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LANDMARK ENERGY AND CLIMATE LEGISLATION: A PERSPECTIVE ON KEY PROVISIONS AND WHAT'S NEXT

On June 26, 2009, the United States House of Representatives passed, by a narrow margin of 219-212, H.R. 2454, the American Clean Energy & Security Act of 2009 ("ACESA"). ACESA is landmark legislation aimed at transforming the energy infrastructure of the United States (by establishing a federal renewable electricity standard and creating important incentives for energy conservation and efficiency) and imposing, for the first time, a cap on economy-wide greenhouse gas ("GHG") emissions combined with a mechanism for GHG emissions trading. Previously, the Senate Energy & Natural Resources Committee on June 17, 2009 passed an energy bill, S. 1462, the American Clean Energy Leadership Act ("ACELA"), addressing a number of important issues -- but not climate change.

The House legislation is a huge step forward, even with what some view to be many flaws, in the challenge of climate change. Congressional passage of climate change legislation will have a major impact on U.S. industries and society. Any energy and climate legislation that passes the Senate -- either this year or next-- will be imperfect and need to address, in some fashion, the outcome of the UN climate change conference in Copenhagen in December.

Our purpose is not to provide a comprehensive summary of the bills.[1] The aim, instead, is to offer some perspective and observations on the most innovative aspects of ACESA and to highlight issues that we think will be of particular interest as companion legislation is crafted by the relevant committees of the U.S. Senate and as energy and cap-and-trade legislation continues to make its way through Congress.

A. RENEWABLE ELECTRICITY STANDARD

ACESA establishes a renewable electricity standard ("RES") for certain retail suppliers and the federal government. The RES provisions are similar in certain respects to those in legislation reported from the Senate Committee on Energy & Natural Resources. Under ACESA, retail electric suppliers that sell at least four million megawatt-hours ("mwh") of electric energy to consumers each year must meet escalating combined renewable energy and efficiency targets (6% by 2012, 9.5% by 2014, 13% by 2016, 16.5% by 2018, and 20% from 2020 to 2039). The federal government must meet the same targets for its renewable electricity consumption by purchasing renewable electricity.

[1] Helpful summaries of ACESA have been produced by, among others, the House Committee on Energy & Commerce (available at http://energycommerce.house.gov/index.php?option=com_content&view=article&id=1633&catid=155&Itemid=55) and by the Pew Center on Global Climate Change (available at http://www.pewclimate.org/docUploads/ACES-Act-detailed-summary-06-26-09.pdf). A summary of the major provisions in ACELA has been produced by the Senate Committee & Natural Resources (available at http://energy.senate.gov/public/_files/ACELAReport.pdf). These are detailed and useful but not necessarily authoritative and they should be checked for omissions or misstatements against the final text as approved by the House or the Senate Committee.

1. Renewable Energy Credits

In most cases, renewable energy credits ("RECs") must account for three-quarters of a retail supplier's combined target. Suppliers can obtain one REC for each mwh of energy generated from renewable resources. Renewable energy resources include wind, solar, geothermal, marine or hydrokinetic, renewable biomass, biogas derived exclusively from renewable biomass, biofuels derived exclusively from renewable biomass, or qualified hydropower. Suppliers can also obtain three RECs for each mwh of renewable electricity obtained from distributed generation. Once obtained, RECs can be traded or banked. Each REC is retired once it is submitted for proof of compliance.

2. Electricity Savings

The remainder of a retail supplier's combined target may be satisfied with proof of electricity savings. Electricity savings are defined as reductions in electric consumption, relative to business-as-usual projections, involving customer facility savings (i.e. reductions in end-use consumption), combined heat and power ("cogeneration") savings, fuel cell savings, or reductions in distribution system losses of electricity. Although electricity savings generally comprise up to 25% of a retail supplier's combined target, a state may petition the Federal Energy Regulatory Commission ("FERC") to increase this portion up to 40% for retailers in the state. Third-parties must verify the savings. Bilateral sales of savings are permitted, but a retail electric supplier can only buy savings that are achieved in the state where it provides service.

