



To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	28 July 2015
From	Helen Hardy	Pages	20
Subject	CEN Taranaki Site Tour Presentation		

Attached herewith is a copy of an announcement released to the NZX by Contact Energy today.

Origin Energy holds 53.09% of quoted ordinary shares in Contact Energy Limited.

Regards

Helen Hardy
Company Secretary

02 8345 5000 – helen.hardy@originenergy.com.au



Taranaki site tour

28 July 2015

James Kilty, Chief Generation and Development Officer
Peter Kane, General Manager Operations
Fraser Gardiner, Head of Investor Relations and Strategy

Contact[®]

Cautionary statement

This presentation may contain projections or forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties.

Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks.

Although management may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realised.

EBITDAF and underlying earnings after tax are non-GAAP (generally accepted accounting practice) profit measures. Information regarding the usefulness, calculation and reconciliation of EBITDAF and underlying earnings is provided in the supporting material.

Furthermore, while all reasonable care has been taken in compiling this presentation, Contact accepts no responsibility for any errors or omissions.

This presentation does not constitute investment advice.

Today's presentation

- Welcome James Kilty
- Safety briefing Paul Fougere - Head of Generation Taranaki
- Thermal update Fraser Gardiner
- Operational overview Peter Kane

If it's not safe, call it.

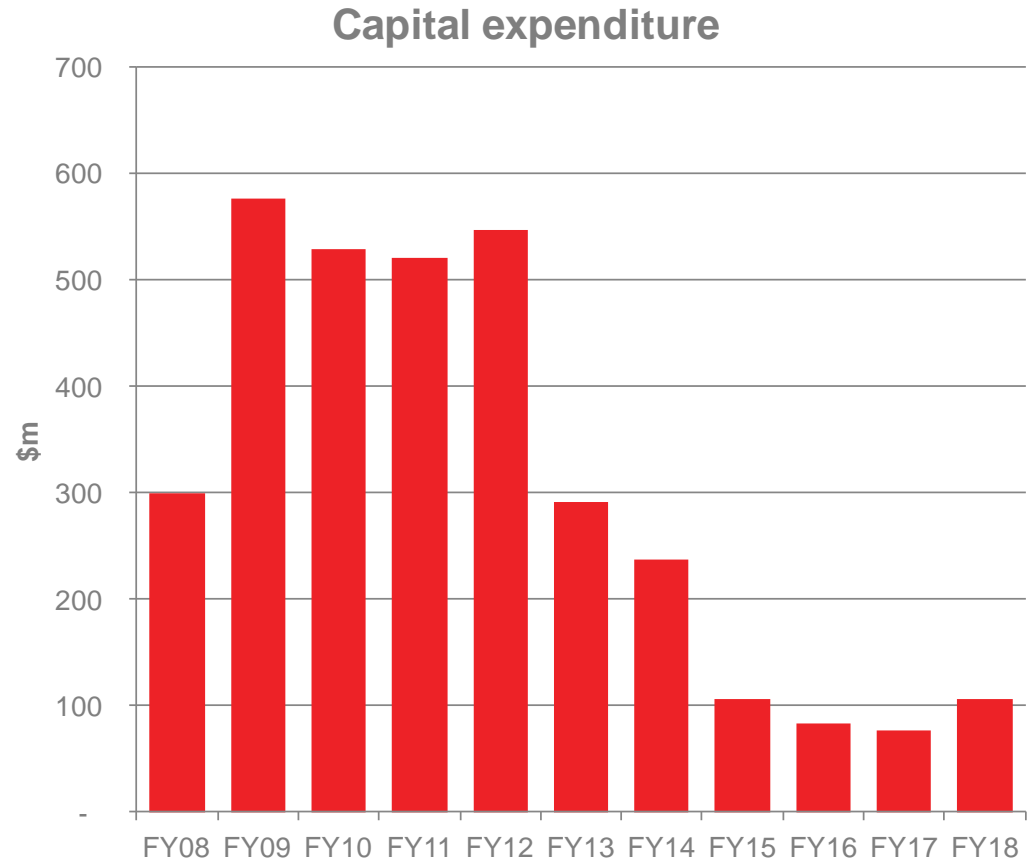
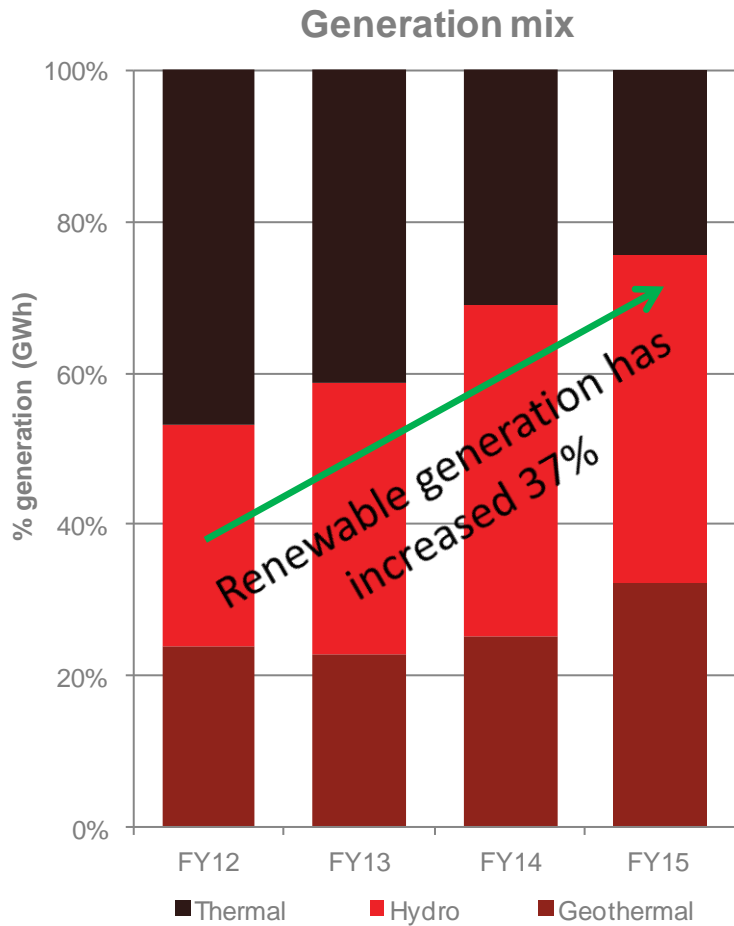
Kick off the conversation



