The rise in refrigerated cargo shipments is good news for major container ports, including the Port of Charleston. Jim Newsome, president and CEO of South Carolina Ports Authority, shares his perspective on what it takes to accommodate reefer cargo and how the SCPA is positioning itself to capitalize on the future growth of this specialized cargo.

CC: There is an ongoing migration in the global reefer market from specialized carriers to containerized carriers. What does this mean for the major container ports? What are some of the key infrastructure developments taking place at major container ports to accommodate this shift, and how are these
developments supporting the shift?

The transition from specialized carriers to containers has been ongoing for several years. The major container carriers have invested heavily in refrigerated container infrastructure and shipboard plugs to accommodate regularly scheduled refrigerated cargo trade, and it is hard to ignore the benefit of weekly sailings in the refrigerated cold chain.

South Carolina ports have addressed this shift by working at the state level to allow permitting of heavier loads on the proper roads, and have densified our reefer storage capacity through stacking and the addition of reefer racks to facilitate servicing, and the like.

From a regional transportation perspective, very little refrigerated cargo in the Southeast ports today moves by rail in protected service. The SCPA sees significant opportunity for this utilizing the overnight stacktrain service between our inland port and the Port of Charleston. The SCPA has cultivated a fairly significant import flow of meat from the Oceania region, which makes some containers available for the export trade.

CC: The buildup of cold storage capacity at or near major container ports is underway to support increasing reefer shipments. In general, what are you seeing? More specifically, what is taking place at the Port of Charleston?

We realized some time ago that growth in refrigerated container shipments in our port required an increase in nearby private sector transload capability. At that time, Charleston had only one such facility with 50,000 square feet. We worked very hard to attract additional private sector investments and were fortunate in the last two years to have three successes from that effort:

- Agro Merchants’ development of a 120,000-square-foot facility.
- New Orleans Cold Storage’s addition of 90,000 square feet of capacity to its existing 50,000 square feet.
- Lineage Logistics’ development of 340,000 square feet of capacity in two phases.
A fourth local provider, Tides Enterprises, supplies additional cold storage capacity to a diverse cargo market. These world-class companies offer strong relationships and capability in this sector that create options for clients of our port.

Thanks in part to enhanced cold storage capacity, the SCPA’s volumes of cold storage cargo increased 38 percent from 2011 to 2014, far outpacing the growth rates experienced by other South Atlantic ports.

**CC:** A number of major box ports around the U.S. are adding more reefer plugs and racks to support reefer growth. While this is important, are there other things that ports are or should be doing, such as training personnel on how to handle and monitor reefer shipments, providing maintenance and repair services for reefer boxes, etc.?

It is critical for ports to be certain that the companies that service refrigerated containers are appropriately staffed with trained mechanics to perform the vital functions needed for a reliable cold chain.

**CC:** Advancements in software and technology are largely responsible for attracting more temperature-controlled shipments to the maritime sector. What are some examples of software and technology, from equipment and hardware developments to tracking/tracing software, that are most impressive?

Refrigerated containers are quite sophisticated today, offering the latest in controlled atmosphere and monitoring capabilities that maintain cargo over the course of a sea voyage. Blast freezing capabilities in the local transload facilities also address a critical market need, along with the presence of the U.S. Department of Agriculture to ensure prompt examination and delivery of cargo.

**CC:** What investments in software and technology has the SCPA/Port of Charleston made to support temp-controlled shipments?

There are numerous steps ports must take to handle growth of this segment, and the SCPA’s capital investments in refrigerated cargo service area and additional racks reflect our commitment to staying ahead of the curve in reefer capacity.
Between the SCPA and private-sector cold storage companies, $73 million is being invested in Charleston’s cold storage capacity, enabling our port to accommodate continued growth of this segment well above the market average.

Refrigerated containers are an important part of the heavy export cargo mix in the Southeast, requiring ports to deepen their harbors to accommodate big container ships.

The SCPA just finalized a deepening study to take our harbor; already the deepest in the Southeast at 45 feet mean low water, to 52 feet by the end of this decade. By the end of the decade, the SCPA will offer the deepest harbor on the U.S. East Coast.

In addition to the deepening project, the SCPA is buying taller cranes, retrofitting existing wharves, and building a significant new container terminal at the former Navy base to accommodate anticipated growth. All of this investment is directly relevant to the ability to attract and service reefer customers.

**CC: In general, what do BCOs and carriers of temperature-controlled shipments want when they are looking for a port partner? Are ports delivering? If not, where are they falling short and how can they improve? Finally, how important are reefer shipments to the SCPA/Port of Charleston, and what are the medium-to long-term plans in the works to support temp-controlled shipments?**

We see major container carriers continuing the trend of regularly scheduled refrigerated cargo shipments in containers, providing unsurpassed reliability in the cold chain. Ports that plan to grow in this sector must work with private sector transload facilities, ensuring that they are filling their capacity and planning for new capacity as needed.

From an operational perspective, major ports such as Charleston are able to stay ahead of the curve by adding capacity and adopting modern approaches to handling containers, such as reefer racks. Ports must ensure containers are quickly repaired and pre-tripped, turn times are good for truckers, and containers get on the intended vessels.
Much cargo today still makes a long domestic journey to the U.S. West Coast, and where frozen cargo is involved, South Atlantic ports such as Charleston can offer greater efficiency. The SCPA sees a significant market for chilled cargo from Chile and other origins that can gain efficiency by moving to the Southeast, rather than the Northeast, due to better handling capability and the growth of population.

The SCPA encourages the movement of more cargo by rail in multiple ways — the protected service for containers on stacktrains via our Greer, South Carolina, inland port and future inland ports, as well as rail refrigerated boxcar shipments from inland origins to rail-served transload facilities. Additionally required is the expansion of trucking capacity by drivers who are accustomed to catering to the high service requirements of this market.

It must be realized and appreciated that there are huge investment requirements to service this market, both on the part of container carriers and ports. Ocean freight rates and port charges must therefore remain at levels that warrant the continued investment in this capability.

*Contact Lara L. Sowinski at lsowinski@gmail.com.*