3. Alternative Compliance and Penalties

Rather than relying on RECs or electricity savings to meet the combined target, suppliers can satisfy some or all of their target with an alternative compliance payment of $25 per mwh (to be adjusted for inflation each year). However, if a supplier fails to reach the combined target, it must pay FERC a civil penalty equal to the shortfall multiplied by double the value of the alternative compliance payment.

4. Role of States

ACESA explicitly leaves state authority over renewable energy incentives intact. In addition, it allows states with preexisting renewable electricity standards that utilize central procurement, such as Illinois and New York, to administer the federal RES. The bill also allows any state to ask FERC to delegate authority to that state to review and verify electricity savings. As part of a state's application, it may propose alternative measurement and verification procedures.

B. Transmission

The three key issues in the Congressional transmission infrastructure debate are siting, planning and cost allocation.

Under current law, siting is generally handled at the state level. ACESA provides for federal backstop siting authority in the Western Interconnection and limits the type of generation that can be served by lines sited pursuant to this authority to those needed to access renewable energy. Further, although ACESA preserves FERC's existing backstop siting authority in National Interest Electric Transmission Corridors in the Eastern Interconnection, it limits this authority to interstate lines and intrastate segments that are integral to interstate lines. In sharp contrast, the Senate bill provides more broadly for federal backstop authority to site certain facilities in both the Eastern and Western

Interconnections, and provides a standard for cost allocation by FERC ("measurable economic and reliability benefits"). Unlike the Senate bill, ACESA does not address the thorny issue of cost allocation.

ACESA does, however, expand the scope of the loan guarantee programs available under Sections 1703 and 1705 of the Energy Policy Act of 2005 ("EPAct 2005") to transmission projects and authorizes a single grant for the first transmission property to qualify for a guarantee under Section 1705. The grant can cover up to 50% of project development and construction, and is capped at $100 million. Finally, ACESA orders retail electric suppliers to offer interconnection and net metering to federal government agencies.

C. ACESA's Cap-and-Trade Program

1. Overview

ACESA sets an overall cap for GHG emissions by "covered entities", beginning with the year 2012. In 2012, covered entities account for approximately two thirds of total U.S. GHG emissions. In 2014, coverage expands to add certain energy-intensive industrial sectors, and in 2016 it adds also natural gas distribution companies, thus accounting for approximately 84.5% of total U.S. GHG emissions. The cap for 2012 is set at approximately 97% of 2005 GHG emissions; by 2020 it is set at approximately 83% of 2005 GHG emissions and it then continues to reduce incrementally to reach 17% of 2005 GHG emissions for covered sectors by 2050: an 83% reduction in absolute terms (i.e., not adjusted for growth in the economy) as compared with GHG emissions in 2005.

To implement the cap, ACESA creates a limited supply of "emission allowances". Each covered entity must surrender, at the end of each year, a number of emission allowances (or other permitted instruments, such as international or domestic offset credits) corresponding to the GHG emissions that are attributable to it under the statute. These may not be the same as the GHG emissions for which it is directly responsible: For example, importers or producers of petroleum-based fuels will be required to surrender allowances corresponding not only to their own direct emissions but also to the GHG emissions that will be produced when the fuels that are imported or produced are actually used in vehicles.

ACESA creates reporting as well as compliance duties, and the former are not in fact limited to "covered entities". All "reporting entities" will have an obligation to inventory and report their GHG emissions, and ACESA imposes certain standards on what continuous monitoring or other technologies must be used to this purpose. Reporting entities would include, for example, any entity that would have been a "covered entity" but which emits 10,000 tons of CO2e (instead of 25,000 tons which is the threshold for a covered entity), or a motor vehicle fleet with emissions of more than 25,000 tons of CO2e on an annual basis (if so designated by the EPA).

