Appendix A:
Legal Issues Associated With Location Requirements

I. In-State and In-Region Requirements

In-state requirements serving as a condition of eligibility can fall into four main categories: (a) a requirement that the renewable generator be *located* in the state or region[89]; (b) a requirement that the renewable generator, wherever located, *produce benefits* for the state; (c) a requirement that in-state customers *physically consume* the renewable energy; and (d) a requirement that the renewable energy be *sold to consumers* in the state. We will discuss each in turn.

A. Excluding Out-of-State Generation

1. In General

Some states have limited renewable resource eligibility to production from generation facilities located within the state. Absent a significant change in Supreme Court application of the Commerce Clause of the U.S. Constitution, the restriction to in-state generation will, if challenged, be found unconstitutional. The courts have continually found that facial discrimination by a state against out-of-state resources is "virtually *per se* invalid." *Philadelphia v. New Jersey*, 437 U.S. 617, 624 (invalidating New Jersey's ban on imports of out-of-state garbage). The exclusion of out-of-state generation is sufficiently similar to court precedents to expect invalidation here.[90]

Nor does the proposal's constitutionality improve upon expanding the in-state generation requirement to an in-region requirement: say, a Vermont law that restricts RPS eligibility to generators located in New England. The state law still would discriminate, facially, against other states. A state law that makes eligible generation located in a list of six states still discriminates against the remaining 44 states. The Court's "virtually per se invalid" test still will apply.

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[89] As discussed below, an in-region location requirement raises the same legal issues as an in-state location requirement.

[90] One legal writer, acknowledging that current Commerce Clause analysis would likely prohibit an in-state generation requirement, has argued that courts should adjust the analysis to take into account the externality, or free-rider problem, thereby upholding state requirements that limit RPS credits to in-state generation where the stimulation of a trading market increases efficiency. (Engel, 1999, at 322-49)

2. The Texas Approach

One variation on the restriction to generators that locate in the state appears in Texas' RPS regulations. There, an out-of-state generator is eligible for credits if its production is transmitted into the state on a dedicated line and metered in Texas.[91] This proposal takes an analytical approach similar to the Maine statute, in that the eligibility is limited to generators that deliver their power to a location relatively near consumers, ensuring that the renewable generation displaces non-renewable generation that otherwise would have operated to serve these consumers. The Texas approach is thus best viewed as a *means of achieving* the goal of restricting RPS benefits to generators that will provide benefits to Texas by requiring, indirectly, that they be located in or near Texas. As the Texas Commission explained:

> The intent of this requirement is to ensure that all [tradable credits] participating in the trading program represent actual megawatt-hours of renewable energy for consumption by Texas retail customers. Renewable facilities that deliver electricity into a transmission system where it is commingled with electricity from non-renewable resources could not be verified as delivered to Texas customers. (Texas Substantive Rule, 1999)

The Texas statute presents some constitutional risk, but the matter is not clear. One might argue that the benefits to Texas of an out-of-state generator flow from its proximity to the state, not from its interconnectedness to the state. Two identical renewable generators located in the same Oklahoma city could provide the same benefits to Texas (e.g., in terms of displacement and diversity). If one of them invested in an interconnection with Texas and the other didn't, the former would not necessarily provide more benefits to Texas, yet would have to pay the extra interconnection cost. (The interconnection might result in more benefits, but the benefits would depend on how the interconnection altered the configuration of generators actually operating.)

Also consider two generators located very close to one another, one inside the Texas border and the other located just over the border. If the two generators are nearly in the same location, the one outside Texas would not necessarily provide fewer benefits to Texas than a renewable generator located just inside the Texas border; yet the non-Texas generator would have to bear the cost of building a special dedicated interconnection to allow for direct, in-Texas metering of its output. The non-Texas generator would have to bear a cost not imposed on the in-Texas generator, *not because it produces fewer benefits because it was located outside the state.* A court could view this treatment

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[91] Section 25,173(c)(11)(e)(4) of the Texas rules states that to be eligible for credits, the facility's output "must be readily capable of being physically metered and verified in Texas by the program administrator. Energy from a renewable facility that is delivered into a transmission system where it is commingled with electricity from non-renewable resources can not be verified as delivered to Texas customers."

as discrimination without a substantial basis. No challenge has been made to the Texas approach, however.

B. Restricting Eligibility to Generation, Wherever Located, Which Produces Benefits for the State

An alternative approach would be to condition RPS eligibility to generators not based on their location but on whether they provide benefits to the state. The contributions would include one or more of the features of renewable energy noted above, depending on what the state's goals are. Thus, for example,

- that the generator's output displaces output from generation contributing to pollution problems affecting the enacting state;

- that the generator's market presence improves the resource diversity in the market which serves the enacting state, and thereby contributes to the stabilization of prices within the state; and/or

- that the generator will contribute to the advancement of renewable technologies.