Stay Safe Mate



The investment in renewable generation has lowered Contact's cost of energy and requires limited ongoing capital expenditure

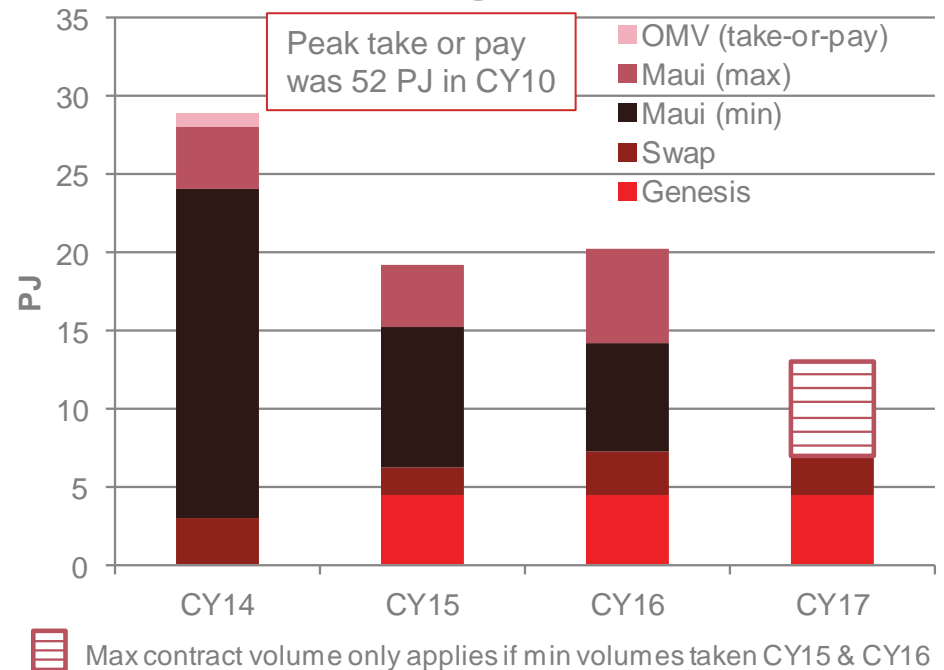


Capital expenditure on CCGTs will be determined by market conditions : \$40-\$50m for every major outage with an 18 month lead time

Thermal assets role is changing from baseload operation to providing hydrology risk management and optionality

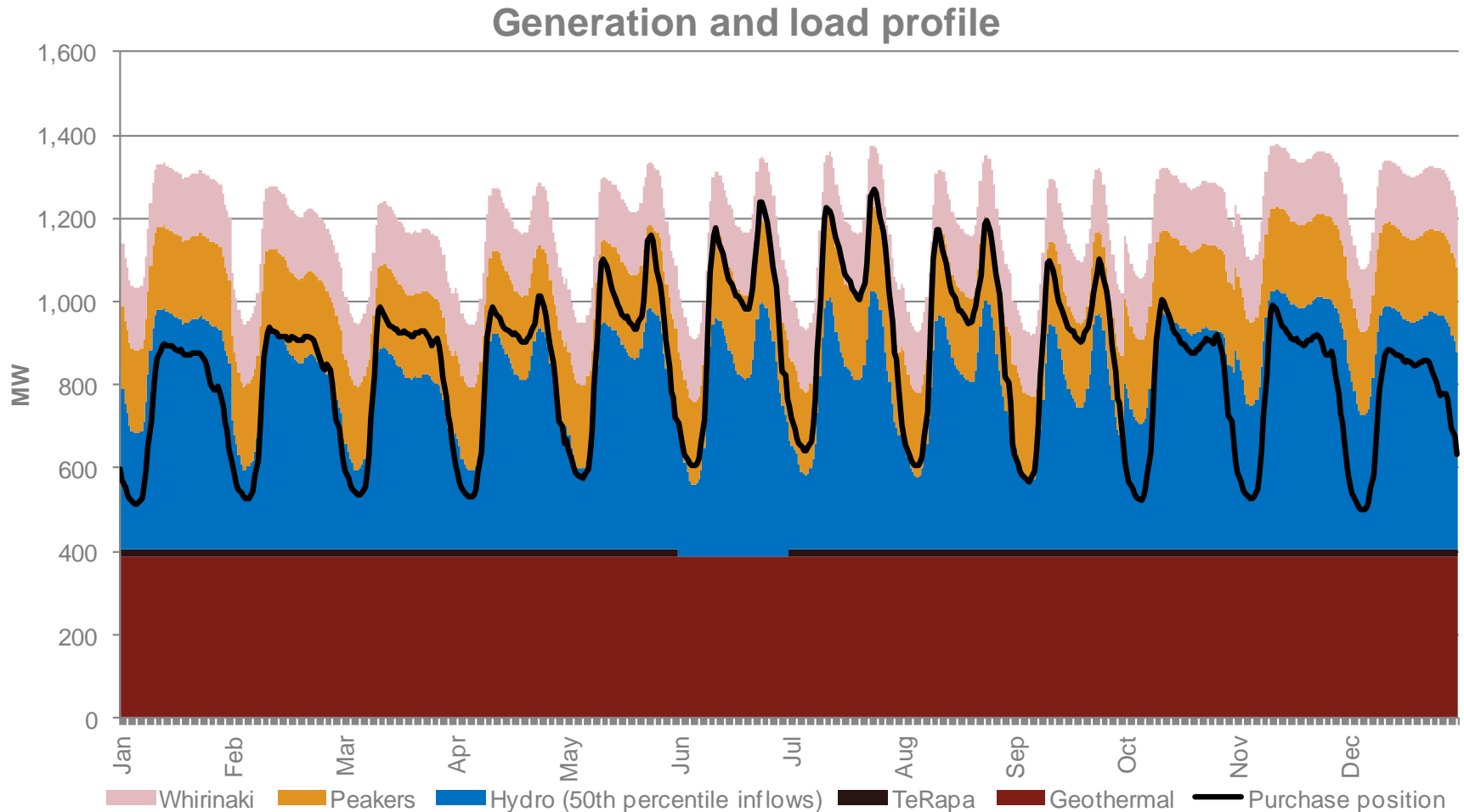
- Extension to gas supply agreement completed with Maui Developments Limited
 - » 22 and 26 petajoules over 2015-2017
 - » Able to move volumes between years combined with 11.3PJ of gas stored provides significant flexibility
- New long-term peaker maintenance agreement covering support and component replacements including a spare engine on-site