One of the most contentious issues in the design and eventual passage of the legislation related to whether these allowances would be given freely out to emitters or auctioned by the government. This led to an elaborate compromise, whereby a considerable portion of the allowances will indeed be allocated freely to certain covered entities, in order to defer the cost impacts of the GHG reduction program. Other allowances will be given out freely to state [and local] governments and to a variety of other recipients, not to account for their respective emissions but to provide indirect funding to key policy areas. The most significant allocation is to electricity, natural gas and low income consumers, but significant allocations are also made to carbon capture and storage technology, to fund programs that will promote energy efficiency and to contribute to the further build-out of

renewable energy.

Other cost containment and flexibility provisions in ACESA include: (1) the creation of a "strategic reserve", consisting of allowances borrowed from future periods, to be auctioned at a minimum reserve price to increase the availability of allowances in the early years of the program; (2) unlimited banking and limited borrowing of emission allowances to and from future compliance periods; (3) a two-year compliance period (entities may borrow, without interest, emission allowances from the year immediately following the current compliance period year which in effect extends the compliance period for each entity); (4) the possibility of trading allowances and of importing "international allowances" for compliance purposes into the U.S.; and (4) offsets.

2. Offsets Provisions

ACESA provides for the use by covered entities of "offset" credits to demonstrate compliance with their emission caps. Each offset credit represents a reduction in GHG emissions that is not already mandated by the legislation, or the voluntary sequestration (e.g., through agricultural or forestry projects or activities) or destruction of an equivalent amount of GHG, and is meant to provide a lower-cost alternative to the acquisition or use of an emission allowance for each ton of CO2e emitted by a covered entity.

ACESA allows for the use of up to 2 billion tons of offsets annually, divided between domestic offsets (1 billion tons) and international offsets (1 billion tons). For each covered entity, no more than half of the allowable percentage of offsets may be used by holding either domestic or international offsets. The EPA retains discretion to increase the number of international offsets by up to 1.5 billion tons if domestic supplies prove to be limited (subject to the 2 billion ton cap). ACESA specifies a "discount" for the use of international offsets, from calendar year 2018 onwards, in comparison to emission allowances or domestic offsets of 1:1.25 (in other words, a covered entity must hold 5 international offsets for every 4 emissions allowances to satisfy its compliance obligations).

ACESA can be seen as placing a major legislative "bet" on the availability and impact of offsets as a cost-containment device. EPA's own analysis of the likely cost of implementation of ACESA highlights this: "Without international offsets, the allowance price would increase 89 percent relative to the core policy scenario". Nevertheless, ACESA places the bulk of this "bet" on categories of offsets that are still quite new — and in respect of which there is still much to learn as it pertains to their design and actual implementation:

Preference for Sector-Based Crediting and REDD. On the international front, the focus of ACESA is on sector-based offset credits and offset credits awarded for reduced emissions from deforestation; while there is still potentially a role for them, the emphasis is distinctly away from category of international offsets that is most familiar to the carbon markets - namely, certified emission reductions or CER's issued pursuant to the Clean Development Mechanism of the Kyoto Protocol ("CDM").

Agriculture and Forestry. Domestically, a very significant focus will also be on agriculture and forestry projects. An important political compromise, reached in negotiations among the senior leadership of the Committee on Energy and Commerce (Chairman Henry Waxman) and the Committee on Agriculture (Chairman Collin Peterson), assigned to the Department of Agriculture - as opposed to the Environmental Protection Agency (EPA) - primary jurisdiction over the qualification of these projects and the issuance of offset credits. Outside of agriculture and forestry, ACESA does not designate specific categories of eligible offsets, but rather creates an Offset Integrity Advisory Board which will

determine the eligibility of offset project types. Once approved, these offset project types will be eligible to generate offset credits which may be used for compliance as a substitute for emission allowances. The list of project types which may be eligible for offset creation will be revised periodically by EPA.

3. Sector-based credits

The preference for "sector-based" crediting is aimed to achieve a number of goals: First, to link the award of international offset credits to an actual change in the overall emissions trajectory or development pathway of the relevant country (as opposed to crediting piecemeal improvements when overall emission trends continue to point upward); second, by requiring that the baseline be set below "business as usual", to create incentives for incremental reductions that are in effectively contributed by the developing countries themselves; and third, to address key competitiveness and trade concerns that are not addressed by the traditional CDM project-level methodologies.

