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## Regulating Imports into RGGI: Toward a Legal, Workable Solution

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# **Regulating Electricity Imports into RGGI: Toward a Legal, Workable Solution**

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*By Shelley Welton, Michael Gerrard, and Jason Munster*

**Center for Climate Change Law  
Columbia Law School  
August 2013 White Paper**

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The Columbia Center for Climate Change Law (CCCL) develops legal techniques to fight climate change, trains law students and lawyers in their use, and provides the legal profession and the public with up-to-date resources on key topics in climate law and regulation. It works closely with the scientists at Columbia University's Earth Institute and with a wide range of governmental, non-governmental and academic organizations.

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## EXECUTIVE SUMMARY

The Regional Greenhouse Gas Initiative (RGGI) is in an exciting period of reform. In February 2013, participating states announced plans to lower RGGI's cap on carbon dioxide emissions by 45% in 2014. At the same time, RGGI states made a commitment to work towards a solution to address the emissions from electricity imports into the region. Given that imports make up between 10 and 52% of RGGI states' electricity consumption, and that these percentages may increase under a tightened emissions cap, it is a critical time to delve more deeply into the options available to RGGI to deal with imports' emissions.

This white paper evaluates the legal workability and constitutionality of what is frequently considered the most feasible mechanism for RGGI to use in regulating imports: an obligation on RGGI "load serving entities" (LSEs)—those companies responsible for supplying electricity to end-use customers—to purchase allowances to account for the emissions associated with the electricity they sell that is imported. Ultimately, although there are many design complexities yet to be worked out, we find that an LSE-centered approach could present a viable pathway forward for RGGI states' regulation of imports. It is likely to create long-term price signals about the value of clean energy and to help prevent emissions "leakage." And importantly, an LSE-centered mechanism has a good chance of being found constitutional under the dormant Commerce Clause and Federal Power Act preemption. However, an LSE-centered approach also has some features that may be considered drawbacks: it would likely increase consumer prices within RGGI without sending any *immediate* price signals to out-of-state generators to incentivize their emissions reductions (instead, such price signals will develop over time as new clean generation and demand-side resources come on-line). Given these features, RGGI states will want to think carefully about whether an LSE-centered imports mechanism accomplishes their goals.

This white paper is organized into three sections, for which the major conclusions are summarized below.

**Design:** Designing LSE-centered imports regulations will be a complex, but achievable, endeavor. Some key issues include:

- *Defining Covered Entities:* States will have to determine how to define LSE compliance obligations and what legislative and/or regulatory changes to state law will be necessary to impose obligations on LSEs.
- *Tracking Emissions Associated with Imports:* Collaboration between states and wholesale market operators will be critical in designing a methodology for tracking imports' emissions, and the existence of wholesale markets will necessitate creating an average emissions factor to be applied to purchases of "system power" that cannot be traced back to a particular plant.
- *Assigning Compliance Obligations to LSEs:* States will need to devise a fair methodology for determining LSE compliance obligations, particularly in the states of Maryland and Delaware where participation in a larger, regional wholesale market complicates the question of tracking "imported" power into these states.
- *Preventing Gaming of the System:* In order to prevent firms from reassigning their clean power for sale into the RGGI region and their dirtier power for sale elsewhere without actually changing their emissions profile, "resource shuffling" rules will be necessary.

**Predicted Effects:** This paper makes some educated predictions as to how LSEs are likely to respond to the imposition of imports regulations, in order to lay the groundwork for a robust constitutional analysis.

- *In the short term:* LSEs will comply with the new obligations either by purchasing allowances to accompany their purchases of imported “system power,” or will turn from the wholesale market to bilateral contracting with in-state generators and/or cleaner out-of-state generators (to the extent permitted by resource shuffling regulations and relevant state laws).
- *In the longer term:* LSEs will comply with the new obligations by entering into contracts with new, cleaner generators that are incentivized by the regulations to come on-line both in- and out-of-region, and customers will be incentivized to invest in more demand-side management as a result of seeing higher electricity prices.
- *Effects felt out of state:* In general, the effects felt out of state in the short term are expected to be relatively small. Out-of-state generators will face no compliance burdens and are not likely to experience major incentives to reduce emissions, as they will continue selling into wholesale markets that award all generators the market clearing price and impose average emissions assumptions. In the longer term, imports regulations should cause out-of-region generators to face increased competition from new renewable generation and demand-side solutions, as is the case for in-RGGI generation.

**Constitutionality:** The primary aim of this paper is to determine whether the envisioned mechanism and its effects can withstand constitutional scrutiny under the dormant commerce clause and Federal Power Act preemption. Although the application of these doctrines to state climate regulations is a novel and evolving topic, we conclude that an LSE-centered mechanism has a good chance of being upheld as constitutional. Key takeaways from our analysis include:

- *Dormant Commerce Clause Discrimination:* LSE-centered regulations should be found non-discriminatory because they are fundamentally *not* protectionist regulations—to the contrary, they impose far greater burdens on in-state generators than out-of-state generators would face. However, this conclusion is subject to many caveats and nuances explored in our analysis.
- *Extraterritoriality:* Because LSE-centered regulations place no burdens on out-of-state generators and are unlikely even to provide them with pronounced price incentives, the regulations should not be found to operate extraterritorially.
- *Pike Balancing:* The notoriously subjective *Pike* balancing inquiry asks whether the burdens of a regulation on out-of-state entities are *clearly excessive* when compared to the regulation’s in-state benefits. Although it is difficult to predict how a court would weigh in-state climate benefits under the *Pike* test, the burden and standard of proof favor a finding upholding imports regulations.
- *The Federal Power Act:* The Federal Power Act grants the federal government exclusive control over wholesale power rates, and it might be argued that imports regulations encroach on this authority. However, this argument seems unlikely to prevail, given that the Act also preserves states’ traditional regulatory authority. Imports regulations would not dictate wholesale power rates, but would impose burdens on LSEs analogous to renewable portfolio standards and other permissible state environmental regulations.

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## INTRODUCTION

The Regional Greenhouse Gas Initiative (RGGI) is in an exciting period of reform. Participating states have used the scheduled 2012 review to transform RGGI into a more effective program going forward. In February 2013, as part of a suite of reforms, RGGI states announced plans to lower RGGI's cap on carbon dioxide emissions by 45% in 2014.<sup>1</sup> At the same time, RGGI states made a commitment “to identifying and evaluating potential tracking tools for emissions associated with electricity imported into the RGGI region, leading to a workable, practicable, and legal mechanism to address such emissions.”<sup>2</sup>

Imports into the RGGI region comprise a non-negligible portion of the total electricity consumed by the region. They make up approximately 16% of New York's electricity and around 10% of New England's.<sup>3</sup> It is more difficult to measure the exact net amount that Maryland and Delaware—the two most southern RGGI states—import, given their participation a larger electricity market that includes many non-RGGI states. However, estimates were given that Maryland sources approximately 40% of its power from out-of-state, and Delaware 52%. As these numbers reflect, much of the electricity currently consumed within RGGI states comes from other places, making the inclusion of imports' emissions within the RGGI program an important element of capturing and reducing *all* of RGGI states' electricity-related carbon dioxide (CO<sub>2</sub>) emissions. Regulating imports may gain added importance as RGGI's tightening of its cap pushes up allowance prices and potentially causes a turn towards importing more power.

This White Paper aims to help states in their commitment to finding a workable, legal method for regulating emissions associated with electricity imported into the RGGI region. It does so by evaluating one of the primary design mechanisms being contemplated by RGGI for use in regulating imports: an obligation on “load serving entities” (LSEs)—those companies responsible for supplying electricity to end-use customers—to purchase allowances to account for the emissions associated with the electricity they sell that is imported. An LSE-centered option is not the only one that RGGI might pursue, although some analysts suggest it is the most practicable approach given the characteristics of the region.<sup>4</sup> We do not consider here alternative design options, such as California's “first deliverer” approach,<sup>5</sup> which might present different legal and policy considerations, although some of our analysis here would be transferable.

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<sup>1</sup> RGGI, Inc., Press Release, *RGGI States Propose Lowering Regional CO<sub>2</sub> Emissions Cap 45, Implementing a More Flexible Cost Control Mechanism* (Feb. 7, 2013), available at [http://www.rggi.org/docs/PressReleases/PR130207\\_ModelRule.pdf](http://www.rggi.org/docs/PressReleases/PR130207_ModelRule.pdf).

<sup>2</sup> *Id.*

<sup>3</sup> See *Energy Sources in New England*, ISO-NE, at [http://www.iso-ne.com/nwsiss/grid\\_mkts/engrgy\\_srcs/](http://www.iso-ne.com/nwsiss/grid_mkts/engrgy_srcs/) (last visited May 6, 2013); NYISO, 2012 STATE OF THE MARKET REPORT, at 41 (Potomac Economics April 2013).

<sup>4</sup> See David Farnsworth & Rachael Terada, *Tracking Emissions Associated with Energy Serving Load in the Regional Greenhouse Gas Initiative* 53 (Regulatory Assistance Project, Apr. 2013), available at <http://www.raponline.org/document/download/id/6509>.

<sup>5</sup> California's “first deliverer” policy imposes a compliance obligation on whoever first delivers electricity to the California grid, be it a generator, a wholesale power marketer, or an LSE. See CAL. ADMIN. CODE § 95102(a)(174) (“First deliverer of electricity” or “first deliverer” means the operator of an electricity generating facility in California or an electricity importer.”). The regulations define “electricity importers” as “the purchasing-selling entity (PSE) on the last segment of the [NERC e-]tag's physical path with the point of receipt located outside the state of California and the point of delivery located inside the state of California.” *Id.* § 95102(a)(140).

Ultimately, although there are many design complexities yet to be worked out, we find that an LSE-centered approach could present a viable pathway forward for RGGI states' regulation of imports. Importantly, an LSE-centered scheme has a good chance of being found constitutional under the dormant Commerce Clause and Federal Power Act preemption.<sup>6</sup>

One additional conclusion emerges from our analysis of an LSE-centered approach to regulating imports. A well-designed LSE approach can deliver on the promise of reducing the emissions associated with electricity consumed in the RGGI region, can send long-term price signals about the value of clean energy, and can serve to help prevent emissions "leakage." It is not, however, likely to provide a direct price signal to existing out-of-state generators to incentivize their emissions reductions, for reasons explained in our analysis. Put otherwise, an LSE-centered scheme is likely to "level the playing field" in terms of LSE purchasing choices, but will not immediately "level the playing field" between in- and out-of-state generators. Accordingly, RGGI states may want to think carefully about what the goals of imports regulations are, and whether the incentives created through an LSE scheme will serve their purposes.

The paper is organized into three sections. Section I discusses the potential design and administration of imports regulations. Section II sketches the likely effects of implementing these regulations. Section III subjects the scheme and its potential effects to legal scrutiny under the dormant Commerce Clause and Federal Power Act preemption.

## **I. DESIGNING AN IMPORTS REGULATION SCHEME**

The first reasonable question to ask when considering regulating LSEs for the emissions associated with electricity imports is: can it be done, from a practical perspective? To ensure environmental integrity and effectiveness, the regulations will have to accomplish the complicated tasks of tracking and assigning emissions to imported power, as well as preventing any gaming of the rules established. This challenge will be particularly pronounced in the PJM region—a regional electricity market that includes two RGGI states, Maryland and Delaware, as well as 11 non-participating states—where it is not easy to monitor "imports" into RGGI, given that only a small portion of the region participates in RGGI.

We believe that despite complications that merit careful attention and potential compromise, workable imports regulations are possible. In this part, we work through some of the key administrative and technical issues that RGGI will face in designing and implementing LSE imports regulations.

### **a. DEFINING THE COMPLIANCE OBLIGATION**

The scheme we are considering would, in general, place a compliance obligation upon LSEs, a term which we use here to describe those entities responsible for selling power to retail end users.<sup>7</sup> A few further details bear consideration.

