SEQWATER'S 17 AUGUST SUBMISSION / RESPONSE TO QCA REQUEST OF 10 AUGUST

10 August 2012

The Authority provides, herewith, another formal (consolidated) information request to Seqwater. [Questions outlined below prior to Seqwater responses.]

A response would be appreciated by Friday 17 August 2012.

From: Colin Nicolson [redacted]
Sent: Friday, 17 August 2012 11:30 AM
To: Angus MacDonald
Cc: Matt Bradbury
Subject: NEW DATA REQUEST 10 AUGUST 2012

Angus

Here are our responses to the data request and supplementary data request (addendum) of 10 August 2012.

QCA Question 1

Past Renewals Data

We have been reviewing the past renewals data prepared by The Indec. Some of the items, appear to be more closely related to operational activities. The definition used to determine the capex/opex split endorsed in the 2006 SunWater review (with see refer Tier 1 Working Paper 10) is as follows:

> *"Based on industry best practice, expenditures related to standard operating activities and other expenditures more closely aligned to corrective and preventative maintenance activities have been reclassified out of the refurbishment [renewals] database and into the general operating and maintenance budgets [opex]."*

a) In relation to the above definition, where relevant, please clarify the exact nature of each of the following types of expenditure [as per your headings and data provided to us]:

- "Recreation Maintenance
- Infrastructure Maint - Reactive Maint
- Infrastructure Maint - Scheduled Maint
- Dam Ops - irrigation schemes
- Operational Maintenance Services."

b) Also, there appear to be some flood damage repair costs included in past renewal expenditure. Refer Atkinson Dam Flood Renewal (**Lower Lockyer Valley WSS**). Your main submission indicates that Seqwater does not intend to recover flood damage costs. Please clarify which items (submitted as past renewals) are flood items that should be excluded.

Seqwater Response to Item 1

In determining the classification of projects, Indec relied on the advice of Seqwater's scheme operators who were asked to identify past operating expenditure that was in the nature of renewals by following the decision chart attached. The decision chart is the same as was used by SunWater for the 2005-06 irrigation price review. The names of the projects shown above are those used by Seqwater under its own naming conventions. Seqwater's names used to describe the projects are not necessarily indicative of the nature of the projects from a renewals perspective. Consequently, a supplementary process was required whereby scheme operators nominated renewal projects in retrospect.

Seqwater's irrigation renewals forecasts excluded expenditure arising from the January 2011 floods however one flood repair works being "Atkinson Dam Flood Renewals" at a cost of $157,261 has been included. A second item submitted in past renewals as "Atkinson Dam Flood Renewals Flow meter, replace non return valve, contract payments" was not flood related. No other flood related costs have been included at this point. Note that some flood costs may subsequently be recognised as renewals if there is a shortfall in insurance funding. The insurance claim is expected to be settled at the end of October, 2012.

QCA Question 2

Opex – Further Clarify Dam Safety Inspection Timing / Costs

In relation to our data request of 14 June on dam safety inspections, you responded on 6 July as follows:

> *Under the 'Operations' heading in NSPs, there is a statement that "Dam operations must meet the regulatory requirements under various Acts including those relating to Dam Safety, Flood Management, Flood Management, Resource Operations Plans...".*
>
> *The range of activities required to meet dam safety requirements includes the operation of dams to meet safety requirements, such as the operation of gated structures during flood events and routine inspections.*
>
> *This is different to periodic dam safety inspections, usually required at 5-yearly intervals, and are based on specific compliance requirements. It is these periodic costs that are captured separately in the lower bound cost base in NSPs.*

Could you please clarify the following:

a) In its revised core submission, Seqwater states that routine dam safety inspections are carried out to identify and plan maintenance requirements. Please confirm that these costs are included in operations rather than planned maintenance outlays; and

b) Seqwater states that it carries out additional in-depth dam safety inspections every 5 years. However, for Central Lockyer Table 7-4 shows that inspections during the regulatory period are to occur in 2014-15 and 2016-17 (two within three years). Refer Table 7-4. Therefore, could you please:

- clarify why these inspections are scheduled two years apart, rather than the 5 years stated; and
- advise when the last thorough (5 yearly) inspections were carried out for all schemes."