Contracted gas volumes



- Focus for the CCGTs is on managing remaining operating hours and improving operating flexibility
 - » 15,500 equivalent operating hours remaining between Otahuhu and TCC before major maintenance required
 - » Otahuhu and TCC capacity factor in FY15 24%
 - » Otahuhu min load improved from 220MW to 180MW

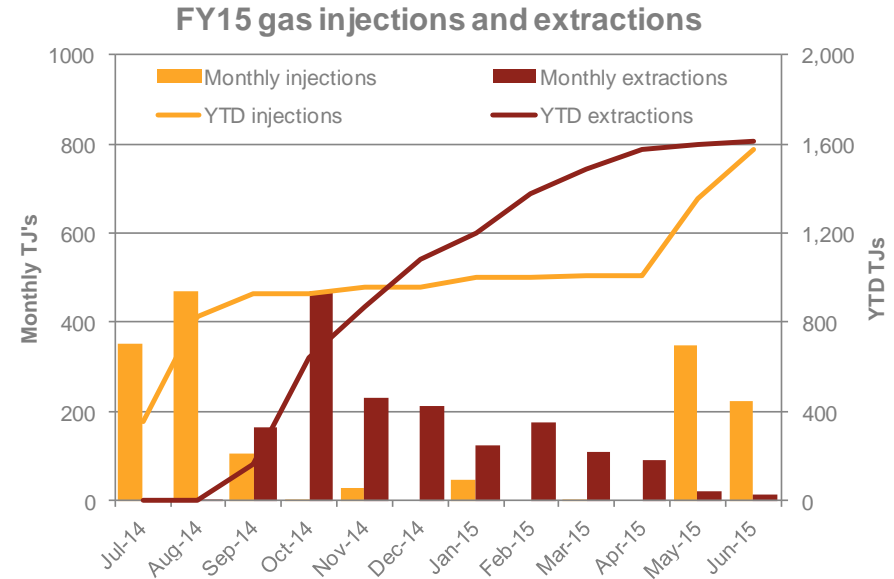
Contact's low cost renewable business combined with gas storage and peakers can support a retail business of around 7.1 TWh



Contact's CCGTs are optional depending on the availability of alternative supply or the ability to secure a spark spread and recover maintenance costs

The role of Ahuroa gas storage is developing, adding value to the thermal operations

- Initial investment (excl Cap interest) \$197m
 - » Assets \$111m
 - » Gas rights \$35m
 - » Cushion gas \$51m
- » Benefits realisation broken in to three stages
 - » Cost: avoided take-or-pay gas
 - » Transition: market education supporting new gas contracts
 - » Trading : Seasonal gas shaping and sale of gas and electricity capacity products



The role of large thermal plants in New Zealand is likely to reduce over time, with Contact well positioned to support flexible development when it is needed

- Stratford
 - » Up to 400 MW of new peaking or CCGT operation consented
- Otahuhu
 - » Up to 400 MW of new CCGT capacity consented; consents to open-cycle Otahuhu B ~\$20m
- Whirinaki
 - » Potential to expand or relocate and convert to gas ~\$60m
- New Plymouth
 - » Option to repurchase land between 2023 and 2038 for electricity generation
- Ahuroa
 - » 2 stage options to expand injection and extraction capacity at 50 TJ/day increments (\$60 - \$80m)