Under this approach, the generator would qualify for benefits regardless of where it is located or to whom it sells its power, because its benefits to the region and the enacting state flow from what it displaces or contributes, not from its physical location or the contractual path its output takes. This approach also avoids the need for contract-path verification (unlike in-state consumption or in-state sales requirements, discussed below).

These restrictions would be legitimate efforts by a state to gain benefits in return for the RPS costs it incurs. While location would be a factor in determining benefits to the state, it would not be the determining factor. Although such a policy clearly will exclude distant generators, the exclusion will occur not because those generators are located in another state, but because their physical circumstances preclude benefits to the state. This feature avoids the facial discrimination attack which makes explicit location requirements vulnerable.

One example of an effort to solve this problem is the Maine statute, which restricts RPS eligibility to entities which "generate power that can physically be delivered to ... the New England Power Pool." Me. Rev. Stat. Ann. tit. 35, sec. 3210 (West 1998). This approach prevents the California-Maine problem, where there is no possibility of benefit to the enacting state. The premise here is that, if the generator is able to deliver to the New England Power Pool, it is likely to be in a location where its displacement and diversity benefits can accrue to Maine.

A state enacting such a concept should take care to make the test fact-based. A provision saying that "all RPS generation must be located within the enacting state or an adjacent state" is vulnerable, even if "adjacent states" seems like a reasonable proxy for "locations that will provide benefits to our state," because it facially discriminates and offers no hope for anyone in any other state to offer proof. It is legally safer to engage in a case-by-case analysis, although fact-based safe harbors (arrived at by a commission, based on an evidentiary record rather than legislated rigidly) might be possible.[92]

The notion of restricting RPS eligibility to generators that can show benefits to the state is likely to satisfy constitutional scrutiny for at least two reasons. First, it does not discriminate against out-of-state generators: any generator, whether in-state or out-of-state, can qualify if it can demonstrate that it provides benefits to in-state consumers. Second, the proposal does not harm out-of-state consumers; it simply makes the enacting state, and the surrounding region that is associated with providing benefits to the state, a more attractive market for renewable energy generation in the same way as would a tax break offered to those who sell to or locate within the state. (See Engel, 1999, at 276-78). (Although the legal problems may diminish, there still could be, from the enacting state's point of view, some mismatch of costs and benefits since the enacting state pays higher power prices while the state hosting the generator realizes job and tax benefits.)

C. In-State Consumption Requirements

Some have suggested that a proxy for providing in-state benefits is in-state consumption. That is, if a generator can show that power physically is flowing from the generator to consumers within the state, the state receives benefits. We offer a few thoughts on this approach.

First, there is not a direct relationship between location of consumption and location of benefit. Unless a state is a market unto itself, the benefits of displacement and diversity are likely to be regional. Therefore, a requirement of in-state consumption does not garner more benefits for the enacting state than the approach described in the preceding subsection, i.e., conditioning RPS eligibility on a showing of some state benefit.

Second, it is technically complex to trace electrons from a generator to a destination; flows can change every hour due to temperature, wind, outages of other generators, changes in demand, and other factors. Even if the generator could show that power flowed into the state, that does not mean that the power would remain and be consumed in the state. Each state, other than Texas, Hawaii, and Alaska, is interconnected with its neighboring states through alternating current ties. As a result, power flowing into the RPS state can readily flow out of the state. Even if there is a requirement of a dedicated line from the generator to the in-state grid, the problem would remain because once the

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[92] For more discussion on safe harbors, see the following subsection.

power enters the state it could leave the state and be consumed elsewhere. (Texas, which has a dedicated line requirement, largely escapes this problem because its interconnections to neighboring states are limited largely to direct current ties. On direct current ties, as distinct from alternating current ties, power flows only when manually directed to. There is, in effect, a mechanical override of the physical laws that normally rule the flow on a conventional interconnected system.)

A statute that restricts RPS eligibility to generators whose output is physically consumed in the state raises constitutional questions, although not as stark as the in-state location requirement. The enacting state's legal argument would be that the in-state consumption requirement, while *discriminatory against generators whose output does not physically flow into the state*, is reasonably discriminatory because it is a proxy for benefits to the state. Because the benefits of renewables are (except in rare cases) not easily confined to a single state, however, the in-state consumption requirement is not a good proxy for benefits. A court therefore could reject the proxy argument and find the statute unnecessarily and unreasonably *discriminates*, particularly where less discriminatory alternatives (such as the requirement of showing regional benefits having a reasonable likelihood to benefit the state, described in the preceding section) are available.

