

Council Reference: Kings Forest Development
Your Reference:



20 March 2017

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to the General Manager

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Sent via email: wayne@northernwatersolution.com

Dear Wayne

Provision of Water and Sewerage Services to Kings Forest

Northern Water Solutions (NWS) has requested a letter from Council indicating that it was feasible for Council to provide bulk water and receive treated wastewater from an operator, licensed under the Water Industry Competition Act 2006, of water and sewerage infrastructure at the Kings Forest development.

On 16 March 2017 Council resolved to issue a letter to NWS advising NWS that it is technically feasible for Council to provide bulk water and receive treated wastewater from NWS for the Kings Forest development subject to:

1. Determining the impact on Council's infrastructure
2. Developing an agreement which ensures Council is not disadvantaged, and
3. A further resolution of Council approving the negotiated agreement

It should be noted that to enable this to occur there is a need for additional Council infrastructure to supply the bulk water and accept the treated wastewater from the development.

The intent of this letter, as requested by Northern Water Solutions, is to inform the Independent Pricing and Regulatory Tribunal that it is technically feasible for Council to provide bulk water to and receive bulk wastewater from a licenced operator at the Kings Forest development. The letter is not a commitment to do so as any such commitment would require a resolution of Council after consideration of a proposed agreement between Northern Water Solutions and Tweed Shire Council.

If you have any enquiries in respect to this matter please contact Rob Siebert at Tweed Shire Council at rsiebert@tweed.nsw.gov.au

Yours faithfully

David Oxenham
DIRECTOR ENGINEERING

Key Retail Business Risk Register

Proposed Context and Risk Definitions for Retail Business Risks

Risk Rating Definitions				
Consequences	\$ Cost (EBIT)	Compliance and Reputation	Injury	Likelihood
1. Low Impact	Less than \$50,000	Complaints / Warranty Claims	First aid / medical treatment in house	1. Rare
2. Moderate Impact	~ \$100,000	Customer Claims	External medical treatment – hospital / doctor	2. Unlikely
3. High Impact	~ \$250,000	Multiple Customer Claims, Regulatory or Criminal Prosecution, Fines or Penalties	Restricted duties / disability	3. Possible
4. Catastrophic	Over \$500,000	Terrorism Act / Major Regulatory Action (Safety/Environmental) / Class Action	Fatality / Permanent Disability	4. Certain

Risk Map

	Low Impact	Moderate Impact	High Impact	Catastrophic Impact
Certain	B (1,4)	B (2,4)	A (3,4)	A (4,4)
Possible	C (1,3)	B (2,3)	A (3,3)	A (4,3)
Unlikely	C (1,2)	B (2,2)	B (3,2)	A (4,2)
Rare	C (1,1)	C (2,1)	B (3,1)	B (4,1)

Risks can be categorized into the following three regions:

- broadly acceptable region;
- ALARP (As Low As Reasonably Practicable) region;
- Intolerable region.

Risk Map

	Low Impact	Moderate Impact	High Impact	Catastrophic Impact
Certain	B (1,4)	B (2,4) R1'	A (3,4)	A (4,4)
Possible	C (1,3)	B (2,3)	A (3,3)	A (4,3)
Unlikely	C (1,2) Broadly Acceptable Region	ALARP Region B (2,2)	B (3,2)	A (4,2)
Rare	C (1,1)	C (2,1) R1''	B (3,1)*	B (4,1)

NOTE 1 - for any single Risk R1:



Retail Supply Management Plan and Provider Systems



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Northern Water Solution Pty Ltd

Pre: Commercial Operation Stage Audit Plans

For Network Operations & Retail Supply

February 2017



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NOTE 1 - for any single Risk R1:

Proposed Context & Risk Definitions for Retail Business Risks

Measures of risk control can reduce the **Consequences** of the potential harm (Hazard) to **[R1']** or reduce the **Likelihood** of occurrence to **[R1''']** of the harm, or both to **[R1'']**.

