## UNFC

## Why do we classify resources?

David MacDonald EGRC Chair

### **VP Segment Reserves, BP**

**Mexico City** 

19 June 2018

## The Problem of Classification



How to Classify?

- By genre
- By artist
- By composer
- By instruments
- By tempo
- By date recorded
- By date purchased

## **Business Impact of Getting it Wrong**

HOME PAGE MY TIMES TODAY'S PAPER VIDEO MOST POPULAR TIMES TOPICS		-	
Che New york Cimes Tuesday, August 26, 2008 Busines	SS		
WORLD U.S. N.Y./REGION BUSINESS TECHNOLOGY SCIENCE HEALTH	SPORTS OPINION		
El Paso Says Reserves May Have Been Falsif	ied		
By HEATHER TIMMONS Published: May 4, 2004	🖾 E-MAIL	BBC	BBC NEWS CHANNEL
The El Paso Corporation, the troubled Houston energy company, said yesterday that an outside investigation had found that some employees might have deliberately overstated oil and gas reserves and that it would need to restate five years of results.		NEWS	
	C SAVE	ws Front Page World	Last Updated: Monday, 19 April, 2004, 11:34 GMT 12:34 UK
	0 SHARE	UK	Shell finance chief is forced out
El Paso, which is struggling to shed billions of dollars in debt after a failed Enron-style expansion into energy trading, said in February that it would reduce its estimates of proven oil and natural gas reserves by 1.8 trillion cubic feet, or about 41 percent, and take a \$1 billion charge for the reduction. In late March, the company said the Securities and		wates	Shell's chief financial officer Judy Boynton has resigned, becoming the third casualty of its reserves crisis.
Exchange Commission had begun a formal investigation.		Business	

### SEC Letter to Devon Dated: May, 2004

### **RE: Reasonable Certainty**

**Question:** Although you state that the reductions were driven by new technical data and well performance, we are not convinced that the prior technical data used to call these reserves proved under Rule 4-10(a) of Regulation S-X was sufficient. Please tell us how the data you had in **1997** allowed you to meet the requirements of reasonable certainty for the reserve volumes you classified as proved at that time for each field.

Question: What are the reasons for these estimates not being correct?

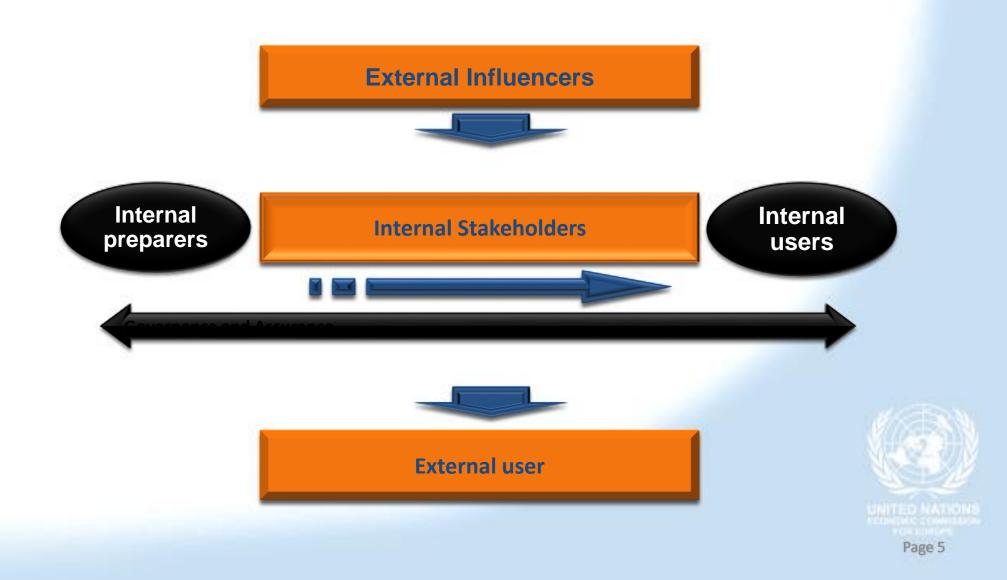
**Question:** What was the basis for the attribution of proved reserves?

