

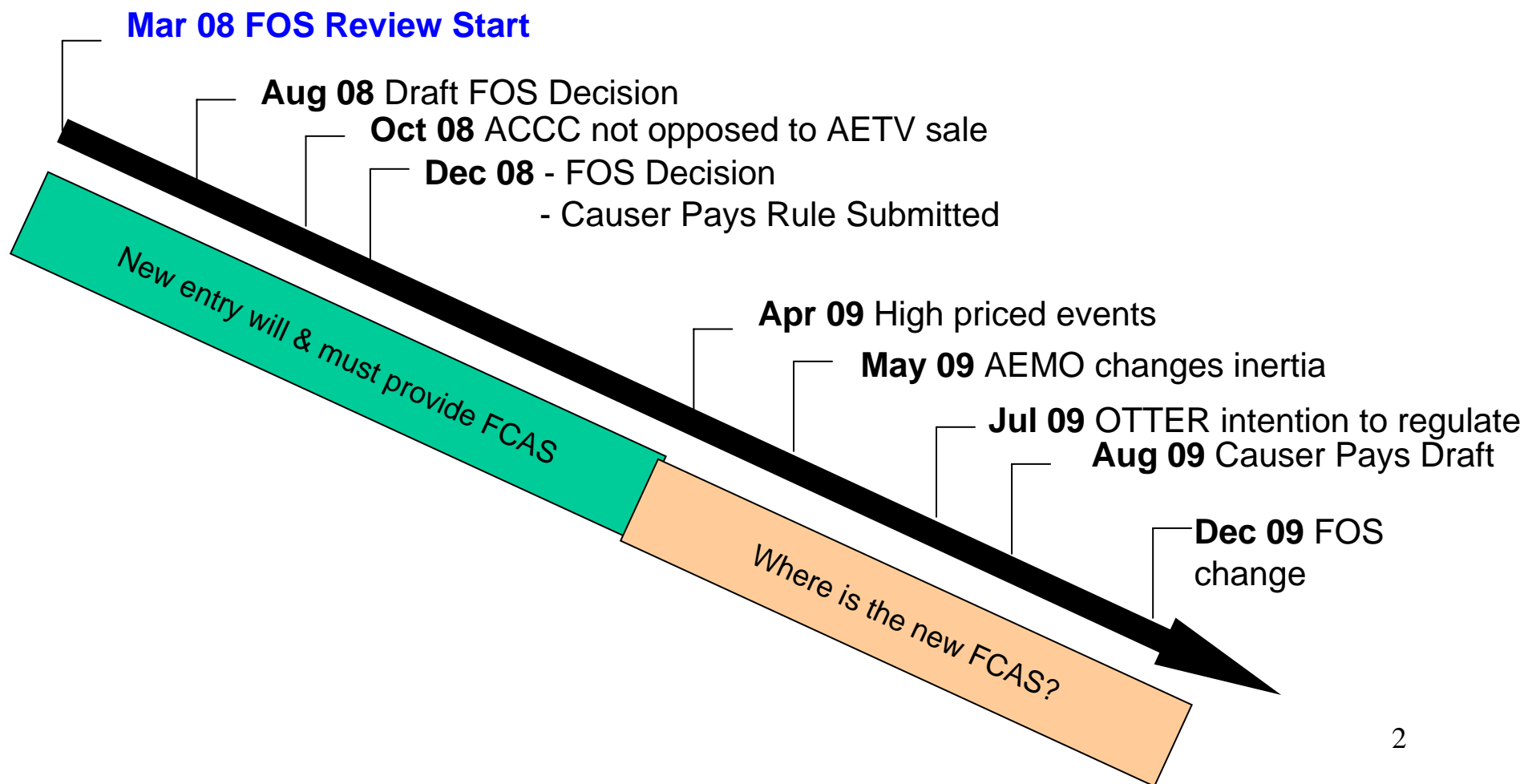
# Hydro Tasmania

## Presentation to OTTER on Potential Regulation of Raise Contingency FCAS

- How the FCAS issues have unfolded
- Dispelling FCAS Myths
- What others had to say (and why)