Instead of crediting reductions in emissions achieved by project-level activities, the idea to credit reductions based on the performance of an entire industrial sector in a given country. Reductions achieved in any one installation or project within a sector will be credited only if and to the extent that sectoral performance reflects an improvement against a baseline or achieves a target set for the sector as a whole. Sectors eligible for crediting might include cement, power generation, and transport, among others. The performance of the sector would be measured against a sectoral baseline that is already better than BAU.

An important revision to ACESA, made just before the bill went to the House floor, requires that reductions be credited only relative to a "domestically enforceable baseline of absolute emissions" (as opposed, for example, to the possible use of "carbon intensity" targets). If this language is retained, it may present some difficulties in the eventual negotiation of baselines between developing countries that are major emitters and the United States (which is what is contemplated by ACESA as a condition of crediting).

It is also not clear how the risks of non-performance or non-delivery will be addressed in the context of individual investors' commitment of funds to activities that will contribute to the achievement of these sectoral targets. The challenge, from an investor's perspective is that sectoral crediting can be done in one of two ways: either (i) the host country is awarded the international offset credits (on a performance basis, presumably) and then allocates them to activities that are deemed to have contributed to reaching the sectoral target: or (ii) the participants in those activities can directly obtain the offset credits, but only if and to the extent that the sectoral targets have indeed been reached. In either case, the obvious risk is that an individual participant will perform precisely as intended — but that the sectoral target will not have been reached because other entities within the sector have under-performed. This risk could very well discourage private capital, be it foreign or domestic, from ever going into the relevant activities.

4. Funding and Credit for Forestry Activities

The GHG Program makes provision for the use of emission allowances to fund international projects to reduce deforestation in developing countries and allocates 5% of allowances to support this effort in the period 2012-2025. The GHG Program sets benchmarks for the use of the proceeds of these allowances to achieve supplemental reductions of at least 720 million tons of CO2e in 2020 and 6 billion tons cumulatively by 2025 and to improve capacity within these countries to prevent deforestation. In order for this funding to be available, it is necessary that EPA (in consultation with the Administrator of US AID) be

satisfied that the developing country: (1) has standing forest stocks that may be at risk of deforestation or degradation; and (2) has entered into a bilateral or multilateral agreement with the US establishing conditions for the standards to be applied with respect to the forest activities (including addressing such standards as establishing a national deforestation baseline).

The GHG Program also provides for the crediting of greenhouse gas emissions reductions through international forestry activities. However, in order to be eligible to create such offsets, the forestry activities must: (1) occur in an eligible developing country; (2) take place in a developing country which has in place a national deforestation baseline against which national deforestation emissions may be measured (which baseline would result in zero net deforestation by no later than 20 years after the baseline has been established); (3) be in accordance with environmentally sustainable forest management practices (with due consideration for certain ecosystem benefits and with the active participation and consent of forest-dependent communities and indigenous peoples); (4) take place in a developing country with the technical and institutional capacity to assess ground-based inventories and the capacity to monitor and measure forest carbon sequestration. These provisions also provide for sub-national (state) or provincial activities, as opposed to national or country level activity, which may be eligible to generate offsets provided the relevant jurisdiction has also established a baseline. Project level activities may also receive offset credits, however, issuance to these projects is constrained by a requirement that the developing country in which the activity will take place: (1) accounts for less than 1 percent of global GHG emissions, and; (2) accounts for less than 3 percent of global forest-sector and land use change GHG emissions. Both sub-national and project level activities are only eligible for the issuance of offset credits for the first 5 years of the GHG Program.

5. Agricultural Offsets -- "The Peterson Amendment"

The provisions with respect to the regulation of offsets, in particular, were the subject of intense negotiations including a significant "11th hour" amendment proposed by the Agriculture Committee Chairman Collin Peterson, which sought to claim jurisdiction over agriculture and forestry offsets for the Department of Agriculture. Prior to the proposed Peterson amendment, these offsets would have been regulated by the EPA. Under the amended ACESA, "Title V - Agricultural and Forestry Related Offsets", the Secretary of Agriculture has jurisdiction with respect to a discrete category of domestic agricultural and forestry practices that are deemed eligible by the Secretary for the generation of offsets.

