatment plant before entering the existing water supply network; and
- an electricity connection and electrical energy to be supplied from the grid to the desalination plant for some construction activities and the operation of the plant and the wider ADP.

The ADP is funded and owned by SA Water.

The desalination plant component will be designed and constructed by an unincorporated joint venture of McConnell Dowell Constructors (Aust) Pty Ltd., Abigroup Contractors Pty Ltd, and Acciona Agua Adelaide Pty Ltd., who comprise AdelaideAqua D&C Contractor.

The desalination plant will be operated and maintained, under a 20 year contract, by AdelaideAqua Pty Ltd. (comprising Acciona Agua Adelaide Pty Ltd and Trility Pty Ltd).

The \$1.824 billion project will be completed by the end of 2012, and will be commissioned to its full operating capacity and capable of producing 100 gegalitres of water per year (GL/year), which is sufficient to fulfil 50% of metropolitan Adelaide's current water needs.

Further details regarding the key features, location, design features and operational requirements of the desalination plant are available on SA Water's website.

## 2.3. Approvals and community consultation

### 2.3.1. State Government Major Development Approval

On 17 April 2008, the State Minister for Urban Development and Planning (**Minister**) declared the ADP to be a "Major Development" pursuant to section 46 of the *Development Act 1993* (SA), as it was considered to be of potential major environmental, economic and social concern. This declaration triggered a transparent and comprehensive state-run evaluation of the ADP, involving rigorous scrutiny of the project's potential environmental impact.

The key steps of the Major Development Approval process were as follows:

- (a) On 24 June 2008, SA Water submitted a Development Application to the Minister which was referred to the Development Assessment Commission (**DAC**), the agency responsible for determining the level of assessment required and issuing formal assessment Guidelines.
- (b) On 29 August 2008, after consultation with a range of State agencies, the DAC announced that the ADP would be subject to the most in-depth form of assessment. This required SA Water to produce an Environmental Impact Statement (**EIS**). The Guidelines issued by the DAC for preparing the EIS can be viewed at: <http://dataserver.planning.sa.gov.au/publications/1312p.pdf>
- (c) SA Water prepared the EIS and it was made available for public viewing from 12 November until 24 December 2008. The EIS set out the stringent environmental objectives and performance criteria of the ADP, and addressed how potential environmental impacts of the ADP can be avoided, mitigated or managed.
- (d) After considering the feedback received on the EIS, SA Water prepared and submitted in January 2009 a Response Document which dealt with the key issues raised by the public and agency submissions.
- (e) Subsequently, the Minister produced an Assessment Report which considered the whole of the proposal including the EIS, public and agency submissions and SA Water's Response Document.
- (f) The final Development Approval for the ADP was granted by the State Governor on 26 February 2009.

The EIS, public and agency submissions, the Response Document and Assessment Report are available for public viewing on Planning SA's website at: <http://www.planning.sa.gov.au/index.cfm?objectid=5087096B-F203-0D46-AC6D2892342F3D00>

Eleven conditions were attached to the final Development Approval which requires environmental management and monitoring plans to be put in place to ensure the construction and operational phases of the project meet the high environmental performance criteria for the project. These plans have been completed in consultation with the Environmental Protection Agency (EPA), local council and key stakeholders and include matters such as groundwater management, flora and fauna, waste management, air quality, site contamination, and sustainability.

The Contractors undertaking the ADP are required to comply with the Development Approval and EIS commitments.

### 2.3.2. Impact on matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)

In September 2008 SA Water submitted an EPBC Act Referral to the Commonwealth Department for the Environment, Water, Heritage and the Arts (DEWHA). The purpose of this referral was to allow DEWHA to determine whether or not the ADP required approval under the EPBC Act.

The EPBC Act protects matters of national “environmental significance” which include nationally listed flora and fauna species. SA Water’s referral set out particular environmental management and mitigation measures. It was considered that the site selected for the plant would not compromise key breeding and/or foraging habitat for any of the species considered in the referral.