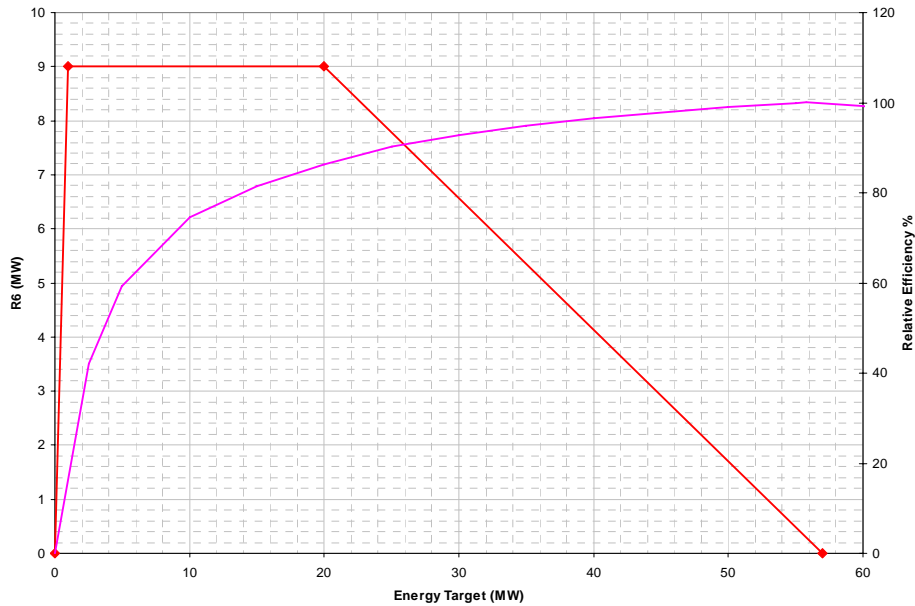
10 September 2009

# Tasmanian FCAS Timeline

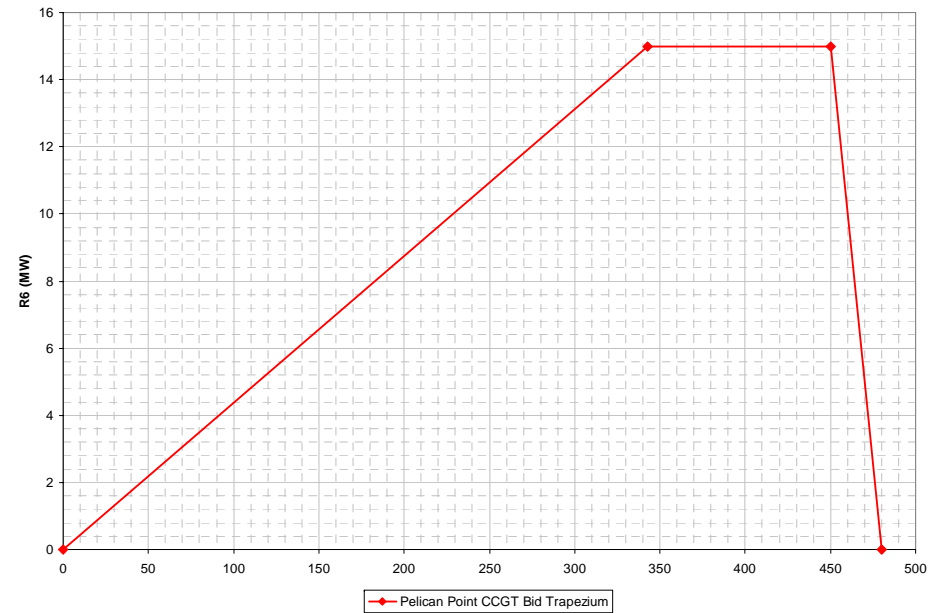


# R6 FCAS Comparison

## Typical hydro