Risk Experience No.	Business Function	Risk Category	Specific Risk Issue (Hazard)	Description of Risk Issue	Consequences of the Risk Issue	Risk with current controls			Existing Risk Management Controls	Existing Risk Management Controls Adequate? Y/N	Risk after additional controls			Action Required	By Whom
						Potential impact 1. Low 2. Moderate 3. High 4. Catastrophic	Probability of risk happening 1. Rare 2. Unlikely 3. Possible 4. Certain	Risk Category			Potential impact 1. Low 2. Moderate 3. High 4. Catastrophic	Probability of risk happening 1. Rare 2. Unlikely 3. Possible 4. Certain	Risk Category		
1	Strategic Business Development	Business Risk	Clients	Project client (e.g. Developer) becomes insolvent/withdraws from project.	Potential to have enormous financial consequences to NWS in the event of major disruption of a project.	4	2	A (4,2)	Network Operator ensures there is pre-contract due diligence assessment of the prospective project and client. Retail Supplier exposure is only once retail supply activity commences after treatment plants are commissioned and network reticulation is operating.	Y	2	2	B (2,2)	Network Operator to: – Only select reputable Clients; – Review options to strengthen pre-project due diligence processes and/or improved financial safeguards in the event of default; – Establish Tri-partite agreements with the major funder, if required; – Stage the construction phases to reduce exposure; – Require Deposits to be paid on each Stage. – Have the Developer commit to a subsidy scheme until sufficient ratable properties are available. – All the above assists in the risk mitigation for the Retail Supplier.	NWS
2	Operations & Maintenance	Loss of plant & equipment	Fire	Potential for fire starting in treatment plant to result in serious damage to buildings, plant & equipment.	Customer service interruption. Increased cost. Loss of access to Network Operator's plant & equipment; Plant outage resulting in loss of essential service. Customer claims; Reputation impact.	4	2	A (4,2)	Network Operator has inbuilt prevention measures, such as; - Fire hose reels, fire extinguishers and smoke detectors.	Y	4	2	A (4,2)	Review adequacy of property loss prevention aspects with the Network Operator that would consider options such as automatic fire sprinklers, monitored fire detection systems, periodic thermal scanning of electrical equipment, fire separation of potential ignitions sources such as electrical switchboards.	NWS/ Fire Consultant
6	Strategic Business Development	Business Risk	Insurance	Major uninsured exposures.	NWS self-insured to the extent of its liability for uninsured exposures. This could have adverse financial consequences should an uninsured major loss occur.	4	3	A (4,3)	Be aware of uninsured exposures & mitigate this risk,	Y	2	1	C (2,1)	Undertake in conjunction with Broker a review and gap analysis Annually of NWS insurance needs and options to address any identified gaps.	NWS and Insurance Broker

5	Strategic Business Development	Business Risk	Project Finance	Insufficient funding/finance of developer. Developer's financier experiences difficulties e.g. GFC. This risk is related to risk of client (developer) becoming insolvent.	Potential to have catastrophic financial consequences for NWS in the event of major disruption of a project.	4	2	A (4,2)	Pre-contract due diligence assessment of the prospective project and client. Selection of only top tier clients.	Y	4	1	B (4,1)	Review options to strengthen pre- project due diligence processes and/or improve financial safeguards in the event of default. E.g. review quality of developer's funding provider etc. Seek bank guarantee. Up front deposits. Developer's subsidy scheme.	NWS Project Team
4	Operations & Maintenance	Occupational Health & Safety	Confined Space	Unauthorized access into PSU pods inside easements.	Asphyxiation, drowning.	4	2	A (4,2)	Operators trained in safe work practices for confined space entry. Locking lids.	Y	4	1	B (4,1)	Provide confined space entry warning labels for all confined spaces. Review options for improved access controls for PSU pods e.g. lockable covers for storage tank hatches. Induct all employees / contractors in Occupational Health & Safety Management arrangements for all aspects of NWS operations.	NWS Plant Operators
3	Strategic Business Development	Business Risk	Customers	Ratepayer population for a development does not achieve developer's growth targets.	Reduced Cash Flow; Reduced profit margins; Reputation impact.	2	3	A (2,3)	Pre-contract due diligence assessment of the prospective project and client. Each developer to guarantee & subsidize retail operation until break-even point in number of ratepayers is obtained.	Y	3	2	B (3,2)	Negotiate future contract agreements such that developers commit to subsidizing the number of ratepayers until the break - even point is reached. This will reduce the risk of revenue shortfalls in the event that ratepayer growth targets are not achieved.	NWS Project Team
23	Operations & Maintenance	Customers	Product misuse	Malicious misuse	Treatment plant & equipment effected by foreign substance e.g. Hydrocarbons	3	3	A (3,3)	Trade waste agreements in place with Customers; appropriate pre- treatment system for Customer; Educating customers on system usage. Close liaison with Network Operator should issue arise.	Y	2	3	B (2,3)	On-going vigilance of customer behavior	NWS Retail
8	Operations & Maintenance	Occupational Health & Safety	Mobile Plant	During the project's housing construction stage damage to PSU caused by mobile equipment.	Crushing, striking; property impact damage.	2	3	B (2,3)	On-site staff provide visual checks & education of building contractors	Y	3	1	B (3,1)	Ongoing site awareness with home building contractors	NWS Project Team

