# **REVIEWING SEVERAL CORROSION MANAGEMENT CASES FROM THE**

### **ENERGY SECTOR**



#### Ali Morshed ICorr Annual Corrosion Forum - Aberdeen

27 August 2024



### Contents

#### Introduction

Why is Corrosion Still an Issue?

Where is the Gap?

**International Case Studies** 

Conclusions

Recommendations

### **The Main Objective**

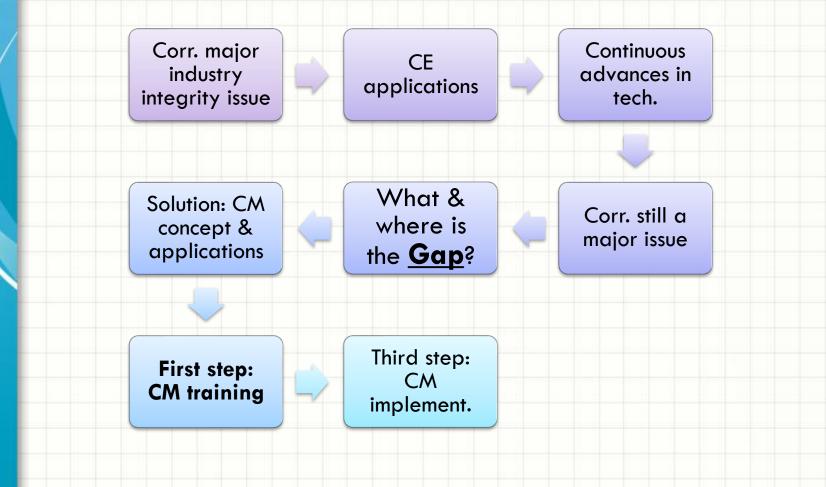
Sharing valuable operational and integrity experience with other energy and power companies.

### Why is Corrosion Still a Major Integrity Issue?

In spite of the continuous and significant technological advances in various fields such as metallurgy, coatings and chemicals, corrosion remains a major integrity threat for the energy and power industries. But why?



### **Corrosion: Still a Universal Integrity Issue**



## What and Where is the Gap?

#### Shortcomings in:

- Design
- Materials Selection
- Transportation
- Installation
- Purchasing(!)
- Hydrotesting
- Operation
- Inspection
- Monitoring
- Documentation
- Procedures
- Communications
- Competency

#### Changes in:

- Feed composition
- Operation
- Process
- Team structure
- Methodologies

# Energy and Power Industries Case Studies and Lessons Learnt

### **Case 01: Poor Storage**



### **Case 02: Poor Installation Practices**



## **Case 03: Poor Design**



### **Case 04: Poor Construction**



### **Case 05: Poor Design & Process Practices**



## **Case 06: Poor Hydrotesting**



### **Conclusions**

#### Non-existent, ineffective or erroneous corrosion control activities

Lack of performance monitoring

Inadequate or total lack of communication or competency or both

### **Recommendations**

Carry out performance monitoring for pertaining corrosion control activities

Introduce and improve communications among various disciplines

Enhance competency via more training and better appointments(!)

#### Thank you for your time, patience and attention.

#### Please send me your comments, questions or suggestions

to:

#### allok\_morshed@hotmail.com