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<sup>6</sup> This paper does not consider the separate issue of whether there may be any additional, foreign commerce-related legal challenges raised by the fact that some RGGI imports come from Canada.

<sup>7</sup> Cf. PJM Interconnection, L.L.C., Rate Schedule FERC No. 44 (Jan. 4, 2013) ("Load Serving Entity or LSE shall mean any entity (or the duly designated agent of such an entity), including a load aggregator or power marketer, (i)

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Most RGGI states have restructured retail electricity markets, wherein retail electricity supply occurs competitively (although in most states, the default service provider—typically a historically regulated utility—still provides service to a large percentage of customers). In these states, compliance obligations would most likely attach to electricity sales by all electricity suppliers, including retail suppliers (similar to many states’ current practice of imposing RPS compliance obligations on these suppliers<sup>8</sup>). Retail customers would likely bear the burden of compliance costs, as retail suppliers would probably pass along the cost of any obligations placed on them to consumers. However, retail suppliers should have an incentive to minimize compliance costs under the basic theory of a competitive marketplace: if certain retail suppliers were able to manage RGGI compliance obligations more cost-effectively than others, such that they kept total electricity costs lower for consumers, consumers might switch from more expensive retail suppliers to these market leaders.

In non-restructured states,<sup>9</sup> placing the compliance obligation on LSEs—as opposed to on end users, with LSEs merely obligated to act as an administrator—might help keep compliance costs as low as possible. Because regulated LSEs have their costs subjected to prudence review, there would be a certain amount of regulatory pressure to minimize the costs of complying with RGGI obligations in order to prove that costs were “prudently incurred.”

There may also be questions about how broadly the compliance obligation should extend. If full coverage is desired, compliance obligations should include *all* end users, or entities serving all end users, including rural cooperatives, municipal utilities, and other similarly situated entities. Ultimately, each RGGI state will have to determine for itself what its options are for defining the compliance obligation, and different treatment in different states may well be acceptable. States might draw upon their experiences creating Renewable Portfolio Standard compliance burdens in order to take advantage of the familiarity those covered entities have in meeting analogous obligations.

LSEs would be assigned a compliance obligation based on the emissions associated with the imported power consumed by their customers, and would be responsible for purchasing allowances to cover these emissions. The ways in which LSEs’ particular compliance obligations would be calculated are discussed in more detail below in Section I(b). LSEs should already have the ability to participate in RGGI auctions to purchase allowances.<sup>10</sup> It may be more complicated to add them as covered entities under various state

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serving end-users . . . , and (ii) that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electric energy to end-users . . . Load Serving Entity shall include any end-use customer that qualifies under state rules or a utility retail tariff to manage directly its own supply of electric power and energy and use of transmission and ancillary services.”).

<sup>8</sup> See, e.g., MD. PUB. UTILS. CODE § 7-703 (applying the state’s Renewable Energy Portfolio Standard to “all retail electricity sales in the State by electricity suppliers”).

<sup>9</sup> Vermont is the only non-restructured state within RGGI. See *Status of Electricity Restructuring by State*, Energy Info. Admin., [http://www.eia.gov/electricity/policies/restructuring/restructure\\_elect.html](http://www.eia.gov/electricity/policies/restructuring/restructure_elect.html) (last visited August 16, 2013).

<sup>10</sup> See RGGI, CO<sub>2</sub> Allowance Auctions: Frequently Asked Questions, at 1 (Oct. 5, 2012), available at [http://www.rggi.org/docs/Auctions/20/RGGI\\_%20CO2\\_%20Allowance\\_%20Auction\\_%20FAQs\\_Apr\\_08\\_2013.pdf](http://www.rggi.org/docs/Auctions/20/RGGI_%20CO2_%20Allowance_%20Auction_%20FAQs_Apr_08_2013.pdf) (“[A]t this time, all parties are eligible to participate in CO<sub>2</sub> allowance auctions, including but not limited to corporations, individuals, non-profit corporations, environmental organizations, brokers, and other interested parties.”).

laws. This paper does not analyze the changes that would be necessary in each state's laws, but if RGGI proceeds with imports regulations, this would be an important area for further inquiry.

One additional important question with respect to assigning LSEs compliance obligations is whether or not RGGI needs to adjust its cap in order to bring LSEs within the ambit of covered entities. If the cap is not adjusted, imports regulations would serve to increase the stringency of RGGI's targets by applying the same cap to a larger quantity of sources.

## **b. TRACKING AND ASSIGNING EMISSIONS**

Imports regulations will necessitate the ability to track CO<sub>2</sub> emissions from generators sending load into the RGGI states and to apportion these emissions obligations among RGGI LSEs. Although utilizing and reforming existing electricity tracking systems in order to accomplish these goals will entail some complexities, we believe the Regulatory Assistance Project's ("RAP's") recent paper provides a workable methodology for moving forward in this regard.<sup>11</sup> We explain and summarize this methodology, as well as point out some of the key areas meriting further discussion, below.

### **Tracking CO<sub>2</sub> Emissions by Using "Attributes" and an "Adjusted Residual Mix"**

The RGGI states are part of three Independent System Operators/Regional Transmission Organizations (ISOs/RTOs) that control electricity transmission and wholesale power markets across the RGGI region: ISO-New England (ISO-NE), the New York ISO (NYISO), and PJM (which includes Maryland and Delaware, along with 11 non-participating states). Importantly, these ISOs/RTOs have already developed capabilities to track Renewable Energy Credits (RECs) to measure compliance with state Renewable Portfolio Standards (RPS), which could form the backbone of a more robust emissions tracking system for CO<sub>2</sub>. ISO-NE uses the Generation Information System (GIS), PJM the Generation Attribute Tracking System (GATS), and NYISO is currently developing a new system to be modeled along similar lines.<sup>12</sup>

These systems function by separately tracking actual generation and that generation's "attributes." For each megawatt-hour (MWh) of energy produced, one attribute is also produced. If the source is renewable, the attribute is a REC. This attribute can then be traded separately from the energy itself. Although currently only attributes with a REC status are traded (as the purpose of tracking attributes is for the moment only to ensure compliance with RPS), the attribute tracking system also contains data on generator location and emissions, among other things. Therefore, these attributes are capable of being used to track CO<sub>2</sub> emissions.

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<sup>11</sup> See David Farnsworth & Rachael Terada, *Tracking Emissions Associated with Energy Serving Load in the Regional Greenhouse Gas Initiative* (Regulatory Assistance Project, Apr. 2013), available at <http://www.raponline.org/document/download/id/6509> [hereinafter "RAP Report"]. We thank the authors for their excellent and thorough analysis, from which much in the following subsections is drawn.

<sup>12</sup> NYISO's current MIS system is not capable of tracking attributes separate from electricity. Recent New York legislation requires that MIS become capable of tracking attributes. See 2012 Session Laws of N.Y. Ch. 436, L. 2012, codified at N.Y. Pub. Auth L. § 1854(19) (2012). For purposes of our analysis, we assume that NYISO will proceed with developing a system capable of tracking generation attributes to the same extent as GIS and GATS.

If all electricity were bought and sold through bilateral contracts, existence of this attribute tracking system alone would prove sufficient to track the emissions associated with imports purchased by RGGI LSEs. But RGGI states are part of restructured electricity markets, where a significant portion of power comes through spot market purchases, “which are a mix of system power that includes both low- and high-emitting units.”<sup>13</sup> Accordingly, it is necessary to construct a methodology for assigning LSEs emissions attributes to accompany the “system power” that they purchase from wholesale markets. RAP has proposed that this be done through creating what is, in essence, an average reflecting the entire emissions of the system power (minus separately tracked renewables), which can be apportioned to LSEs based on the MWh of system power they purchase.

RAP proposes to do this through creation of what it terms an “adjusted residual mix.”<sup>14</sup> The “system mix” is the weighted average of all attributes produced in a region. The system mix contains emissions profiles of some plants that already have accounted for their emissions via RECs. These need to be netted out, and are removed from the calculation.<sup>15</sup> Subtracting out REC attributes produces what is called a “residual mix.” A residual mix describes the average amount of CO<sub>2</sub> produced in a control region per MWh after removing RECs. To accurately reflect RGGI’s existing compliance requirements, the residual mix needs to be further adjusted: it contains some generators whose emissions are already covered by allowances, like RGGI generators, or whose emissions that are excluded from RGGI, like <25MW plants. To reflect the fact that these generators already have purchased allowances for all their associated emissions, the emissions attribute for power from these generators is adjusted to zero emissions (otherwise, their emissions would be double-counted, once at the source and again in determining the system’s average mix). Then, these zero-emissions sources are averaged with the remaining system power, thereby creating the “adjusted residual mix,” which reflects the fact that some of the power fed into the system comes from RGGI generators, while some does not. Finally, net imports from adjacent ISOs/RTOs are accounted for, based on that region’s adjusted residual mix. What is left is all power production in the region, except for renewable, contained within the adjusted residual mix. Thus, this mix reflects the *average* CO<sub>2</sub> emissions associated with each MWh of wholesale system power subject to RGGI.

A simplified example may serve to clarify this concept. Assume there is a coal-fired generator in NY and the exact same coal-fired generator in PA. Each produces one ton of CO<sub>2</sub> per MWh, and each sells 1000 MWh into the NYISO wholesale market. The adjusted residual mix (assuming for simplicity’s sake that these are the entirety of NYISO sales for a certain period) will include 1 ton/MWh from the PA plant, plus zero tons/MWh from the NY plant, given that the NY plant will have acquired RGGI allowances to account for its emissions. Together, this weighted average will result in an adjusted residual mix of .5 tons/MWh. How this is then applied to LSEs is discussed in the next subsection.

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<sup>13</sup> RGGI, *Potential Emissions Leakage and the Regional Greenhouse Gas Initiative: Final Report of the RGGI Emissions Leakage Multi-State Staff Working Group to the RGGI Agency Heads*, at 6 (March 2008).

<sup>14</sup> See RAP report, page 26, for a fuller description of the Adjusted Residual Mix.

<sup>15</sup> There is one complicating factor to simply netting out RECS: Because RECs are awarded to “renewable” power—a category that, depending on state rules, may not all be carbon-free power—there is arguably a need to require LSEs to acquire some carbon allowances even for that power for which they hold RECs. If states choose to proceed with imports regulations, this topic merits further exploration and discussion. In resolving this issue, care should be taken to ensure that in-state and out-of-state renewable generators are treated comparably in order to avoid constitutional violations.

## Calculating LSE Compliance Obligations

RGGI LSEs source their power through a combination of bilateral contracts and wholesale power purchases (and some self-generation, though not much given that most RGGI states are restructured). GATs, GIS, and New York's MIS systems can tell state regulators how many MWh each LSE purchased during a given period. LSEs can provide information about that power which came from bilateral contracts, which can be assigned a compliance obligation based on the characteristics of the generator the power was purchased from. LSEs may also have purchased RECs to comply with state RPS, which will essentially transform a corresponding portion of their power purchases into renewable power. However, as noted *supra* note 15, states may still want to assign *some* carbon obligation to this REC-associated power, given that not all renewable sources are carbon-free. The remaining MWh purchased by an LSE would be presumed to be system power, and would be assigned the adjusted residual mix value.

Therefore, to continue our simplified example from above, assume that a NY LSE purchased all the system power created by the two coal plants in NY and PA – 2000 MWh. Its compliance obligation would be  $2000 \text{ MWh} * .5 \text{ tons/MWh}$  (the adjusted residual mix) = 1000 tons CO<sub>2</sub> emissions (the same amount emitted by the PA plant, which is the desired result, as the NY plant already purchased RGGI allowances to cover its emissions).