On 11 November 2008 DEWHA issued its Notification of Referral Decision, indicating that the ADP proposal was not a “controlled action” within the meaning of the EPBC Act.

The Referral submitted by SA Water and Notification of Referral Decision from DEWHA can be viewed on the DEWHA website at:

[http://www.environment.gov.au/cgi-bin/epbc/epbc\\_ap.pl?name=current\\_referral\\_detail&proposal\\_id=4509](http://www.environment.gov.au/cgi-bin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=4509)

### 2.3.3. EPA licence to operate the Adelaide Desalination Plant

Operation of the ADP will involve discharging brine, or concentrated salt water, into the Gulf of St Vincent. The ADP will also use and store water treatment chemicals on site. Apart from Major Development Approval, the operator of the ADP (AdelaideAqua Pty Ltd) will also require an EPA licence as, pursuant to Schedule 1 the *Environment Protection Act 1993* (SA), operation of the desalination plant will involve activities of environmental significance.

On 16 December 2009 AdelaideAqua D&C Contractor applied to the EPA for the requisite licence, for the commencement of commissioning works, as part of the construction of the plant. The EPA considered public and agency submissions received on AdelaideAqua’s licence application. The EPA issued the Operating Licence on 17 November 2010. Upon handover of the plant to the operator, the Operating Licence will be issued to AdelaideAqua Pty Ltd. Further details are available on the EPA’s website: [http://www.epa.sa.gov.au/environmental\\_info/water\\_quality/projects/adelaide\\_desalination\\_plant](http://www.epa.sa.gov.au/environmental_info/water_quality/projects/adelaide_desalination_plant)

## 2.4. The procurement process

This section outlines the procurement model used and process undertaken for the three major components of the ADP (outlined in section 2.2 above).

### 2.4.1. Desalination plant and infrastructure

SA Water undertook a Competitive Procurement Process for the procurement of the desalination plant and infrastructure using a Design, Build, Operate and Maintain (DBOM) procurement model. Under this procurement model SA Water finances and owns the desalination plant and infrastructure and the private sector designs and builds the plant and also operates and maintains the plant and infrastructure for a period of 20 years.

The four key stages of the DBOM procurement process were as follows:

**Phase 1** - Expressions of interest: An invitation for respondents to submit expression of interest was publicly advertised in July 2008. Expressions of interest were received from consortia in August 2008.

SA Water evaluated the expressions of interest in accordance with formal evaluation and probity plans and three respondent consortia were short-listed to proceed to the request for proposal stage.

**Phase 2** - Request for proposal: The request for proposal document was issued to the short-listed respondents in September 2008. The short-listed respondents then submitted detailed technical proposals (including designs) and commercial proposals (price and contractual terms). The request for proposal process also included a comprehensive interaction process between the respondents and SA Water in relation to the resolution of technical and commercial issues.

**Phase 3** - Evaluation and negotiation: SA Water evaluated the technical and commercial proposals received through the request for proposal process in accordance with formal evaluation and probity plans and selected a preferred respondent.

**Phase 4** - Contract execution: SA Water and the preferred respondent executed contracts following final approvals in February 2009. The preferred respondent was the Adelaide Aqua Consortium.

### 2.4.2. [Transfer pipeline system](#)

SA Water undertook a competitive procurement process for the procurement of the transfer pipeline using a competitive early contractor involvement procurement model. Under this procurement model SA Water finances and owns the transfer pipeline and the private sector designs and constructs the transfer pipeline.

The four key stages of the proposed transfer pipeline system procurement process were as follows:

**Phase 1** – Preliminary proposals: An invitation for respondents to submit Expressions of Interest was publicly advertised in July 2008. Expressions of Interest were received from consortia in September 2008. SA Water evaluated these in accordance with formal evaluation and probity plans and two respondent consortiums were short-listed to proceed to the Phase 2 process.

