

Automation on Trial at the Port of Virginia

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I. Introduction: When Cranes Meet Contracts

Port technology has been advancing steadily, with innovations such as IoT, blockchain, digital twin technology, and marine terminal automation aimed to enhance operational efficiency. These technologies improve decision-making, resource allocation, and operational performance. However, in the United States, the major barrier to port automation's progress—such as semi-automated stacking cranes and autonomous trucks or fully automated terminals—is not so much engineering or financing as it is labor.

Figure 1. Thomas Hart Benton's *City Building*, the tension between innovation and labor



Benton's work captures the interplay of human effort, structure, and mechanization — a reminder that every advance in technology rests on negotiated foundations. Source: Whitney Museum of American Art, Thomas Hart Benton, *City Building*, 1930, <https://whitney.org/collection/works/1052>.

The International Longshoremen's Association (ILA) and the United States Maritime Alliance (USMX) addressed this reality in their negotiated 2023 Master Contract. Article 11 of that agreement requires that any introduction of new technology or equipment follows a "specific and thorough review process" with the ILA before implementation (ILA & USMX, 2023). The intent was to prevent unilateral automation and ensure longshore labor had a voice in technological transitions.

Now, less than a year later, the boundaries of that provision are being tested at the Port of Norfolk. In April 2025, the Virginia Port Authority (VPA) purchased and installed semi-automated ship-to-shore cranes at Norfolk International Terminals. Its operating arm,

Virginia International Terminals (VIT), did not purchase the cranes, but now deploys them in daily operations. The ILA has filed suit, arguing that this arrangement amounts to a deliberate circumvention of Article 11.

The VPA responds that it is not a signatory to the Master Contract, is legally prohibited from collective bargaining under state law, and is simply fulfilling its statutory mandate as a developer of port infrastructure (Code of Virginia, 2024). This lawsuit is more than a fight over cranes—it is a contest over governance, law, and the future of automation in American ports.

This article examines the legal and institutional dimensions of that contest. It outlines the arguments advanced and anticipated by both the ILA and the VPA, situating them within broader questions of

state authority, federal labor law, and the evolving relationship between automation, governance, and labor in U.S. ports.

II. Automation's Promise, Labor's Obstacle

Automation is alluring--automated equipment reduces operating costs, minimizes accidents, and increasingly supports environmental goals through electrification. From the perspective of port authorities, automation also means improving competitiveness. East Coast gateways—Savannah, Charleston, New York/New Jersey, and Virginia—compete fiercely for discretionary cargo moving inland. Failure to modernize risks losing market share.

But as Knatz et al. (2022) and the U.S. Government Accountability Office (2024) observe, labor remains the decisive constraint. Unlike smaller ports where automation is constrained by capital, in the United States' largest ports the bottleneck is the balance of power between management and organized labor. Kent et al. (2025) emphasized this same point, addressing in part the role of labor in shaping automation in U.S. ports.

It is against this backdrop that Article 11 was inserted into the 2023 Master Contract. Designed to manage what the ILA calls "technology shocks," the provision requires consultation prior to the introduction of new technology (ILA & USMX, 2023). The Virginia dispute will determine how much force that requirement really has.

III. Governance Matters: VPA and VIT's Unique Structure

Virginia's port governance model is unique. The VPA, as a state agency established under the Code of Virginia ((Title 62.1, Chapter 10 (§§ 62.1-128 – 62.1-146)), is mandated "to foster and stimulate the commerce of the ports of the Commonwealth" (§ 62.1-132). However, under current Virginia law, the VPA, as a state agency, is not authorized to engage in collective bargaining with unions (Code of Virginia (§§ 40.1 – 57.2).

To address this, the VPA created Virginia International Terminals, LLC (VIT), a single-member limited liability company wholly owned by the Authority (Virginia Port Authority, 2015; Virginia Port Authority, 2025). Unlike the VPA, VIT is the signatory to the ILA–USMX Master Contract and handles terminal operations and labor relations.