### Adjusted Residual Mix in PJM

One important consideration worth frankly discussing is that the crafting of LSE obligations based on the “adjusted residual mix” methodology will have differing impacts in the three ISO/RTOs. In particular, Maryland and Delaware's position within PJM complicates their RGGI compliance obligations, as they do not have RTO wholesale market boundaries that align with RGGI boundaries, as do ISO-NE and NYISO. PJM's adjusted residual mix can be expected to be higher than NYISO's or ISO-NE's, given that the mix will include a high percentage of non-RGGI power and power coming from more coal-intensive states. Under the adjusted residual mix methodology, Maryland and Delaware LSEs would be assigned a compliance obligation based on these PJM-wide averages, which would not make any assumptions that the power produced within Maryland or Delaware was consumed by those states. Whether this is a fair result is a policy judgment.

If it were determined that this burden were too high, it might be possible to adjust these states' obligations. For example, it could simply be assumed that 100% (or any other negotiated percentage) of power sold by Delaware and Maryland generators into the wholesale market is actually consumed in-state, even though this number cannot be directly tracked. These MWh could then be apportioned among Maryland and Delaware LSEs to reduce their compliance obligations. Whether this solution might raise additional legal uncertainty is discussed *infra* Section III.

#### c. PREVENTING GAMING OF THE SYSTEM<sup>16</sup>

If LSE compliance obligations were imposed as described above with no further restrictions, it would create a natural tendency to “game” the system. Because bilateral contracts avoid having the adjusted residual mix applied, and instead have obligations assigned based on actual emissions, LSEs

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<sup>16</sup> For further details, see RAP report, page 59.

would naturally seek to contract bilaterally with every generator outside the region that was cleaner than average.

If this were allowed, generators in non-RGGI states could simply indicate—on paper—that they were selling all their cleaner energy (be it nuclear, hydro, wind, etc.) to a RGGI LSE, while selling their fossil energy outside the RGGI region, *without actually changing their overall emissions profile*. Obviously, this would result in RGGI failing to reduce overall CO<sub>2</sub> emissions associated with electricity consumed in the region.

To prevent this “resource shuffling” from undermining the goal of reducing RGGI CO<sub>2</sub> emissions, RAP recommends that RGGI adopt restrictions on the ability of LSEs to have their bilateral contracts with out-of-RGGI generators recognized as “specified” bilateral contracts for compliance purposes.<sup>17</sup> “Specified” bilateral contracts would be permitted only in three circumstances:

1. A historical contract with a specific power plant and a specific path to delivery
2. A purchase of power from a newly developed resource
3. A purchase of incremental power at an existing power plant

Limiting recognition of bilateral contracts to these circumstances should prevent resource shuffling while allowing RGGI to incentivize new, clean generation both inside and outside the RGGI region.<sup>18</sup>

Potential complications arise with respect to how to operationalize these general restrictions. In particular, many questions have been raised about how historical contracts could be demonstrated. Proving a historical contract in a long-since restructured region that has changed its production profile since deregulation could be onerous, and in some cases impossible. For example, the trend of natural gas displacing coal in the past ten years means that new natural gas plants may have only sold to the wholesale market, and never had bilateral contracts. While it would not be problematic for scheme functionality if limited historical contracts could be proven, it might hurt the palatability of the scheme for participating LSEs. For this reason, RGGI may want to consider building flexibility into the methods LSEs are allowed to use to demonstrate historical bilateral contracts. Consultation with LSEs in designing these rules would be advisable.

It is worth noting that California has already encountered challenges with how to design clear, fair resource shuffling regulations, and is due to release updated regulations soon.<sup>19</sup> Its experience in crafting these rules could be instructive for RGGI, should it choose to proceed down this path.

#### **d. GETTING THE SYSTEMS THERE**

Implementation of the tracking scheme described above will require some reforms of existing systems. State regulators will need to work collaboratively with GATS, GIS, and New York’s new

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<sup>17</sup> Note that there would not be an *actual* limitation placed on entering these contracts. Rather, the restriction would be on the contract’s *recognition* for purposes of RGGI compliance.

<sup>18</sup> There is also a question about whether resource shuffling rules should require LSEs to declare as “specified” any bilateral contracts for dirtier-than-average imports. We do not know whether there is an appreciable amount of power currently imported on these terms.

<sup>19</sup> See Cal. Air. Res. Bd., Resolution 12-51, at 3 (Oct. 18, 2012).

equivalent to implement necessary changes, including ensuring the use of the best emissions data and aligning various timing requirements. RAP's recent technical paper describes at length the potential data sources that RGGI might use and the modifications necessary to ensure regulator access to high quality data.<sup>20</sup> We do not delve into these issues in detail here, except to note that none of them appears to present an insurmountable hurdle, assuming the ISOs/RTOs are cooperative. And importantly, the necessary data can all be acquired without mandating self-reporting by out-of-state generators to RGGI regulators, eliminating any concern that there might be constitutional hurdles presented in data acquisition.

#### **e. LINE LOSS**

RGGI will also have to decide whether to address line loss in its imports regulations.<sup>21</sup> All electricity transmittance causes a portion of the power to be lost as heat. Inside the RGGI region, generators pay for allowances based on the CO<sub>2</sub> intensity of MWh produced. Due to line losses, the total number of MWh purchased by RGGI LSEs is less than the total number of MWh generated by generators. In other words, the generators purchase allowances to cover the emissions from more MWh than are actually delivered to LSEs, thereby effectively accounting for line losses inside the RGGI system.

To accomplish true parity, an imports regulation scheme would also want to account for line losses in some fashion. While line losses could not be directly measured for all imports and vary due to a host of complicating factors including distance, time of day, weather, and system congestion, a small percent of line loss can always be assumed—in the United States, the average is six percent.<sup>22</sup> Accordingly, if a RGGI LSE purchases 100 MWh from the system, an out-of-state generator may have actually produced 106 MWh of electricity to deliver 100 MWh to the LSE at the point of sale. If LSEs compliance obligations are based on sales data, regulators might want to require them to “gross-up” their allowance purchase requirement for imports in order to account for the emissions associated with the MWh lost between generation and purchase. Whether this line loss gross-up would add any legal risk to the scheme is discussed *infra* Section III.

#### **f. DESIGN CONCLUSIONS**

We believe there is a path forward for designing workable LSE-centered imports regulations, should RGGI choose to pursue an LSE-centered approach. It will be most challenging to determine precisely how these regulations should function in the PJM region, but a compromise that makes certain assumptions in order to treat Maryland and Delaware LSEs and consumers fairly should be achievable.

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<sup>20</sup> See RAP Report at 29 et seq.

<sup>21</sup> See page 36 of the RAP report for its treatment of line losses.

<sup>22</sup> See *Electric Power Transmission and Distribution Losses*, World Bank, at <http://data.worldbank.org/indicator/EG.ELC.LOSS.ZS> (last visited May 1, 2013).

## II. POTENTIAL EFFECTS OF OUTLINED SCHEME

In order to perform a robust legal analysis, it is first necessary to understand what the practical effects of the scheme outlined above might be. It is, of course, difficult to predict with certainty the ways in which various entities will react to the obligations and incentives created by imports regulations, so what follows are our best guesses about some of the likely consequences.

It first bears noting that, separate and apart from whether imports regulations are adopted, RGGI's current imposition of allowance obligations on in-state generators has effects that reverberate through the ISO-NE, NYISO, and PJM wholesale markets. As a general matter, the predictable effect of requiring in-state generation to buy allowances is that wholesale market prices may increase, as generators will face added costs, will include these into the prices they bid into the market, and will thereby drive up the market clearing price (at least to the extent that the marginal unit in the market is a RGGI-affected unit).<sup>23</sup> It can further be expected that as RGGI lowers its cap, allowance prices will increase, causing wholesale market price increases as well.<sup>24</sup> However, to the extent RGGI proceeds continue to be heavily invested in clean energy and energy efficiency, or to the extent that price increases spur similar investments, such investments will have a mitigating effect on any price increases.<sup>25</sup> Indeed, one recent report finds that RGGI-funded investments in energy efficiency made between 2009 and 2011 will lower prices over time and ultimately save customers a net \$1.1 billion.<sup>26</sup> Predicting the magnitude and direction of future wholesale price impacts due to a lowered cap is beyond the scope of this paper, but might be a fruitful area for further inquiry.

As described above, RGGI imports regulations will place a compliance obligation on in-region LSEs to hold an allowance for each ton of emissions associated with imported electricity. This obligation extends both to imports purchased through the wholesale market, and imports purchased via bilateral contract (though in practice, this latter category is reported to be very small). LSEs will not be responsible for acquiring allowances for electricity purchased from specified in-state sources (because such sources will have already acquired allowances to cover their emissions) or clean sources (because they have no emissions).

The next question is, what are an LSE's compliance options? LSEs have many, some of which may be easier to adopt than others in the short term. They can: (1) purchase allowances; (2) shift purchases from the wholesale market to bilateral contracts with existing in-region generators; (3) enter into specified

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<sup>23</sup> See, e.g., N.Y. State Energy Plan 2009, Electricity Assessment: Resources and Markets, at 17 (2009), available at [http://www.nysenergyplan.com/final/Electricity\\_Assessment\\_Resource\\_and\\_Markets.pdf](http://www.nysenergyplan.com/final/Electricity_Assessment_Resource_and_Markets.pdf); see also ISO New England Press Release, *Estimate of Connecticut's Generator Tax on New England's Wholesale Energy Prices* (June 6, 2011) (finding that a \$2.50 tax on generators imposed by Connecticut might lead to up to a \$0.44/MWh increase in the average annual New England wholesale electricity price).

<sup>24</sup> Although the possibility has been raised that this impact of RGGI upon wholesale prices might itself create a Federal Power Act preemption issue, it is not one that we analyze here, as this is a feature of the existing scheme, not of imports regulations.

<sup>25</sup> See U.S. EPA, ASSESSING THE MULTIPLE BENEFITS OF CLEAN ENERGY: A RESOURCE FOR STATES, at 4 (EPA-430-R-11-014 Sept. 2011), available at [http://www.epa.gov/statelocalclimate/documents/pdf/epa\\_assessing\\_benefits.pdf](http://www.epa.gov/statelocalclimate/documents/pdf/epa_assessing_benefits.pdf).

<sup>26</sup> PAUL J. HIBBARD ET AL., THE ECONOMIC IMPACTS OF THE REGIONAL GREENHOUSE GAS INITIATIVE ON TEN NORTHEAST AND MID-ATLANTIC STATES, at 34 (Analysis Group, Nov. 15, 2011), available at [http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic\\_Impact\\_RGGI\\_Report.pdf](http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic_Impact_RGGI_Report.pdf).

contracts for new or incremental clean generation from within RGGI or to be imported into RGGI<sup>27</sup>; and/or (4) aid/incentivize customers to invest in more energy efficiency, demand response, or distributed energy to lower their overall electricity purchase needs. One additional way that LSEs could be permitted to comply with RGGI is through purchasing extra RECs (voluntarily, beyond those required for RPS compliance, to the extent that these are available and cheaper than comparable allowance purchases). Again, though, as noted *supra*, most—if not all—RGGI states include in their Renewable Portfolio Standards some methods of generation that are “renewable” but not carbon-free, and it may be impossible to easily differentiate “zero emissions” RECs from carbon-emitting RECs. Accordingly, states should consider whether and how they want to allow voluntary additional REC purchases to count for compliance with RGGI.

We would expect that strategy (2)—shifting from wholesale purchases to bilateral contracts with in-region generation—might prove popular until it was exhausted as an option, as this would likely be the lowest cost compliance strategy. LSEs are essentially “takers” in the ISO wholesale markets,<sup>28</sup> such that they cannot make special requests regarding the characteristics or price of the wholesale electricity they receive.<sup>29</sup> Therefore, when purchasing general “system power” from the wholesale market, LSEs will have to pay the wholesale price both for in-region generation and imports, and *then*, under imports regulations, will need to purchase allowances for the imports’ emissions. Accordingly, in-region power—that can be identified as such through a bilateral contract and therefore carries no compliance obligation for the LSE<sup>30</sup>—will be cheaper power, from an LSE’s perspective, because it will not have to purchase allowances to accompany such power, as it would have to do for system power.<sup>31</sup> For this reason, we can envision that there may well be a shift away from wholesale market purchases towards in-region bilateral contracts.