**Phase 2** – Detailed proposals: This phase includes the preparation by the two short-listed respondents of their technical proposal and commercial proposal for the transfer pipeline system. The short-listed respondents then submitted detailed technical proposals (including designs) and commercial proposals (price and contractual terms).

**Phase 3** - Evaluation and negotiation: SA Water evaluated the technical and commercial proposals in accordance with formal evaluation and probity plans and selected a preferred respondent.

**Phase 4** - Contractual close: SA Water and the preferred respondent executed contracts following final approvals in December 2008. The preferred respondent was a consortium of McConnell Dowell Constructors (Aust) Pty Ltd and Built Environs Pty Ltd.

### 2.4.3. [Renewable energy](#)

SA Water undertook a competitive procurement process for the supply of 100% renewable energy from GreenPower accredited renewable energy sources in South Australia to meet the total electricity demand of the ADP during the operations phase for up to a 20-year contract period.

The procurement of energy for the ADP incorporated the following:

**Phase 1** - Expressions of Interest: An open request for expressions of interest for the supply of renewable energy was advertised in December 2008. Expressions of interest were received by SA Water in [February 2009]. SA Water evaluated the expressions of interest in accordance with formal evaluation and probity plans and four respondents were short-listed to proceed to the request for proposal stage.

**Phase 2** - Request for proposal: The request for proposal document was issued to the short-listed respondents in March 2009. Short-listed respondents submitted detailed proposals including price and contractual terms). The request for proposal process also included a comprehensive interaction process between the respondents and SA Water in relation to the resolution of operational and commercial issues. Proposals were received in July 2009

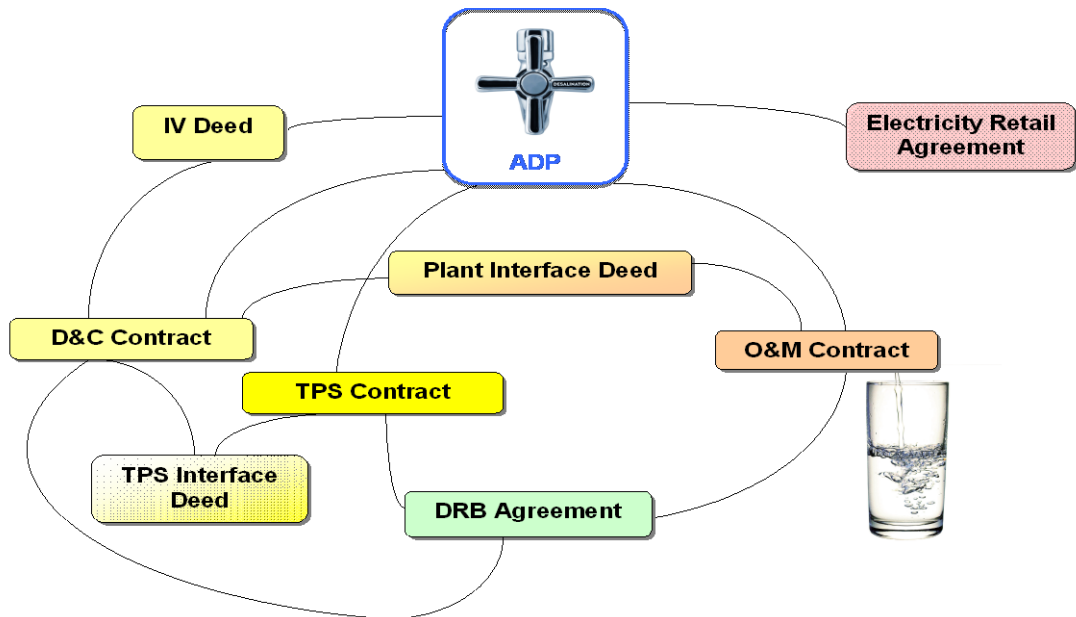
**Phase 3** - Evaluation and negotiation: SA Water evaluated proposals received through the request for proposal process in accordance with formal evaluation and probity plans and selected a preferred respondent.

