# **Energy Resources of Australia Ltd**

**Australian Financial Community** 





## Forward-looking statements

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#### Forward-looking statements

This presentation includes forward-looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding ERA's financial position, business strategy, plans and objectives of management for future operations (including development plans and subjectives relating to ERA's products, production forecasts and reserve and resource positions), are forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of ERA, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

Such forward-looking statements are based on numerous assumptions regarding ERA's present and future business strategies and the environment in which ERA will operate in the future. Among the important factors that could cause ERA's actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, levels of actual production during any period, levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on sales revenues, market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation and such other risk factors identified in ERA's most recent Annual Report. Forward-looking statements should, therefore, be construed in light of such risk factors and undue reliance should not be placed on forward-looking statements. These forward-looking statements speak only as of the date of this presentation.

Nothing in this presentation should be interpreted to mean that future earnings per share of ERA will necessarily match or exceed its historical published earnings per share.

The information in this presentation relating to exploration results is based on information compiled by Greg Rogers, who is a member of the Australasian Institute of Mining and Metallurgy. Greg Rogers is a full-time employee of the company and he has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Greg Rogers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Acknowledge Traditional Owners**

The mining operations of Energy Resources of Australia Ltd (ERA) are located on Aboriginal land and are surrounded by, but separate from, Kakadu National Park.

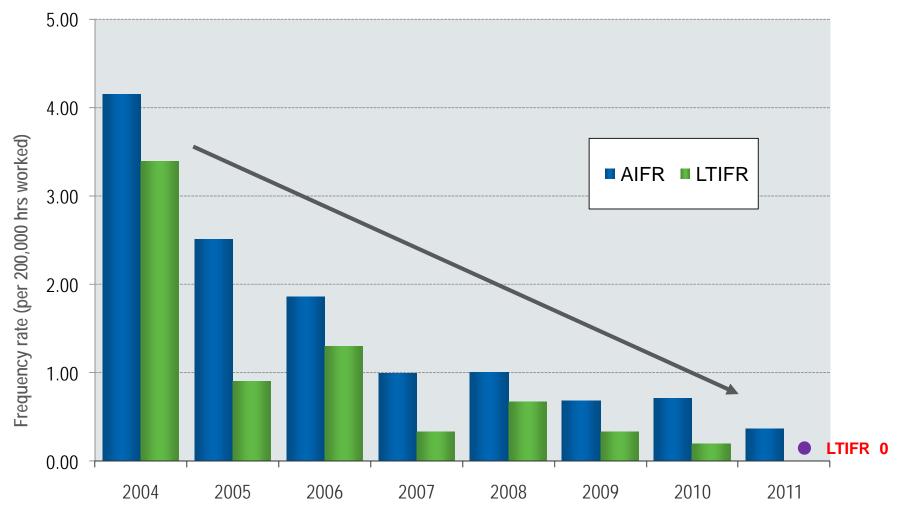
ERA respectfully acknowledges the Mirarr, Traditional Owners of the land on which the Ranger Mine is situated.

### **Key Outcomes in YTD - May 2011**

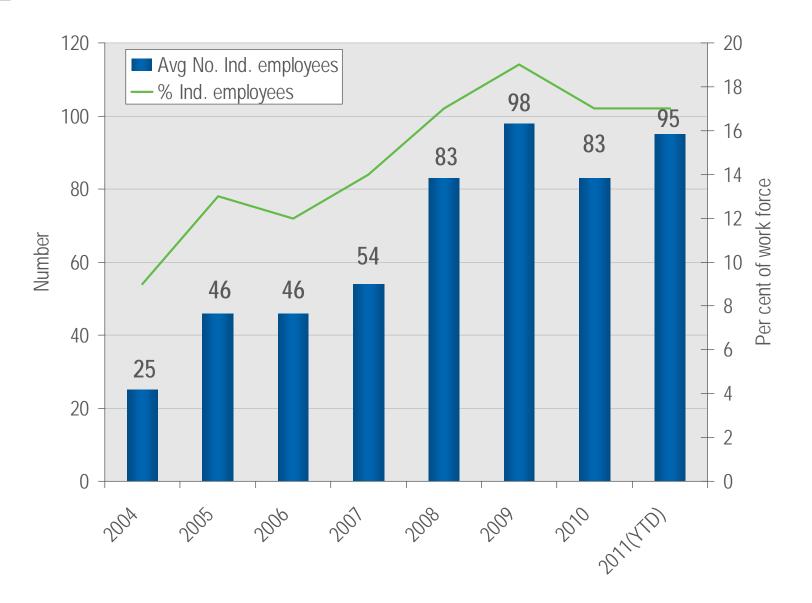
- Continued strong safety performance;
- Suspension of production from late January to expected late July 2011;
- Successful management of third highest wet season on record;
- Significant maintenance work completed in plant;
- Strong mining fleet utilisation resulting in higher material mined;
- Announced significant investment in water management;
  - Brine concentrator
  - Tailings Storage Facility
  - Pond water treatment
- Decisions for Heap Leach Project and Ranger 3 Deeps Project pending