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<sup>27</sup> This generation could be renewable and thus perfectly clean from a RGGI viewpoint, or it could simply be *cleaner* than the systems mix, in which case there would still be some allowance obligation, but a smaller one. In the case where RGGI compliance entities enter into bilateral contracts to purchase new renewable generation, care will need to be taken to ensure that the RECs generated from such sources are appropriately retired, in order to avoid double-counting.

<sup>28</sup> LSEs do have some ability to hedge against market price fluctuations by entering bilateral contracts, but this ability would not allow them to demand specific types of wholesale power, or price differentials, as a result of having a RGGI compliance obligation imposed.

<sup>29</sup> We assume here that LSE compliance obligations are therefore unlikely to have major direct influences on wholesale market prices, but have not found any analysis to confirm this point.

<sup>30</sup> We assume here that the limitation on specified contracts would not extend to in-region contracts between a RGGI generator and a RGGI LSE, as these would not qualify as contracts for “imports.” However, limitations on specified contracts *could* be crafted to apply to in-region contracts as well, eliminating this compliance option.

<sup>31</sup> It may be helpful to explain this through some basic equations. Remember that in-region power carries zero emissions obligations for the LSE because the generator has already purchased allowances. Wholesale system power, on the other hand, has emissions obligations at the level of the adjusted residual mix, represented below by X tons/MWh.

For every megawatt-hour of in-region power an LSE purchases through a bilateral contract, the **Total Price = contract price + \$0 in allowance obligations.**

In contrast, if the LSE buys a megawatt-hour of system power, the **Total Price = wholesale price + X tons/MWh \* allowance price/ton = wholesale price + X(allowance price).**

Accordingly, unless there is a major divergence between the contract price and the wholesale price per megawatt hour, bilateral contracting is likely to be cheaper because it carries no allowance obligations.



Of course, the extent to which this happens will depend on many factors. In some RGGI states, state law may constrain the extent to which certain providers—particularly default service providers<sup>32</sup>—can enter into bilateral contracts that pay any price higher than the “best price” available “in light of market conditions.”<sup>33</sup> These rules might prevent such providers from bilaterally contracting with in-region generators at higher prices that factor in the cost of allowances. Those states will have to consider whether to amend state law to allow for this compliance strategy. If a shift to bilateral contracting is not available to certain market participants, then there may be limited short-term compliance options aside from simply purchasing allowances to accompany wholesale power purchases—a strategy likely to be costly to consumers without sending any short-term signals about the value of cleaner power to out-of-state generators. Additional variables that might impact the extent to which bilateral contracts are employed as a compliance strategy include RGGI’s price impact on wholesale markets, the stringency of the adjusted residual mix applied to an LSE, the relative competitiveness and availability of renewable generation and demand-side investment opportunities in the short term, and the extent to which LSEs feel pressure to minimize compliance costs. The incentives to move to bilateral contracting (if permitted by state law) would likely be most acute in PJM states, as these states would face the highest adjusted residual mix and rely on the wholesale market for a large amount of their power.<sup>34</sup> In the longer term, LSEs might increasingly respond to imports regulations by purchasing new, cleaner generation in and outside of RGGI and by undertaking all cost-effective demand reduction strategies.<sup>35</sup> This, of course, well serves the underlying objectives of RGGI.

As a practical matter, it bears noting that this predicted consequence of imports regulations—a shift from wholesale market purchases to bilateral contracts with in-region generation, thereby causing in-region generation to exit the wholesale market—might prove unpopular with non-RGGI generators selling into the wholesale market (as it would tend to lower wholesale prices back down, to the extent RGGI generators raised prices). More generally, it may strike some as perverse if RGGI ends up incentivizing significant exit from the competitive wholesale markets that FERC has spent the past two decades attempting to construct. Whether or not this resistance might lead to a successful legal challenge is, however, a separate question, and one that we take up in the next Part.<sup>36</sup> Importantly, FERC has endorsed bilateral contracting as perfectly compatible with wholesale markets, and indeed requires

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<sup>32</sup> States that have restructured typically require the previously regulated utility to provide default service, also sometimes also referred to as provider of last resort or standard offer service, to customers who choose not to switch to a new retail supplier. *See, e.g.*, MD. PUB. UTILITIES CODE § 7-510(c)(2).

<sup>33</sup> *See, e.g.*, MD. PUB. UTILITIES CODE § 7-510(c)(4)(ii).

<sup>34</sup> However, application of an assumption that Maryland and Delaware sales into the wholesale market were consumed by in-state generators would mitigate this effect.

<sup>35</sup> Presumably, although the details would vary based on particular states’ rules, more demand side measures would meet Public Utility Commission tests for “cost-effectiveness” if there were an imports compliance obligation placed on LSEs.

<sup>36</sup> It has also been noted to us that some LSEs might object to the proposed scheme on fairness grounds, depending upon the geography and distribution of resources of a state. For example, from a physical resource perspective, upstate New York typically imports hydropower, whereas downstate New York imports from PJM. However, under the proposed imports regulations, all of these imports would be assigned an equal adjusted residual mix, to the extent that they occurred through the wholesale market. Flexibility in the rules regarding the ways in which historic specified contracts can be identified might alleviate some of these concerns.

ISOs/RTOs to dedicate a portion of their websites to creating a “bulletin board” to facilitate long-term bilateral contracting in organized markets.<sup>37</sup>

Another set of effects worth considering are those on non-RGGI generators and states. In general, we expect these effects to be relatively small as compared to the in-region effects because, as explained, LSEs are by and large price-takers in the regional markets. They therefore do not have a lot of leverage to require out-of-RGGI generators to change their prices or generation methods. While an adjusted residual mix will be applied to imports, the out-of-state generators will not feel this burden directly, as the imports obligation will occur on the retail side of the wholesale market, with the major costs likely passed on to RGGI consumers. We thus can hypothesize only one way in which out-of-region generation might feel an immediate impact of imports regulations: those out-of-state generators with a generation mix cleaner than what is assumed by the adjusted residual mix might wish to contract with RGGI LSEs to sell their power at a premium over the going rate for system power, but might be prevented from doing so by RGGI’s limitations on what power is allowed to achieve “specified” status. In the longer run, imports regulations should cause out-of-region generators to face increased competition from new renewable generation and/or demand-side solutions, but this would prove equally the case for in-RGGI generation.<sup>38</sup>

### III. LEGAL PERMISSIBILITY OF OUTLINED SCHEME

Having laid out the broad details of how imports regulations might function in practice, we now turn to the issue of whether this scheme would survive a challenge under the dormant Commerce Clause (the “DCC”) or Federal Power Act preemption.

#### a. THE DORMANT COMMERCE CLAUSE

##### i. OVERVIEW

The precedent surrounding (and creating) the DCC is often criticized as quite messy, but its basic tenet is well-settled: states may not engage in “economic protectionism” by enacting “regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.”<sup>39</sup> The first question a court asks when examining a law under the DCC is whether or not the law is discriminatory. A few particulars about this test are worth noting. A law can discriminate either on its face, in its purpose, or in practical effect.<sup>40</sup> If so, such a law is considered “virtually *per se*” invalid.<sup>41</sup>

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<sup>37</sup> See 125 FERC ¶ 61,071, Wholesale Competition in Regions with Organized Electric Markets, at ¶ 281 (Oct. 17, 2008) (“The Commission did not find that there is a fundamental problem with long-term contracting for electric power, either inside or outside of organized markets.”). Although the order references long-term contracting, FERC explained that it also permitted RTOs and ISOs to include offers for shorter-term (less than one year) contracts on their websites. *Id.* at ¶ 301.

<sup>38</sup> One final possible effect of imports regulations is that LSEs might strive to bifurcate or segment wholesale power markets. For example, LSEs might request of their ISOs to be able to specifically purchase only in-region power, or to negotiate price differentials for in- versus out-of-region power. This paper does not consider the additional constitutional risks posed by this hypothetical compliance strategy.

<sup>39</sup> *Dep’t of Rev. v. Davis*, 553 U.S. 328, 337-38 (2008) (internal quotation omitted).

<sup>40</sup> See *Maine v. Taylor*, 477 U.S. 131, 138 (1986); *Bacchus Imports, Ltd. v. Dias*, 468 U.S. 263, 270 (1984).

<sup>41</sup> *Davis*, 553 U.S. at 338. Nominally, a “strict scrutiny” standard applies, meaning that in rare circumstances, courts will uphold a discriminatory law as justified in terms of legitimate “local benefits” and the “unavailability of

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“Discrimination” in this context refers to “differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.”<sup>42</sup>

As suggested by the above-quoted sentence, to fail the discrimination inquiry, a law must do more than merely place *some burden* on out-of-state economic interests—it must have a protectionist motivation or effect. Laws that do not clearly favor in-state interests are judged under the more lenient test articulated in *Pike v. Bruce Church, Inc.*<sup>43</sup> The *Pike* balancing test provides that an even-handed regulation with some effect on out-of-state commerce may be upheld so long as (1) it effectuates a legitimate local public interest; and (2) its incidental impacts on interstate commerce do not impose a burden that is clearly in excess of the putative local benefits.<sup>44</sup>

A law will also be struck down if it is deemed an extraterritorial regulation.<sup>45</sup> Laws that fail this extraterritoriality inquiry are those that attempt to “directly control[] commerce occurring wholly outside the boundaries of a State.”<sup>46</sup> In deciding whether a statute regulates extraterritorially, courts consider the consequences of the statute itself and the effects that would arise if many states adopted similar legislation.<sup>47</sup>

We consider below how arguments against LSE-centered imports regulations under each of the above-outlined prongs of the DCC might fare.

## ii. *DISCRIMINATION*

Opponents of imports regulations might challenge them as discriminatory on their face, in purpose, or in effect. To avoid a finding of purposive discrimination, regulators should avoid imputing any protectionist motivation to the regulations. For example, regulators would want to avoid any suggestion that imports regulations were motivated by a desire to have more of the electricity that is consumed within RGGI come from within the region. Instead, imports regulations should be defended as necessary for RGGI to regulate all power consumed in the RGGI region evenhandedly. Anticipating a need to defend the program legally, it may be advisable to memorialize agreement among the RGGI states on the purposes of imports regulations.

As a general matter, we believe that a goal-oriented, geography-neutral justification for imports regulations should pass muster as non-discriminatory. Under current RGGI rules, not all CO<sub>2</sub> emissions associated with electricity consumed in RGGI states are accounted for. By placing a burden only on in-region electricity *generators*, RGGI has allowed in-region consumers of fossil fuel-fired electricity that is imported into the RGGI region to have essentially a “free pass.” This loophole creates perverse incentives for retail suppliers of electricity to import cheap, high-emitting electricity and prevents participating states

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nondiscriminatory alternatives” that would effectuate the statute’s goals. *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 353 (1977).

<sup>42</sup> *Or. Waste Sys., Inc. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 99 (1994).

<sup>43</sup> 397 U.S. 137 (1970).

<sup>44</sup> *Id.* at 142.

<sup>45</sup> *See, e.g., Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989).

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

from being able to fully account for and reduce the CO<sub>2</sub> emissions associated with electricity *consumption* in their states. Ultimately, this regulatory gap risks undermining RGGI’s goal of reducing Signatory States’ CO<sub>2</sub> emissions.<sup>48</sup> Imports regulations should therefore be defensible as necessary to force in-region consumers to bear the costs of—and ultimately reduce—the emissions associated with the electricity they consume, *irrespective of that electricity’s origin*.

However, a DCC analysis of imports regulations must necessarily address the fact that electricity is more complicated to regulate than traditional products, like apples<sup>49</sup> or milk cartons.<sup>50</sup> As explained above, the complex design of the electricity system necessitates that imports regulations impose certain requirements on imports that are avoided in the case of regulating in-state generation. In this way, pure equality of treatment between in-state and imported electricity is impossible.<sup>51</sup> Under the outlined scheme, imported electricity will bear two burdens that in-state generators do not: (1) an adjusted residual mix applied to electricity LSEs import into the RGGI region, and (2) a limit on what contracts can achieve “specified” status and therefore escape having the adjusted residual mix applied. Nevertheless, we do not think these differences in treatment are likely to be found to amount to discrimination, for the reasons explained below.