Seqwater Response to Item 2

The costs of annual dam safety inspections are included in operations.

The 5 yearly dam safety compliance inspections are carried out on a dam by dam basis and not on a scheme basis. As stated in the Central Lockyer WSS NSP, Clarendon Dam is due for inspection in 2014-15 and Bill Gunn Dam in 2015-16.

The 5 yearly dam safety inspections are carried out in accordance with the dam safety conditions schedule issued by the dam safety regulator to dam owners in respect to each dam. Consequently, inspections are not carried out by scheme. Clarendon Dam was last reviewed on 15 April 2010 and Bill Gunn Dam was inspected on 26 July 2012. All other dams have been inspected in accordance with the dam regulator's requirements.

QCA Question 3

Dam Safety Upgrades

We note $2.147 million was provided to SunWater through a CSO to off-set costs associated with spillway upgrades at Bjelke-Petersen Dam and Borumba Dam in 2006-07 and 2007-08.

- In light of this, we ask that Seqwater clarify in what year Borumba Dam spillway upgrades occurred during the period 2006-13? What were the actual costs incurred? Have any of these costs been included in the calculation of opening ARR balances for 1 July 2013, for the purpose of irrigation price setting?

- Also please advise any amounts ($) of past or forecast expenditure (renewals or opex) related to dam safety upgrades – and in what years -- that may (inadvertently) have been included in costs to be recovered from Seqwater irrigation customers in 2013-17 prices

If any have been included then we will exclude all such costs (regardless of CSO apportionment) as the Ministerial Direction directs the Authority to exclude Dam Safety Upgrades.

- In summary, we ask that you confirm that this is the correct approach as no such costs should be passed on to Seqwater's irrigation customers.

Seqwater Response to Item 3

No dam safety upgrade costs have been included in renewals expenditure. The dam safety upgrade works undertaken and completed in Seqwater schemes was the Borumba Dam upgrade which was funded by government both during its SunWater ownership and its Seqwater ownership. Early planning for the Maroon Dam and Moogerah Dam upgrades was undertaken in 2010-11. These costs were excluded on the basis that the Ministerial Direction also expressly excludes dam safety upgrades. During Seqwater's ownership of Borumba Dam, $3.859M was expended but not included in 2008-09 renewals and $0.019M was expended but not included in 2009-10 renewals, the year the work was completed.

See response above. Dam safety upgrade costs have not been included in Seqwater's schemes renewals.

See responses above. Seqwater recognised that no dam upgrade costs are to be passed to irrigators and ensured that such costs were excluded.

QCA Question 4

Recalculating HUF for Central Brisbane River WSS

We have reviewed PB's report as well as SunWater's Technical Report on Headworks Utilisation Factors (HUFs) to obtain an understanding of how the HUFs had been derived for all of Seqwater's irrigation schemes.

For Central Brisbane River WSS, the brief illustration set out in PB's report does not enable us to fully understand how the HUFs had been derived. We have therefore referred to the more detailed explanation on HUF from SunWater's Technical Report.

Basically, the information needed for us to adapt the HUF more usefully is as follows.

Please provide for Central Brisbane River WSS:

a) Water sharing rules between MP and HP groups (this was made available to the Authority for Central Lockyer, Lower Lockyer, Logan River, Mary River and Warrill Valley through these schemes' ROP/IROL);

b) The 15-year sequences of combined daily storage volume data used to develop ***the probability*** that in turn is used to calculate the HUFs; and

c) Detail the manner in which the probability being assessed was developed. From SunWater's Technical Report it looks like an 'exceedance curve' is used to assess this probability.

d) Please provide Central Brisbane's exceedance curve and an explanation of how it should be interpreted.

Seqwater Response to Item 4

The water sharing rules are found in the Moreton ROP commencing on page 18 and also refer to page 95 of the appendices.

Attached (Wiv 15yrs.wmf) is the 15 year storage volume graph. Also attached is the 15 year data set (sv_Ts.txt).