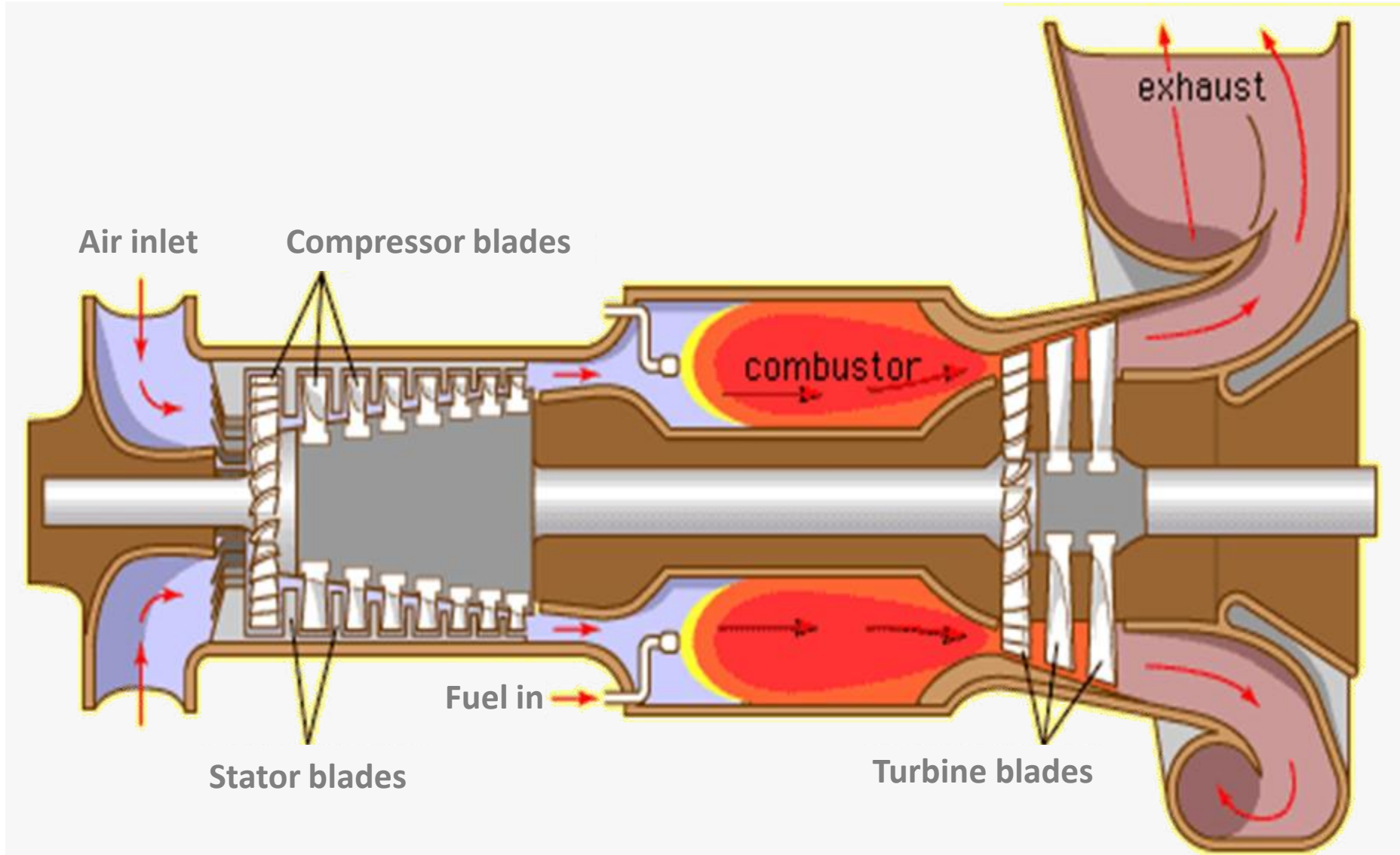




Thermal operations — Peter Kane

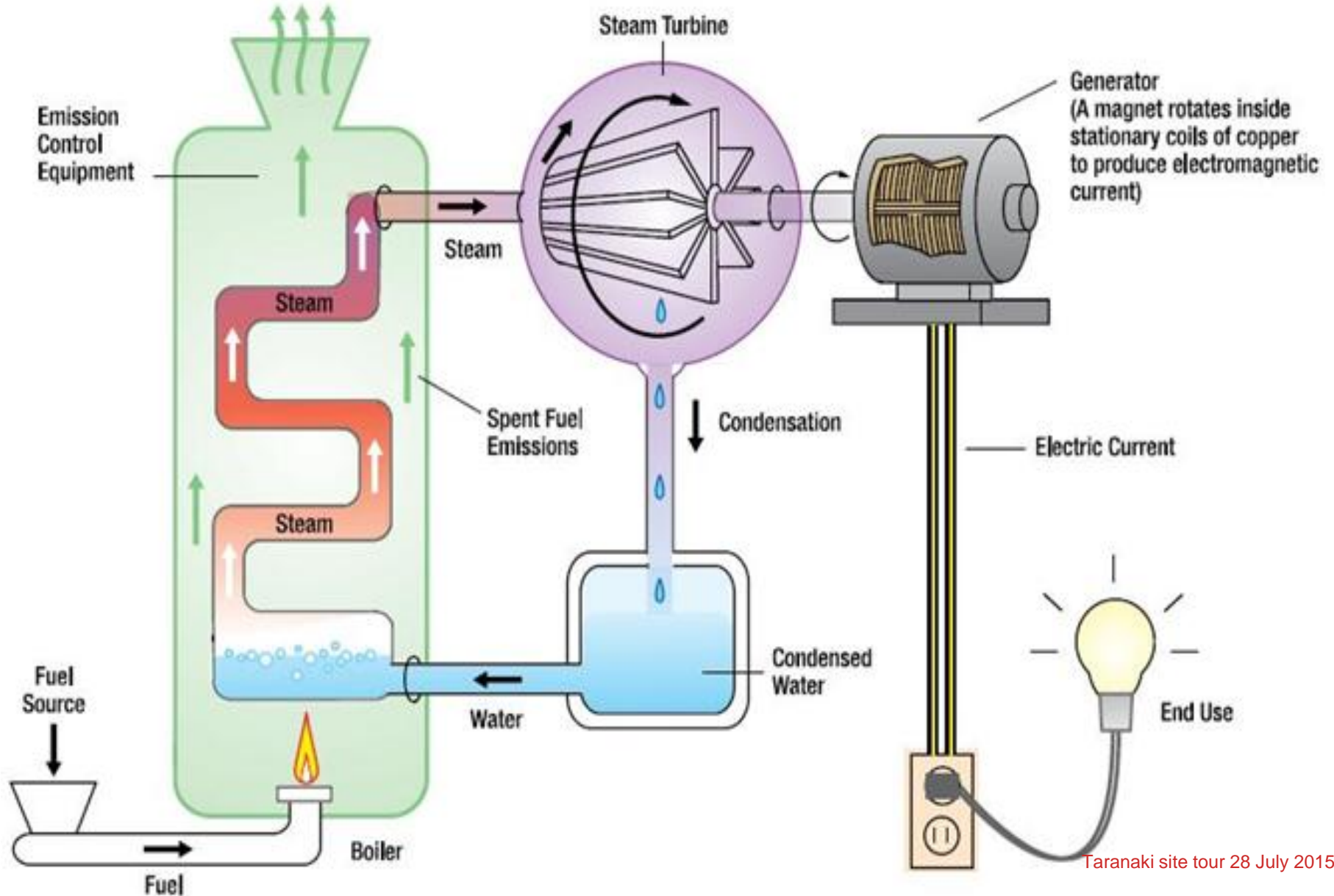
Gas turbine: The Brayton Cycle