10	Operations & Maintenance	Occupational Health & Safety	Electrical Safety	Electrical hazard associated with PSU electrical systems.	Fire, Electrocution.	4	1	C (4,1)	Modern installations. Qualified electrical contractors perform installation work. Preventative maintenance program in place. Work performed only by qualified	Y	4	1	B (4,1)	All inductions to cover the Occupational Health & Safety Management arrangements for all aspects of NWS operations.	NWS Operations
11	Operations & Maintenance	Occupational Health & Safety	Rotating Machinery	Pump drive shafts and other treatment plant machinery with moving parts.	Entrapment; shearing; tearing.	4	1	B (4,1)	Machine Guarding.	Y	4	1	B (4,1)	Ensure ongoing strict control over the integrity of machine guarding. Review opportunities to improve risk controls over moving/rotating machinery hazards e.g. warning labels, induction training, machinery isolation lock-out / tag-out procedures, safety interlocks.	NWS
12	Operations & Maintenance	Quality Assurance	Treated Water Quality	Treated water out of specification.	Personal injury, property damage, environmental damage, customer claims; regulatory action.	4	1	B (4,1)	Continuous process and water quality monitoring at all stages of the treatment process.	Y	4	1	B (4,1)	Continual review of improvement opportunities for water QA processes. Constant review & assessment of critical information updates from Network Operator.	NWS & consultant
13	Operations & Maintenance	Customers	Privacy/Confidentiality	Utility customer information privacy breach.	Prosecution; Penalties; Customer Claims; Reputation Impact	4	1	B (4,1)	Safeguards over customer privacy are documented in the relevant Customer Charter and Privacy Policy. Safeguards are considered adequate subject to ongoing review.	Y	4	1	B (4,1)	Review IT security arrangements on an annual basis.	NWS IT
14	Operations & Maintenance	Products	Malicious Tamper / Sabotage	Malicious tampering with treatment process resulting in out of specification treated water.	Personal injury, property damage, environmental damage, customer claims; regulatory action.	4	1	B (4,1)		N	4	1	B (4,1)	Network Operator to have continual review & assessment of plant security measures. Have available appropriate channels of communication direct with Retail Supplier.	NWS
15	Operations & Maintenance	Products	Malicious Tamper / Sabotage	Malicious tampering with treated water storage.	Personal injury, property damage, environmental damage, customer claims; regulatory action.	4	1	B (4,1)		N	4	1	B (4,1)	Same as Risk Reference No.36	NWS
16	Strategic Business Development	Crisis Management & Business Continuity Planning	Serious business disruption - effecting supply	Loss of a treatment plant, or other serious business disruption.	Increased cost. Plant outage. Customer claims; Reputation impact.	4	1	B (4,1)	Typically, contingency plans are in place to respond to disruption to individual projects.	Y	3	1	B (3,1)	Consider establishing a formalized Crisis Management & Business Continuity Plans that will, in the event of a serious business disruption, help NWS to continue to achieve its key business objectives .	

