

Lost in transit?

In this article, **Ingolf Kaiser** looks at problems that have arisen with customs authorities, as a result of the quantity of LNG cargo decreasing because of evaporation between the time of loading and the time of discharge.

Bills of lading for LNG cargoes have traditionally had only limited relevance. This is because cargo is generally purchased at the load port on free onboard (FOB) terms, and sold at the discharge port on delivered ex ship (DES) terms. The vessel's charterer owns the cargo during the voyage, until the vessel arrives at the delivery point at the discharge port, and the buyer pays only for the quantity actually received. So long as the delivered quantity is within any maximum / minimum limits agreed in the applicable sale contract, the buyer at the discharge port will not be interested in whether it is less than the quantity shown on the bill of lading.

However, a vessel carrying LNG will in general arrive at the discharge port with less cargo than at the start of the voyage and, therefore, less than the quantity shown on the bill of lading, due to natural boil-off. A reduction in cargo quantity during the voyage comes as no surprise to the ship owner, charterer, or the cargo receiver, but the customs authorities at the port of discharge may require this to be accounted for. In some recent cases, authorities have sought to impose fines for discrepancies between the quantity shown on the bill of lading and the quantity discharged at the end of the voyage. At the time of writing, the proceedings commenced by these authorities have not yet been resolved.

Bill of lading quantity v Arrival quantity

The quantity shown on the bill of lading is taken from the quantity calculated at the port of loading using figures from the vessel's custody transfer measurement

system (CTMS). This gives accurate readings of liquid and vapour in the ship's cargo tanks before commencement and after completion of loading, allowing the loaded quantity to be calculated. The CTMS is also used to measure the quantity of cargo before and after discharge, so it is straightforward to show the quantity of cargo onboard at the time when the vessel arrived at the discharge port and, therefore, the quantity 'lost' during the voyage.

However, given the difference between the quantity on arrival and the quantity shown on the bill of lading, the customs authorities may require the shipowner to go further and explain how and why the reduction in cargo quantity occurred during the voyage. This is more complicated because there may have been a number of different causes.

Boil-off

Boil-off may occur at more than the daily natural boil-off rate warranted in the charterparty (usually 0.13% to 0.17%), for example because of bad weather, or 'forced' boil-off where the charterer orders the ship to generate additional boil-off for use in the ship's engines to increase speed, or because the charterer requires the pressures in the cargo tanks to be adjusted, or even as a result of technical problems with the vessel.

If the amount of boil-off during the voyage is no more than the warranted natural boil-off, the reduction can easily be explained to the authorities. However if the total boil-off exceeds the amount of natural boil-off warranted in the charterparty, it may not be possible to show accurately how much boil-off has been caused by each of the different factors, even though the total amount of boil-off can be accounted for using the CTMS figures. How much detail is required will depend on the approach taken by the relevant authorities.

In principle, the authorities should not be concerned with the details of what happened during the voyage

but rather with ensuring that the quantity onboard at the time of arrival at the discharge port is correctly described and accounted for. The bill of lading figure is a starting point for this, but because of boil-off during the voyage it is no more than a starting point. In practice however, local customs authorities are not always familiar with LNG boil-off, and since the vessel is usually required to declare the quantity shown on the bill of lading, the authorities may require a full explanation to account for any differences.

Heel

In addition to boil-off during the voyage, another factor affecting the quantity of LNG discharged from the vessel at the discharge port is that the vessel's charterer will usually give orders to the shipowner to retain a quantity of LNG in the cargo tanks, known as heel, at the time of discharge. The heel is used to keep the cargo tanks cold until arrival at the next load port and may also be used for propulsion, and the quantity needed will depend on how long it is expected to take until the vessel can load its next cargo. This can be accounted for by providing a copy of the charterer's orders, or if the voyage is for a single trip it will be the shipowner who requires heel to keep the cargo tanks cold and there will be documents to show that this has been agreed with the charterer.

Turning to possible solutions, the problems caused by heel being retained onboard have in some cases been addressed by issuing replacement bills of lading, which identify separately the heel (that will remain onboard) and the rest of the cargo (that will be discharged). In such cases the new bill of lading covering the heel may show the heel quantity as being destined for a different port, i.e. the next intended port after the port of discharge for this voyage. However, apart from the usual difficulties relating to issuing replacement bills of lading, this does not resolve any problems arising from the cargo quantity being reduced during the voyage because of boil-off – the total cargo covered by the new bills should still be the quantity originally loaded, but this will have reduced during the voyage, and will not be the quantity onboard at the discharge port.

Solutions

A more realistic solution to solve both boil-off and heel issues may be that a dialogue with the relevant authorities is needed to understand what information they require, and how best to account for any differences in order to show that customs duties are being paid in full. For example, once the reasons for boil-off are better understood, the authorities may be satisfied with appropriate documents from the vessel's CTMS calculations. Meanwhile, owners and charterers may want to consider whether – in new charterparties – the charterparty terms provide a fair allocation of risk for any fines that may be imposed in cases where the authorities cannot be satisfied.

Conclusion

It is clear from the above that defending a claim purely based on the HVR would give rise to much uncertainty in establishing liability and quantum of damages. This is why in practice, most contracts of carriage for LNG cargo put into place a contractual scheme of compensation, under which remedies for boil-off are often absolute and not dependent on proof of loss. Such a scheme offers certainty and simplicity, which is something to consider when drafting or reviewing a carriage contract for LNG cargo.



Ingolf Kaiser
Partner

T: +44 20 7809 2619
E: ingolf.kaiser@shlegal.com

Ingolf is a partner in the London office and regularly advises shipowners and their P&I Clubs on liability arising under LNG charters and bills of lading.