Typical efficiency: 33% - 45%



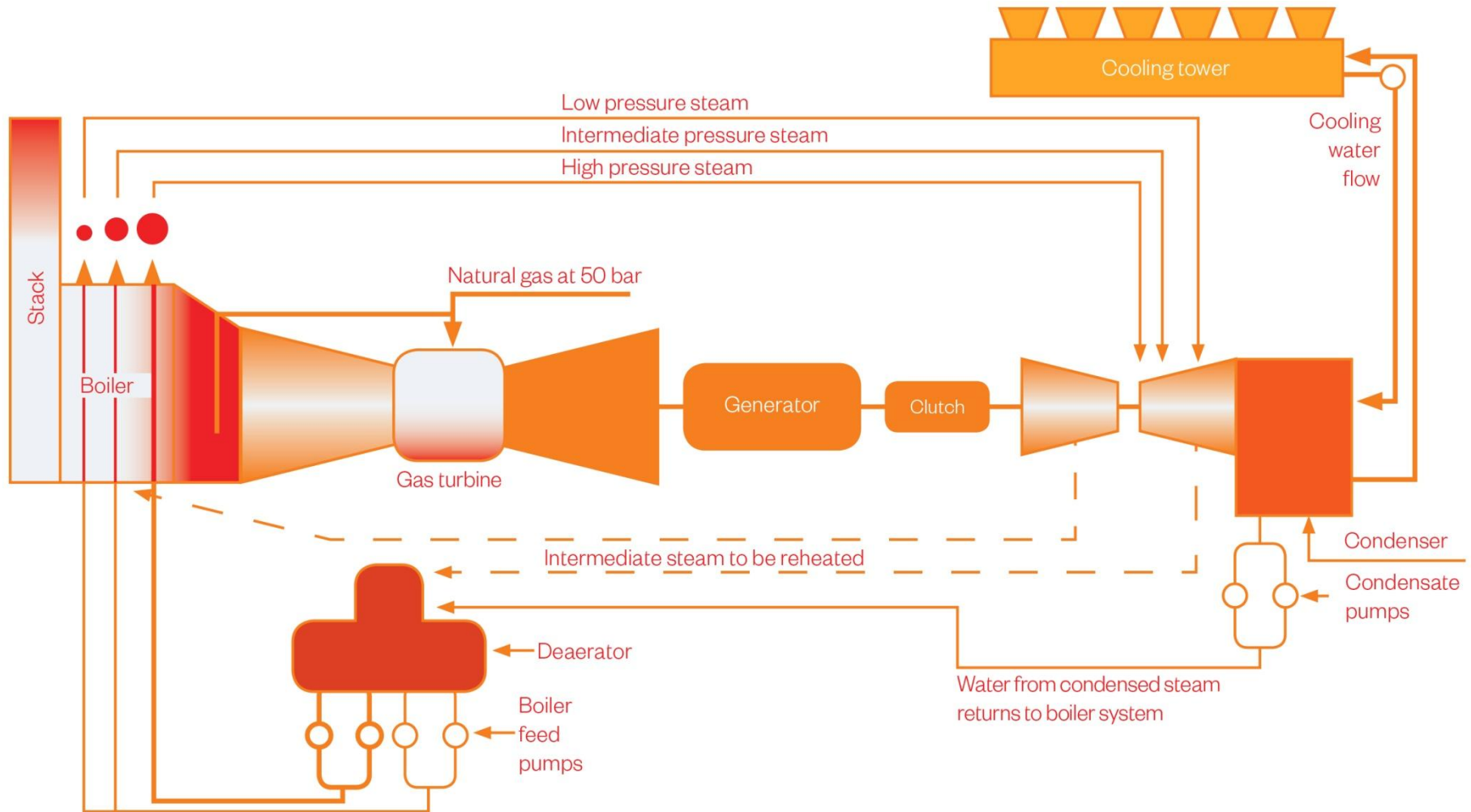
Steam turbine – The Rankin Cycle

Typical efficiency: 33 – 38%