### **I. Facial Discrimination**

A challenge of facial discrimination would argue that because imports regulations apply by their terms *only* to imported power, they facially discriminate based on origin. But acceptance of this argument would require myopia regarding the overall design of the RGGI scheme, which imposes equivalent burdens on in-state generation. We think it unlikely that a court would decide to look at imports regulations in isolation from the larger RGGI scheme. This principle is well supported by Supreme Court precedent:

The question of constitutional validity is not to be determined by artificial standards. What is required is that state action, whether through one agency or another, or through one enactment or more than one, shall be consistent with the restrictions of the Federal Constitution. There is no demand in that Constitution that the state shall put its requirements in any one statute. It may distribute them as it sees fit, if the result, taken in its totality, is within the state's constitutional power.<sup>52</sup>

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<sup>48</sup> The concept/threat of “leakage” can be used here to bolster the claim that imports regulations are a necessary component of RGGI’s cap-and-trade scheme. Any modeling showing that RGGI’s emissions reductions will be eroded without imports regulations will be helpful in demonstrating why imports regulations are critical to the program’s integrity. RGGI might further assert that it cannot meet its goal of serving as a viable model of a cap-and-trade program if it does not produce real cuts in CO<sub>2</sub> emissions.

<sup>49</sup> *Hunt v. Wash. St. Apple Adver. Comm’n*, 432 U.S. 333 (1977).

<sup>50</sup> *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456 (1981).

<sup>51</sup> This sentence slightly overstates the case. It would be possible to treat in-region and out-of-region identically if RGGI chose to shift entirely to a load-based approach to regulation, where Load Serving Entities were responsible for the emissions associated with all power consumed by their customers, such that in-region generators had no compliance obligations. We have not considered the political or practical feasibility of this option, although it has certain appeal for streamlining the legal analysis.

<sup>52</sup> *Gregg Dyeing Co. v. Query*, 286 U.S. 472, 479-80 (1932). Cf. *West Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 190-91 (1994) (refusing to analyze separately a state tax scheme that applied even-handedly to all milk producers, and a state subsidy given from these proceeds only to in-state milk producers, as independent regulations).

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Similar reasoning obtained in a 1982 Supreme Court case examining Nebraska groundwater regulations that applied only to interstate water transfers. As the Court explained, although “Commerce clause concerns [were] implicated” by the regulation’s focus only on interstate transfers, this facially differential treatment would not be unconstitutional if the same restrictions were also applied in intrastate transfers: “Obviously, a State that imposes severe withdrawal and use restrictions on its own citizens is not discriminating against interstate commerce when it seeks to prevent the uncontrolled transfer of water out of the State. An exemption for interstate transfers would be inconsistent with the *ideal of evenhandedness* in regulation.”<sup>53</sup>

Even, however, assuming that a court views imports and in-state obligations in conjunction, there is a further challenge that might also be framed as a “facial” challenge, based on the fact that imports alone would bear the obligations of an adjusted residual mix and limitations on “specified” contracts. Opponents would likely argue that these differences violate the “ideal of evenhandedness.”

A court might view these differences in imports’ treatment as enough, standing alone, to subject the scheme to strict scrutiny. But we think RGGI should have a valid argument that although imports regulations necessarily place different limitations on out-of-state power, these do not impermissibly *disadvantage* out-of-state power, but instead are structurally necessary components of imposing even-handed obligations on in- and out-of state power. There is scant case law squarely addressing the question of whether it is permissible for a law to treat out-of-state products *differently*, as long as there is no disadvantage as compared to in-state products. (This dearth of case law is likely attributable to the fact that for most products other than electricity, there are no complex physical attributes that would necessitate doing so.) However, the way the facial discrimination inquiry is framed supports the premise that it is permissible. For example, the Supreme Court recently laid out the contours of the facial discrimination inquiry as follows:

To determine whether a law violates this so-called ‘dormant’ aspect of the Commerce Clause, we first ask whether it discriminates on its face against interstate commerce. In this context, discrimination simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.<sup>54</sup>

This language suggests that facially differential treatment alone does not establish discrimination—there must also be a disparate burden.

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Analogies to the compensatory tax doctrine might also offer RGGI support on this point (even if, strategically, RGGI does not want to be labeled a tax). That doctrine permits a state to enact a tax that might on its face be discriminatory, so long as it can show that in-state entities *already* bear an equivalent burden. *See Or. Waste Systems, Inc. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 102-04. Similarly, it should be permissible for a regional cap-and-trade program to place obligations on imported power so long as in-region generation already bears an equivalent burden. *Cf. Heddy Bolster, The Commerce Clause Meets Environmental Protection: The Compensatory Tax Doctrine as a Defense of Potential Regional Carbon Dioxide Regulation*, 47 B.C. L. REV. 737 (2006) (concluding, slightly differently from our analysis, that a court would likely find imports regulations to be facially discriminatory, but suggesting that they could be saved by the compensatory tax doctrine).

<sup>53</sup> *Sporhase v. Nebraska*, 458 U.S. 941, 955-56 (1982) (emphasis added).

<sup>54</sup> *United Haulers Ass’n, Inc. v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 338 (2007).

In the case of imports regulations, it is not readily apparent whether application of an adjusted residual mix, coupled with a limit on specified contract status, actually disadvantages out-of-state generators, as compared to the generator-based compliance obligation placed on in-state sources. For this reason, we think that any “facial” challenge to imports regulations would probably merge with an “in effects” challenge. To properly analyze this issue, a court would have to look to the potential effects of the restrictions—an inquiry to which we turn in the next subsection.

## 2. Discrimination in Effect

More complex to analyze is an in-effect challenge, which would argue that the differential treatment required for imports amounts to discrimination because it would, in practice, disadvantage out-of-state generation. However, we see no strong argument—at least *ex ante*—that the scheme would in fact harm out-of-staters while benefiting in-staters.<sup>55</sup>

Critically, discrimination under the DCC requires not just differential treatment, but also a protectionist motivation or outcome.<sup>56</sup> An in-effect challenge could therefore prevail only if it showed that the burdens placed on imports (out-of-state generation)<sup>57</sup> would work to the benefit of in-state generation, or had the purpose of doing so.

We do not believe this should be the case. Based on our envisioned potential effects, three possible arguments present themselves. An opponent might first argue that any shift in LSE purchasing towards bilateral contracts with in-region generation instead of wholesale purchases would constitute a benefit to in-state generation. But even if this occurs to a notable degree—and we are not sure if it will (particularly given that state law may constrain this purchasing strategy in certain states, and for certain entities)—it does not necessarily mean that the overall percentage of in-state purchases would increase.<sup>58</sup> And if the

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<sup>55</sup> It is worth noting that an early constitutional challenge to RGGI’s imports regulations would probably take the form of a “facial challenge,” instead of an “as-applied” challenge, as it likely will require some amount of time before the impacts of imports regulations are borne out. “A ‘facial challenge,’ as opposed to an ‘as-applied challenge,’ does not seek to analyze the impact of a statute against the factual context of the case; rather, it seeks to invalidate a statute as unconstitutional on the basis of its text.” Gage O’Grady, *The Role of Speculation in Facial Challenges*, 53 ARIZ. L. REV. 867, 869 (2011). RGGI should have an easier time defending a facial challenge alleging “discrimination in effect,” as courts are loathe to engage in too much speculation regarding what the potential consequences of a scheme might be. *See id.* at 881-83.

<sup>56</sup> *See, e.g., Dep’t of Rev. v. Davis*, 553 U.S. 328, 338-39 (2008) (“Absent discrimination for the forbidden purpose [of protectionism] . . . the law will be upheld unless the burden imposed on [interstate] commerce is clearly excessive in relation to the putative local benefits.” (internal quotation marks omitted)); *Or. Waste Sys., Inc. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 99 (1994) (“‘[D]iscrimination’ simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter”).

<sup>57</sup> The DCC’s inquiry focuses on treatment of “similarly situated entities” in and out of state, and thus a DCC analysis would like compare how in-state generators and out-of-state generators fare under imports regulations, even though the compliance obligation for imports regulations would fall on in-region LSEs. *See Gen. Motors Corp. v. Tracy*, 519 U.S. 278, 298 (1997).

<sup>58</sup> Many RGGI are states currently net importers, so may not have considerably more in-region generation to deploy. However, if RGGI states are net importers for *economic* reasons but have unused in-state capacity, an imports obligation might make this capacity economic again. But any tendency in this direction should be counterbalanced: if RGGI turns towards bilateral contracting with in-state generators, wholesale market demand would fall and the wholesale price would also likely fall as these more expensive generators exited the market (at least if RGGI generators are on the margin), making imports regain some of their attractiveness. For those RGGI states that are

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percentage of in- versus out-of-region power does not change, there would be no apparent protectionism in simply shifting purchasing modes. However, if modeling suggested that imports regulations would in fact lead to an appreciably greater dispatch of in-region power and fewer imports than would be the case without RGGI,<sup>59</sup> there would be a stronger argument that the regulations were discriminatory in effect.<sup>60</sup> RGGI might consider performing some modeling to determine the extent of its risk in this regard.

Second, relatively cleaner (but non-renewable) generators outside the RGGI region might argue that the imports regulations unfairly disadvantage them.<sup>61</sup> These cleaner firms might wish to sell their power via specified contract with RGGI LSEs in order to escape application of the adjusted residual mix, but would be prohibited from doing so by resource shuffling rules.<sup>62</sup> But this result should not constitute discrimination. Most importantly, it would be difficult for these cleaner firms to argue that they are disadvantaged as compared to in-RGGI generators. In-region generators have to purchase allowances to account for their emissions—a burden that out-of-region clean generators do not have to shoulder. In this way, an LSE-centered imports scheme still “advantages” all out-of-state generators sending load into RGGI as compared to in-state sources, given that the wholesale market will shield out-of-staters from any direct transmittal of compliance costs upstream (as explained *supra* section II).<sup>63</sup> The only real burden out-of-region cleaner generators face is that they are not able to take advantage of the price differentials created by RGGI for clean versus non-clean power, such that they are treated the same as their dirtier out-of-state counterparts, who, in turn, benefit from being lumped together with the cleaner out-of-state firms. But it is unlikely that this “lumping together” of out-of-state firms, although arguably unfortunate, would rise to the level of discrimination. The Supreme Court held in *Exxon Corp. v. Governor of Maryland* that the dormant Commerce Clause “protects the interstate market, not particular interstate firms,” explaining

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net exporters, whether the percentage of in-state consumption coming from in-state generation would change depends upon the amount and sources of power currently exchanged across these state borders in both directions. The complex interactions at play here suggest that this might be an area where further study is warranted.

<sup>59</sup> RGGI’s timeline for adopting imports regulations might complicate the use of modeling as proof of discrimination. In particular, if there has been a shift toward more imports during the early years of the program when imports regulations have not been in place, then models showing that imports regulations would increase in-region generation at the expense of imports should not necessarily be taken as evidence of discrimination. Rather, any changes that imports regulations cause in the balance of in-region generation versus imports should arguably be compared to the projected quantity of electricity imports that would exist in a hypothetical market without RGGI (or, perhaps, to the amount of electricity imports pre-RGGI, although much has changed in the markets since this time).

<sup>60</sup> *Cf. PPL Energyplus, LLC v. Nazarian*, No. 12-cv-01286 (D. Md., complaint filed Apr. 27, 2012) (alleging that Maryland’s requirement that its LSEs enter into contracts with certain generators violated the dormant Commerce Clause by favoring new generating facilities located in Maryland). On the other hand, if imports regulations caused only a small shift towards in-region generation, this effect might not necessarily prove fatal. On at least one occasion, the Supreme Court approved of a state law even though it was clear that it would benefit one Minnesota industry—pulpwood producers—“significantly . . . at the expense of out-of-state firms.” *See Clover Leaf Creamery*, 449 U.S. at 473.