# A Couple of Anecdotes

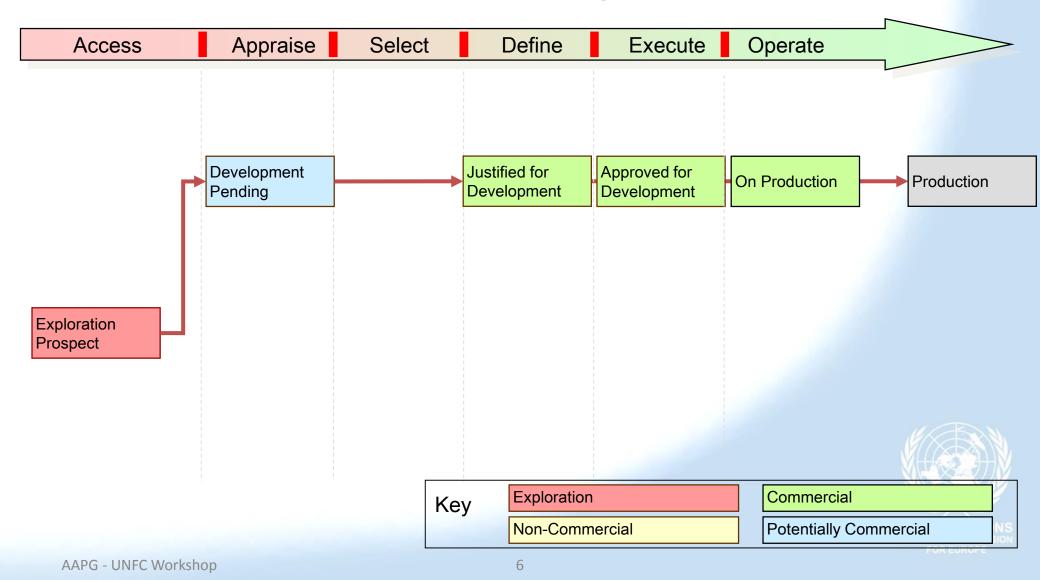
- A famous company misrepresents its reserves with collusion of the board of directors
- Application of revised rules significantly alters management's previous estimate
- Risk mitigation not in-place results in revision of field reserves
- Management found to be trading shares prior to release of revised reserves estimates

Institute of Mining and Metallurgy London, 1911

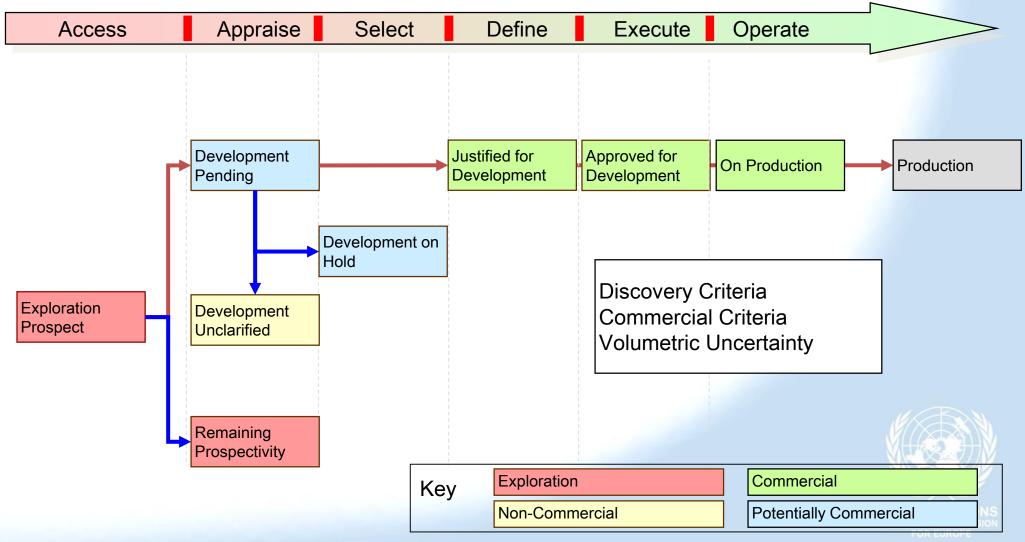
## **Stakeholders for Resource Classification**