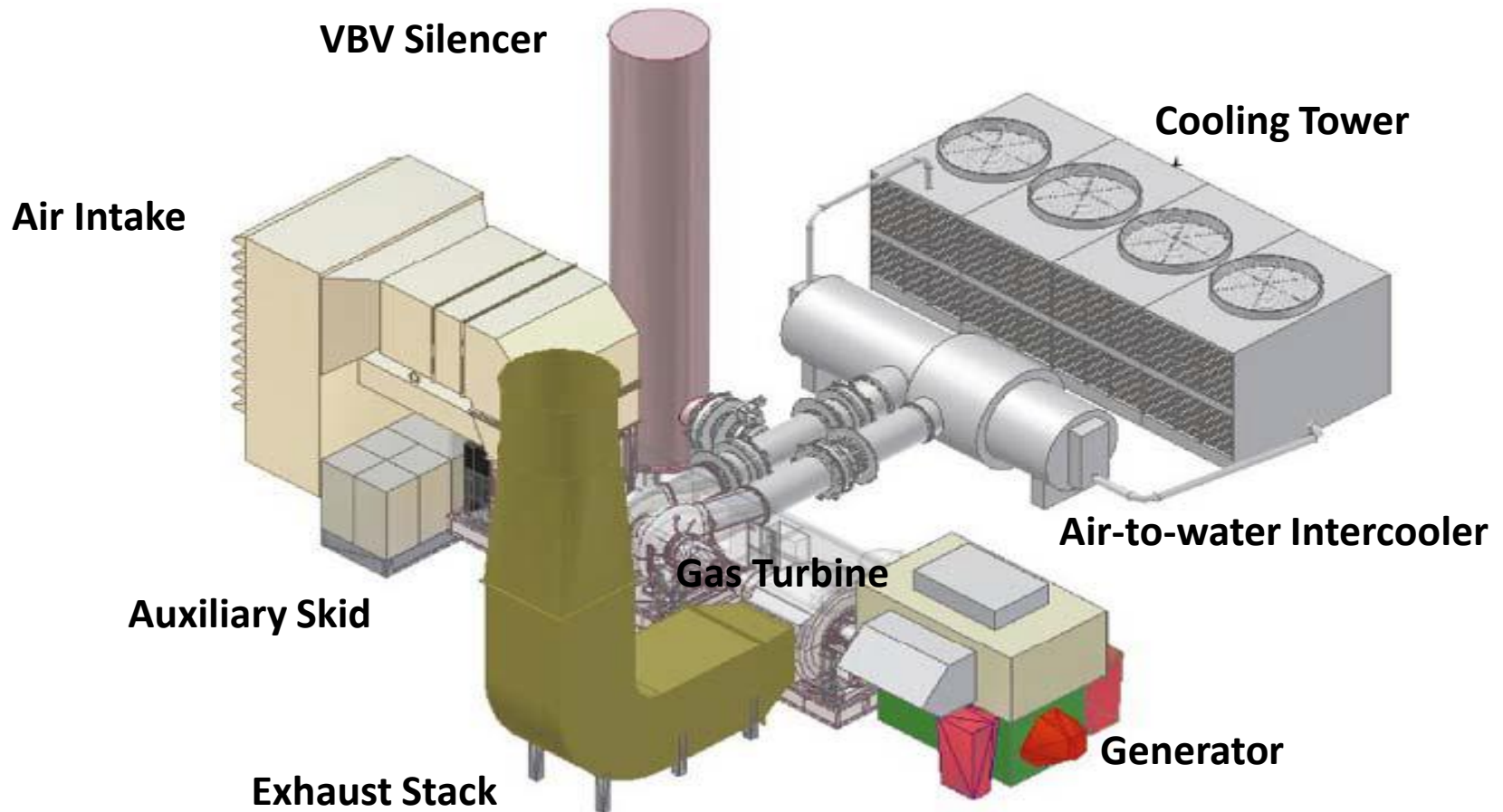


Combined Cycle

Typical efficiency: 55% - 60%



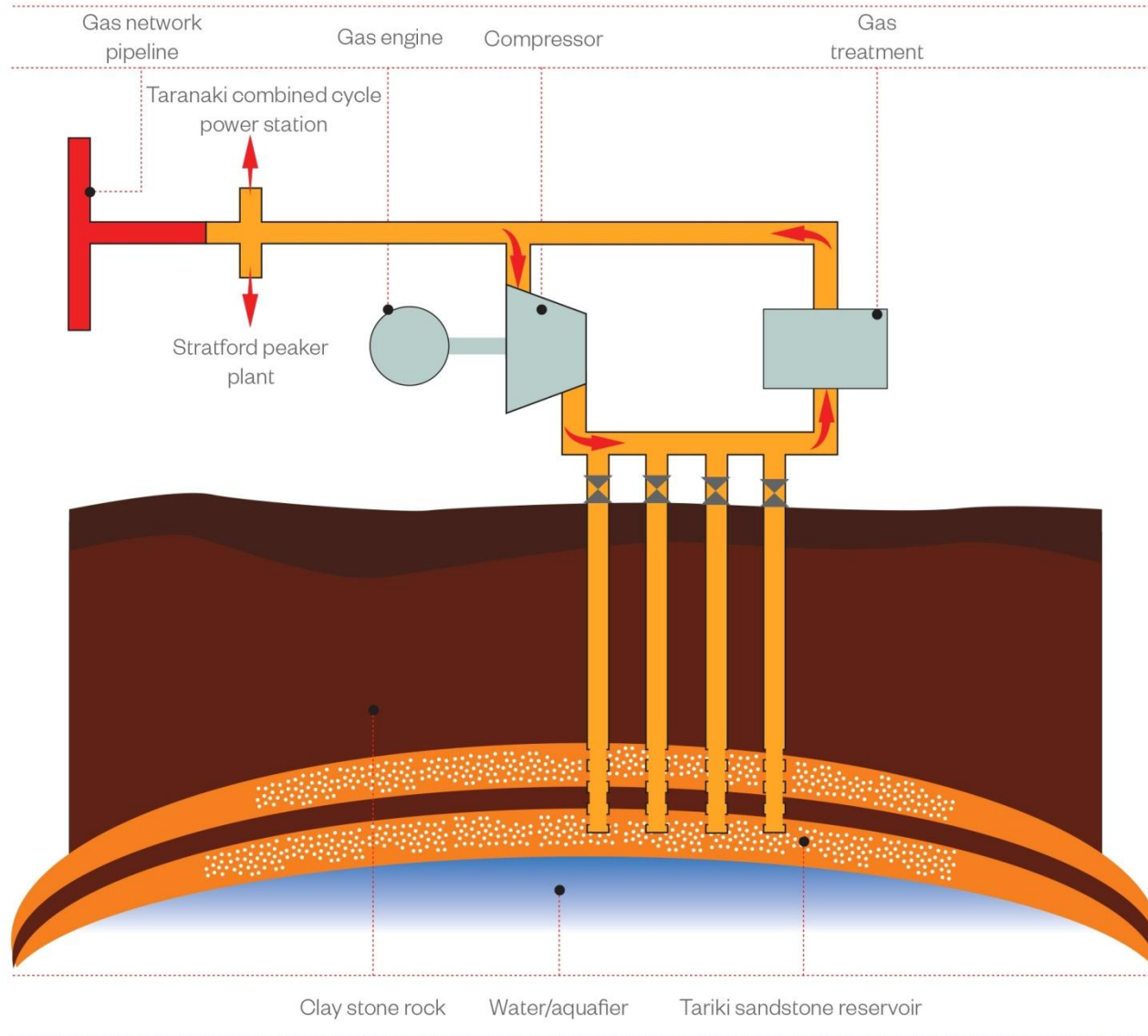
LMS 100 gas-fired peakers