<sup>61</sup> Potentially aggrieved firms would most likely be cleaner, but non-renewable, generators, as the latter have the renewable nature of their generation compensated through RECs, which are excluded from the adjusted residual mix.

<sup>62</sup> Resource shuffling rules might permit some of these contracts to proceed, to the extent they could qualify as “specified” based on proven historical relationships with RGGI LSEs.

<sup>63</sup> At least, this out-of-state advantage holds so long as the differential between the wholesale market price and the price paid for in-region bilateral contracts is less than the full cost of the associated allowances.

that “[t]he fact that the burden of a state regulation falls on some interstate companies does not, by itself, establish a claim of discrimination against interstate commerce.”<sup>64</sup> Circuit courts have frequently cited *Exxon* in upholding state laws that have negative impacts on particular firms, so long as the interstate market as a whole, as compared to the in-state market, is not disadvantaged. In the case of imports regulations, because the adjusted residual mix would be, by definition, an average, it should benefit some firms while burdening others. Under *Exxon*’s logic, such a shift in comparative advantage among out-of-state firms should not amount to discrimination against interstate commerce.<sup>65</sup> Nevertheless, to limit claims along these lines by cleaner out-of-state generators, RGGI again may want to consider affording broad flexibility to LSEs to demonstrate historical bilateral contracts with out-of-state generators.

Third, the design of imports regulations may require making an assumption that Maryland and Delaware consume their generation sold into the wholesale market in-state, even where this cannot be directly tracked. If this assumption is made, these generators would be removed from calculation of the PJM adjusted residual mix, making the mix “dirtier” and potentially raising objections from out-of-state generators. The fact that PJM’s geography requires making this assumption does perhaps lend an air of artificiality to the calculations of “emissions resulting from imports” into Maryland and Delaware and might cause a court to scrutinize the issue more closely. Again, though, differential treatment alone is not impermissible. We still do not see imposition of this assumption as readily leading to a strong argument of protectionism. The power exempted from the adjusted residual mix calculation would still be subject to a RGGI compliance obligation, such that in- and out-of-region power would still receive equal treatment. And indeed, these assumptions might actually create less of an incentive for Maryland and Delaware LSEs to move towards in-state bilateral contracting in place of wholesale market purchases (if state law were to permit this as a compliance option).

In sum, we see no strong argument that the differential burdens necessarily placed on out-of-region generators through imports regulations would be protectionist, and therefore discriminatory, in nature. Accordingly, we believe a court would be correct to find that the burdens placed on interstate commerce are incidental ones that are properly analyzed under *Pike* balancing (an analysis to which we turn *infra* Section III(a)(4)).

However, a few words of caution are in order. First, the argument that RGGI is only seeking “equality of treatment” between in- and out-of-state electricity might be complicated by the fact that RGGI adopted in-state requirements several years before it would adopt imports requirements. We do not think this timeline is fatal, but RGGI might think carefully about how to justify the regulations as necessary at this point in time, even though they were ostensibly considered unnecessary earlier. It may be helpful to draw

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<sup>64</sup> 437 U.S. 117, 126-28 (1978).

<sup>65</sup> See also, e.g., *Wine And Spirits Retailers, Inc. v. Rhode Island*, 481 F.3d 1, 14-15 (1st Cir. 2007) (quoting *Exxon* in explaining that the fact that the challenged state laws “may have had a negative impact on [plaintiff’s] business model is, in itself, insufficient to show discriminatory effect”); *Instructional Sys., Inc. v. Computer Curriculum Corp.*, 35 F.3d 813, 827 (3d. Cir. 1994) (“[T] he fact that a law may have devastating economic consequences on a particular interstate firm is not sufficient to rise to a Commerce Clause burden.” (internal quotations omitted)); *Ford Motor Co. v. Insurance Comm’r*, 874 F.2d 926, 944 (3d. Cir. 1989) (quoting *Exxon* in explaining that “[a]s the Supreme Court has noted, ‘[t]he Commerce Clause [does not] protect[ ] the particular structure or method of operation in a retail market.... the Clause protects the interstate market, not the particular interstate firms, from prohibitive or burdensome regulations.’” (emphasis and second and third alterations in *Ford*)); *Brown & Williamson Tobacco Corp. v. Pataki*, 320 F.3d 200, 213 (2d. Cir. 2003) (same).



on the concept of “leakage” of emissions, particularly as RGGI’s cap is tightened, as one concern now motivating imports regulations.

RGGI might also want to consider whether to amend its definitions in order to strengthen claims of even-handed treatment of in-state and out-of-state electricity. For example, California does not place a separate compliance obligation on imports, but instead applies its general cap-and-trade regulations to all “first deliverers of electricity”—those entities which first deliver power into the California grid. This category includes, by definition, in-state generators, LSEs, and wholesale power marketers.<sup>66</sup> While RGGI may have technical reasons for opting for LSE regulations rather than a first deliverer model, it might consider whether it can still craft a definition of “covered entities” that naturally includes LSEs and in-state generators, rather than crafting separate compliance obligations for LSEs. Although arguably just a matter of semantics or framing, beginning from a place of even-handedness within the regulatory definitions might better showcase the equality of treatment between imports and in-state generation.

Finally, no discussion of imports regulations’ constitutional vulnerability would be complete without reference to the case of *Rocky Mountain Farmers Union v. Goldstene* (“*RMFU*”), which is pending in the Ninth Circuit Court of Appeals.<sup>67</sup> That case considers the permissibility under the DCC of California’s low carbon fuel standard (LCFS), which the district court struck down on multiple grounds.<sup>68</sup> The LCFS requires suppliers of transportation fuels in California to meet annual “carbon intensity” targets.<sup>69</sup> On the issue of discrimination, the district court found California’s LCFS to be facially discriminatory on the ground that the standard’s design treated Midwest corn-derived ethanol differently from similar corn-derived ethanol made in California, by assigning Midwest ethanol higher carbon intensity based on the location of the production facility and the distance the product traveled.<sup>70</sup> On appeal, appellants argued that this ruling fundamentally misconstrues the nature of the LCFS, which is designed to treat all products equally based on a lifecycle analysis of carbon content.<sup>71</sup> The Ninth Circuit’s ruling (and perhaps subsequent consideration by the Supreme Court) will likely have a major impact in shaping how the DCC is applied to the novel field of state carbon regulation.<sup>72</sup>

### iii. EXTRATERRITORIALITY

The second legal hurdle that imports regulations will have to clear is the DCC’s prohibition on extraterritorial regulation. Similar to claims made in *RMFU*, opponents of imports regulations might argue that the goal of the regulations would be to lower out-of-region generators’ GHG emissions, such that imports regulations are just a ploy to regulate indirectly these wholly out-of-state emissions that

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<sup>66</sup> See CAL. ADMIN. CODE § 95102(a).

<sup>67</sup> See *Rocky Mountain Farmers Union v. Goldstene*, Nos. 12-15131, 12-15135 (9th Cir.) (Argued Oct. 2012), appealing 843 F. Supp. 2d 1071 (E.D. Cal. Dec. 29, 2011) [hereinafter *RMFU*].

<sup>68</sup> See *id.*

<sup>69</sup> See *RMFU*, 843 F. Supp. 2d at 1080.

<sup>70</sup> See *id.* The *RMFU* district court’s reasoning on the issue of extraterritoriality is discussed *infra* in the following section.

<sup>71</sup> See, e.g., *RMFU*, Ninth Circuit Docket Nos. 12-15131, 12-15135, Appellants’ Opening Brief, at 37 (filed June 8, 2012, Doc. No. 63).

<sup>72</sup> Of course, there are notable differences between California’s LCFS and imports regulations, the most obvious being that imports regulations would not include any type of “score” based on the distance that the electricity traveled.

RGGI states could not regulate directly. We believe acceptance of this argument would require an overly expansive reading of the doctrine of extraterritoriality. This element of the dormant commerce clause inquiry is, however, considerably less clear and well-developed than the discrimination inquiry.<sup>73</sup>

Extraterritoriality applies where a regulation “directly controls commerce occurring wholly outside the boundaries of a State.”<sup>74</sup> This statement is broad enough to leave questions as to precisely what is forbidden. One leading scholar suggests that it is commonly “understood only to constrain a state from formally asserting legal authority outside its borders.”<sup>75</sup> In accord with this view, the Second Circuit has made clear that a “[m]ere ‘upstream pricing impact’ is not a violation of the dormant Commerce Clause, even if the impact is felt out-of-state where the stream originates.”<sup>76</sup> There is space to argue that the Supreme Court also endorsed a narrow understanding of the doctrine in the 2003 case *Pharmaceutical Research and Manufacturers of America v. Walsh*, where it readily dismissed an extraterritorial challenge upon finding that Maine was not dictating out-of-state prices.<sup>77</sup> However, *Walsh* does not treat the issue of extraterritoriality at length.

Importantly, courts have often upheld laws that require changes in out-of-state behavior in order to access the in-state market, as long as they do not exert direct control over the way that commerce *must* be conducted outside of state boundaries. For example, the Supreme Court upheld Minnesota’s law requiring milk distributors to change their packaging from plastic to paper if they wanted to continue selling within that state; and more recently, the Second Circuit upheld a Vermont law requiring manufacturers to label all lamps sold in that state.<sup>78</sup> Even though these laws required actual changes in physical practices by out-of-state manufacturers, they were permissible because they did not dictate the terms by which out-of-state commerce had to occur for products *not* entering the Minnesota or Vermont marketplace, respectively.<sup>79</sup>

Under this line of extraterritoriality analysis, we believe imports regulations would be on relatively solid footing. RGGI imports regulations operate at a further level of remove than either the Minnesota or Vermont laws mentioned above. Imports regulations place compliance obligations on RGGI LSEs in an effort to control and reduce in-state consumption. There are no compliance obligations placed on out-of-

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<sup>73</sup> See, e.g., Katherine Florey, *State Courts, State Territory, State Power: Reflections on the Extraterritoriality Principle in Choice of Law and Legislation*, 84 NOTRE DAME L. REV. 1057, 1084-92 (2009) (discussing many scholars’ and courts’ critiques of the doctrine).

<sup>74</sup> Healy, 491 U.S. at 336.

<sup>75</sup> Gillian E. Metzger, *Congress, Article IV, and Interstate Relations*, 120 HARV. L. REV. 1468, 1521 (2007).

<sup>76</sup> *Freedom Holdings, Inc. v. Cuomo*, 624 F.3d 38, 67 (2d Cir. 2010) (alteration in original) (quoting *Freedom Holdings, Inc. v. Cuomo*, 592 F. Supp. 2d 684, 707 (S.D.N.Y. 2009)).

<sup>77</sup> 538 U.S. 644, 669 (2003) (“[A] s the Court of Appeals correctly stated, unlike price control or price affirmation statutes, ‘the Maine Act does not regulate the price of any out-of-state transaction, either by its express terms or by its inevitable effect. Maine does not insist that manufacturers sell their drugs to a wholesaler for a certain price. Similarly, Maine is not tying the price of its in-state products to out-of-state prices.’ The rule that was applied in *Baldwin* and *Healy* accordingly is not applicable to this case.” (internal citation omitted)).

<sup>78</sup> See *Nat’l Elec. Mfrs. Ass’n v. Sorrell*, 272 F.3d 104, 110-12 (2d Cir. 2001) (explaining that the fact that “manufacturers must bear some of the costs of the Vermont regulation in the form of lower profits” did not cause the statute to violate the Commerce Clause).

