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Project Cargo & Delay in Start Up – An Underwriter’s Perspective

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Project Cargo



- Definition of Project Cargo
- Underwriting Considerations – Cargo and DSU
- Critical Item Definition and examples
- Wordings and Questionnaire
- What happens when things go wrong

QUESTIONS?

Project Cargo



- What is Project Cargo? The transit risk for all goods relating to construction of:
 - Road, bridge, tunnel or railway.
 - Power station.
 - Manufacturing plant.
 - Mining or dam project.

Can also be extended to include Delay in Start Up or Advanced Loss of Profits

Construction for Bridge



Construction site of 2nd cross-sea bridge in Hangzhou Bay area

Photo taken on Oct. 10, 2012 shows the construction site of the Jiaxing-Shaoxing Cross-Sea Bridge in Haining, east China's Zhejiang Province. The bridge, scheduled to open at the end of 2012, is the second cross-sea bridge in the Hangzhou Bay area. (Xinhua/Xu Yu)

Workers install concrete box girders for the Jiaxing-Shaoxing Cross-Sea Bridge in Haining, east China's Zhejiang Province, Oct. 10, 2012. The bridge, scheduled to open at the end of 2012, is the second cross-sea bridge in the Hangzhou Bay area. (Xinhua/Xu Yu)

Source: news.xinhuanet.com

Construction for Tunnel



Yangtze River Tunnels, China

Source: www.roadtraffic-technology.com



HCC's Maroshi-Ruparel water tunnel project in Mumbai

Source: www.constructionweekonline.in

A Power Station



Didcot power station cooling towers

Source: www.getreading.co.uk



Medupi Coal-Fired Power Station - Power Technology

The power plant will have six units that will together generate 4,800MW.

Source: www.power-technology.com

A Methanol Plant



Paramount Transport

The Atlas Methanol Plant is one of the largest methanol plants in the world. Paramount was responsible for the mechanical erection and project management of the entire plant.

Source: www.paramounttransport.com

capacity requirements



recent values

- project cargo **\$ 60 million to \$ 150 million**
- ALOP/DSU **\$ 100 million to \$ 850 million**

Underwriting consideration



- Underwriting considerations **Cargo**.
 - Cargo Delivery is usually manufacturer warehouse to project site.
- Risk elements?
 - Weight, dimensions, value
 - Transit to port, load, stow, perils of the sea (weather, piracy, barges, heavylift) discharge, transit to final site, road carriers, fabrication, off site storage, positioning.

Headline Characteristics of Project Cargo Risks



- Long term – non cancel contracts (up to 10 years)
- High Valued non uniform items
- Long replacement time of key items
- Remote Location of project site
- Risk managed business
- ALOP/DSU Coverage

Project Cargo - Underwriting Consideration



Policy Wording (be aware of clauses extending cover – removal of debris, extra expenses, deferred unpacking, 50/50 Clause)

Types of transport (barges, heavy lift vessels, multi axle trailers)

Availability and replacement time of critical items

Know full details of the final transit leg – route survey is critical

Who pays survey fees?

Survey Warranty – Cover will be restricted following breaches

Types of Conveyances



Barge



Hydraulic Trailer



Airfreight



Heavy Lift Ship

Project Cargo Risk Management – Key Features



- Identification of Critical Items

- Critical item identification is a complex issue and depends on multiple considerations.
- Items that are likely to cause a delay to the project construction process if damaged, lost in or delayed in transit.
- Equipment with long replacement time (repair, re-manufacture, re-shipping, installation & commissioning).
- Items that are large, out of gauge, heavy or otherwise difficult to handle equipment and require special handling or transportation considerations eg. RORO handling, Barging, On Deck Stowage.
- Items of high value (> USD 3 mio) shipped complete.

Critical items



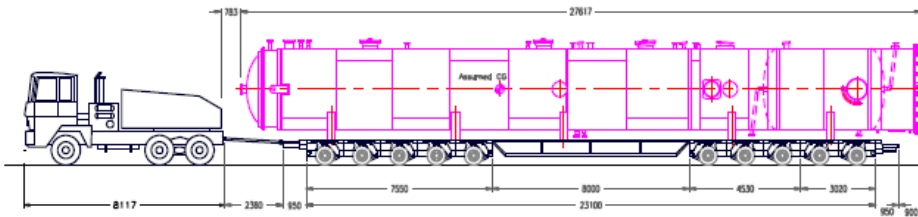
Rosneft performs unique transportation of project cargo for Achinsk Refinery

As part of the modernization project of Achinsk Refinery OJSC Rosneft is carrying out a unique transport operation for delivery of hydrocracking reactors to the refinery yard, the oil company