## Safety

### Continued strong safety performance

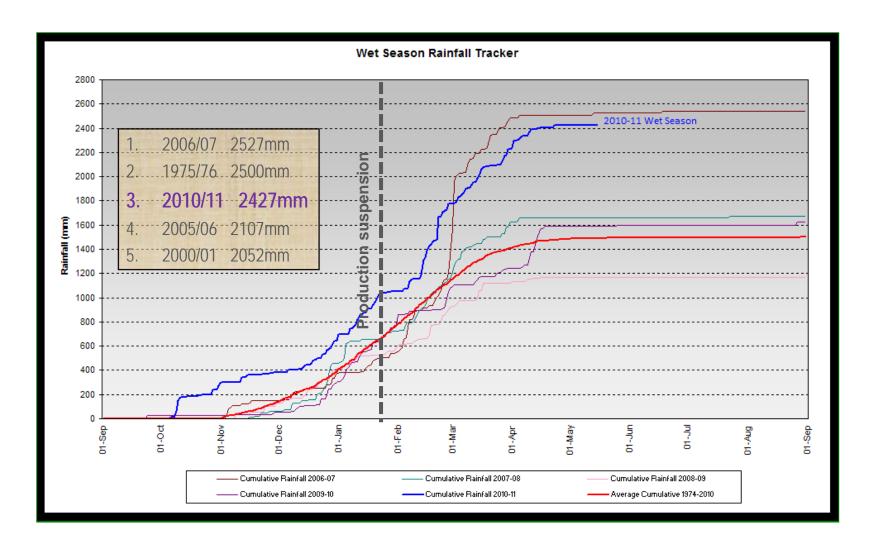


### **Indigenous Employment**



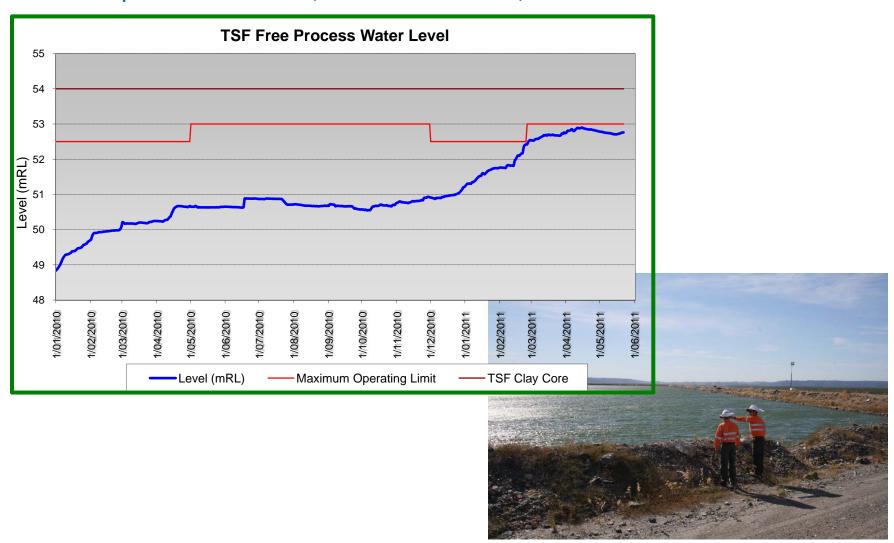
### 2010/2011 Wet Season

Rainfall from 01 September 2010 to 23 May 2011 (2427mm Bureau of Meteorology Jabiru Airport)



