



MII – Power Generation

'War Stories'

20 June 2023



AGENDA

- 1. Introduction to LWI
- 2. Our Approach to Claims
- 3. War Stories
- 4. Questions



Lloyd Warwick International

Global & Asian Operation

- A global loss adjuster with hub offices in UK, Europe, Americas, Asia Pacific & Africa
- Primary focus on Up/Downstream Energy, Traditional Power, Renewable Energy
- Operational and Construction phases
- BI and DSU claims, with specialist focus on loss mitigation and expediting
- Part of the McLarens group of companies access to McLarens network

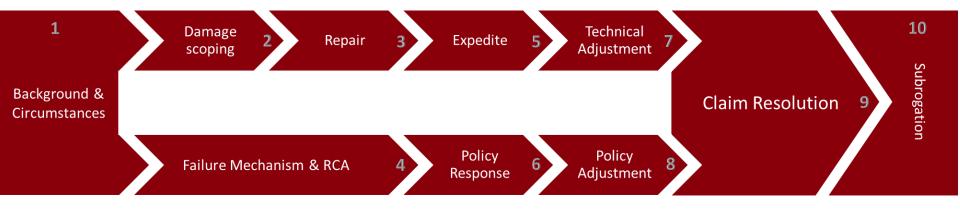
Singapore Office

- 7 experienced adjusters
- Multi-disciplinary background in Engineering, Insurance, & Law
- Hub for all claims in the region + global account management



Our Approach

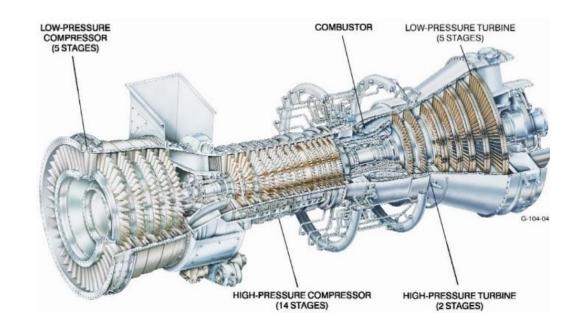
Claims Procedure





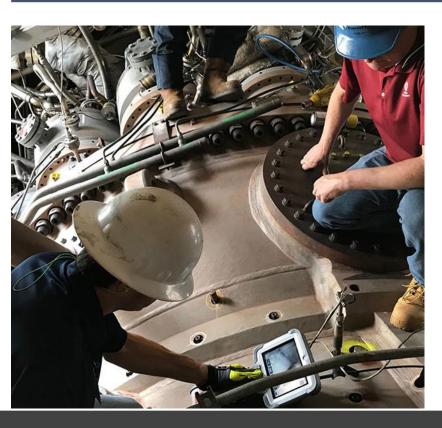
Background - LM-6000

- Combined-Cycle Power Plant
- GE LM6000 aero-derivative gas turbine
- 3x authorised workshops
 - GE in Houston
 - MTU in Berlin
 - IGI in Japan
- Lease pool by subscription
- Easily containerised for shipping





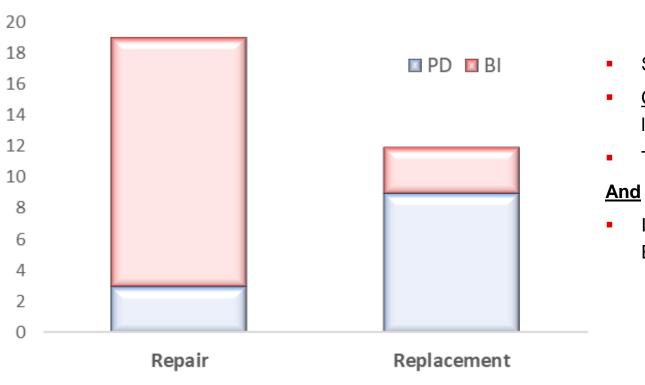
Power Plant – Machinery Breakdown



- Breakdown event during normal operations
- High-Pressure Compressor (HPC) section confirmed to have impact damage
- LM6000 cannot be repaired on site, or even opened up for detailed damage inspection
- No LTSA in place, no access to lease or spare engine
- All loss mitigation and expediting solutions under consideration
- Decision on remedial option needed to be made in advance of RCA completion