Ahuroa gas storage facility



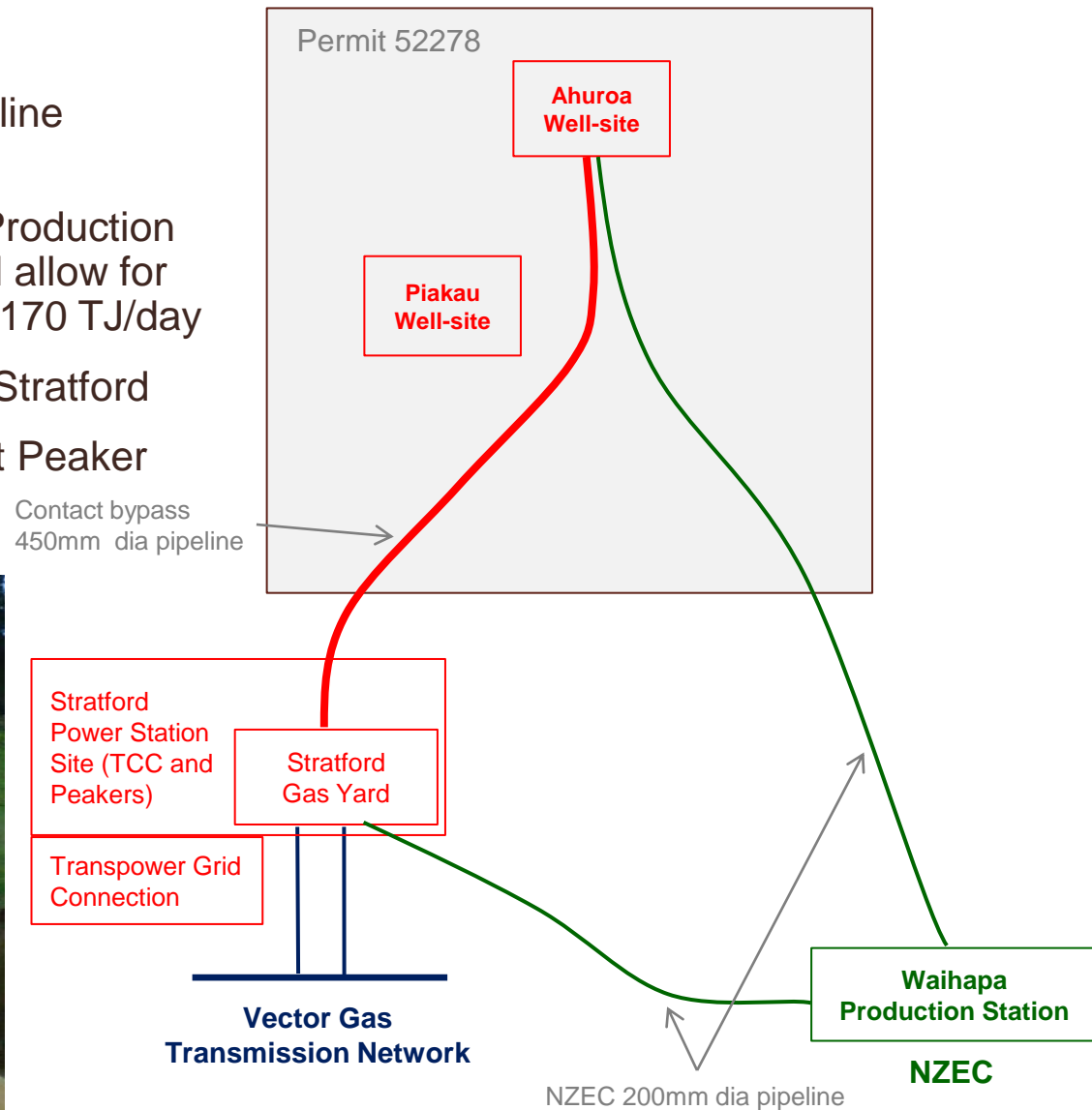
AGS provides Contact with up to 17 PJ of gas storage capacity