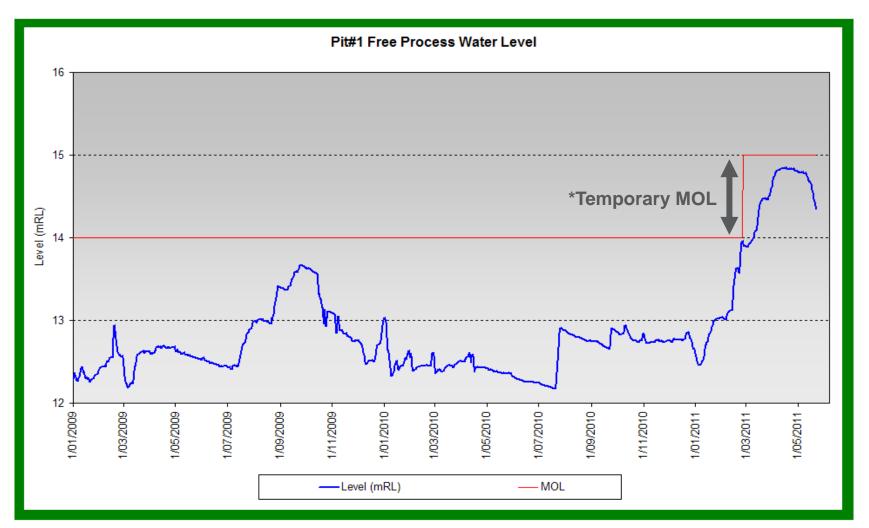
## Tailings Storage Facility status as of 23 May 2011

Free process water level (Relative Level 52.77m)



## Pit#1 status as of 23 May 2011

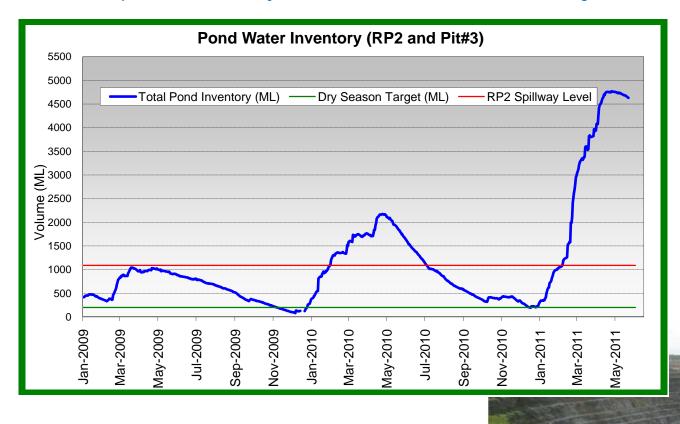
Free process water level (Relative Level 14.25m)



<sup>\*</sup> Temporary maximum operating limit (MOL) as approved by the regulators

### Pit #3 status as of 23 May 2011

Total pond water inventory at the end of the 2010/2011 wet season higher than 2006/2007 (Cyclone Monica)