Comparisons highlight how institutional diversity complicates uniform contract provisions. In Savannah, the Georgia Ports Authority employs its own personnel to operate ship-to-shore cranes, while private stevedores handle yard operations—a model the GPA itself characterizes as "hybrid governance" (Georgia Ports Authority, n.d.-a; Georgia Ports Authority, n.d.-b). In Charleston, the South Carolina Ports Authority similarly operates cranes with its own workforce under state law, while the yard operation is assigned to private stevedores under ILA contracts. In contrast, New York/New Jersey and Los Angeles/Long Beach follow classic landlord models, engaging in leasing of or operating agreements for entire terminals to private operators who negotiate directly with labor. Virginia's model straddles these categories, blending state-owned corporate ownership with operational functions handled by VIT, the equivalent of a state-owned enterprise. It is precisely within this blurred space that the dispute has erupted.

The governance diversity across selected U.S. ports is summarized in Table 1, which highlights key differences in operating models, labor arrangements, and legal contexts.

Table 1: Comparative Governance Models of Selected U.S. Ports

Port	Governance Model	Who Operates Cranes?	Who Handles Yard Work?	Union Contract Coverage	Legal/Institutional Note
Virginia (VPA/VIT)	State port authority owns assets; VIT (wholly-owned LLC) operates terminals	VPA purchases equipment; VIT operates cranes	VIT employees (ILA labor)	VIT is signatory to ILA–USMX Master Contract	Legal tension: VPA not a signatory, but owns equipment; subject of current ILA lawsuit
Savannah (GPA)	State port authority landlord-operator hybrid	GPA employees operate ship-to-shore cranes	Private stevedores (ILA labor)	Covered by ILA Master Contract	“Hybrid governance” noted in GPA materials
Charleston (SCPA)	State port authority landlord-operator hybrid	SCPA employees operate ship-to-shore cranes	Private stevedores (ILA labor)	Covered by ILA Master Contract	4th Cir. upheld ILA’s work-preservation claim; Supreme Court denied cert. (No. 23-325, 2024)
New York/New Jersey (PANYNJ)	Classic landlord model under bi-state compact commission	Private terminal operators (ILA labor)	Private terminal operators (ILA labor)	Covered by ILA Master Contract	Labor issues surfaced in NY/NJ automation case study
Los Angeles/Long Beach	Classic landlord models under board of harbor commissioners	Private terminal operators (ILWU labor)	Private terminal operators (ILWU labor)	Covered by ILWU–PMA West Coast contract	Automation disputes heavily litigated (ILWU vs. PMA)

IV. The ILA’s Legal Arguments: Substance Over Form

The ILA argues that VPA’s procurement of semi-automated cranes, implemented without consultation, violates both Article 11 of the Master Contract and the National Labor Relations Act (NLRA, 29 U.S.C. §§ 151–169).

First, the union claims a breach of contract. Article 11 requires a “specific and thorough review process” before new technology is deployed. By permitting VPA to purchase and install cranes while VIT disclaims responsibility, management has, in the ILA’s view, rendered Article 11 meaningless (ILA & USMX, 2023). Courts, the union argues, should look to substance over form: if VIT operates the

cranes, then the obligation to consult applies, regardless of whether VPA formally made the purchase and installed them. Precedent seems to support this reasoning. In *Labor Board v. General Electric Co.* (1969), courts emphasized the need to look at the reality of employer conduct rather than its corporate formalities in labor disputes.

Second, the ILA asserts that the VPA's actions breach the NLRA's duty to bargain in good faith. Section 8(a)(5) of the Act (29 U.S.C. § 158) prohibits employers from refusing to bargain collectively. By funneling automation decisions through VPA, the union contends, management has engaged in a de facto refusal to bargain, frustrating the collective bargaining process.