generator

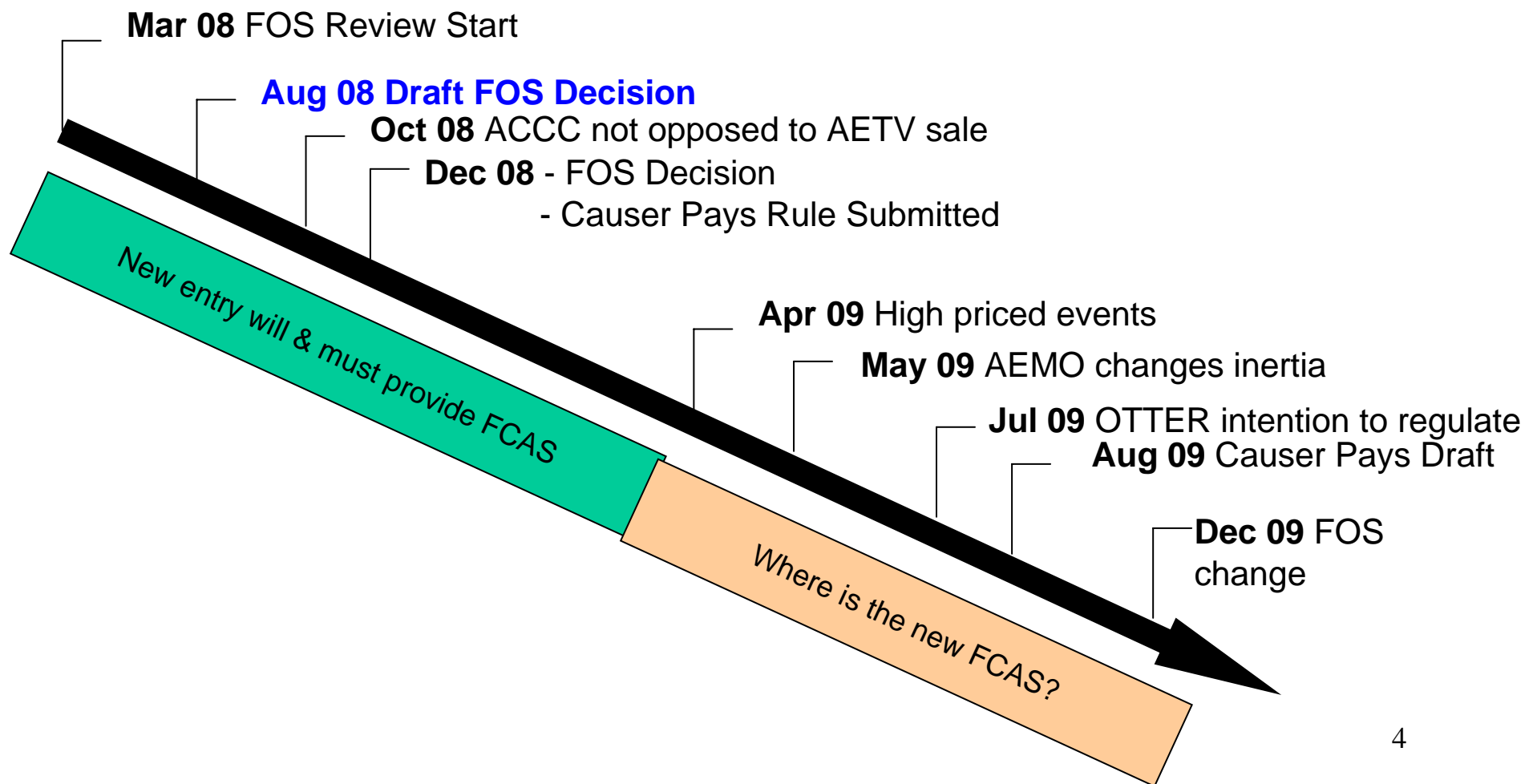


## Typical CCGT



The efficient supply of raise contingency FCAS is central to the supply-side equation in Tasmania