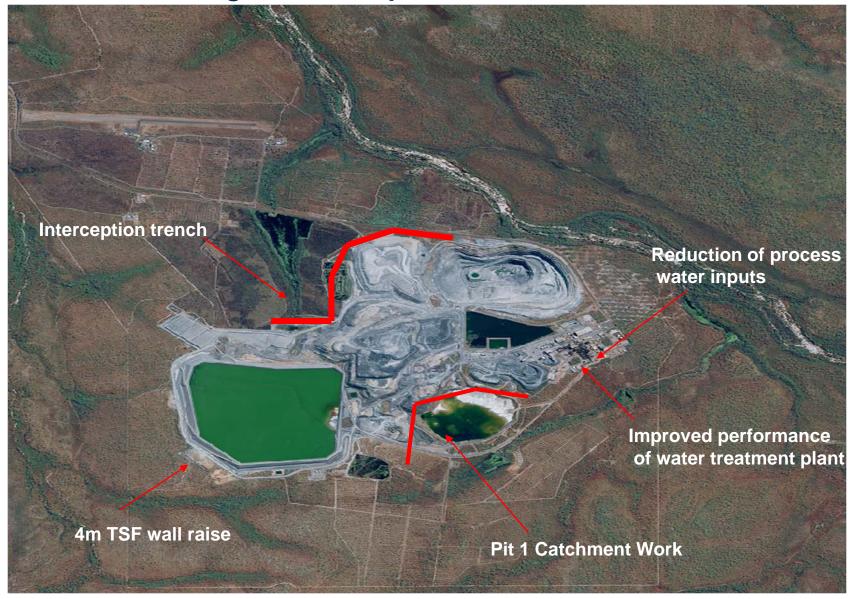


### Water Management Improvements

- Significant catchment reduction works around Pit 1 to divert pond water from the process water catchment
- Plant modifications reduced process water inputs by approx. 500 mega litres per year
- Enhanced treatment capacity of the current process water treatment plant by 26%,
- Raising the embankment of the Tailings Storage Facility (TSF) by 4 metres to provide additional storage during the 2011/12 and 2012/13 wet seasons and until the Brine Concentrator is commissioned
- Shut-down from 28 January to maintain the TSF level below the Maximum Operating Limit
- Installation of interception trenches around waste dumps to segregate clean run-off
- Obtained approval to temporarily increase the maximum operating level of Pit 1 to store process water

Using Pit 3 for emergency water storage remains the ultimate safeguard to protect the environment and preserve the structural integrity of the TSF. Trigger protocols have been prepared in consultation with Stakeholders

## Water Management Improvements



### **Additional Pond Water Treatment**

- Addition of 11 mega litres /day
   of pond water treatment
   which doubles the current
   capacity
- Installation commenced April
- Foundations completed, tanks installed, pipelines installed, 5 containers installed
- To be commissioned by July 2011
- Pit 3 to be fully de-watered by Q4 2011



## **Tailings Storage Facility Lift**

#### **Objective**

- To provide process water storage through to Pit#3 availability to accept tailings and brine concentrator commissioning
- Increase embankment by four metres

#### Phase 1

- Phase completed
- No new land disturbance
- Water management incorporated rainfall runoff to RP2

#### Phase 2

 Commenced February 2011 with forecast completion mid June 2011

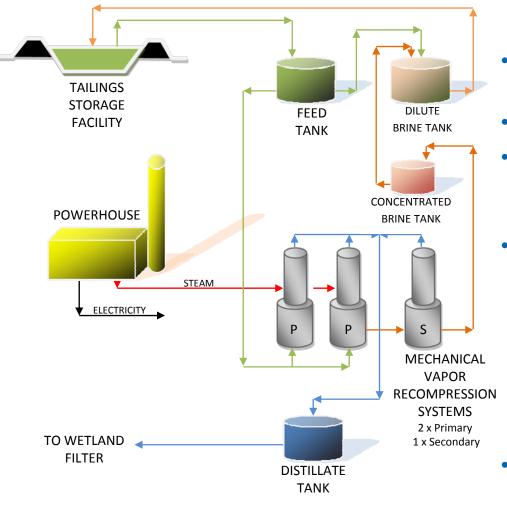
#### Phase 3

- Planned for June 2011 through October 2011
- Application to change Maximum Operating Limit being drafted;
- Final crest to be Relative Level 58m





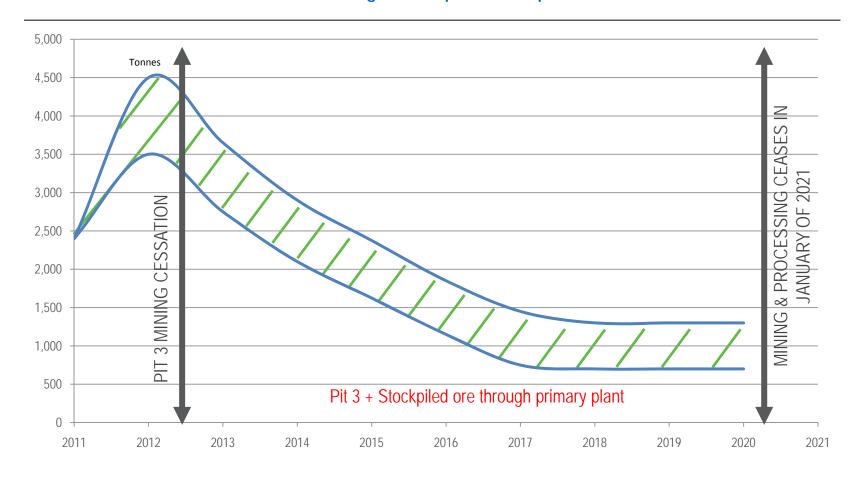
### Brine Concentrator - Conceptual Flow Sheet