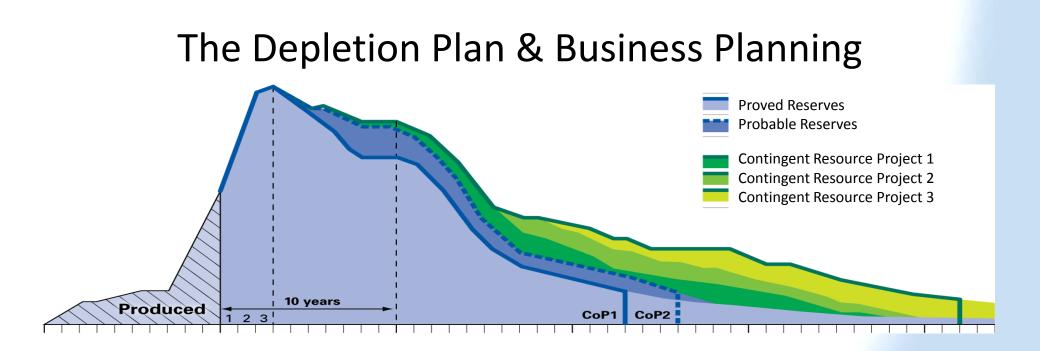


## **Resource Progression**



## **Resource Progression**





#### **Activity Plan**

Focuses on production of proved and probable reserves and timely execution of activity to complete future projects, such as water and/or gas injection

### **Business Plan**

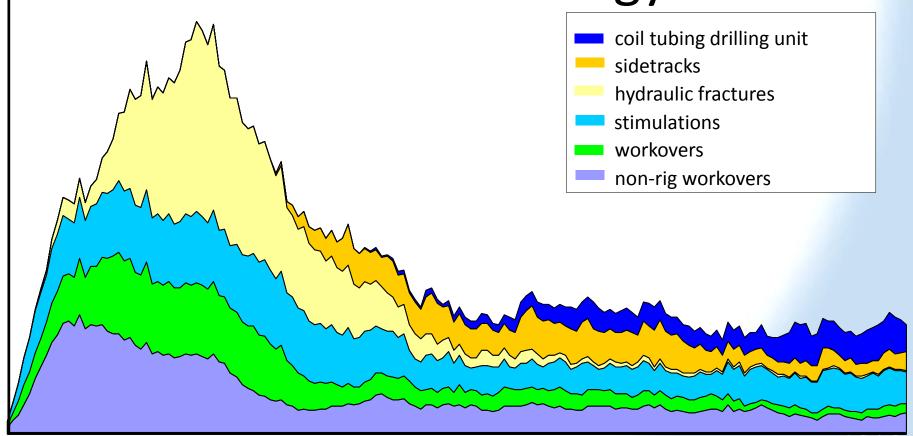
Focuses on the medium to long term value of the Asset but is constrained by assumptions regarding corporate strategy and investment availability.

#### **Depletion Plan**

Describes the total resource envelope including the proved and probable reserves and Contingent Resources up to the estimated ultimate recovery or technical limit.



### Role of Technology



The improvement of hydrocarbon recovery and investment efficiency is demonstrably linked with advances in technology.

The right linkage between depletion and technology plans is vital to maximising value from our assets.

incremental production mbd

## **Diversity in stakeholder characteristics**

- Ability to tailor reporting information
  - Range of information available- financial statements or beyond?
- Level of sophistication
  - Sophisticated users
    - » Industry specialists
    - » Use of information as inputs to own analysis using own assumptions
    - » Use of full range of value relevant information
  - Less sophisticated users
    - » Greater reliance on financial statements
- Conflicts between stakeholders?
  - Views on cost/ benefit of information
- View of what is useful information
- Is there one 'answer' that meets the needs of all users?