**Phase 4** - Contract execution: SA Water and the preferred respondent executed contracts following final approvals in September 2009. The preferred respondent was AGL South Australia Pty Limited.

### 3. Overview of the contracts and parties

This section of the ADP fact sheet identifies the contracts and parties for each of the three major components of the ADP.

The following is a brief overview of how the key contracts from each component are integrated and coordinated. The detail of each major component then follows.



Although the desalination plant is being designed and constructed and subsequently operated and maintained through separate agreements, the ADP contracts will still ensure that the desalination plant and the ADP generally, is designed, constructed, operated and maintained as an integrated and coordinated package.

#### 3.1. The desalination plant and associated infrastructure

The key agreements in relation to the desalination plant and infrastructure are:

- (a) the design and construction contract (**D&C Contract**) involving an unincorporated joint venture involving McConnell Dowell Constructors (Aust) Pty Ltd (a member of the Aveng Limited group), Abigroup Contractors Pty Ltd (a member of the Lend Lease<sup>1</sup> group) and Acciona Agua Adelaide Pty Ltd (a member of the Acciona SA group), (collectively the **D&C Contractor**); <sup>1</sup>[The change of ownership from the Bilfinger Berger group was effected on 10 March 2011]
- (b) the operation and maintenance contract (**O&M Contract**) involving AdelaideAqua Pty Ltd, whose shareholders are Acciona Agua Adelaide Pty Ltd, and Trility Pty Ltd<sup>2</sup> (of the Parent group of Mitsubishi Corporation; Manilla Water Company, Inc; JGC Corporation; and Innovation Network of Japan) (the **Operator**); <sup>2</sup>[The change of ownership from United Utilities Australia Pty Ltd was effected on 1 March 2011]
- (c) the deed between the parties to the D&C Contract and O&M Contract to record and require the coordination, cooperation and collaboration between them (**Plant Interface Deed**);

- (d) the deed of appointment of APP Corporation Pty Limited (the **Independent Verifier**) to perform verification services in respect of the process, activities and works under the ADP contracts (**IV Deed**); and
- (e) the agreement establishing the dispute resolution board which is engaged to resolve disputes under the D&C Contract, O&M Contract, and the contract for the design and construction of the ADP pump station and transfer pipeline system (**DRB Agreement**).

### 3.1.1. The D&C Contract

The D&C Contract between SA Water and the D&C Contractor is a conventional design and construct contract and sets out the design and construction arrangements for the desalination plant.

As identified in section 3.1(a) above, the D&C Contractor is comprised of three entities who are in an unincorporated joint venture. These entities are jointly and severally liable to SA Water, which provides SA Water with the benefit of being able to pursue any of them to ensure the proper performance of the D&C Contractor's obligations.

Major elements of the D&C Contract include:

**Warranties and indemnities:** The D&C Contractor provides a number of warranties to SA Water in respect of the Desalination Plant and how it will perform its works, including that the Desalination Plant will be fit for purpose and satisfy all of the technical requirements of the D&C Contract. If the D&C Contractor breaches these warranties SA Water can bring an action against the D&C Contractor for breach of contract.

**Time obligations:** The D&C Contract contains a detailed regime to ensure that the desalination plant is completed on time, and there are financial mechanisms within the D&C Contract to incentivise the D&C Contractor to complete its works on time. The D&C Contractor will only be entitled to an extension of time if specified causes of delay actually delay it in completing its activities. The D&C Contractor accepts the risk of any costs, loss, expense or damage resulting from any delay to its works in all other circumstances.

**Payment:** In consideration of performing the works (within the times required under the D&C Contract), the D&C Contractor will be entitled to monthly payments for work performed, up to the total contract price.