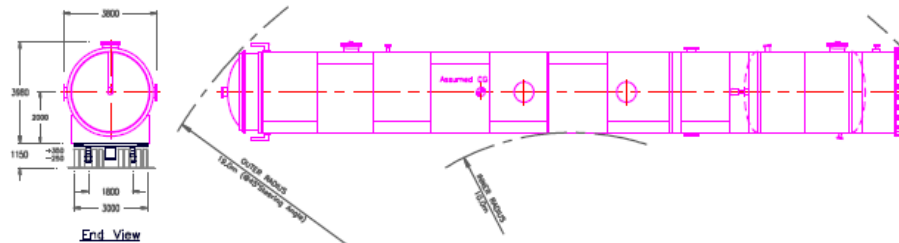
The equipment consisting of four reactors of total weight of over 2,500 tonnes is being transported to a distance of about 12 kilometers. From the Italian port of Mantova two reactors were carried by two barges along the Northern Sea Route to the port of Dudinka, and then down the Yenisei to a temporary berth in the village of Kubekovo. From there, the heavy-lift cargo will be delivered to Achinsk refinery by heavy trucks. The largest reactor, weighing about 1,300 tonnes, will be transported by a 36-meter transport module. The module has 24 dual axes, i.e. a total of 384 wheels and ensures maximum stability and optimum load distribution on the road.

Source: www.heavyliftspecialist.com

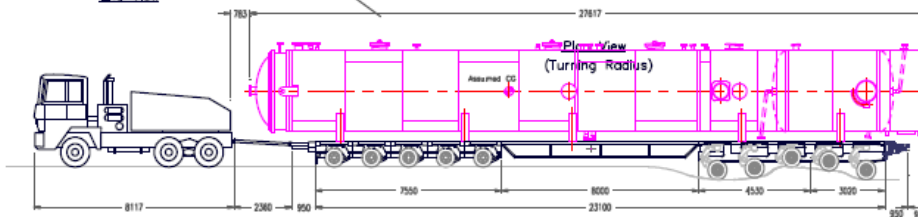
Method Statements – Multi-axle Trailer Configuration



Side View



End View



Critical items



Saulsbury Industries Vessel Lift

Source:
https://www.youtube.com/watch?feature=player_detailpage&v=rtazRVJeg2Y



122,000lb Transformer Lift

Source:
https://www.youtube.com/watch?feature=player_detailpage&v=flikQ5h12_0

Illustrations of some challenging Project Cargo movements



Transporting a Geothermal Generator up mountainous terrain at Bandung, Indonesia.



Transporting a Power Transformer up hilly terrain to the Bakun Hydroelectric Power Station site at Sarawak, Malaysia.

Illustrations of some challenging Project Cargo movements

A river crossing challenge in Thailand. The bridge over the river could not be used as it was structurally not strong enough to support the weight of the cargo hence a by-pass was constructed next to the bridge whereby a floating pontoon bridge was erected for the heavy project cargo passage across the river.



Underwriting consideration – Delay in Start Up



Risks Covered – following a loss under Section 1, loss damage or breakdown of any conveyance including vessel or GA salvage or life saving operations. Port blockage? Unexploded mines?

Indemnity – loss of profit, fixed costs, debt servicing, increased cost of working. Penalties and fines?

If a cargo loss occurs can the item be replaced without triggering DSU?