# Tasmanian FCAS Timeline



# Co-optimisation R6

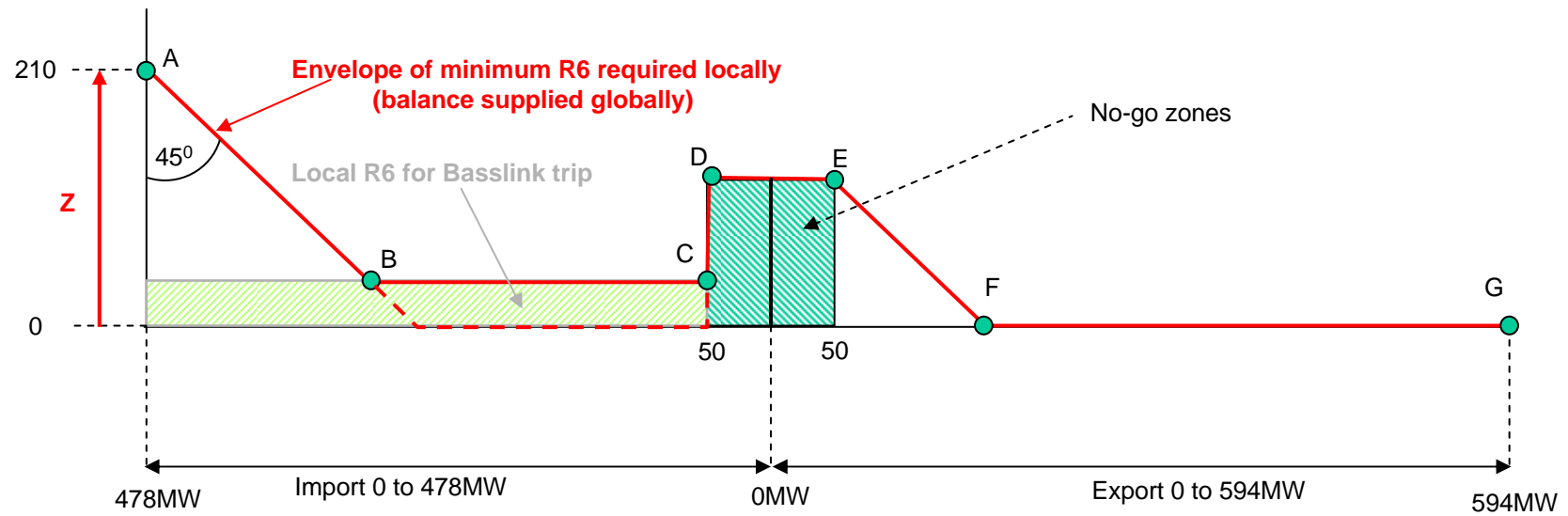