**Security for performance:** The D&C Contractor has provided unconditional undertakings/bank guarantees to SA Water as security for the performance of its obligations and liabilities – such as liabilities (for example defect rectification) arising from failure to meet plant performance, reliability and durability requirements. To further secure the performance of the D&C Contractor's obligations and liabilities, each entity forming the D&C Contractor has procured for SA Water a parent company guarantee in favour of SA Water. Under these guarantees, the guarantors unconditionally and irrevocably guarantee to SA Water (amongst other things) the performance of the D&C Contractor's obligations.

**Defects liability:** If any defect is identified during the 24 month period after completion and handover of the desalination plant, SA Water can require the D&C Contractor to rectify that defect where directed to do so by SA Water. 'Defect' is defined widely and includes any defect, deficiency or omission in the desalination plant or the D&C Contractor's works under the D&C Contract.

**Health and safety:** The D&C Contractor must comply, and ensure that any person under its control complies, with OHS&W law. To ensure that the works are performed safely, the D&C Contractor is also required to:

- (a) maintain, review and update, and perform its activities in accordance with, a detailed safety management plan and OHS&W management plan;
- (b) conduct regular safety audits; and
- (c) provide evidence of its compliance with its OHS&W management plan where requested by SA Water.

**Environmental obligations:** There are a range of obligations on the D&C Contractor to protect the environment. Amongst other things:

- (a) the D&C Contractor is required to:

- (i) maintain, review, update and amend its management and monitoring plan;
  - (ii) report all incidents that cause, threaten or have the potential to cause material or serious environmental harm; and
  - (iii) clean up, at its own cost, pollution caused or contributed to by the D&C Contractor, its associates or the O&M Contractor; and
- (b) SA Water may suspend the whole or any part of the D&C Contractor's activities where the D&C Contractor is not complying with its environmental obligations.

**Minimising impacts on the community:** The D&C Contract reflects SA Water's firm view that the project will not be a success unless it incorporates community consultation, and, to this end, the D&C Contractor is required to engage with the local community, inform the local community of significant milestones, changed conditions, construction operations and other matters which may be of interest or concern to the community and generally interact with the local community.

**Insurances:** Between SA Water and the D&C Contractor, comprehensive insurances are required to be obtained and maintained in respect of the desalination plant and the D&C Contractor's activities.

**Events of default:** Under the D&C Contract SA Water has a range of remedies available to it in the event of default by the D&C Contractor, escalating to termination if a serious default (for instance a recurring breach of OHS&W obligations) is not rectified.

### 3.1.2. The O&M Contract

Under the O&M Contract between SA Water and the Operator for the operation and maintenance of the desalination plant, the key obligations of the Operator are to:

- (a) operate and maintain the desalination plant in accordance with the strict quality and process controls provided for in the O&M Contract for the term of 20 years;
- (b) deliver the specified quality of drinking water to SA Water in volumes required by SA Water from time to time; and
- (c) hand back the desalination plant to SA Water at the end of the operation and maintenance term.

To ensure that the operation and maintenance of the desalination plant is integrated with the plant's design and construction, the Operator is required to be heavily involved with, and responsible for, aspects of the development of the design, testing, commissioning and process proving of the desalination plant.

Other key aspects of the O&M Contract are outlined below.

**Quality:** The O&M Contract provides for specific and stringent quality benchmarks for the services to be provided by the Operator. For example, the services must be performed in accordance with best industry practice, the detailed technical requirements of the O&M Contract and a suite of management plans required to be developed by the Operator and approved by SA Water.

**Security for performance:** The Operator has also provided unconditional undertakings/bank guarantees to SA Water as security for the performance of its obligations and liabilities under the O&M Contract. Each of the shareholders in the O&M Contractor has also procured a parent company guarantee in favour of SA Water. Again, under these guarantees, the guarantors unconditionally and irrevocably guarantee to SA Water (amongst other things) the performance of the Operator's obligations.

