Reference case briefing

August/September 2017
Perth, Melbourne, and Adelaide
Welcome address
Industry perspective
Overview of the taskforce
Reference case concept
Proof of concept delivery
The role of NERA
Panel session Q&A
NETWORKING BREAK
Welcome Address

Stuart Smith
CEO
NOPSEMA
An oil and gas industry perspective

Rob Bell  
HSE Policy Director, APPEA

Matt Doman  
SA Director, APPEA
Reference case background

Matt Smith
Environment Manager, NOPSEMA
What was the problem?

A wide range of and some poor consultation practices leading to a loss of trust

Transparency of decision making not meeting community expectations

From August 2015
• Targeted compliance action when justified
• Activity status and summaries web page
• Subscription service to EP status updates
• Published list of forums NOPSEMA participate
• Published decision notifications
• Published brochures and fact sheets
• Participated in offshore oil and gas open days
Actions (2)

- Participated in review of the adequacy of the consultation and transparency regulatory provisions
- Clarify and extent the EP Summary requirements
- Revised and published Statement of Reasons policy
- Published decision making guidelines
- Dedicated community information web page
What does the problem look like now?

- Industry demanding reduction of regulatory burden
- Community expectations rising for increased disclosure of information
- Collaborative solutions needed
## Drivers for change

**The story of growing inefficiencies**

### Developing an EP is:
- An **uncertain** activity for titleholders
- **Confusing** for relevant persons during consultation
- A **long and demanding** process for all involved

### The EP product itself is becoming:
- Lengthier, more variable, and more **complex**
- A source of **competitive advantage** in some circumstances
- **Demanded** by communities and their representatives for close scrutiny
- **Disclosed** to a different and pessimistic audience

### Wide-scale EP improvements are challenging because:
- **Collaboration is difficult** due to little margins in time and staggered projects
- There is too much **risk upgrading** an EP product that works
- Low oil price equals **cost (and resource) pressure**
• Task force established by NOPSEMA
  – Purpose: To align and coordinate multiple cross-jurisdictional efforts to improve community confidence in the offshore petroleum regime.
  – Aim: To smooth the transition to increased transparency
  – Removes existing collaboration barriers
• Outcomes are;
  – The Environment Regulations permit information disclosure that matches community expectations
  – The Australian community has confidence in the offshore petroleum regulatory regime
  – Environment Plans have reduced size and complexity
Oversight

Steering Committee

- Government of Western Australia, Department of Mines, Industry Regulation and Safety
- NOPSEMA
- NERA
- Australian Government, Department of Industry, Innovation and Science
- Government of South Australia, Department of State Development
- Northern Territory Government

Stakeholder representative(s) (TBD)
Task force outcomes and work streams

1. Legislative change process
2. Monitor sector readiness for transparency
3. Events and community reference group
4. NOPSEMA system updates
5. Alignment of regulatory interpretation
6. Reference case concept
Work Stream 5: Deliverables

EP Glossary ↔ EP Clinics

EP Syllabus
Work Stream 5: Outcomes

• For titleholders:
  – Clarity of regulatory requirements
  – Improved stakeholder engagement
  – Fewer EP resubmissions

• For stakeholders:
  – Consistent language across EPs
  – Consistent content across EPs
  – Improved understanding during engagement activities
Reference case concept

Matt Smith
Environment Manager, NOPSEMA
A ‘reference case’ removes typical content and common practices from an Environment Plan for publication through other means.

FIVE MAIN REFERENCE CASE ‘LENSES’

- Impacts on fish and water quality from sewage and grey-water discharge
- Assessment and management of diesel spills beyond 50km from land
- Information sharing requirements and considerations during consultation with XXXX
- In-situ wellhead decommissioning for deep water drilling campaigns
- The impact of VSP on migrating tuna in the GAB
- Subsea dispersant injection in deep water blowouts
- Tactical response plans for oil spills in the Pilbara
- Evidence based effect thresholds for whales

**ACTIVITY / ASPECT / IMPACT OR RISK / RECEPTOR / CONTROL MEASURE**
Assessment and management of diesel spills beyond 50km from land

- ~50 EPs annually, most containing this risk
- 15 titleholders that commission 100k diesel spill modelling
- Potential annual industry saving $1.5m
- Potential reference case cost is ~$20,000

Reference case potential

- Unlimited number of RCs
- Aligned drivers
- Increased certainty
- No obligation to comply
- Broader application across petroleum life cycle
# RC selection and prioritisation

## Phase 1: Proof of concept
- Simple, standardised, well-understood, broad benefit to many
- Develop and agree ‘universe’ and structure of RC’s
- Establish RC template and development method

## Phase 2A: Titleholder demand driven cases
- Titleholders to request and resource RC’s
- Tackle more complex, targeted and specific parts of EP’s
- Utilise existing information drawn from multiple titleholders

## Phase 2B: Stakeholder benefit driven cases
- NOPSEMA to prioritise and ‘commission’ RC’s
- Seek to reduce consultation burden and large sections of EP’s

## Phase 3: Transition driven cases
- Increase production numbers and streamline development processes
- Ensure ‘new owner’ is ready to administer the ongoing development of RC’s
RC development rules

- Maximum number of participants
- Extent and membership of peer review to match scope of RC
- No ‘new’ information to be created
- Differences in opinion to result in scope limitations
- Contributing company and individual to receive author credit
- Public consultation to occur in one of March/May/August or October to spread burden
How to contribute