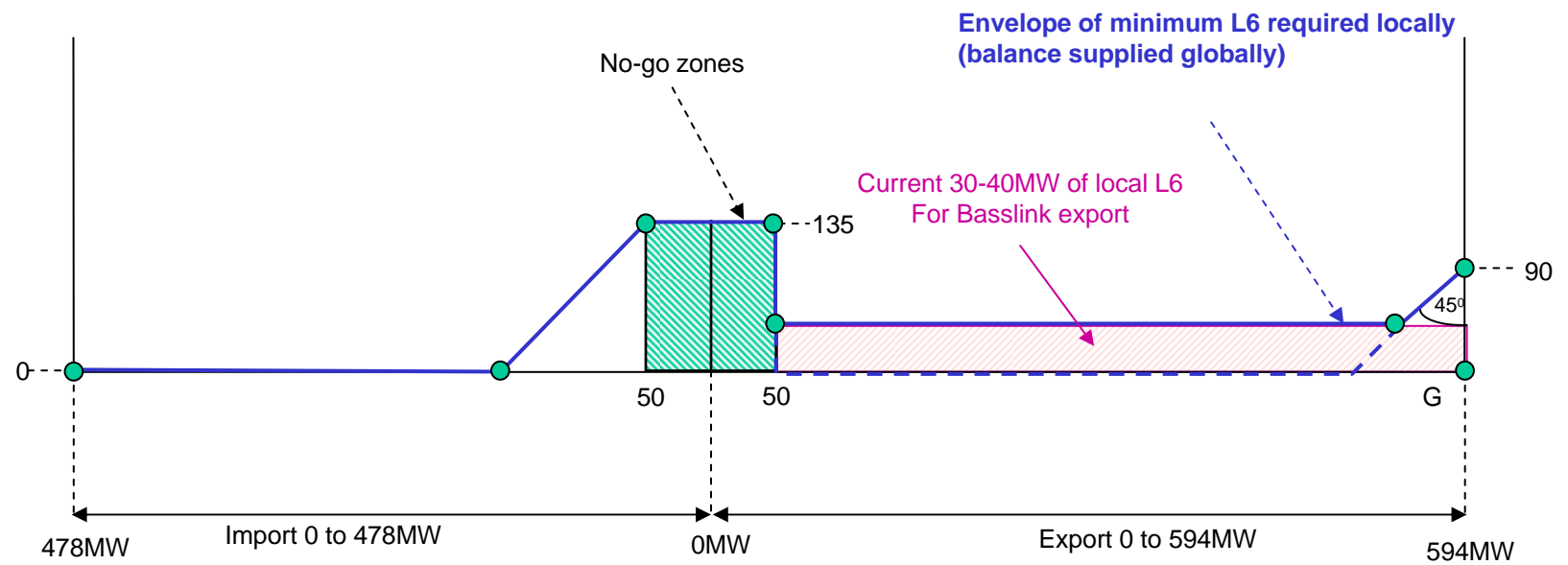
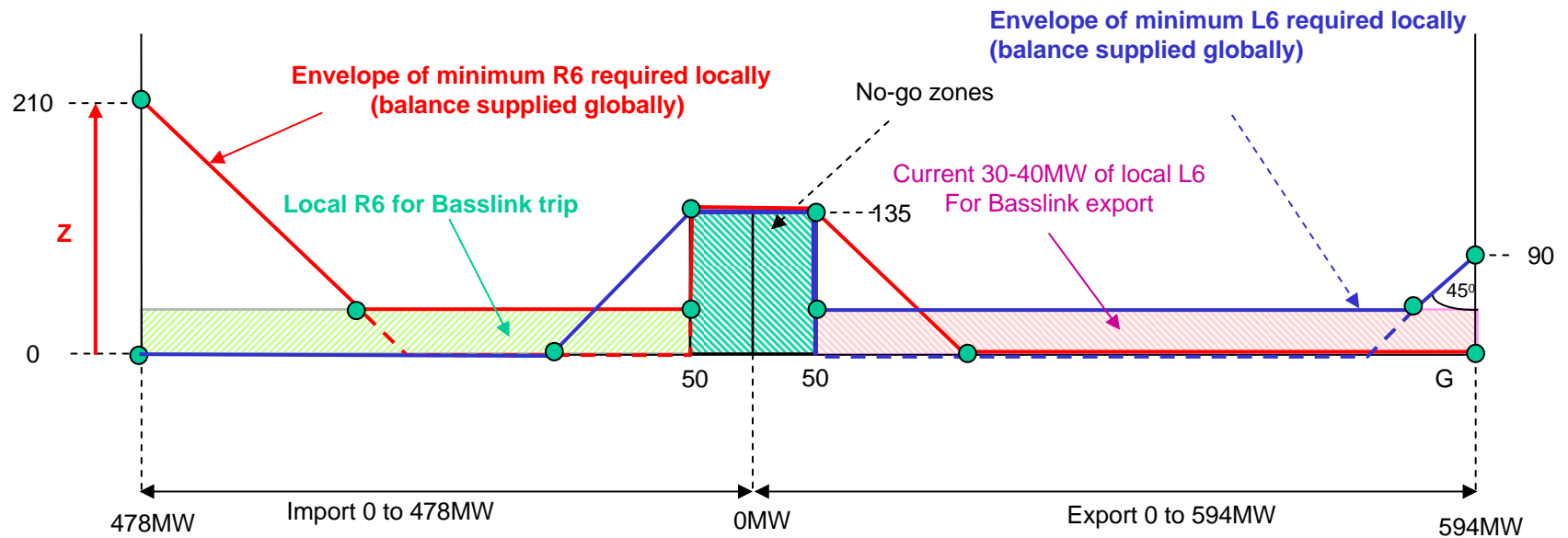