If an in-state consumption requirement is constitutional, and a state wishes to apply the requirement rather than the more efficacious benefits test, the question then arises how an out-of-state generator can show that its output was consumed within the state. As discussed above, this showing is a challenge because, unless a generator is directly connected with the in-state consumer (a very rare circumstances), it is not automatically true that its output will be consumed inside the state.

This challenge is not insurmountable, but it is difficult. The general principle would be to allow the generator to meet the in-state consumption requirement if it can demonstrate a contract path to consumers in the state and a reasonable likelihood that a substantial portion of the output actually flowed into and was consumed within the state. This approach would require showing that the contract paths reasonably resemble physical paths. The generator could make the showing in a variety of ways, such as:

- estimating the power flows from the plant for the specific transactions at issue, showing that a substantial part of the output will flow into and be consumed within the RPS state;
- demonstrating that the contract path falls within a region whose historical pattern of flows indicates that power generated by the plant normally flows into or near the RPS state; and/or
- showing that the generator is connected to specified backbone transmission facilities which, based on historical patterns, carry power to the RPS state.

To simplify the administrative process, a state commission could make some or all of these factors safe harbors, i.e., if the generation satisfied one of these factors it would be entitled automatically to eligibility under the contract-path approach. It is important, however, to allow those who do not meet a safe harbor to seek to make the showing. Making the safe harbors the exclusive means of compliance could lead to court challenge arguing that the safe harbors constituted a ruse to discriminate against out-of-state generators.

Because the closeness of the fit between contract path and physical path will vary with facts, it is best to place the general principle in legislation, and require the state commission to apply the principle on a case-by-case basis. Specifying in legislation a qualifying geographic area (e.g., "any renewable generator located within a 100 mile radius of the state may qualify") comes uncomfortably close to establishing an exclusive, impermeable boundary that courts will view as discrimination. Requiring instead that a generator must demonstrate a reasonable likelihood that its output is consumed within the enacting state allows the state commission to apply flexible, practical tests. Provided the state commission bases its decisions on facts applied evenhandedly, courts will have a basis for deferring to the state.

Finally, it is best if the obligation to make this showing falls on every generator, not only on out-of-state generators. Even an in-state generator cannot assume without inquiry that its output is consumed within the state (unless that generator is located in Texas, Hawaii or Alaska, i.e., states not interconnected with other states through alternating current ties). To impose the factual showing obligation on out-of-state generators only therefore could be seen by a court as discriminatory.

In-state consumption requirements based on contract paths, even with simplifying safe harbors, however, present all of the practical difficulties associated with contract-path verification, discussed in Chapter Six, part II, in addition to presenting potential Constitutional problems. Moreover, though an RPS could still, in theory, be based on a system of tradable credits under this approach -- the credits would be awarded after the generator shows that its output was contractually tied to in-state consumers and is reasonably likely to resemble a physical path -- the need to document contract paths eliminates one of the significant benefits of a tradable credit system: that tradable credits do not require the physical or contractual delivery of power to particular consumers.

D. In-State Sales Requirements

Another approach for linking renewable generation to the state enacting the RPS is to require a contract path between the generator and in-state consumers, an approach sometimes called an "in-state sales requirement." While this approach carries a smaller constitutional risk, it fails to assure that the state will receive benefits.

An in-state sales requirement would not contain a facially discriminatory provision and therefore avoids the potential Commerce Clause problems associated with an in-state location requirement or an in-state consumption requirement. It is not facially discriminatory because any generator, regardless of its location, that can establish a contract-path to the enacting state would be eligible.

Although the statute might appear to discriminate against out-of-state consumers in that only in-state customers can purchase the power, its constitutionality is unaffected. Nothing about the enacting state's law prevents other states from obtaining the same benefits for their own consumers. In the context of consumer treatment, the Court "prohibits states only from forcing out-of-state consumers to 'surrender whatever *competitive advantages* they may possess' over in-state consumers." [Engel, 1999, at 277-78 (quoting *Brown-Forman Distillers Corp. v. New York State Liquor Auth.*, 476 U.S. 573, 580 (1986) (emphasis added).]

Despite its constitutional soundness, the in-state sales approach fails to ensure benefits for the enacting state, as does the approach of conditioning RPS eligibility upon a showing of benefits to the state. The in-state sales requirement has no inherent connection to in-state benefits because it is possible to create contract paths from very distant generators that provide few if any benefits to the in-state purchasing consumer.