Tailored Solution

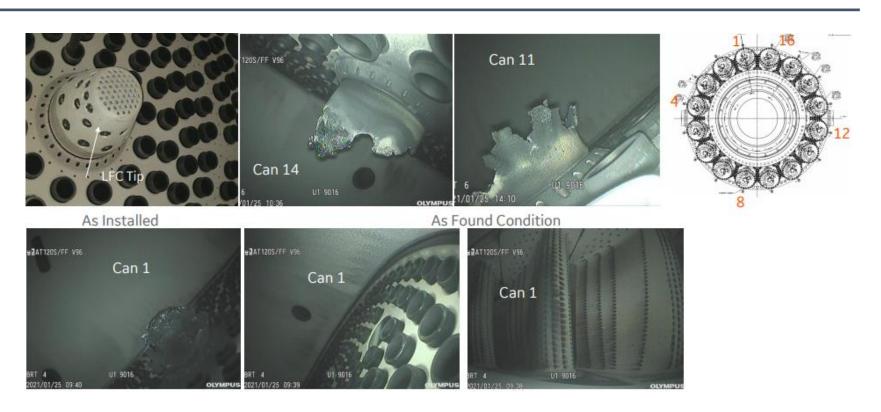


- Source Refurbished engine
- Confidence of the Market local and international
- Total saving of ~USD 7m

Insured purchased damaged
Engine... Further savings!!!



Power Plant Construction – 'Unexpected Event' to Combustors





'Spanner in the Works'

- STG Last overhauled 10 years ago
- No operational problems noted during intermittent running
- Opened for hours-based overhaul
- Generator Stator Core found with impact and melting damage
- Stator Core requires replacement luckily, Insured had an adjacent decommissioned Generator to use for spares

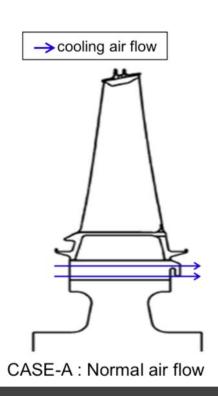


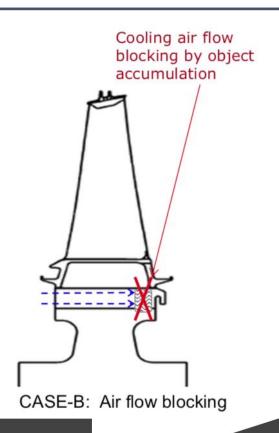
Key Question: When did the damage occur and which policy year should respond?



GT – Bleed Air









GT – Bleed Air

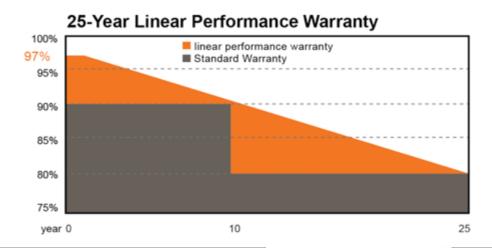




Solar (PV)

- Power Plant 40MW 138,000 panel mounted PV modules each with a capacity of ~300W.
- Incident Flood (2-3m depth)
- Damage Around 30,000 PV modules and 50 array boxes submerged by flood water
- Claim USD 4m+ (PD) and USD 2m+ (BI)







A Stalemate...

- Insured: all flood-affected PV modules being replaced due to fear of damage
 vs
- Insurers: proof of physical damage is the Insured's burden of proof.

Action Plan:

- Engage hydrologist
- Specialist Consultant for Field Testing
- Establish Warranty Curve
- Analysis of Warranty Curve





Resolution

Findings

- Adequate flood protection in place
- ~40% of all affected panels were tested
- From results identified pattern in PV module degradation
- Damage mechanism <u>not</u> flooding of PV modules, but...
- Inundation of array boxes leading to ground faults



Solutions

- Identified affected array boxes and allowed the replacement of 10x PV modules per string
- Claim settled at USD 2.8m (USD 1.6m PD and USD 1.2m BI)



Contact Information

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