• To cater for different circumstances companies can participate in the task force by providing:
  – Information
  – Short term secondments
  – Technical expertise
  – Reviews and/or project management
  – Funding of services
  – Funding of whole reference cases

To contribute to the reference case project email environment@nopsema.gov.au

The benefits to industry will be proportional to the resources provided to the project
RC’s in the long term

• Long term owner cannot be NOPSEMA
  – NOPSEMA will continue to input through scoping and prioritisation as well as review prior to public comment and subsequent endorsement of RC’s

• Future owner to have the following features:
  – Independence from commercial activities associated with EPs
  – Publication and open source access for all reference cases
  – Facilitate and manage the public comment on all RC’s
  – Planned periodic updates to RC’s (at least annually)
  – Reactive assessment and update because of ‘new’ information
  – Re-endorsement (5-yearly) and peer review (on update) processes
  – Continual development of RC’s on a titleholder demand basis
Scope of NERA Reference Case Project

• Objective: Deliver a “Proof of Concept”

• Design a process for development and template for a reference case
• Prepare four “reference cases” in consultation with industry and NOPSEMA
Model for Reference Cases

• Built around the RC “thread of logic”
Model for Reference Cases

- Each RC selected within the context of a “universe”
  - Activities
  - Aspects
  - Impacts
  - Receptors
  - Control types
Selection Criteria

**Principles**
- “Proof of concept” – i.e. test the system, not resolve technical industry issues
- Sufficiently challenging to test the process
- Not so complex to impede progress

**Activity**
- Simple activity, simple & accepted aspects
- Relevant – common activity, subject of impending EPs

**Receptors / Impacts**
- Discrete, easily identified receptors
- Credible impacts, well understood

**Controls**
- Recognised standards (e.g. MARPOL), or
- Commonly accepted industry practices
Selected Reference Cases

• The assessment and management of:

  • Sewage and grey water discharges from vessel operations
  • Anchoring operations
  • Diesel spills from vessels
  • Vessel noise impact on cetaceans

Endorsed by the APPEA HSE Committee
## Schedule

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<th>Reference Case</th>
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collaboration & innovation
transforming Australia’s energy resources

Tim Duff
1 NERA - Collaboration and innovation
Australia has seen 25 years of sustained growth, strongly underpinned by the energy resources sector...

But is now in transition ...
1 Industry growth centres

- Industry led and independent
- Trusted brokers of innovation
- Drive productivity & competitiveness
- Transfer more of our investment in knowledge into commercial value developed here in Australia
- But connected to global markets
Who is NERA?

NERA was established in 2016 as an independent, not for profit company.

NERA covers the energy resources sector, specifically onshore and offshore oil and gas, uranium and coal.

NERA’s role is to maximise the value to the economy of a globally competitive Australian energy resources sector that is sustainable, innovative and diverse.
A plan for the Australian energy resources sector

NERA’s Sector Competitiveness Plan:

- Sets out a 10 year strategic road map for the Australian energy resources sector to improve efficiency, productivity and competitiveness, adopt digital technology and respond to the rapidly changing energy market

- Identifies opportunities and priorities for the different stakeholders to collaborate and drive the innovation required to enable the Australian energy resources sector to transform its’ productivity performance, compete globally and be sustainable
1 Sector Knowledge Priorities

- Work skills of the future
- Enabling effective collaboration
- Understanding Australia’s resource base
- Social licence to operate
- Unlock future resources
- New markets, New technologies, New business models
- Commercialisation of research and development
- Efficient operations and maintenance
- Regulatory framework optimisation
Why Cooperation and Collaboration Matters
2 The size of the Opportunity

Changing Energy Supply

Technology - Disruptor or Enabler

Speed of Change

2 Why transformation matters

Changing Energy Demand
Why is transformation hard

2

Internal pipeline approach to challenges

Typically self limited to a few long term research partners and suppliers

High risk aversion delivers slow results
2 Extending the innovation boundary

1. **The safe zone** – look internally, improve margins and keep cash coming in

2. **Emerging innovation** – work with vendors, extend collaboration externally and create new value

3. **External/ innovation** - engage with multiple external knowledge experts, use technology to verify and de risk adoption of innovation
Collaborative transformation in action

- Define problems to be addressed
- Undertake research into alternates
- Set the regulatory environment
- Develop and deploy solutions for Operators
- Develop potential solutions
- New products tested
2 What Collaboration looks like

- Strategic relationships
- Technology transfers
- Knowledge sharing
- Opportunity and problem identification
- Solutions development
- Technology commercialisation
Creating Connections for Growth

New business models
Based on collaboration and innovation to facilitate the commercialization and adoption of disruptive technologies, securing a sustainable, competitive future.

Improved collaboration
Amongst industry and sector participants will lead to sharing of innovative solutions, development of synergies to drive value creation, reductions in duplication and create further cost saving opportunities.

The size of the prize is significant for everyone
The Australian energy resources sector has the potential to play a major role in Australia’s and the world’s energy future, generate substantial revenue for the nation and grow an export orientated service and technology sector.
3 Collaboration Fund
Call for Proposals
Thank you and any questions?

Dates for your diary
- 25/26 Oct APPEA HSE Conference (Perth)
- 7 December – End of Year Update (Perth)