- ~17 PJ max working volume
- 11.3 PJ working volume as at 30 June 2015
- Connected to Stratford power stations by 2 pipelines
- Operated by NZEC (from Waihapa Production Station)
- Max reservoir pressure 3,450 psi
- 45TJ/day extraction rate (single train)
- 27 TJ/day injection rate (via Waihapa Production Station) (single train)

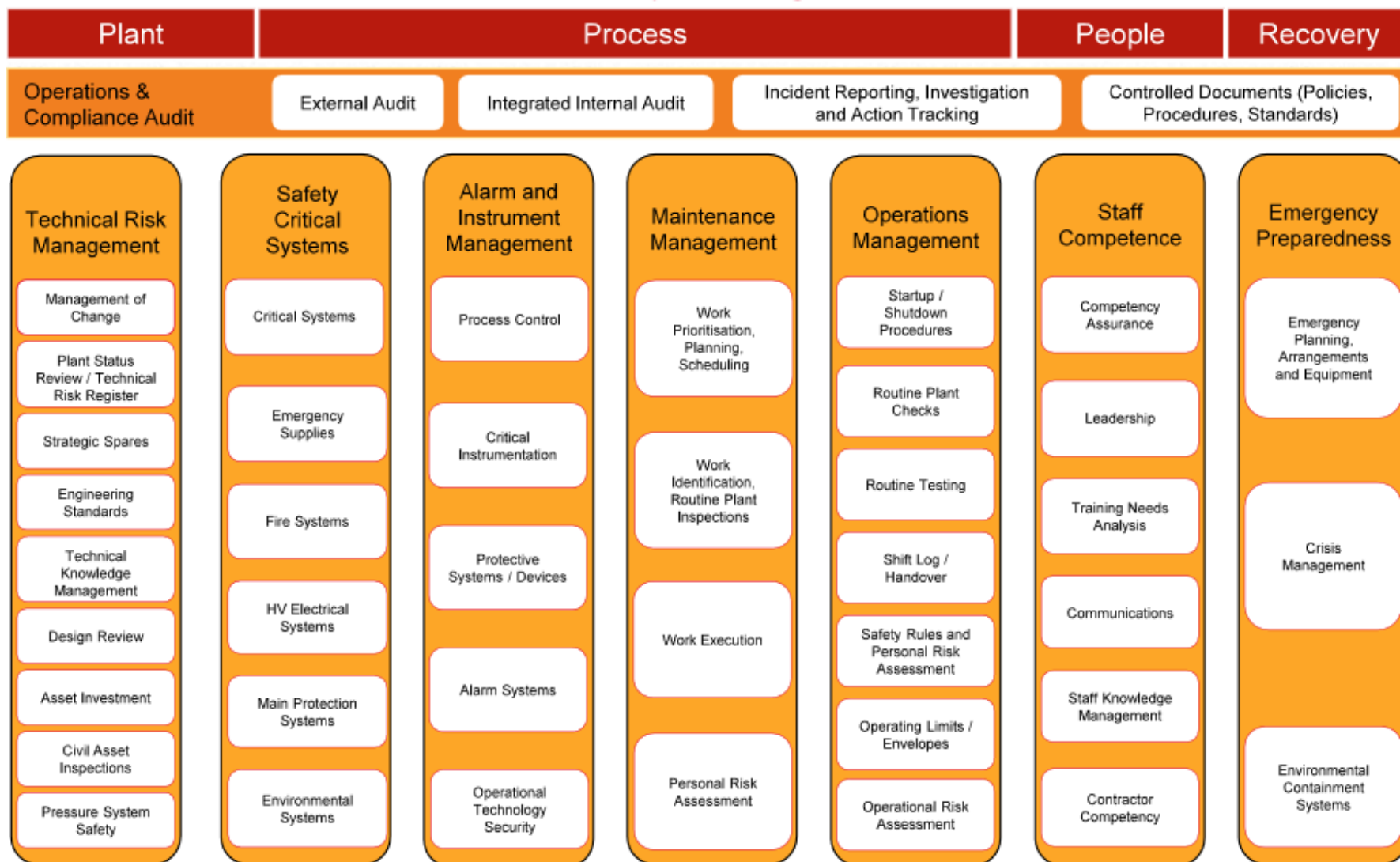
AGS is connected to the Stratford power stations by two pipelines

- Bypass pipeline completed 2013
 - » 8.7km, 450mm diameter pipeline between Ahuroa and Stratford
 - » Purpose to bypass Waihapa Production Station to eliminate costs, and allow for storage development of up to 170 TJ/day
 - » Option of 2 pipeline routes to Stratford
 - » Increased line-pack to support Peaker start-up



OSIP programme – redefining process safety

Contact Process Safety Management Framework



Bow tie diagrams are used to visualise the hazard being assessed