<sup>79</sup> See also *Cotto Waxo Co. v. Williams*, 46 F.3d 790, 793-94 (8th Cir. 1995) (refusing to strike Minnesota ban on petroleum-based sweeping compounds as extraterritorial, even though out-of-state manufacturers could no longer sell certain products in Minnesota, because it did not “necessarily require[] out-of-state commerce to be conducted according to in-state terms”).

region generators, nor are there any strictures placed on how out-of-region generators produce power. Accordingly, out-of-state generators would not be required to alter their practices in any way as a result of these regulations—even for that power being sent into the RGGI region.

However, the district court in *RMFU* applied a more stringent interpretation of extraterritoriality. That court found that because California’s LCFS would incentivize the alteration of land use practices and electricity generation choices outside of the state—albeit through indirect means—it was impermissibly extraterritorial.<sup>80</sup> In its view, the critical factor appeared to be that California was attempting to change out-of-state production *methods*, rather than actual chemical or physical product characteristics.<sup>81</sup>

If this prohibition on incentivizing changes to out-of-state manufacturing processes is upheld on appeal *and* is applied by a court reviewing imports regulations, RGGI might be more vulnerable to an extraterritoriality challenge. There is little precedent on the issue of whether regulation that changes the manufacturing methods of products entering a state, rather than product characteristics, is acceptable.<sup>82</sup> But there is room for distinguishing imports regulations as operating at an even further level of remove than the California LCFS. Although imports regulations require LSEs to reduce consumption of GHG emitting electricity, they are agnostic as to how LSEs go about reducing that consumption and LSEs have many compliance options (outlined above in Section II). In turn, LSE compliance choices might influence ISO/RTO wholesale market prices for power and the prices that LSEs are willing to pay for specified imported power. But this is as close as LSE-centered imports regulations come to exerting influence on out-of-state generators. Indeed, although RGGI states would no doubt *like* for out-of-state generators to be incentivized to change their generation profiles, *it is by no means clear that RGGI will provide any pronounced incentives in this regard to existing out-of-state generators*, at least in the short term (given that the wholesale market acts as a mitigator of in- versus out-of-RGGI power prices). This is a distinction between an LSE-centered scheme and one that more directly places compliance obligations on importers (such as California’s first-deliverer policy).<sup>83</sup> Instead of sending direct price signals, an LSE scheme will incentivize a slower change in the kinds of power generation that will be valued going

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<sup>80</sup> *RMFU*, 843 F. Supp. 2d at 1092.

<sup>81</sup> *See id.*

<sup>82</sup> There is considerable discussion of the older Supreme Court case *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 524 (1935), in the Ninth Circuit *RMFU* briefing, with each side arguing that it supports their view of the extraterritoriality doctrine on this point. In that case, New York required milk sellers in the state to affirm that if they purchased their milk out of state, they would still adhere to the minimum price requirements that New York imposed for in-state milk. The Supreme Court struck the rule, explaining that New York obviously could not dictate a price to be paid in Vermont, and was equally without power to “prohibit[]its sale thereafter if the price that has been paid for it to the farmers of Vermont is less than would be owing in like circumstances to farmers in New York.” However, the Supreme Court also stated that milk “may be excluded if necessary safeguards have been omitted.” *Id.* It simply refused to allow New York to regulate prices as a method of ensuring the sanitation of milk through general arguments about “economic welfare.” *Id.* We do not see this case as cutting persuasively in either direction vis-à-vis imports regulations—while it does suggest that *some* regulation of out-of-state processes is permissible to protect in-state consumers, it does not go so far as to set forth a clear path for the regulation of embedded carbon content.

<sup>83</sup> We do not mean to suggest by this comment that California’s scheme would fail the extraterritoriality inquiry (and we do not undertake an analysis of that scheme’s constitutional viability here). We merely intend to highlight that an LSE-centered scheme presents *less* of an extraterritoriality risk than a first deliverer scheme.

forward. In contrast, because California’s LCFS applied directly to fuel providers, there was a more direct linkage among the requirements, compliance options, and out-of-state manufacturing processes.

Therefore, we believe that even under a relatively stringent interpretation of extraterritoriality, imports regulations’ extraterritorial effects are arguably too contingent to support a finding of extraterritoriality. Any effects felt by out-of-state generators will depend on the strength of a price signal effect transmitted slowly upstream via LSE compliance strategies—a relatively benign out-of-state impact compared with many that have previously withstood scrutiny.<sup>84</sup>

However, regulating line loss might present additional risk under extraterritoriality. Because line loss is in part a function of distance, line-loss gross-up provisions could come dangerously close to the regulations invalidated in *RMFU*, given that they would penalize imports for, in essence, being imports. Perhaps a number could be selected that was representative of the same amount of line loss that occurred during intra-RGGI transmission, to avoid penalizing imports for simply coming over a longer distance. Or, it might be prudent for RGGI to opt for “good enough” imports regulations that do not account for line loss, and thereby sidestep the thornier legal issues raised by including this factor.

The Supreme Court has also, at times, invalidated state laws as extraterritorial regulations when those affected activities could be subjected to inconsistent regulations if many states adopted similar legislation.<sup>85</sup> This “Balkanization” argument might also be mounted against imports regulations, but would be a weaker claim than the arguments explored so far. Although LSEs and generators might face different greenhouse gas emissions compliance obligations in different states, right now this is a distant hypothetical. This fact alone might be enough to negate a Balkanization argument, as some courts require a showing of “actual conflict.”<sup>86</sup> Moreover, the very fact that RGGI is a regional program might help it defend a Balkanization argument—in a sense, RGGI itself prevents Balkanization by harmonizing the efforts of the participating states. And finally, if a court were to consider the possibility of hypothetical conflicting regulations, RGGI might express willingness to work with any states adopting their own greenhouse gas cap-and-trade (or equivalent) programs to ensure that power imported into the RGGI region was not “double-counted.” RGGI might include in any agreement on imports regulations a paragraph explicitly expressing willingness to do this.

#### iv. *PIKE* BALANCING

If imports regulations pass a discrimination inquiry, they will be analyzed under *Pike* balancing. *Pike* provides that “where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”<sup>87</sup> By surviving a discrimination inquiry, imports regulations would show themselves to be even-handed regulations with

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<sup>84</sup> See Sorrell, 272 F.3d at 110-12 (explaining that even a regulation that drives “some or all producers or distributors” from a particular state poses no DCC problems, as “a decision to abandon the state’s market rests entirely with individual manufacturers”).

<sup>85</sup> See *CTS Corp. v. Dynamics Corp. of America*, 481 U.S. 69, 88 (1987).

<sup>86</sup> See *SPGGC, LLC v. Blumenthal*, 505 F.3d 183, 196 (2d. Cir. 2007) (requiring an “actual conflict” between the challenged regulation and the law in other states in order to find interstate conflict).

<sup>87</sup> *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

only incidental effects on interstate commerce.<sup>88</sup> Therefore, the *Pike* balancing analysis would focus on whether they effectuated a legitimate interest without excessively burdening interstate commerce.<sup>89</sup> It is somewhat difficult to predict exactly how a court will approach the fact- and values-intensive inquiry required,<sup>90</sup> but the burden and standard of proof favor defendants: in order to strike down a law, a plaintiff must show that the burden imposed on interstate commerce would *clearly exceed* the local benefits derived from it.<sup>91</sup>

The *Pike* inquiry begins with whether or not there is a legitimate local interest at stake. This should not be difficult for RGGI to establish. The Supreme Court has confirmed that states have a legitimate interest in guarding against the environmental risks posed by climate change.<sup>92</sup>

It remains, then, to analyze the benefits as compared to the burdens of imports regulations. The justification for imports regulations – the “benefit”—would be something along the lines of “even-handed treatment of all electricity *consumed* in the RGGI region, irrespective of origin, to account for and reduce participating states’ greenhouse gas emissions.”<sup>93</sup> RGGI could further assert that RGGI states would be less successful in lowering their carbon emissions absent imports regulations. Drawing on the concept of “leakage,” RGGI could explain that, absent imports regulations, LSEs would likely turn to purchasing more high-emitting power from out of state, thereby offsetting emissions reductions achieved in the region.

Opponents might try to negate the claimed benefits by making the argument that none of this evidence matters, because state action alone cannot save participating states from the harms of climate change, such that RGGI does not produce a real benefit. RGGI states’ strongest response is that RGGI is their contribution to solving a global problem, adopted partly with the hope and expectation that it will spur additional action elsewhere. *Massachusetts v. EPA* supports the positions that states have a special interest in preventing the harms associated with climate change, even though the problem is a global one, and that even a small contribution to the solution to a global problem is a valid exercise of governmental

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<sup>88</sup> See *Bacchus*, 468 U.S. at 270 (explaining that only once a law passes the discrimination inquiry is it afforded “a more flexible approach permitting inquiry into the balance between local benefits and the burden on interstate commerce.”); see also *Cotto Waxo Co. v. Williams*, 46 F.3d 790, 793 (8th Cir. 1995) (“[I]f the challenged statute regulates evenhandedly, then it burdens interstate commerce indirectly and is subject to a balancing test.”).

<sup>89</sup> See *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 472 (1981).

<sup>90</sup> “Asking the *Pike* question . . . can be a lot like asking whether a blue race-car is clearly faster than it is blue.” *Lebamoff Enterprises, Inc. v. Huskey*, 666 F.3d 455, 468-69 (7th Cir. 2012) (Hamilton, J., concurring); cf. *Davis*, 553 U.S. 328, 355 (2008) (recognizing the unsuitability of the judicial process for answering the many cost-benefit questions raised in dormant Commerce Clause challenges).

<sup>91</sup> See *Pike*, 397 U.S. at 142. It is worth noting that “a majority of the [Supreme] Court has not invalidated a law using *Pike* balancing in over twenty years, though it is not unheard of for lower courts to do so.” Norman R. Williams & Brannon P. Denning, *The ‘New Protectionism’ and the American Common Market*, 85 NOTRE DAME L. REV. 247, 304 (2009).

<sup>92</sup> See *Massachusetts v. EPA*, 549 U.S. 497, 521 (2007); *Amer. Elec. Power Co. v. Connecticut*, 582 F.3d 309, 341 (2d Cir. 2009), *rev’d on other grounds*, 131 S. Ct. 2527, 2535 (2011). Even the *RMFU* district court agreed with California on this point, although it struck down their LCFS regulations on almost every other ground. *RMFU*, 843 F. Supp. 2d at 1093.

<sup>93</sup> A full argument would proceed along familiar lines to explain the many state environmental benefits that would accrue from reducing greenhouse gas emissions.

authority.<sup>94</sup> However, this special state interest has not yet specifically been recognized in the *Pike* balancing context.

Separate from this issue, there have been some questions raised about the amount of evidence RGGI would need in order to demonstrate the necessity of imports regulations. Importantly, *Pike* speaks in terms of “*putative* local benefits,”<sup>95</sup> which courts generally interpret to require only a demonstration that the benefits are not “illusory.”<sup>96</sup> Accordingly, while RGGI would ideally have some basic modeling showing how and why leakage might occur, there should not be a need for data-intensive proof of imports regulations’ particular contribution to ensuring RGGI’s environmental integrity. Similarly, there should not be a need for a state-specific showing of “leakage”—RGGI should be able to argue persuasively that because it is a regional market, “leakage” at any junction would have effects that redounded throughout the market.

These benefits must be weighed against out-of-state burdens. As noted earlier, out-of-state power would face two burdens above and beyond in-region generation<sup>97</sup>: (1) an adjusted residual mix applied to electricity LSEs import into the RGGI region, and (2) a limit on what contracts can achieve “specified” status, in order to prevent resource shuffling.

To carry the day, opponents of imports regulations would bear the burden of proving that these restrictions are “clearly excessive” when compared to the benefits imports regulations would provide. This would be a difficult—though not impossible—argument to win. RGGI has a strong argument for why these two particular burdens are necessary in order to prevent gaming that could otherwise undermine their system.<sup>98</sup> Unless faced with a particularly unsympathetic judge, it seems unlikely that these burdens would be found clearly excessive to RGGI’s benefits as a regional solution to the pressing problem of climate change.<sup>99</sup> Importantly, out-of-state generators would be able to freely continue selling electricity into RGGI, via the wholesale market and bilateral contracts.<sup>100</sup> Moreover, compliance burdens would fall on in-region LSEs, such that out-of-state generators would not have to do anything in order to

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<sup>94</sup> 549 U.S. 497, 522 (2007).