- Approval of \$80 million to conduct a feasibility study and to secure long lead items. Total capex estimated at \$220 million
- Target capacity 1.83Gigalitres of distillate per year
- Modular to allow for phased expansion
- 2 year procurement and construction lead time with commissioning scheduled for second half of 2013
  - Further studies are being conducted on brine and salt disposal. Options being considered to remove/store residual salts include:
    - Blending with tailings;
    - Injection into the deposited tailings (Pit 3);
       and
    - A cystalliser to produce a solid waste
- Pilot plant studies underway at Rio Tinto's Research Facility
- No regret decision as water must be treated

### Ranger Production Range

Current operations including Pit 3 (ending at the end 2012) and excludes major projects such as Ranger 3 Deeps and Heap Leach



## Capital Expenditure – Water Management (2011-2014)

	Total (\$ million)
Brine concentrator (\$80 million approved)	220
Tailings Storage Facility Embankment Lift (RL58m)	52
Pond Water – water treatment capacity 11ml/day	17
Pond Water Retention Ponds	30
Pit 3 tailings and process water pumping systems	48
	<u>Total 367</u>

### **Rehabilitation Activities**

### Current operations (Pit 3 and stockpiles), excluding major projects

#### **Description**

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

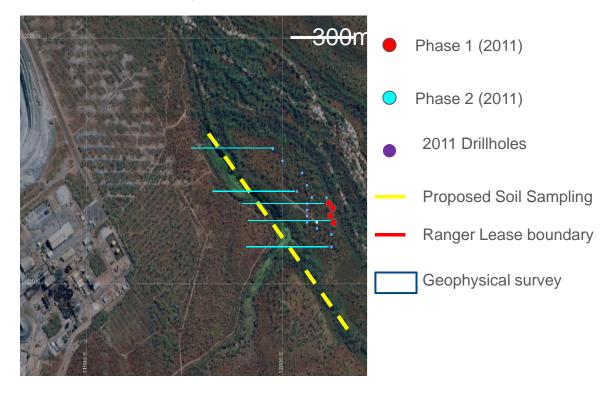
Facilities Demolition
Pit #3 Backfill
Relocate Residual Stockpiles
Tails Reclamation to Pit #3
Water Treatment



- Under the current lease obligation ERA is required to perform very significant rehabilitation work
- ERA must fully rehabilitate the Ranger site by 2026
- Most significant pieces of this work are:
  - Water treatment (all water must be treated on site)
  - Rehabilitation of Pit#1 (water extraction and >15Mt waste rock capping required)
  - Relocation of tailings dam to Pit#3 (water, tailings wall and rehabilitation of site)
  - Backfilling of Pit#3 (>100Mt of material needs to be moved back into pit)
- Significant capital and resources required
- The rehabilitation program is currently being reviewed including options and costs
- Rehabilitation is required under any strategic scenario
- Progressive rehabilitation will be carried out where possible

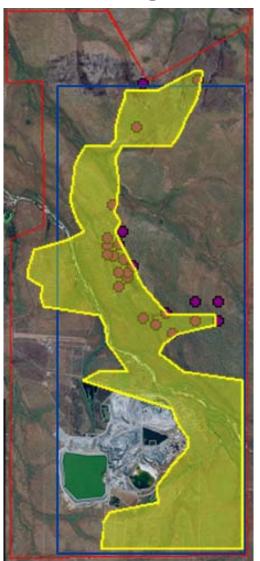
### **Exploration Programme**

Zone 1 – George Town Structure



- Ranger exploration program scheduled for 2011 2013
- Ranger 2011 Exploration program total \$9 million
- Total estimated at approximately \$20 million over 2011-2013