Unlike the provisions with respect to offsets generally, the Peterson Amendment designates an initial list of eligible domestic agricultural and forestry practices. The Secretary can add to the list of eligible offset practices, but the statutory language could be read to bar him from withdrawing any of the listed practices from crediting even if subsequent scientific findings shed doubt on their effectiveness. Moreover, the credentialing and role of the Advisory Committee for forest and agricultural offsets is much weaker than the corresponding requirements for the Offset Integrity Advisory Board that advises EPA on the offset program that that agency oversees. One particular issue likely to receive attention is the "early action" provision in the Peterson Amendment allowing activities going back to 2001 to be included if they are participating in a recognized voluntary offset program that has met standards for transparency and public input, or "other programs." This language may portend some potential uncertainty about the categories and quality of early action offsets that will be allowed.

One of the key issues when addressing forest carbon offset crediting is the issue of reversals (where the carbon sequestered in the forest carbon or biomass is released,

removing the basis for the crediting of the offset for such activity). Importantly, the provisions with respect to domestic agricultural and forestry practices provide for the reversal of carbon sequestration through "term offset credits". Subtitle F permits the Secretary of Agriculture to address reversals, in lieu of permanently accounting for reversals, by accounting for reversals only within the "crediting period" (being the time period within which the offset project is eligible to receive offset credits for the carbon sequestration activity) and issuing term offset credits for the relevant project. Term offset credits which have not expired may then be used in lieu of domestic offset credits for the purposes of demonstrating compliance. However, this method of addressing reversals leaves open the issue of how reversals which occur outside of the relevant crediting period will be addressed and specifically what happens to term offset credits if a reversal takes place outside of the crediting period. The use of "temporary credits" has been proposed in the context of land use land use change forestry (LULUCF) projects pursuant to the CDM under the UNFCCC. However, in that context, its potential use has been problematic because any temporary credit used for compliance in a registry account of a entity results in a liability. The liability is created by the need to replace the temporary credit.

6.. International Measures -- Protection for US Carbon-Intensive Industries

ACESA contains an amendment proposed by Rep. Sander Levin which adds a new "Title IV - Transitioning to a Clean Energy Economy" which purports to establish mechanisms to safeguard the competitiveness of greenhouse gas emissions-intensive U.S. manufacturing industries. This amendment is designed to address the issue of "carbon leakage" -- where imported goods in the US, manufactured at lesser cost in developing countries because those countries sectors were not bound by an emissions cap, are required to hold allowances to compensate. To address this issue, Title IV allocates emission allowances to greenhouse gas emissions-intensive and trade-exposed domestic manufacturing industries at no cost. Title IV then requires importers of certain energy-intensive goods to acquire "international reserve" emission allowances in an amount covering the greenhouse gas emissions associated with the manufacture of the imported goods. International reserve allowances would be drawn from an independent allowance pool and could not be used by domestic entities to comply with their domestic cap-and-trade obligations arising under the GHG Program.

D. Carbon Capture and Sequestration

ACESA seeks to promote the commercial deployment of carbon capture and sequestration technology in a number of ways It calls for the EPA to promulgate new regulations addressing geologic sequestration sites, imposes carbon emission reduction requirements for certain coal-fueled power plants, and requires the EPA to devise a strategy to address the barriers to the commercial deployment of carbon sequestration.

The bill amends Title VII of the Clean Air Act by providing for the distribution of emissions allowances to encourage the commercial deployment of carbon capture and sequestration technology. In addition, it provides for the establishment of the Carbon Storage Research Corporation once it is approved by a referendum of qualified utility industry organizations. The Corporation would encourage the development of commercial-scale carbon dioxide capture and storage technologies by awarding grants to utilities and other eligible entities. The bill provides for approximately $1 billion in annual funding for the Corporation, to be generated through assessments collected from distribution utilities based on the amount of fossil fuel-based electricity they deliver directly to retail customers.