7	Strategic Business Development	Legal & Compliance	Changes to legislation	Potential for future changes to legislation - increased regulation on private water utilities. Not aware of any imminent changes that would have adverse consequences	Need to re-assess the business model	3	2	B (3,2)	Maintain watching brief over developments to legislation regulating water industry / private water service providers.	Y	3	2	B (3,2)	Continue monitoring legislative developments.	NWS
17	Operations & Maintenance	Environment	IPART License Compliance	Non-compliance with IPART license Conditions	Prosecution; Penalties; Environmental damage; Reputation impact.	3	2	B (3,2)	Regular audits from IPART; Operate within the IPART license conditions.	Y	3	2	B (3,2)	Longer term - as the business grows and number of operational sites increases, periodically review adequacy of risk management controls over compliance with all license conditions.	NWS
18	Operations & Maintenance	Plant and Equipment	Equipment Breakdown	Breakdown leads to customer supply interruption. Equipment fails to perform to specification.	Customer claims; increased cost. Reputation impact.	3	2	B (3,2)	Network Operator has in place their own Operating Management System that include;-Preventative Maintenance program. Critical spares. Process monitoring and alarm system.	Y	3	2	B (3,2)	Review supply agreements to ensure equipment suppliers are held responsible for faulty goods and services.	NWS Operations
19	Operations & Maintenance	Environment	Drinking water supply	Insufficient water supplies to service customers i.e. under-estimated at design/feasibility stage or supply interrupted.	Increased cost. Customer service interruptions. Reputation impact.	3	2	B (3,2)	Access to water supply will be between Network Operator & Local Bulk Water Supplier TSC & sufficient quantities will be negotiated in the agreement between these parties. If groundwater is the source then the Network Operator will ensure that resources are assessed from the outset as part of obtaining a network operators license from IPART to extract	Y	3	2	B (3,2)	Review agreements that are in place annually with bulk supplier and DPI access license for Town Supply	NWS Operations
20	Operations & Maintenance	Plant and Equipment	Process control/monitoring system failure.	Loss of plant's control/monitoring system.	Customer supply interrupted. Increased cost. Plant outage. Reputation impact.	3	2	B (3,2)	Regular data backups are made and kept on site and off site of all Retail Supplier systems. Network Operator will ensure - the design of the system has sufficient	Y	3	2	B (3,2)	Longer term action - as the business grows and number of plants increases, review contingency plans to respond to control/monitoring system outages e.g. IT Disaster Recovery Planning.	NWS Operations

									redundancy inbuilt to cater for all failures.						
21	Operations & Maintenance	Products	Product misuse	Recycled water misused by customer(s) e.g. incorrectly used as drinking water.	Personal injury. Customer reputation impact.	3	2	B (3,2)	Rate payer customers are warned about the intended uses and misuses of the recycled water supply via the customer information booklet (which is approved upon connection application). Water supply pipelines are color coded to help distinguish recycled water supply.	Y	3	2	B (3,2)	No specific action required.	NWS Project Team
22	Operations & Maintenance	Information Technology	Computer Reliance	Failure of computer control / monitoring systems for by deliberate/ accidental interference or breakdown.	Customer interruption. Increased cost. System outage. Reputation impact.	3	2	B (3,2)	Operators trained in safe work practices for confined space entry. Locking lids.	Y	3	2	B (3,2)	Longer term action - as the business grows, review contingency plans in association with Network Operator to respond to control/monitoring system outages e.g. IT Disaster Recovery Planning.	NWS Operations
19	Operations & Maintenance	Loss of Network Operators plant & equipment	Natural perils	Flood or other natural perils.	Customer service interruption. Increased cost. Loss of plant & equipment; Plant outage. Customer claims; Reputation impact.	3	2	B (3,2)	Network Operator ensures treatment plant is sited above 1 in 100 year flood level.	Y	2	1	C (2,1)	Unlikely	NWS Project Team
21	Human Resources	Recruitment	Skills Shortage	Availability of skilled, experienced employees does not keep pace with the growth of the business.	Potential to over-extend existing people resources. Greater potential for operational errors/omissions.	2	3	B (2,3)		Y	2	2	B (2,2)	Ensure that recruitment plans are in line with the business growth plans.	NWS Operations

Appendix 5.2.6(b)

Northern Water Solution Pty Ltd

Kings Forest Customer Complaint Procedures

March 2017



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