<sup>95</sup> It therefore “matters not whether these benefits actually come into being at the end of the day.” *Pharm. Care Mgmt. Ass’n v. Rowe*, 429 F.3d 294, 313 (1st Cir. 2005); *see also* *National Ass’n of Optometrists & Opticians v. Harris*, 682 F.3d 1144, 1155-56 (9th Cir. 2012) (“*Pike* discusses . . . *putative* local benefits . . . . It does not mention actual benefits as part of the test for determining when a regulation violates the dormant Commerce Clause.” (emphasis in original)).

<sup>96</sup> The Ninth Circuit recently explained that in order for a law’s benefits to be deemed illusory, “the state must fail to make even a colorable showing that the regulations contribute to health and safety, resulting in overwhelmingly one-sided evidence that there are no real benefits to the challenged law.” *Harris*, 682 F.3d at 1156 n.17.

<sup>97</sup> The baseline compliance obligation on LSEs to buy allowances to cover their imports should not factor into the *Pike* analysis, as the “incidental burdens” of the *Pike* inquiry “are the burdens on interstate commerce that exceed the burdens on intrastate commerce.” *New York State Trawlers Ass’n v. Jorling*, 16 F.3d 1303, 1308 (2d Cir.1994) (citing *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 471).

<sup>98</sup> As one element of the *Pike* inquiry, courts ask whether the benefit “could be promoted as well with a lesser impact on interstate activities.” *Id.*, 449 U.S. at 471 (quoting *Pike*, 397 U.S. at 142).

<sup>99</sup> *See, e.g.*, *Pharm. Care Mgmt.*, 429 F.3d at 294 (refusing to accept the argument that a Maine regulation that would drive some pharmaceutical benefit companies to stop doing business in Maine entirely had burdens in excess of its local benefits).

<sup>100</sup> *See* *Clover Leaf Creamery Co.*, 449 U.S. at 472-73 (1981) (rejecting *Pike* challenge because the burden imposed on interstate commerce was relatively minor where milk products could “continue to move freely across the Minnesota border” but dairies would have to change their packaging requirements).

comply with the scheme. But again, the outcome of a *Pike* inquiry can be difficult to predict, and courts have not yet applied a balancing test to state measures to reduce the global problem of climate change.

#### v. *STRICT SCRUTINY*

If a court were to find imports regulations discriminatory, RGGI could attempt to “justify [them] both in terms of the local benefits flowing from the [regulations] and the unavailability of nondiscriminatory alternatives adequate to preserve the local interests at stake.”<sup>101</sup> However, success on these grounds is rare.

The arguments that RGGI might make here about the program’s local benefits and imports regulations’ necessity are quite similar to the ones it would make under *Pike* balancing. Accordingly, we do not spell them out at length here. The analysis would likely turn on whether a court believed there to be *no adequate* nondiscriminatory alternatives. RGGI would argue that its cap-and-trade program would fail to achieve the central goal of capping and then reducing GHG emissions without including imports regulations, and that cap-and-trade is an essential element of its participating states’ CO<sub>2</sub> emissions reductions strategies. Specifically with respect to the differential treatment of imports, RGGI could explain that there is a “reason, apart from their origin,” that imports must be treated differently, given the features of the interstate electricity market.<sup>102</sup> Opponents would argue that there are many ways to achieve CO<sub>2</sub> emissions reductions other than a discriminatory cap-and-trade program, including incentives, taxes, etc. While a court might side with RGGI on this point, the infrequency with which courts uphold discriminatory statutes does not suggest that RGGI would prevail.

RGGI might consider one option to insulate itself from a fatal finding of discrimination or extraterritoriality: it could declare its resource shuffling regulations severable from the remainder of imports regulations. By doing so, it could protect the broad outlines of its imports regulations while allowing a court to strike what it might view as the most problematic aspect of the rules. However, there may be good reasons for not declaring severability, if resource shuffling regulations are critical to the success of the scheme. It might be helpful to conduct further analysis on the extent to which the absence of resource shuffling regulations would undermine the effectiveness of imports regulations.<sup>103</sup>

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<sup>101</sup> Hunt v. Wash. State Apple Advertising Comm'n, 432 U.S. 333, 353 (1977).

<sup>102</sup> In the one case upholding a discriminatory law as constitutional, the Supreme Court approved of Maine’s ban on importation of baitfish because there was a “reason, apart from their origin, to treat them differently.” *Maine v. Taylor*, 477 U.S. 131, 152 (1986).

<sup>103</sup> Such a study was recently done for California, and it concluded that there was “strong vulnerability to leakage” without resource shuffling rules in place. See James Bushnell, Yihsu Chen & Matthew Zaragoza, *Downstream Regulation of CO<sub>2</sub> Emissions in California’s Electricity Sector*, at 26 (UC Energy Institute & Haas School of Business Working Paper No. 236, Jan. 2013).

***b. FEDERAL POWER ACT***

The final legal issue we analyze is preemption by the FPA. The FPA grants the Federal Energy Regulatory Commission (FERC) “exclusive jurisdiction over the rates to be charged . . . interstate wholesale customers.”<sup>104</sup> However, the FPA also specifies that FERC’s jurisdiction “extend[s] only to those matters which are not subject to regulation by the States.”<sup>105</sup>

An FPA preemption challenge would likely assert that imports regulations are impliedly preempted by the FPA, because they add an additional cost to any out-of-state power imported into the RGGI region and thus directly affect wholesale electricity rates.<sup>106</sup> We do not believe this argument would prevail. The FPA’s reservation of some state regulatory authority provides a clear textual indication that the drafters of the FPA did not intend for the statute to preempt all state activity in the field of electricity regulation, even when state regulation might *incidentally* affect wholesale prices.<sup>107</sup> This principle is born out in the innumerable state environmental policies that are permissible but that certainly impact wholesale electricity prices indirectly, including siting rules for generation, air quality standards, etc. And indeed, FERC has made its views on this matter clear: “As a general matter, states have broad powers to direct the planning and resource decisions of utilities under their jurisdiction. States may . . . order utilities to purchase renewable generation . . . [or] seek to encourage renewable or other types of resources through their tax structure or by giving direct subsidies.”<sup>108</sup>

Imports regulations should have no more of an impact on wholesale prices than other permissible state policies. They would not mandate a particular purchase price for certain types of wholesale electricity.<sup>109</sup> Instead, based on state value judgments about the importance of accounting for and reducing the environmental consequences of electricity consumption, imports regulations would require LSEs to acquire allowances to account for emissions from imported electricity. This allowance requirement would, in turn, cause LSEs to change purchasing habits in order to minimize costs. These types of incentives appear analogous to the ones generated by state RPS, which require LSEs to purchase certain percentages of renewables and thereby *indirectly* impact wholesale market choices, but do not directly dictate wholesale market prices. FERC has indicated that it believes RPS-type state policies to be

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<sup>104</sup> See *Nantahala Power and Light Co. v. Thornburg*, 476 U.S. 953, 966 (1986).

<sup>105</sup> 16 U.S.C. § 824d(a) (2012).

<sup>106</sup> Implied preemption results when “compliance with both federal and state regulations is a physical impossibility,” when state law impedes the federal law’s objective, or when “[t]he scheme of federal regulation . . . [is] so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it.”<sup>106</sup> *Hillsborough Cnty., Fla. v. Automated Med. Labs., Inc.*, 471 U.S. 707, 713 (1985) (internal quotations omitted).

<sup>107</sup> See *Hillsborough Cnty., Fla. v. Automated Med. Labs., Inc.*, 471 U.S. 707, 715 (1985).

<sup>108</sup> *S. Cal. Ed. Co.*, 71 F.E.R.C. ¶ 61,269 (1995).

<sup>109</sup> As we noted in a previous white paper, this distinguishes imports regulations from potentially problematic state feed-in tariffs. A feed-in tariff is a policy instrument that guarantees developers of renewable generation a certain price, or a fixed premium above the spot market price. See Steven Ferrey et al., *Fire and Ice: World Renewable Energy and Carbon Control Mechanisms Confront Constitutional Barriers*, 20 DUKE ENVTL. L. & POL’Y F. 125, 169-70 (2010); see also *Cal. Pub. Utils. Comm’n*, 133 FERC ¶ 61,059 (2010). In contrast, imports regulations would not mandate a purchase price for certain types of wholesale electricity, but instead would place a separate obligation on LSEs to purchase emissions allowances to cover emissions associated with their electricity purchases.



permissible.<sup>110</sup> We do not readily see any way to persuasively distinguish imports regulations from RPS and similar policies, such that they might give rise to an FPA preemption claim.

We want to note here that there might be greater FPA legal risk involved if states insert themselves into LSE compliance decision-making. That is to say, states should avoid *mandating* that LSEs choose any particular method of complying with imports obligations, in order to avoid an FPA preemption challenge alleging impermissible wholesale market interference.<sup>111</sup> But given FERC's consistent endorsement of bilateral contracting as consistent with wholesale markets,<sup>112</sup> we see no strong legal claim that RGGI's incentivizing a voluntary shift toward bilateral contracting—should this occur—would be preempted by the FPA.

In sum, we are cautiously optimistic that the imports regulation scheme described in Part II would withstand legal challenge under the DCC and under an FPA preemption challenge. Of course, however, the cutting-edge nature of imports regulations makes them difficult to analogize to existing DCC precedent in ways that provide any guarantees. A Ninth Circuit decision in *RMFU* that reinstates California's LCFS would make us more confident in our DCC conclusions.

## CONCLUSION

Based on our analysis, we believe there is a workable and legal pathway forward for regulating the emissions associated with imports into the RGGI region through assigning compliance obligations to RGGI LSEs. This pathway is not without its practical complications, as it would require changes in relevant state laws and new levels of cooperation among states, LSEs, and their RTOs/ISOs. But with appropriate commitments from the involved parties, it can be done, if RGGI states decide that it is the right design option to pursue. And although a legal challenge is likely, we think there is a good chance it would not be successful, for the reasons explained above. We hope this analysis helps RGGI in its effort to move forward in considering ways in which it might permissibly regulate imports.

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<sup>110</sup> See *id.* (explaining that states may order utilities to purchase renewable generation); cf. *American Ref-Fuel Co.*, 105 FERC ¶ 61,004 (2003), *appeal dismissed*, *Xcel Energy Servs., Inc. v. FERC*, 407 F.3d 1242 (D.C. Cir. 2005) (finding that RECs do not automatically pass to utility purchasers under PURPA because they are a separate, state-created attribute designed to reward renewable generators for the environmental benefits of their projects).

<sup>111</sup> See, e.g., *Entergy Nuclear Vermont Yankee, LLC v. Shumlin*, Docket Nos. 12-707, 12-791, Slip Op. at \*54 (2d Cir. Aug. 14, 2013) (dismissing as not yet ripe a claim that Vermont impermissibly conditioned Vermont Yankee's operation of a nuclear plant on the existence of a below-market power purchase agreement with Vermont utilities). Cf. *PPL Energyplus, LLC v. Nazarian*, No. 12-cv-01286 (D. Md., complaint filed Apr. 27, 2012) (alleging that Maryland impermissibly infringed on FERC's exclusive authority over wholesale market rates by requiring Maryland LSEs to enter into contracts with certain generators that guaranteed them fixed prices for their wholesale energy and capacity).

<sup>112</sup> See *supra* note 37 and accompanying text. See also *San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Servs.*, 93 FERC ¶ 61,294, at 61,993 (2000) (responding to the California deregulation crisis by encouraging California utilities to expand their long-term bilateral contracting in place of spot market purchases in order to mitigate their exposure, and endorsing the use of spot markets to "shape a portfolio, not to define it").