Figure 1

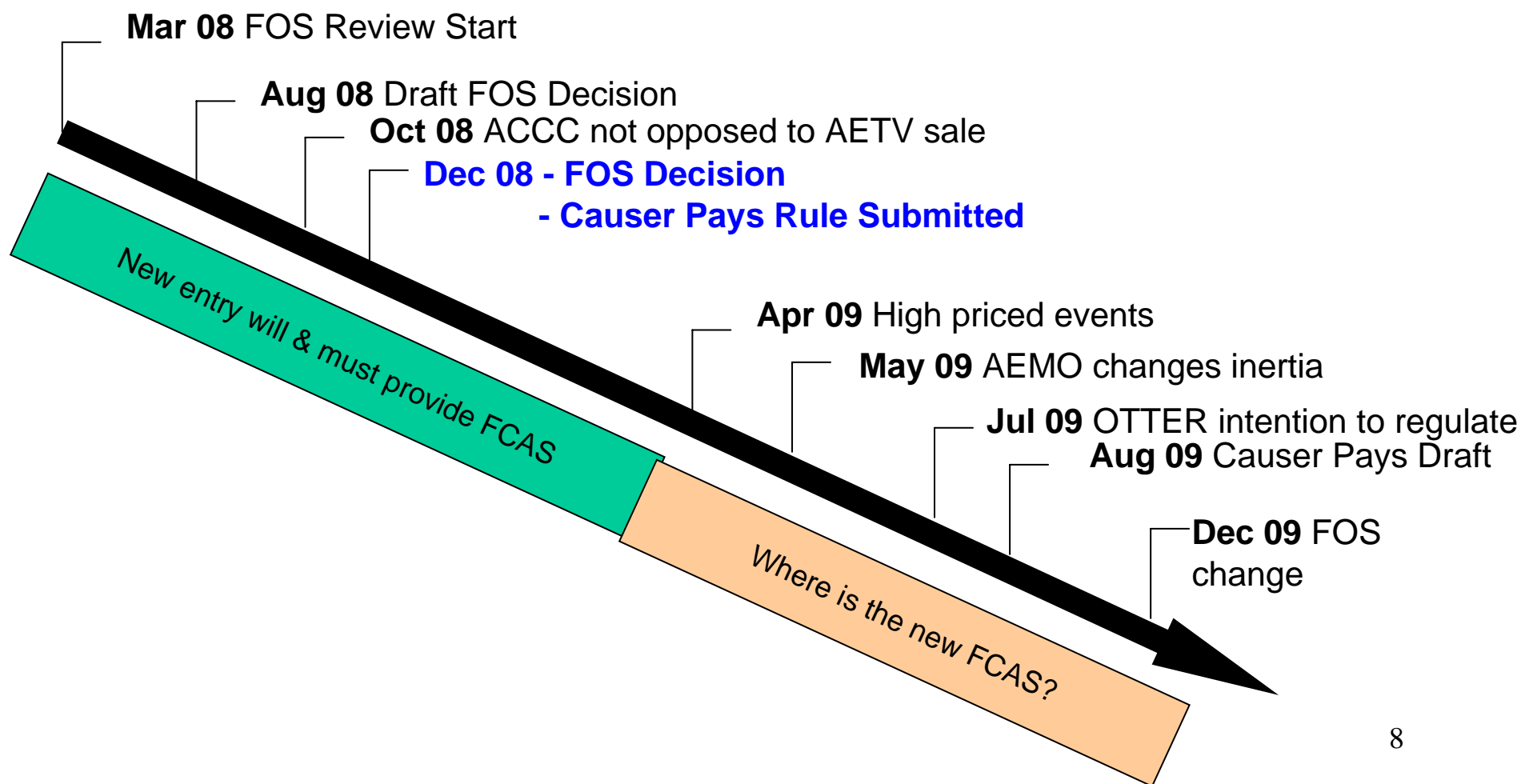
# Co-optimisation L6



# Co-optimisation R6 & L6



# Tasmanian FCAS Timeline





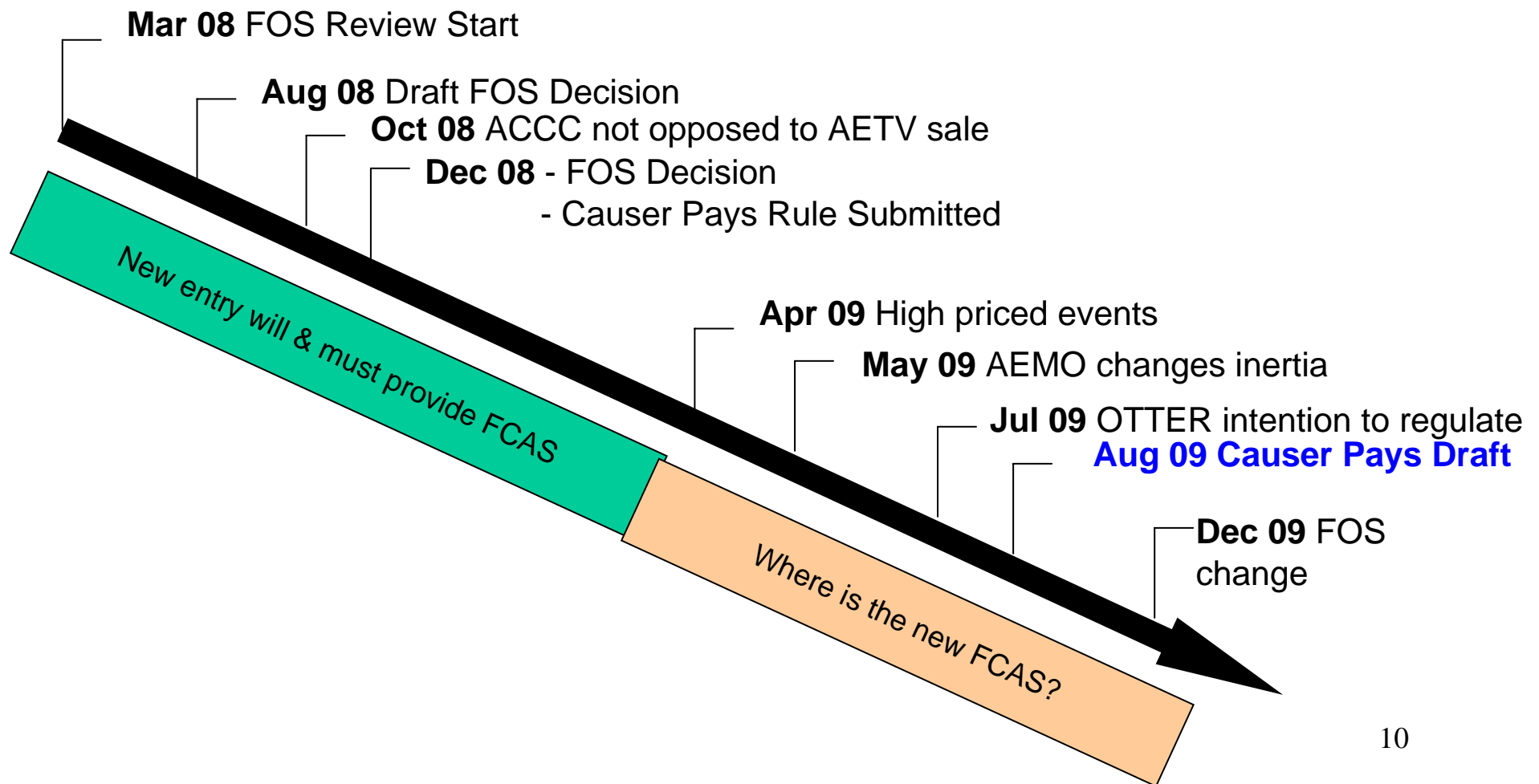
# AETV FCAS Liability

(1<sup>st</sup> -17<sup>th</sup> April)

	Avg MW	Max MW
R6	1	9
R60	2.3	18.7
R5	2.3	19.3

- Made the commercial choice on level of exposure to energy/FCAS markets knowing commissioning programs
- Declined existing Raise and Energy capability of BB unit 2
- Approximately \$425k (assuming fully exposed)
- AETV investment in FCAS = Nil??
- HT investment in FCAS = \$800k (30MW R6 & 100MW L6)

