

Dubai International Financial Centre (DIFC) DCP

Plant Upgrade / Expansion

Design Considerations,
Challenges, Risks & Lessons
Learned



Types of DCP Upgrades / Expansions

Unplanned

Planned

Unforeseeable
Upgrade

Foreseeable
Upgrade

DIFC Plant

Design Considerations

Minimize the construction & installation works in the future.

Make provisions.



~~The Assumption~~ ...defeated the Purpose

Future Equipment are either determined at the time of the design or to the installed ones or can be determined later.

- Manufacturers change
- Products change
- Operational data input
- Authorities' Regulations change

2008 As-Built

2018 As-Built

The Challenges

Design

- Incorporate operational data input
- Different equipment
- Electrical load distribution
- Avoid interruption of operation

The Challenges



Major Piping Modifications



Water Stopping

Hot Tapping

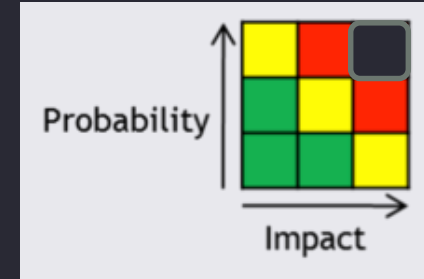
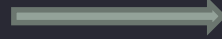


The Challenges



The Main Risk

Interruption of operation



How we mitigated the risk

Increase supervision

Rigid work permit system

VS

How it should have been mitigated

Flexible design

Less provisions

Less points of interface

Physical separation

Sighs of Relief

OWER

**Removable
Façade
Cladding**





Removable Concrete Slabs



Service Lift(s)



**Cranes /
Monorails**

Thank You