ACESA requires the EPA to establish an approach to regulating the geologic sequestration

of carbon dioxide. The bill amends both the Clean Air Act and the Safe Drinking Water Act to require the EPA to promulgate regulations addressing the risk of sequestered carbon dioxide leaking into the atmosphere or drinking water. Further, ACESA calls for an EPA task force to consider a number of legal issues associated with the commercial development of carbon capture and sequestration technology. The bill also requires the EPA to conduct a study on how existing statutes administered by EPA would apply to carbon dioxide injection and geologic sequestration.

Finally, ACESA amends Title VIII of the Clean Air Act to impose new performance standards on certain coal-fueled power plants. For plants initially permitted after January 1, 2020, the bill calls for a 65% reduction in emissions of carbon dioxide, and for plants initially permitted between January 1, 2009 and January 1, 2020, a 50% reduction in emissions. Plants initially permitted prior to January 1, 2009 are not subject to these carbon control requirements. The bill requires the EPA administrator to consider reducing the maximum permissible carbon dioxide emission rate in 2025 and at subsequent five year intervals to reflect the development of emission reducing technology.

E. Smart Grid

ACESA further sets the stage for increased integration of smart grid technologies by requiring further study of the technologies, incorporating smart grid technologies into existing energy efficiency programs, and linking the technologies to reductions in peak demand. It directs the Secretary of Energy and the Administrator of the EPA to assess the potential for the cost-effective use of such technologies in all products that are reviewed for Energy Star designations. Provided integration of smart grid technologies is cost-effective, the Secretary and the Administrator must report to Congress on the contributions that such products would make to reducing peak demand, promoting grid stability, and enhancing national energy and electricity cost savings. The report must also address options for providing consumers information on smart grid products. Further, it directs Load Serving Entities to achieve the maximum realistic reductions in peak demand using smart grid and peak demand reduction technologies during calendar year 2012, and calls for further reductions during calendar year 2015.

F. Other Noteworthy Provisions

1. Investment in Clean Energy Technologies

ACESA calls for the establishment of the Clean Energy Deployment Administration, a government owned corporation that would provide loans, letters of credit, and loan guarantees to facilitate the development of clean energy technologies. The Administration would support a number of different clean energy industries and would not provide more than 30% of its support to any one technology. In addition, $25 million is authorized for the creation of the Renewable Power Borrowing Authority, a new federal lending authority for renewable energy in areas not served by federal power marketing administrations.

2. Renewable Resources and Energy Efficiency

ACESA creates the National Bioenergy Partnership to coordinate support for the infrastructure necessary to promote the deployment of sustainable biomass fuels and bioenergy technology. Section 1703 of EPAct 2005 is amended by expanding the loan guarantee program to include funding for the construction of pipelines for renewable fuels. The Electric and Thermal Waste Energy Recovery Award Program is created to encourage the recovery of thermal energy produced as a byproduct by electric power generation facilities and thermal energy production facilities that use fossil or nuclear fuels. Finally,

the bill appropriates $15 billion for each of fiscal years 2010 and 2011 for the Clean Energy Manufacturing Revolving Loan Fund Program for small and medium sized manufacturers to finance the costs of reequipping, expanding, or establishing facilities to produce clean energy and energy efficient products, or reducing energy intensity or greenhouse gas production of manufacturing facilities in the U.S.

3. TRANSPORTATION

ACESA calls for the development of plans to support plug-in hybrid and plug-in electric vehicles, the establishment of a program to deploy and integrate plug-in vehicles in multiple regions, and financial assistance to vehicle manufacturers to facilitate the manufacture of plug-in vehicles. An additional $25 million in loans is authorized under the Advanced Technology Vehicle Manufacturing Loan Program. ACESA also creates an "open fuel standard" that would require automakers to produce more flexible fuel vehicles.

4. BUILDINGS

For the first time, ACESA grants the federal government the authority to enforce building codes. The bill establishes energy-efficiency improvement targets for new homes and commercial building and creates an energy performance labeling program for buildings.

If you have any questions concerning the material discussed in this client alert, please contact the following members of our clean energy and climate industry group:

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