# Tasmanian FCAS Timeline

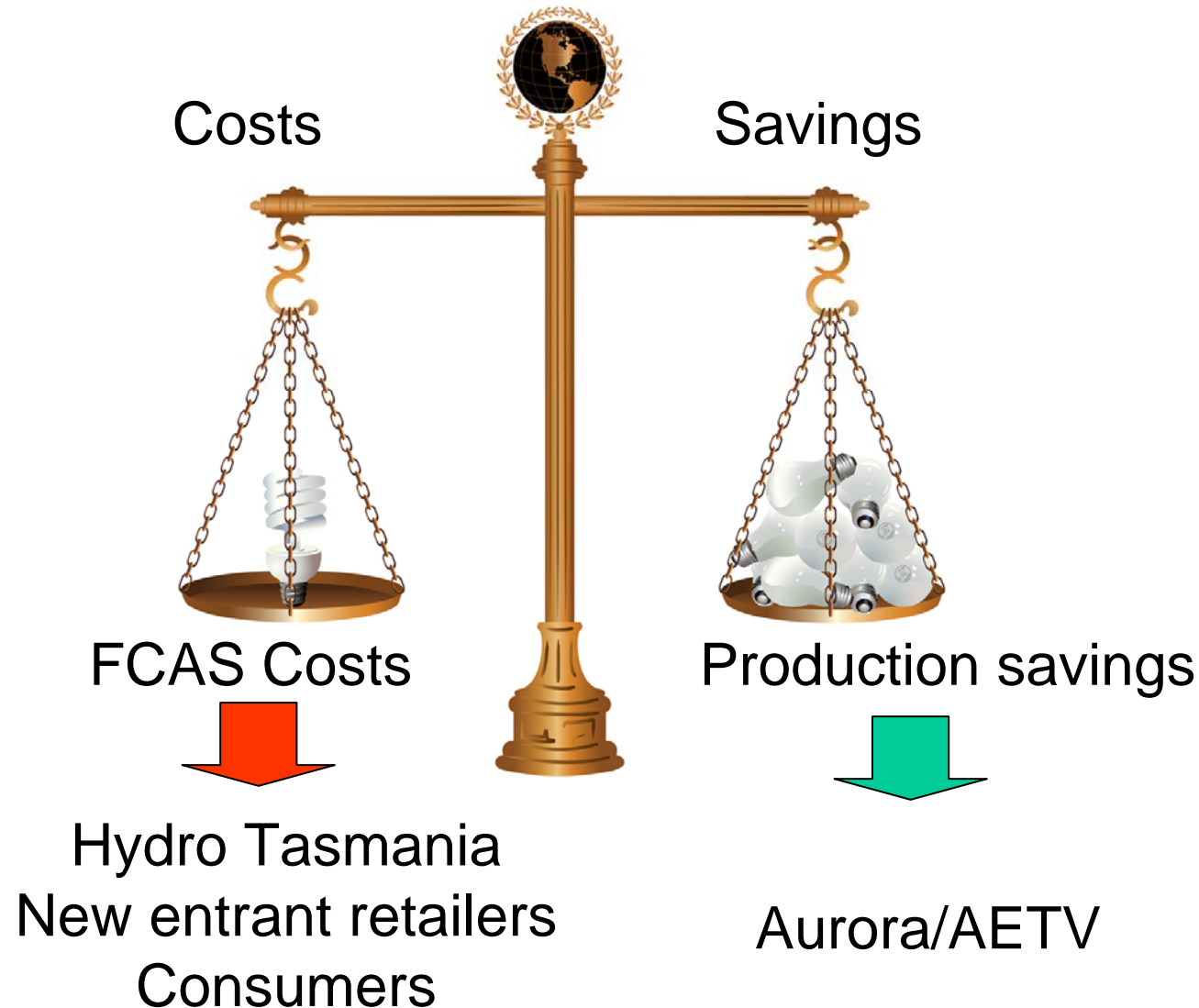


# Summary of Submissions

Aurora Energy & its 100% subsidiary AETV	Businesses exposed to FCAS due to failure to manage market risks. Support regulation as cheap means of protection from competition
LMS and Infratil (PPA)	
Energy Response	Experienced market participants who recognise the risks of market intervention. Oppose regulation on market principles.
Hydro Tas	
R40s	
NGF	
AER	Submission lacks any substantiating argument or facts
RTA	Raise or lower?

- Noticeable omissions
  - Independent advice (eg AEMO & CRA in TFOS)
  - New wind proponents
  - Other new entrants (geothermal)
- No assessment of net benefit (approach correctly adopted by AEMC in TFOS review)

# Cost and savings allocation



# Summary

- April '08 – Issues
  - New generation required
  - Trade off of supply side costs and benefits
  - R6/L6 availability and costs central to equation
- Dec '08 – TFOS Determination recommends 'package' of measures required to ensure net benefit
  - Slightly tighter FOS
  - Contingency size limit
  - Obligation for new entrant to bring new R6/L6 to market
- Apr '09 – high prices expose AETV's commercial choice not to provide or procure FCAS – inconsistent with TFOS submissions

# Where to from here?

- OTTER announce intent to declare Hydro Tasmania raise contingency FCAS as declared service.
- April 08 issues exacerbated and remain unaddressed
- How does declaration of a single participant address the key FCAS issues?
- What are the market and competition risks created by such a declaration?