In addition, as discussed in Chapter Six, part II, it is not possible to trace the contract path between all generators and the load that those generators serve contractually since not all generation is sold pursuant to bilateral contracts involving specific generators. Finally, as with the in-state consumption requirement, the need to document contract paths would eliminate one of the significant benefits of a tradable credit system: that tradable credits do not require the physical or contractual delivery of power to particular consumers.

II. U.S. Domestic Content Requirement

Given significant renewable resource opportunities in Canada and Mexico, a border state might consider excluding or limiting those resources in order to increase the chance that the resources developed for its RPS will produce benefits that will accrue to the state. Vast Canadian hydroelectric resources present a special case of this issue for any state wishing to use an RPS program to support or expand the hydroelectric resources currently in its resource mix.

The same *per se* prohibition on a state requiring in-state generation sources applies to a restriction against foreign resources. Under the Commerce Clause, a state may not discriminate against out-of-state resources, whether those resources reside in another state or in another country.

Because of this Commerce Clause prohibition, it is not necessary to consider similar obstacles that would face a ban on extra-territorial resources that might exist under international trade agreements and international law. However, a domestic-content requirement also could be subject to challenge under international trade agreements. In particular, Canada or Mexico could file a challenge to a state's domestic requirement with the international tribunal established to arbitrate compliance with the North American Free Trade Agreement (NAFTA). Such a challenge might contend that the requirement is an illegal barrier to trade in renewable generation. The likelihood that such a challenge would be successful is beyond the scope of this report.

On much stronger constitutional footing would be a restriction against a source rather than against an origin. Excluding hydroelectricity is different from excluding Canadian power. That hydroelectric power is a more significant resource in Canada than in the enacting state does not change this analysis. Assuming that hydroelectricity is physically feasible within the enacting state, the restriction would fall on both in-state and out-of-state resources, and therefore it would not discriminate on geographic grounds. If hydroelectricity was not feasible within the state, however, a court might view the prohibition as geographic discrimination in disguise, and invalidate on that basis.

III. Reciprocity Requirement

Some have suggested that a state exclude from eligibility renewable resources that (a) are located in states that have not opened their markets to retail competition, or (b) are owned by or under contract to a utility whose retail service territory is not subject to competition. The first limitation will likely fail constitutional review because it discriminates based on state boundaries. The second is likely to pass because it does not so discriminate.

The desire of a retail competition state for "reciprocity" from other states does not change the discriminatory nature of a law that discriminates on the basis of state boundaries. In *Great Atlantic & Pacific Tea Co., Inc. v. Cottrell*, 424 U.S. 366 (1976), the Court invalidated Mississippi legislation stating that milk from another state could not be sold in Mississippi unless the other state accepted milk from Mississippi on a reciprocal basis. The Court reasoned that a state may not condition its conformance with the free flow of goods under the Commerce Clause on the other state's conformance with the Commerce Clause. See also *Sporhase v. Nebraska*, 458 U.S. 941 (1986) (reaching the same conclusion in a water exportation scenario).

The same constitutional infirmity would not exist if the state aimed its reciprocity goal not at other states, but at certain service territories within the enacting state. In some states, retail competition legislation authorizes municipal and rural cooperative systems to "opt out" of retail competition. A state might wish to make ineligible for RPS compliance those resources that are owned by, or under contract to, such in-state entities where the entities have not opted for retail competition. Because all the

affected territories are within the enacting state, no Commerce Clause issue arises. (Advocates of this approach should consult their state constitutions, particularly the equal protection clauses therein.)

A closer question is whether the state could condition eligibility on the generator being located in territories that have retail competition, whether such territories are inside or outside the state.. If the enacting state has territories that lack competition (such as municipal or cooperative areas), the risk that such a requirement would be seen as a simple exclusion of power from other states would be reduced. The requirement of competition in the generator's location would be independent of the state in which the generator is located.

Likewise, if the RPS excludes all generators that are owned by a utility whose retail service territory is not subject to competition -- particularly where the restriction would also include some in-state facilities -- then the risk of invalidation would be reduced. For policy and practical reasons, however, excluding resources on this basis is unwise. First, the status of retail competition in the utility's territory may have no bearing on whether the facility continues to produce power.

Second, unless the exclusion is applied to all affiliates of such utilities (which could significantly narrow the pool of eligible renewable energy projects and project investors), then the resource could simply be transferred to an affiliate of the regulated utility.

Third, the exclusion imputes a culpability to the owner that may have no basis. In short, retail competition is a gross proxy that raises unsolvable practical issues. A better test would be a facility-by-facility review of such facilities, or the exclusion of certain types of facilities that are generally economic and which may, in the process, exclude many utility-owned resources.