Third, the union may frame the case as an interference or control problem. Even if VPA and VIT are technically separate entities, the ILA could argue that VPA exercised such control over VIT—through procurement, funding, and policy direction—that the separation is artificial. This reasoning parallels the joint employer doctrine, a contentious issue in labor law, where two entities may be treated as a single employer if one exerts significant control over the other's labor relations. In this case, VPA's 100 percent ownership of VIT strengthens the union's assertion that the entities cannot be neatly disentangled (*Virginia Port Authority*, 2015).

Finally, the ILA alleges a pattern of interference. According to the complaint, VPA leadership has historically directed VIT to resist stronger labor protections during contract negotiations. The installation of semi-automated cranes without consultation, they argue, is not an isolated misstep, but part of a broader strategy to undermine bargaining obligations.

V. The VPA's Legal Defense: Separation and Statute

The VPA, in contrast, presents its case as one of statutory compliance and contractual clarity.

First, the VPA argues that it is not a signatory to the ILA–USMX Master Contract. Under general principles of contract law, non-signatories are not bound by the obligations of agreements they did not sign unless they assume them expressly. The U.S. Supreme Court in *AT&T Technologies v. Communications Workers of America* (1986) reaffirmed that arbitration is a matter of consent, not coercion, and that parties cannot be compelled to arbitrate disputes they have not agreed to submit to arbitration.² Although that case dealt with who determines arbitrability rather than non-signatory obligations, it underscores the contractual foundation of such commitments. Conversely, in *GE Energy Power Conversion France SAS v. Outokumpu Stainless USA LLC* (2020), the Court clarified that non-signatories may, under certain circumstances, enforce or be bound by arbitration agreements through domestic legal doctrines such as equitable estoppel or agency. In this light, the ILA could argue that VPA's control over VIT and direct involvement in procuring automated equipment bring it within the scope of the Master Contract's consultation obligations.

² Although Article 11 of the ILA–USMX Master Contract is not an arbitration clause in the strict sense, it can be argued that it functions similarly because it prescribes a mandatory consultative process before disputes over new technology may arise. Courts can interpret such provisions through a comparable contractual lens—emphasizing consent, scope, and the identity of bound parties. In this sense, cases such as *AT&T Technologies v. Communications Workers of America* (1986) and *GE Energy Power Conversion France SAS v. Outokumpu Stainless USA LLC* (2020) perhaps illustrate how non-signatory principles could analogously apply to Article 11's consultation requirement.

Second, VPA invokes state law. The Code of Virginia explicitly prohibits state agencies like VPA from collective bargaining. That prohibition was the reason VIT was created in the first place. To require VPA to consult with the ILA would place it in direct violation of state law (Code of Virginia, 2024). In VPA's framing, it is not circumventing labor obligations but complying with its statutory mandate.

Third, VPA emphasizes the distinct corporate roles of VPA and VIT. VPA's role is to procure and develop infrastructure, while VIT's role is to operate terminals and manage labor. By this logic, purchasing cranes is a developer function, not a labor-relations decision. The cranes were simply transferred to VIT for operation, with no labor obligation attached to the procurement itself.

Fourth, VPA could argue that the union's remedy lies elsewhere. If the ILA believes VIT violated the Master Contract, its recourse is to file a grievance and proceed through arbitration under the agreement's established dispute-resolution mechanisms. Suing VPA directly, a non-signatory public authority, circumvents that process.

Finally, VPA situates its actions within its statutory mission. Its enabling legislation charges it to "foster and stimulate commerce" for the Commonwealth (§ 62.1-132). By investing in semi-automated cranes, VPA argues it was fulfilling its duty to improve efficiency, reduce congestion, and promote economic growth. Framing automation as a public duty strengthens its legitimacy even if it does not resolve the contractual dispute.

VI. The Jurisdictional Paradox

The paradox is stark. If courts treat VPA and VIT as entirely separate entities, Article 11 becomes toothless in any state where public authorities own equipment but are legally barred from bargaining. If courts treat them as one entity, then Virginia's statutory prohibition on collective bargaining collides with the NLRA's protections.