Scheduled Commercial Operation Date

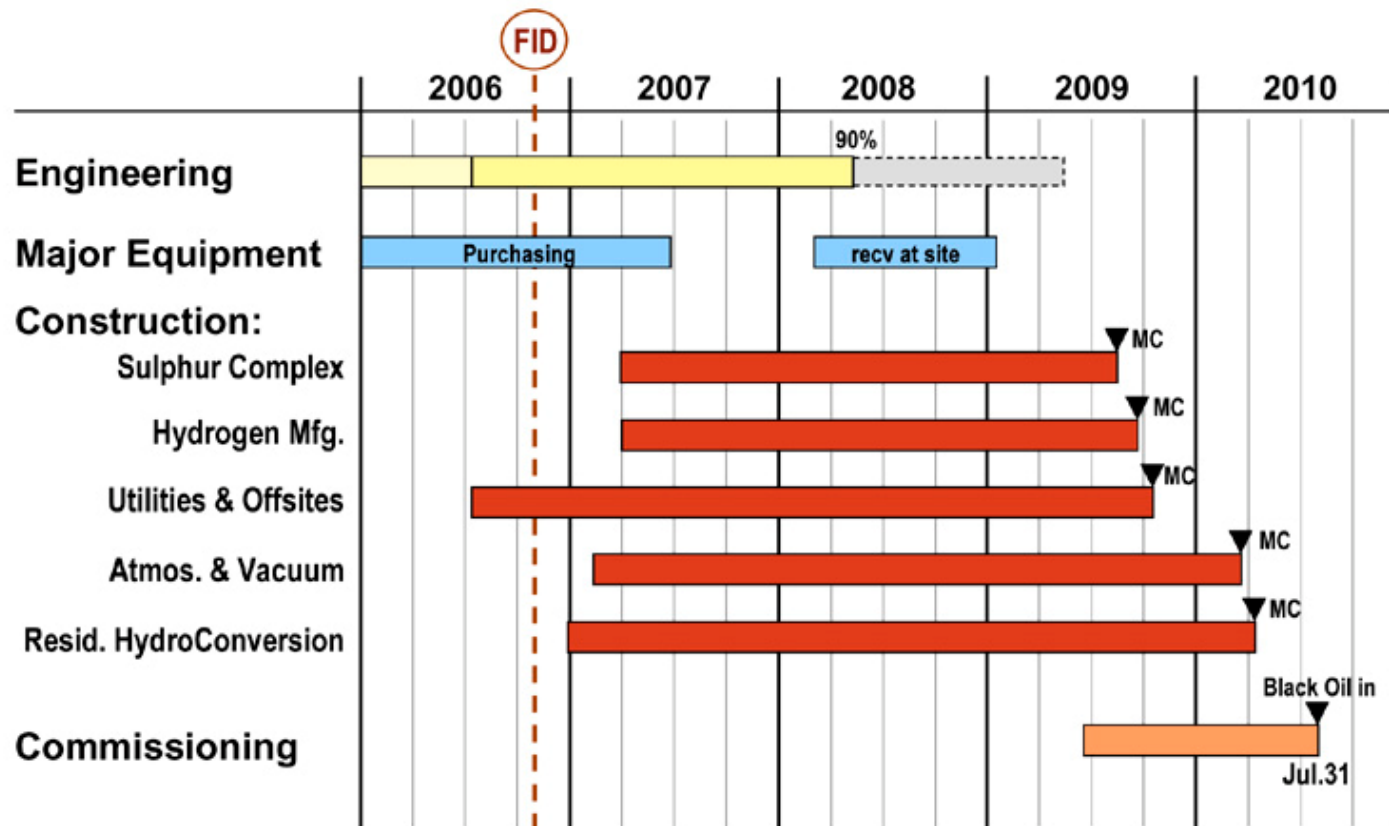
Underwriting consideration – Shipping schedule