Attached (Wiv&Somerset.wmf) is the ranked plot of the combined storages (Wivenhoe and Somerset dam for the simulation period).

Table below shows storage volume with percent of exceedance for the combined dams for the ROP case modelled.

Scenario	Percent of time exceeded or equalled (%)				
	1%	5%	50%	90%	99%
ROP Case	1,204,320	1,169,660	1,033,140	733,104	382,193

QCA Question 5

Priority Groups (Central Lockyer)

a) Clarify terminology:
   - Seqwater's main submission says: "High A and High B" and medium and high priority [WAE] are to be treated the same (Seqwater main submission approx. pg77); whereas
   - Seqwater's Central Lockyer NSP says: "Risk A Priority and Risk B Priority" and medium and high priority
   - Question: Are these the same thing – if so, what are the correct terms.

b) Once the above is clarified, please confirm that "Risk A Priority, Risk B Priority and medium priority" (only) are to be treated as medium priority WAE for the purposes of irrigation pricing?

Seqwater Response to Item 5

Under the IROL, Central Lockyer has High, Risk A, Risk B and Medium priority water allocations. The references to "High A" and "High B" should be taken to read "Risk A" and "Risk B".

It is confirmed that "*Risk A Priority, Risk B Priority and medium priority" (only) are to be treated as medium priority WAE for the purposes of irrigation pricing*".

QCA Question 6

Consultation on Central Brisbane River WSS – Supply Contract

- Stakeholders have submitted that – as no consultation took place prior to the Standard Supply Contract – Central Brisbane River WSS taking effect – the contract does not have effect.
- Please outline what consultation took place with irrigators prior to the Standard Supply Contract, Central Brisbane River WSS taking effect?

Seqwater Response to Item 6

No consultation took place with irrigators in respect to the Standard Supply Contract which is deemed under the *Water Act 2000*.

QCA Question 7

Consultation on and Introduction of Central Brisbane River WSS – Service Targets

The Standard Supply Contract Central Brisbane River WSS makes mention of:

> [s5(e)] ROL Holder shall, at approximately annual intervals, during this agreement publish a report comparing the performance of ROL Holder with the Service Target;
>
> [s5(f)] ROL Holder shall publish Service Targets for the Regulated Area and revise these from time to time after considering changes in customer needs determined through customer consultation, and changes in industry practice and procedures.

We note your submission states that no Service Targets exist in Central Brisbane River and Central Lockyer WSSs.

- Please outline further how Seqwater proposes to establish Service Targets in consultation with customers and the proposed timeframes?
- What type of Service Targets does Seqwater envisage in establishing in each WSS?
- What is the link between the Service Targets (referred to in the supply contracts, if any) and the "levels of service" that we are required to give consideration to in recommending prices (see Ministerial Direction)?

Below are responses we received on the yet outstanding information we requested from Seqwater. The information is either yet to be provided or the responses were inadequate.

Seqwater Response to Item 7

Seqwater intends to establish Service Targets through a consultation process with its customers. No definite time frame is proposed at this point however Seqwater expects that this matter will receive some priority following the restructure of the bulk water entities. It is envisaged that the types of service targets will be similar to those established at other schemes and will reflect past practice.

The QCA should note that the regulatory requirements (ROPs, dam regulator etc) are the key driver of operations and costs compared to the typical scheme service targets. While it is preferable that service targets exist, we do not believe that they have any material bearing on costs given the nature of the service and the over-arching requirements of the ROP and other regulation.

QCA Question 8

Other Outstanding Operating Expenditure Matters

a) Forecast Operating Expenditure – 2006-07 to 2010-11 (SunWater);

   Seqwater response: Forecast operating expenditure for 2006-07 to 2010-11 is not available and cannot be supplied.

   - **Please confirm that this is still the case in light of recent data discoveries (if not, please provide).**

b) Provide details and documentation of how the forecast operational expenditure estimates (including associated adjustments) were calculated.

   Seqwater response: To be provided early next week.