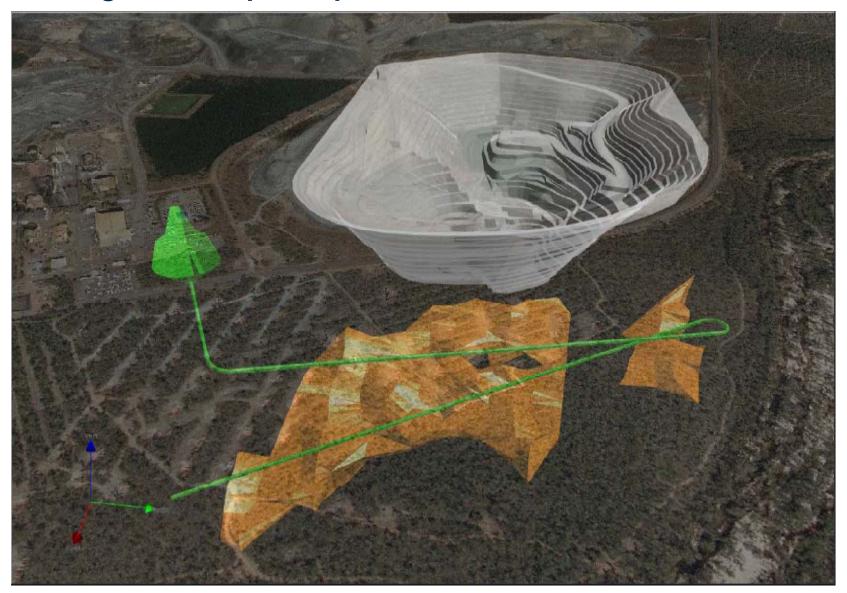
Zone 2 – Ranger Lease



### **Business Review**

- Internal team assisted by KPMG reviewing ERA's near term strategic priorities, business activities and operating model
- Two core objectives:
- Reduce near term cash costs to ensure the business is focussing on the most strategically appropriate and value creating activities, while ensuring our people remain safe and the environment is protected
- Define a path to restructure the business for the future after closure of Pit 3,
   when production will be significantly lower
- Immediate focus on reducing use of contractors, maintenance costs, improving procurement practices and limiting sustaining capital expenditure
- More detail to be provided with 2011 half year results announcement

## Ranger 3 Deeps Exploration Decline



### Ranger 3 Deeps Exploration Decline – Critical Milestones

Milestone	Target Date
Project approval	June 2011
Award Site Preparation work	August 2011
Commencement of Box Cut Excavation	May 2012
Box Cut Excavation Completion	Oct 2012
Commencement of Decline Construction	Oct 2012
Commencement of Diamond Drilling	Jun 2013
Decline Construction Completion	Nov 2013
Diamond Drilling Completion	May 2014

### Ranger 3 Deeps Exploration Decline – Potential Path to Production

- Exploration decline expected to be fully completed by 2014
- All drilling information studied and finalised
- Study completed on underground mine by early 2015
- Conversion of resources to reserves
- EIS submitted
- Mine Technical Committee approval sought for underground mine

### **Proposed Heap Leach**

- ERA Board approval given for Feasibility Study (FS) in October 2009 (\$36 million)
- Work continues on the Environmental Impact Statement (EIS) and it is expected to be ready for submission to the Northern Territory and Commonwealth Governments in H2 2011.
- Key dates:

Completion of the feasibility study
 Q4 2010

Government approvals2012

ERA Board approval
 Pending FS and government approvals

Project implementation
 18-24 months

Project completion and first production
 2014 depending on all approvals

- Heap Leach approval requires wide range of stakeholders acceptance
- Approval pending

### **Summary**

- Continued strong safety performance
- Severe rainfall season successfully managed by the suspension of production and significant water management strategies
- Expect to start up plant by end of July. Forecast production is 2400 tonnes for 2011
- Ranger 3 Deeps and Heap Leach decision to be announced shortly
- Significant investment in water management to support ERA future
- Business review will examine strategic priorities, business activities and operational model
- Rehabilitation costs under review
- Exploration potential of Ranger Project Area