**Waste management:** The Operator is responsible for the proper handling and disposal of any waste produced by the desalination plant.

**Capacity testing:** Every year during the operation and maintenance of the desalination plant, the Operator must perform a test to prove for a continuous period of at least seven days that the desalination plant is able to comply with SA Water's requirements contained in the O&M Contract.

**Drinking water quality:** To ensure the drinking water produced by the desalination plant of the high standard, the O&M Contract provides detailed requirements in relation to the management of water quality. The Operator must carefully monitor, and carry out a range of water quality tests, in accordance with a specified timetable, and otherwise as required by SA Water. To this end, the Operator must

develop a water quality management plan and comply with it. The Operator is also required to immediately notify SA Water if it considers that unsafe drinking water may have been supplied by the desalination plant.

**Drinking Water Volume:** SA Water has considerable flexibility in ordering the volume of water that is actually required from time to time.

**Suspension:** SA Water has rights to suspend the services under the O&M Contract – for example, if a suspension is necessary to investigate or mitigate the effects of any breach of the O&M Contract by the Operator or any emergency or force majeure event.

**Responsibility for construction / design defects:** To provide SA Water with remedies in addition to those under the D&C Contract in respect of faults and defects in the desalination plant, the Operator must rectify faults and defects. It must also carry out a detailed audit of the condition of the desalination plant and the existence of any faults or defects after the 9th year of operation.

**Warranties and indemnities:** The Operator provides a number of warranties to SA Water in respect of the operation and maintenance of the desalination plant, including that the desalination plant will be operated and maintained in accordance with best industry practice.

**Cost:** The amount payable to the Operator is scalable to the volume of water produced at different times.

**Abatement / payment principles:** The fee payable to the Operator is subject to a number of abatements if the O&M Contract is not being complied with, for example where the volume of water ordered cannot be supplied. This payment model will further incentivise the Operator to strictly comply with all of its obligations.

**Shutdown:** SA Water can require the plant to be shut down for an extended period, which might be appropriate if other supplies of water were to become abundant.

**Health and safety:** The O&M Contractor must take responsibility for, and comply with, detailed obligations in relation to, the health and safety of people at the desalination plant or who could be affected by it. To ensure that the services are performed safely, the O&M Contractor must, for example:

- (a) conduct detailed risk assessments and safety related training ;and
- (b) comply with, and continually update, a detailed safety management plan and OHS&W plan.

SA Water may suspend the Operator's services if it is not satisfied that they are being carried out safely.

**Environmental obligations:** The O&M Contract imposes detailed obligations on the Operator in relation to the protection of the environment, including:

- (a) complying with an extensive environmental management plan and environmental management system;
- (b) immediately reporting actual, potential or claimed contamination or pollution; and
- (c) cleaning up contamination or pollution (whether caused by the Operator or others).

**Insurances:** The Operator is required to maintain comprehensive insurances in respect of the operation and maintenance of the desalination plant and the Operator's other obligations.

**Events of default and suspension:** The O&M Contract contains a detailed regime in relation to defaults by the O&M Contractor. Where SA Water considers that an 'event of default' has occurred, it can direct the O&M Contractor to rectify that default, and if it is not rectified within the time required by SA Water (or if the O&M Contractor is not diligently remedying the default), SA Water has a right to terminate the O&M Contract. Such events of default include where the Operator fails to maintain the capability to supply the minimum required volume of water for a certain period of time or the where water produced by the desalination plant fails to comply with the required specifications.

**Minimising impact on the community:** The Operator is required to engage with the community during the operation phase of the ADP, and an operations review group will be established to consider customer and community feedback and action taken to address any feedback.

### 3.1.3. The Plant Interface Deed

To provide additional protection, SA Water has also procured the execution of an interface deed between the major contracting parties.