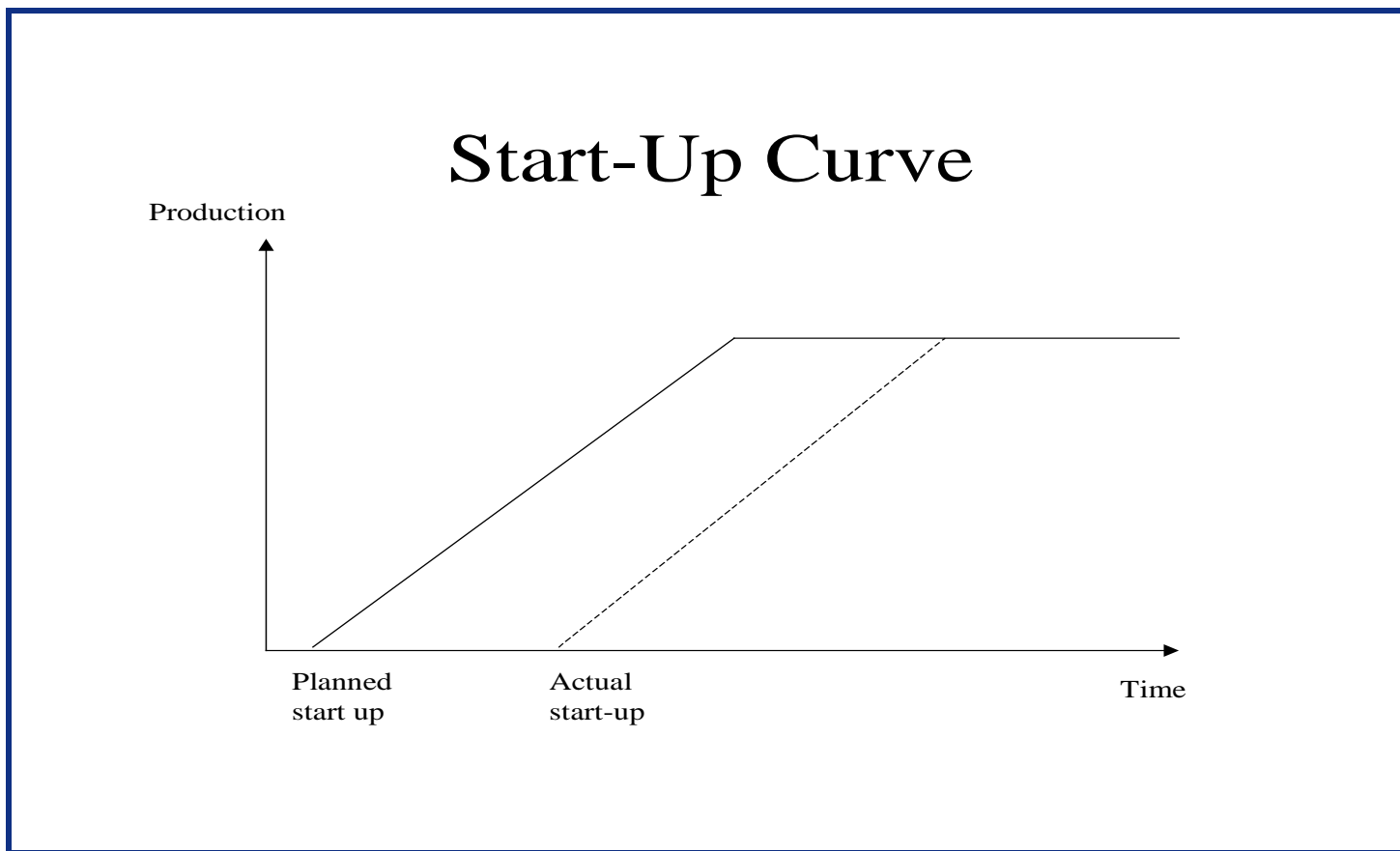
Main Plant Equipments – Port of Shipment and Schedule

<u>Item</u>	<u>Equipment</u>	<u>Supplier</u>	<u>Port</u>	<u>Schedule Shipment Date</u>	<u>Schedule Delivery Date</u>
1.	Gas Turbine Generator (GTG No.1)	GE	Rotterdam or Antwerp	16th Jan 06	2nd March 06
2.	Gas Turbine Generator (GTG No.2)	GE	Rotterdam or Antwerp	21st Jan 06	16th March 06
3.	Steam turbine Generator (STG)	Mitsubishi	Yokohama	Jan 07	Feb 07
4.	Heat Recovery Steam Generator (HRSG No.1)	Mitsubishi	Yokohama	Oct 06	Nov 06
5.	Heat Recovery Steam Generator (HRSG No.2)	Mitsubishi	Yokohama	Oct 06	Nov 06
6.	Generator Step-up Power Transformer (3 units in one shipment)	ABB	Haiphong	May 06	June 06
7.	Distributed Control System	Foxboro	US	Apr 06	May 06
8.	Air Cooled Condenser (ACC)	GEA-BTT	Changshu (China) and Antwerp	Oct 06	Nov 06

Underwriting consideration – GANTT Chart



START-UP CURVE – with Delay



Underwriting consideration – DSU wording for Project Cargo Insurance and Project Cargo Delay in Start Up Wording



What is the globally accepted DSU wording?

- JC20. The new starting point. (ECB, Munich Re wording)
- Indemnity period – 6, 18 or 24 months.
- DSU deductible – 30, 45, 60 days.

JC2009_020 Project
Cargo Insurance and
Project Cargo Delay in
Start Up Wording



Adobe Acrobat
Document

Underwriting consideration – Project Cargo Insurance and Project Cargo Delay in Start Up Wording Questionnaire JC2009/020A



The information provided herein is material to the insurers acceptance of risk.

1. Name of Insured parties including principal insured, lenders, financiers and contractors (including sub contractors):	8. Contact details of Project Logistic Manager.	15. Period of Indemnity
2. Location of final site:	9. Basis of valuation:	16. Full details and breakdown of indemnity being purchased.
3. Project Description:	10. Scheduled Commercial Operation Date(s).	17. Are there any second hand Project Cargo Critical Items. (If so, please provide details).
4. Please attach a full schedule of items to be shipped, including values to be declared for transit insurance and proportion containerised.	11. Anticipated transit/shipping dates for all Critical Items being transported.	18. If the answer to 17 is yes, are replacements for these second hand Project Cargo Critical Items available?
5. Are domestic transits to be covered under this policy or under the CAR/EAR Policy?	12. What is the maximum replacement period in the event of total loss of any one Project Cargo Critical Item (calculated from the date of re-order to date of delivery)	19. Are there any Project Cargo Critical Items of a unique or special nature, including prototypes
6. Where and from whom are the goods to be sourced. Packing specifications and terms of sale from supplier to be provided:	13. What is the maximum installation, testing and commissioning period for Project Cargo Critical Items.	20. What repairs of Project Cargo Critical Items can be effected on site:
7. Full details of the delivery route from manufacturers location to final site (including details of hauliers / sea / air / road / rail and barge.	14. How is the project being financed:	21. In the event of loss or damage to the Project Cargo, can part or all of the Indemnity be earned/paid by alternative means. If so, how much and by what means:

JC2009_020A
PCI PCDSU
Questionnaire

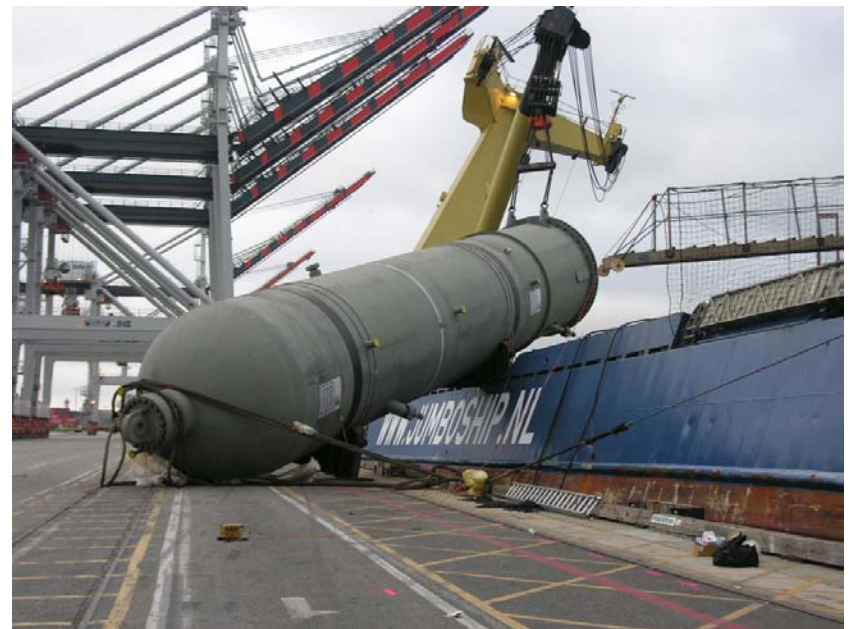


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When things go wrong

Carrying vessel lifting gear failure

A 638 Metric Ton Petroleum Reactor dropped during offloading. The Cause – Cable snapped during discharge process. As vessel was under ballast at the time, the sudden load loss caused the vessel to broach violently to starboard side.



Transformer Offloaded from Barge



Bridge collapsed under the weight of cargo. No pre-delivery route assessment survey done.

Incident took place in August 2009 when the forwarder attempted to transport a GE Gas Turbine across a bridge on the Shetrumji River at Bhavnagar, India. The bridge obviously wasn't designed to take the weight of the Gas Turbine!!



- EMD GT46C-ACe Locomotive Dropped on Delivery. A brand new American Engineered EMD GT46C-ACe was dropped while being unloaded from the cargo-ship at dock. Not sure of the root cause yet but this one is going to be expensive to fix. The frame is certainly broken and every rotating apparatus can be deemed scrap. Who pays this bill? (1:04 mins) - <https://www.youtube.com/watch?v=OvyIrsZ7Zhs>
- CAT 793 Gets dropped onto ship in Durban Harbour South Africa (2:40 mins) - <https://www.youtube.com/watch?v=SSEgx6yfVuE&feature=youtu.be>
- Loading 600 tons jack up legs into mv lone heavy lift vessel RHB stevedoring Rotterdam - RHB stevedoring Rotterdam loading 8 jack up legs of 78 metres length and 630 tons each onto mv lone. the strongest heavy lifter with 2 x 1000 tons ships cranes. nice project cargo and heavy lifts. (1:32 mins) - https://www.youtube.com/watch?v=8moan_C8upY&feature=youtu.be
- **Jumbo Shipping: Loading of a 1200t Vacuum Tower in Antwerp (Belgium)** - The loading of a 1200t, 50m long and 18m wide Vacuum Tower onto the weatherdeck of HLV Fairplayer in Antwerp (Belgium). (2:00 mins) - <https://www.youtube.com/watch?v=2ImSIQUDZRg>



Thank you.

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