   - **Please provide a detailed basis outlining the methodology for forecasting OPEX base year ASAP**. As part of this please also provide the basis for the electricity forecasts base year.

c) Can repairs and maintenance costs be provided at a further degree of disaggregation (i.e. Labour, contractors and materials)? If so, please provide.

Seqwater response: Seqwater can provide disaggregated information for maintenance costs, however this will take some time to produce and will be provided separately. We are currently aiming to have this information available late next week.

- **Please provide ASAP**.

Seqwater Response to Item 8

a) The forecast operating expenditure for 2006-07 to 2010-11 remains unavailable.

b) The draft overview version will be provided by close of business on 17 August 2012 and the full submission by 24 August 2012.

c) Although it was thought that further disaggregation of costs could be provided, attempts to do so have found that it cannot be done in any meaningful fashion. Therefore Seqwater advises, with regret, that it cannot provide further information beyond that already provided.

QCA Question 9

Addendum to - 10 August 2012 Data Request

As discussed, further to our data request n 10 August 2012 – in relation to HUF Item 4.

We are trying to recalculate (modified) HUF, instead of Seqwater's recommended adjusted nominal WAE for (the purpose of cost allocation), in the Central Brisbane River WSS.

Currently, with the data we have, we cannot recalculate the HUF. SunWater's technical report (where there are definitions of these parameters) was not sufficiently clear.

We ask, therefore, that Seqwater expand further on the illustration in Figure B-11 of PB's report (below). Specifically, we seek an explanation of how each number was derived that enters into Figure B-11.

Step 3:

- MP0 AA (228,888) – how is this derived?
- AA 62% HP AA – is this calculated or is this what they intend to allocate to HP AA or MP0AA?
- HP100 AA (394,600) – how is this derived?
- Equivalent MP AA of 15% - how is this derived?
- MP0 (228,888) – how is this derived?
- MP100 AA (768,082) – how is this derived?
- MP100 (768,082) – how is this derived?
- The FSV Headworks (1,165,200) seems to be only for Somerset

Step 4:

- HP1 (224,002) – how is this derived?
- MP1 (539,194) – how is this derived?
- TOP (397,118) – how is this derived?
- HP2 (116,556) – how is this derived?
- MP2 (280,562) – how is this derived?
- P1 & P2 (100%) – is this 100% policy intention, if not what is this?
- P3 (50%) – is this 50% policy intention, if not what is this?

This is the illustration to which our questions refer.

STEP 1- Identify the water entitlement groupings

Water Entitlement	Nominal Volume (ML)
HPA	279000
MPA	7041

STEP 2- Determine the volumes of the water entitlement

Water Entitlement	ROPCF	HPA max	MPA min
HPA	0		
MPA	0		7041

STEP 3- Determine the Water Sharing Rules

Parameters	Formula	AA	Value
MP0 AA	228888	62%	HP AA
HP100 AA	394600	15%	MP AA
Equivalent MP AA	15%		
Adj Volume	none		
MP0	228888		

Parameters	Formula
MP100 AA	768082
Adj Volume	none
MP100	768082

Parameters	Formula
FSV Hwks	1165200
DSV hwks	4886
CV = FSVHwks -DSVHwks	1160314

STEP 4- Assess the hydrologic Performance of each component of headworks storage

Parameters	Formula	Probability	Values/Formula	Parameters	Formula
HP1	224002	P1	100%	HP1util	224002
MP1	539194	P2	100%	MP1util	539194
TOP	397118	TOP MP & HP			
HP2	116556	P3	50%	HP2util	58278
MP2	280562	P3	50%	MP2util	140281

STEP 5- Determine the headworks Utilisation Factors

Parameters	Formula
HUFmp	71%
HUFhp	29%

Assumptions/Limitation

Sensitivity Analysis

Any Comments related to IROL & ROP

Figure B- 11. Central Brisbane Water Supply Scheme – Fifteen (15) year Critical Period

Seqwater Response to Item 9

Attached spreadsheet (HUF calculations for QCA_CBrisbane.xlxs) provides the explanation requested. As this is a difficult matter, we are happy to meet and include representatives from PB if required.

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Economic Regulation
Queensland Bulk Water Supply Authority *trading as* Seqwater

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