The Plant Interface Deed records and requires the coordination, cooperation and collaboration of each of the D&C Contractor and the Operator, so that their respective obligations will be performed in an integrated and coordinated manner.

Importantly, neither the D&C Contractor nor the Operator can claim relief from their respective obligations to SA Water by reason of the other's failure to meet its obligations under the D&C Contract or O&M Contract (as applicable). The Operator is not entitled, for example, to claim any relief from its obligations to SA Water, or any relief from any liability or abatement under the O&M Contract, due to any failure or alleged failure on the part of the D&C Contractor to properly perform its obligations under the D&C Contract. In simple terms this means that the Operator is at risk of not meeting its performance requirements if the D&C Contractor has failed to adequately design and construct the desalination plant.

This type of cross-liability provision places considerable responsibility on each of the D&C Contractor and the Operator for the performance of the other. This responsibility provides an incentive amongst the private sector entities to ensure compliance by all other contracting parties.

### 3.1.4. The Independent Verifier Deed

The IV Deed provides for the appointment of an independent expert (the Independent Verifier) to perform an extensive verification role under the ADP contracts.

The Independent Verifier is appointed by SA Water and the D&C Contractor, and is required to act independently of those parties and also the Operator. SA Water pays the Independent Verifier's fees.

The Independent Verifier acts as both a safeguard for SA Water (being an additional check that the desalination plant is being designed and constructed in accordance with the D&C Contract), and also as a referee between the SA Water and the D&C Contractor. Its role extends beyond the typical "superintendence" role in traditional construction contracts to provide detailed review and oversight of the performance of the D&C Contractor.

Key aspects of the Independent Verifier's functions include:

- (a) inspecting the D&C Contractor's activities and the works and verifying that they comply with the requirements of the D&C Contract – particularly in relation to process, quality and durability;
- (b) conducting compliance audits of the processes and activities of the D&C Contractor, subcontractors and the design team for the desalination plant;
- (c) reviewing design documentation prepared by or on behalf of the D&C Contractor;
- (d) reviewing and verifying aspects of the progressive completion of the desalination plant;
- (e) reviewing, monitoring and verifying the tests and results of testing undertaken by the D&C Contractor;
- (f) reporting to the project control group overseeing the design and construction of the desalination plant.

### 3.1.5. DRB Agreement

The D&C Contract, O&M Contract, Plant Interface Deed, TPS Contract and TPS Interface Deed (see section 3.2 below) each provide for a dispute resolution process which includes the establishment and the operation of a dispute resolution board (**Board**) to assist in resolving disputes under these contracts.

The appointed members of the Board are Patrick O'Sullivan QC, Mr Phillip Blunden and Mr Garry Ash.

The previous member, Mr Peter Youens resigned from the Board. Mr Garry Ash was selected by the project parties to replace him as of 23 March 2011. The members have specialist knowledge and experience with major projects and disputes in the area of legal, engineering and programming.

The DRB Agreement sets out the rights, obligations and duties of the parties in relation to the Board and the functions and obligations of the Board. All disputes may be referred to the Board for resolution. A party can reject the Board's recommendation and is then free to litigate the dispute. The exception to this is where a dispute arising between the parties to the D & C Contract or the O & M Contract relates to a claim valued at less than a pre-agreed threshold, in which case the Board's recommendation is final and binding.

## 3.2. Transfer pipeline system

The main agreements in relation to the transfer pipeline system component are:

- (a) the design and construction contract for the ADP's pump station and transfer pipeline system (**TPS Contract**) involving McConnell Dowell Constructors (Aust) Pty Ltd and Built Environs Pty Ltd (collectively the **TPS Contractor**);
- (b) the deed between the parties to the D&C Contract and TPS Contract to record and require the coordination, cooperation and collaboration between them (**TPS Interface Deed**); and
- (c) the DRB Agreement (discussed at section 3.1.5 above).

