Keeping the energy flowing

NORTH AUCKLAND AND NORTHLAND GRID UPGRADE PROJECT

Risk Based Procurement

7 November 2013

Paul Duffy, Project Director NAaN

Contents

- Risk Based Procurement
  - Supplier and Manufacturing Risk
  - Procurement Risk – Working Example

Risk Matrix

Risk Based Prioritisation Scoring Matrix				
Rate of Failure	Criticality			
	Low	Medium	High	Extreme
High				
Moderate				
Low				
Very Low				

Criticality And Rates of Failure

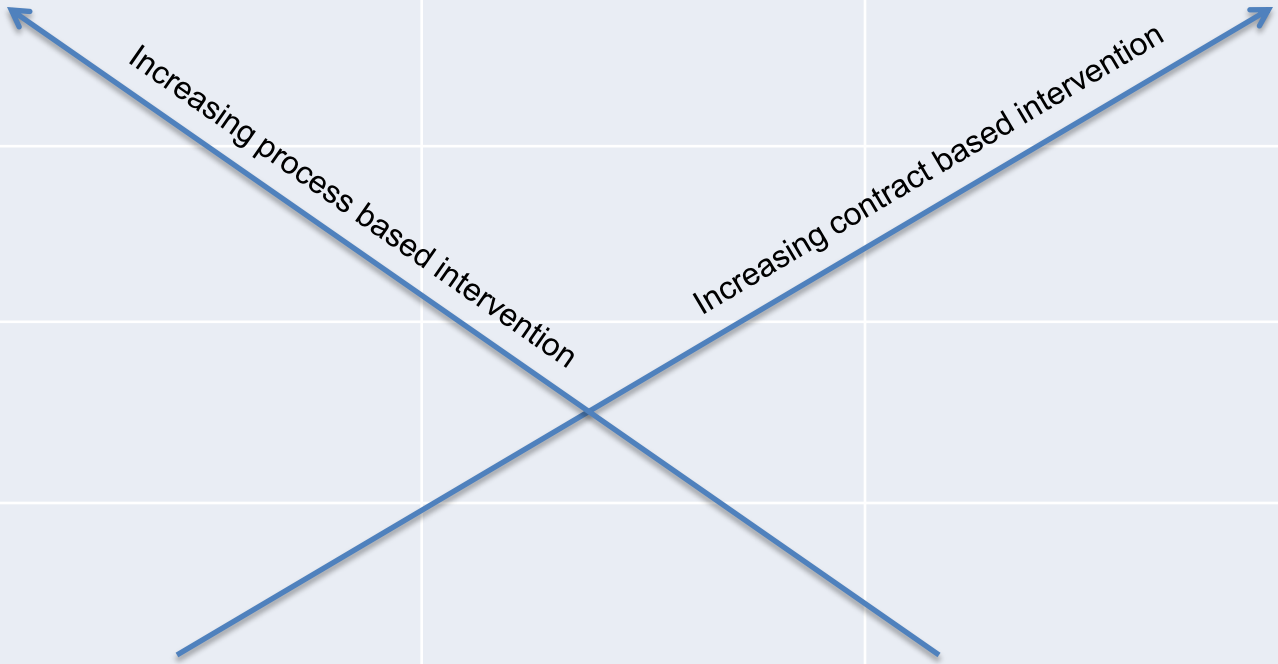
- Criticality
  - Safety
  - Impact on Network
  - Environmental
- Rates of Failure
  - Manufacturer focussed
  - Quantity based
  - Expected lifetime

Risk Matrix

Risk Based Prioritisation Scoring Matrix				
Rate of Failure Failure Rate*Q/Life	**Criticality**			
	Low	**Medium**	**High**	**Extreme**
High > 0.10	Capacitor cans	Disconnectors Earth switches	Protective relays	
Moderate 0.02 - 0.10			Circuit breakers Cables below 220kV	Power transformers 220kV cables Critical transmission line components
Low 0.01 – 0.02	Surge arrestors	Instrument transformers		
Very Low < 0.01				

Procurement Quality Intervention

Risk Level	Regular Supplier (Existing)	Regular Supplier (New)	Non Regular Supplier
Extreme			
High			
Medium			
Low			



Summary

- Risk Based Procurement
  - A key part of managing operational risk
  - A key part of managing project risk
  - A structured approach to supplier relationships