



RISK & PCC 19

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Australian Cost
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RISK ENGINEERING & PROJECT CONTROLS CONFERENCE 2019

International Convention Centre, Sydney Australia



15 – 17 May 2019 | ICC Sydney

*A Time for Action – Risk Engineering & Project Controls
Impacting the Future*

risk-pcc19.com.au

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JUST LITTLE BITS OF HISTORY REPEATING?

**RECONCILING RISK ENGINEERING AND PROJECT CONTROLS WITH EPC
CONTRACTUAL RISKS RELATING TO TIME**



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FACT OR FICTION?

MAJOR INFRASTRUCTURE PROJECTS INVOLVE SENSIBLE PARTIES THAT FAIRLY ALLOCATE RISK TO THE PARTY BEST ABLE TO MANAGE THAT RISK

GET ON WITH THE JOB, GET A 'BEST FOR PROJECT' OUTCOME AND EVERYONE WILL WORK TO A FAIR RESOLUTION OF ANY ISSUES AT THE END OF THE JOB

LAWYERS AND JUDGES UNDERSTAND THE PRACTICALITIES OF WORKING ON A MAJOR PROJECT AND HOW BEST TO ALLOCATE ENGINEERING RISK – SO DO BANKERS AND GOVERNMENT

THE PROBLEM IS ONEROUS CONTRACTS AND CONTRACT MODELS

EPC CONTRACTORS ARE REALLY GOLDFISH



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THE REALITY OF THE CURRENT AUSTRALIAN EPC MARKET

- BIG CONTRACTORS ARE IN THE RED – LEND LEASE ENGINEERING, LAING O’ROURKE & ORS
- MANY HAVE FAILED – RCR TOMLINSON A MAJOR RECENT EXAMPLE
- WHILST AWARENESS IS INCREASING BASIC RISK ENGINEERING AND PROJECT CONTROLS HAVE NOT MATURED IN THE AUSTRALIAN EPC MARKET OVER THE LAST DECADE
- RISK ALLOCATION PROBLEMS START AT FEDERAL AND STATE GOVERNMENT – A FOCUS ON ‘CERTAINTY’ AND THE MANTRA ‘ON TIME, ON BUDGET’ HAVE RESULTED IN HARSH, ONE SIDED RISK ALLOCATION
- IN TURN, THIS HAS RESULTED IN A CLIMATE WHERE IT HAS BECOME THE NORM FOR HEAD CONTRACTORS TO SIMPLY FORCE THOSE RISKS DOWNSTREAM



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RISK MANAGEMENT 101 – ABRAHAMSON PRINCIPLES

A Party should bear a risk in a construction project where

- (1) The risk is within their control;*
- (2) The Party can transfer the risk by insurance or share it downstream in a manner which is fair and economically feasible;*
- (3) The economic benefit of assuming that risk is priced;*
- (4) It is realistic that the Party can manage that risk and is efficient to do so; and*
- (5) If the risk eventuates, it falls on that Party to manage at first instance – and it is not practical for other parties to manage or transfer that primary risk obligation.*



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CASE STUDY 1 – NBN PROJECT... THE LARGEST INFRASTRUCTURE PROJECT IN AUSTRALIA

- No clear scope
- No clear timeframe
- Standards changing almost 12 years after inception
- Sites and deliverables changing
- Strong potential for 5G to render whole project obsolete
- Ongoing value engineering and cost cutting
- Extraordinary level of public scrutiny
- How do you think risk is allocated Federal Government – NBN Co – Head Contractors – Downstream?



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CASE STUDY 1 – NBN PROJECT... THE LARGEST INFRASTRUCTURE PROJECT IN AUSTRALIA

Lack of basic genuine commitment to sensible risk allocation and project controls

More than just a contract filled with time bars and difficult notice provisions

Culture of ‘Lets not be accountable – push risk downstream’

Perceived ‘bankability’ or certainty “on time on budget”

Proper consideration of risk engineering would not have permitted a model for delivery which did not promote collaboration and risk sharing and instead pushed for adversarial contracting.

But that was over a decade ago – started by a different Federal Government...



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CASE STUDY 2 – THE NSW LIGHT RAIL EXPANSION PROJECT

- No one knows what's under the ground
- No clear scope – Again, no clear timeframe
- Present disputes totalling over 100% original contract sum
- Sites and deliverables changing
- Ongoing value engineering and cost cutting
- Extraordinary level of public scrutiny
- How do you think risk is allocated by the State Government – Head Contractor - Consultants



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CASE STUDY 2 – THE NSW LIGHT RAIL PROJECT

Why allocate risk relating to delays in respect of what's under the ground to a foreign contractor?

Why would that head contractor best manage or be best positioned to take the risk of our state government not knowing what services are where under the City of Sydney?

Again, why would the contract include hard lump sums, fixed and draconian notices and time bars?

The contract model didn't help – but more fundamentally, risks relating to time arising from site conditions were misallocated before lawyers got a chance to get involved



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CASE STUDY 3 – THE QCLNG PROJECT – ITS NOT JUST GOVERNMENT

Over 500KM OF LNG pipeline, traversing 1000s of properties

Access to each of those properties placed on the head contractor

Site risk put on head contractor

Head contractor was a foreign joint venture of major international contractors

Contract again was again unhelpful – but more fundamental was the absence of sensible controls prior to commencement

Result was a lot of arbitration work for most of the major construction law teams in Australia (my firm included)



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CASE STUDY 4 – RCR O’DONNELL GRIFFIN GROUP – PROJECT CONTROLS ARE NOT IN PLACE DOWNSTREAM

In August 2018, RCR was valued at almost \$1B

By late 2018, Administrators had identified unpaid debts of over \$630M – over \$250M owed to subcontractors

O’Donnell Griffin had been a reliable electrical contractor for decades.

What went wrong?

RCR took almost every conceivable EPC risk as head contractor in a number of solar projects

It took risk of site, grid connection, AEMO compliance, access to properties, regulatory and even, in some contracts, changes in law.

Lack of reporting- lack of controls as to real time exposure from small amounts – translating to large amounts up the contractual chain - only winners are class action lawyers (and even I hate them)



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COMMON THEMES

In Government and Major Private Projects

- Risk allocation based on perceived ability to push risk downstream based on market acceptance (often without even basic risk engineering consideration) in a tough market
- Ineffective notice and time bar regimes which do not incentivise collaboration or risk sharing
- Perceived 'bankability' and 'certainty' is ultimately illusory
- Commencement of projects before concept is properly detailed – but adopting, even at ECI stage, contracts more suited to a clearly defined scope of works
- Focus on risk transference on a 'top down' approach – perhaps in part an over-reaction to being burnt when 'alliancing' was popular during the resources boom



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FINAL CASE STUDY – RAIL PROJECT WESTERN SYDNEY

What if \$80,000 on a full time contracts administrator could save you \$12m?

My last war story about a contractor that ‘put the contract in the bottom drawer’

All Just Little Bits of History Repeating...



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IS NEC THE SOLUTION?

It is a model that encourages the process of actively collaborating and managing risks that develop from inception to completion

Risk sharing – identifying, evaluating, avoiding, allocating and managing risks and opportunities are better achieved by more collaborative models – but not in isolation

The culture of ‘top down’ contract styles and blindly passing risk downstream is more fundamental than contract - it goes to a systemic failure of risk allocation which has become the EPC industry norm



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THANK YOU

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