### 3.2.1. TPS Contract

The TPS Contract requires the TPS Contractor to design, construct and commission the pump station and transfer pipeline system from the desalination plant in Port Stanvac to the Happy Valley Water System. The TPS Contract is similar to the desalination plant D&C Contract.

### 3.2.2. TPS Interface Deed

SA Water has also required the D&C Contractor and TPS Contractor to enter into the TPS Interface Deed so that the desalination plant and the ADP's pump station and transfer pipeline system are delivered in an integrated and coordinated fashion.

Each of the D&C Contractor and TPS Contractor has express obligations to coordinate its activities with, and assist the other, regularly update the other as to the progress of its works, and comply with its obligations under an agreed pipeline interface management plan which puts a framework around these coordination and integration obligations.

## 3.3. Renewable Energy

As part of the Major Development Approval process (see section 2.3.1 above) SA Water committed that for the ADP, renewable energy would be used for the production of the desalinated water and the transfer of this water to the distribution network.

With regards to this commitment, SA Water has since entered into a 20 year agreement with AGL South Australia Pty Limited (**AGL**) for the sale of 100% accredited renewable energy to the Adelaide Desalination Plant. The award of the agreement to AGL followed a competitive bid process conducted by SA Water.

The *Agreement for the Sale of Accredited Renewable Energy* (or **RESA**) provides for AGL to sell 100% of the electricity to be consumed by the 100 giga litre per annum Adelaide Desalination Plant.

The accredited renewable energy to be sold by AGL comprises:

- (a) Renewable Energy Certificates (**RECs**) in respect of that portion of the electricity consumed by the Plant for which RECs are required to be surrendered under the Commonwealth's renewable energy target legislation (**RET Volume**); and

- (b) GreenPower under the National GreenPower Accreditation Program (**GreenPower Program**) in respect of the balance of the electricity consumed by the Plant (**GreenPower Volume**).

SA Water has the option to purchase an additional amount of GreenPower up to the RET Volume.

The RESA requires AGL to meet its sale obligations in respect of the RET Volume and the GreenPower Volume from renewable energy generators which are located in South Australia and are accredited under the National GreenPower Accreditation Program. The GreenPower program has more stringent requirements regarding the types of renewable energy generators which can be accredited for the supply of GreenPower, than is the case under the RET legislation.

The purchase of GreenPower is expected to have environmental benefits above and beyond the traditional '*electricity plus RECs*' approach used for other desalination plants around Australia. This was due to changes in Federal Government policy in 2009 which means that additional (voluntary) GreenPower purchases under the GreenPower Program will be treated as additional when accounting for Australia's pollution reduction targets after June 2012 under the recently legislated Clean Energy Act.

Due to the variable nature of the electricity requirements of the Adelaide Desalination Plant (which is a result of seasonal and other factors which affect the availability of water from alternative sources), it was important that the electricity sale arrangements for the Adelaide Desalination Plant provide volume flexibility. The RESA delivers to SA Water total volume flexibility with no minimum electricity consumption requirement. During periods of low electricity consumption SA Water will be required to purchase a base level of GreenPower accredited RECs, however SA Water will be able to bank or use these RECs to satisfy its broader environmental corporate targets.

The RESA delivers for the Adelaide Desalination Plant a secure, long term sale arrangement for competitively priced renewable energy for the Adelaide Desalination Plant. Importantly, the price payable by SA Water for accredited renewable energy sold by AGL is a fixed price for each contract year, and the price will not be subject to review, nor will there be any additional costs passed through to SA Water, as a result of any environmental, carbon or greenhouse gas related tax or any change in law related to the environment. This includes the introduction or subsequent variation or abolition of any Carbon Pollution Reduction Scheme or other carbon or greenhouse gas emissions abatement or trading scheme, or any variation or abolition of the REC Scheme.

The obligations of AGL under the RESA have been guaranteed by AGL Energy Ltd, the parent company of the AGL group and a substantial ASX listed public company.

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