This raises tough questions of federalism. The NLRA governs private employers and their bargaining obligations. Can it be extended to a state agency like VPA? Courts have historically tread cautiously in extending NLRA jurisdiction to public instrumentalities, but the intertwining of VPA and VIT complicates the matter.

Recent federal appellate jurisprudence illustrates this caution. In *South Carolina State Ports Authority v. NLRB* (2023), the Fourth Circuit Court of Appeals upheld the National Labor Relations Board's finding that the International Longshoremen's Association's lawsuit against shipping carriers was a lawful effort to preserve traditional longshore work under the work-preservation doctrine.³ The decision did not directly affirm the South Carolina Ports Authority's right to employ state personnel as crane operators, nor did it adjudicate the legality of the Authority's hybrid labor model. However, by declining to find fault with the use of state employees, the ruling implicitly acknowledged the complexity of applying federal labor law to state-created entities. When the U.S. Supreme Court later denied certiorari (No. 23-325, 2024), it left the Fourth Circuit's decision intact—thereby allowing,

³ Although the case was submitted to the U.S. Supreme Court via a petition for certiorari (No. 23-325), the Court declined to hear it, leaving the Fourth Circuit's decision in place. The appellate ruling did not explicitly uphold the South Carolina Ports Authority's right to employ state workers as crane operators. Instead, it focused on the legality of the ILA's lawsuit under the NLRA's work-preservation doctrine, implicitly recognizing the Authority's hybrid labor model without directly validating it.

though not endorsing, the coexistence of hybrid labor models within the boundaries of federal labor law.

Virginia's case thus falls within a growing body of precedent recognizing the limits of federal labor law when applied to state port authorities.

VII. Implications Beyond Virginia

The stakes are high. If the ILA prevails, port authorities may be forced to restructure their procurement processes, ensuring that all automation investments are routed through signatory operators. If the VPA prevails, unions may insist on stronger, more explicit language in future contracts to prevent public authorities from exploiting governance separations.

More broadly, the case underscores the centrality of governance design in shaping port modernization. Automation goes beyond cranes, algorithms, and capital expenditure. It is influenced by law, contracts, and institutional arrangements that dictate how decisions are made and who has a voice.

The outcome in *South Carolina State Ports Authority v. NLRB* (2023), left standing after the Supreme Court declined to review it, reinforces this point. By allowing the Fourth Circuit's ruling to stand, the Court indirectly acknowledged that national labor agreements cannot be mechanically applied across all ports. Institutional structures make a difference. For Virginia, this means that the outcome of the current dispute will resonate well beyond Norfolk: it will test whether Article 11 can effectively constrain a port authority structured to operate outside of the bargaining framework.

VIII. Conclusion: When Law Shapes Logistics

The semi-automated cranes at Norfolk International Terminals represent more than a technological upgrade. They embody a deeper struggle over the boundaries of public authority, labor contracts, and federal law.

The ILA frames the case as a deliberate circumvention of bargaining rights; the VPA frames it as statutory compliance and public duty. Between them lies a paradox that exposes the fragility of national labor agreements when confronted with diverse institutional frameworks and state law constraints.

In retrospect, the seeds of the Virginia dispute may lie not only in how Article 11 is applied, but in how it was conceived. The Master Contract, drafted to govern terminal operators within a relatively uniform framework, seems not to have fully anticipated the patchwork of institutional arrangements that define U.S. ports, where public authorities own assets, separate companies operate them, and state laws constrain collective bargaining. In failing to account for these governance variations, the case reveals the very ambiguity now being tested in court. Moreover, by examining the arguments on both sides, this case illustrates how the intersection of public law and private contracts can reshape the practical boundaries of collective bargaining in the age of automation.

The outcome may reverberate far beyond Virginia. It will determine whether Article 11 of the Master Contract is a robust safeguard or a paper barrier—and whether governance design can coexist with

labor protection in a rapidly evolving technological environment. And it will remind us that in logistics, the question of who buys the crane can be every bit as consequential as how it is operated.

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