

	Sen. Bingaman: Draft Siting of Interstate Electric Transmission Facilities	Sen. Ben Nelson: (S. 807) "Smart Management of America's Energy's & Technologies Energy Act"	Sen. Dorgan: (S. 774) "National Energy Security Act of 2009"	Reps. Waxman-Markey: (HR 2454) "American Clean Energy and Security Act of 2009"	Sen. Reid: (S. 539) "Clean Renewable Energy and Economic Development Act"
Status	<ul style="list-style-type: none"> In committee mark-up (recess until June 1) Most recent version released 5.21.09 (Text) Items in red below denote changes from the May 8 version. 	<ul style="list-style-type: none"> Introduced April 2, 2009 Referred to the Senate Finance Committee Text 	<ul style="list-style-type: none"> Introduced April 1, 2009 Referred to Senate Finance Committee Text 	<ul style="list-style-type: none"> Adopted by committee on May 21, 2009 Waxman will introduce transmission siting amendment on House floor Bill must move through a number of committees first 	<ul style="list-style-type: none"> Introduced March 5, 2009 Referred to Committee on Energy and Natural Resources Text
Scope	<ul style="list-style-type: none"> Regional entities identify and plan for high-priority national transmission project ($\geq 345\text{kV AC}$ & $\geq 300\text{kV DC}$ or the superconducting cable equivalent, or renewable feeder line) Added definition of Indian Tribe Removed "Indian Tribe" from list of load serving entities Defines location-constrained resource (including fossil fuel plant with CCS) 	<ul style="list-style-type: none"> Creates an interstate "energy superhighway" of extra high voltage transmission ($\geq 400\text{kV}$). Siting preference to use existing rights-of-way Smart grid technology Integration of interconnections 	<ul style="list-style-type: none"> Creates a "clean energy superhighway" Extra high voltage ($\geq 345\text{ kV AC}$ & $\geq 400\text{ kV DC}$, 230kV w/ waiver) Renewable and low-carbon location-constrained resources Smart grid 50% of light duty vehicles to be "grid-enabled" electric vehicles by 2030 	<ul style="list-style-type: none"> Directs FERC to reform the regional planning process to modernize the electric grid and provide for new transmission lines to carry electricity generated from renewable sources. Planning is to be done by regional entities 	<ul style="list-style-type: none"> Enhance electric grid to take full advantage of renewable resources Create Interconnection-wide "green transmission grid", high-voltage ($\geq 345\text{kV}$) "backbone" with renewable energy feeder lines
Planners	<ul style="list-style-type: none"> 1+ utilities, regional entities, RTOs, ISOs, etc. shall submit plan to FERC If any utility does not participate in planning, must submit own plan to FERC FERC coordinates regional plans, integrate w/ interconnection-wide plans 	<ul style="list-style-type: none"> FERC has exclusive planning authority 	<ul style="list-style-type: none"> 1-4 Regional planning entities for each interconnect (not ERCOT), selected by FERC Invite governors & Indian tribe representative to participate in the planning organization 	<ul style="list-style-type: none"> Regional Planning Entities Submit plans to FERC 	<ul style="list-style-type: none"> Regional planning entities certified by FERC Federal transmitting utility shall participate in the planning process
Planning timeline	<ul style="list-style-type: none"> 180 days for FERC to issue planning principles Plan to be submitted as soon as possible but not later than 2 years from enactment and periodically thereafter 	<ul style="list-style-type: none"> FERC 1 year deadline to submit plan to Congress and President 	<ul style="list-style-type: none"> 180 days for selection of regional planning entity plus 1 year for planning 	<ul style="list-style-type: none"> Plan must be submitted to FERC 18 months after the promulgation of the planning principles (which would be 2 ½ years after enactment) 	<ul style="list-style-type: none"> 120 days for FERC to certify regional planning entities 1 yr. from certification entities submit plan 1 year from plan submission federal transmitting utilities identify green transmission grid project facilities
Plan Approval	<ul style="list-style-type: none"> FERC 	<ul style="list-style-type: none"> Congress If Congress disapproves, FERC submits a modification If Congress does not act on a joint-resolution for modification, FERC may authorize construction w/in 18 months 	<ul style="list-style-type: none"> FERC has final approval of plans submitted by regional planning entities 	<ul style="list-style-type: none"> FERC 	<ul style="list-style-type: none"> Initial, then annual approval by FERC
Plan Requirements	<ul style="list-style-type: none"> Planning principles address how utilities should fully incorporate high-priority national transmission projects and how utilities should coordinate with each other and states and tribes to analyze needed interconnection additions or modifications to grid 	<ul style="list-style-type: none"> Construction of $\geq 10,000$ miles of HV ($\geq 400\text{kV}$) lines Use existing rights-of-way where possible National scale, including connections of interconnections Examine feasibility of alternatives to standing towers, including burial of HV lines (sp. in hwy medians) Cost allocation includes fed. Gov't 	<ul style="list-style-type: none"> Evaluate location-constrained resources Conduct long-term planning on both 10 & 20-year horizons Establish appropriate areas to be avoided in siting facilities ID necessary transmission infrastructure Perform necessary engineering analyses Consider project staging, including building & construction timelines 	<ul style="list-style-type: none"> Plans should be developed from sub-regional plans where possible 	<ul style="list-style-type: none"> Plan renewable energy transmission Identify green transmission grid projects Account for national and state renewable energy requirements & plan infrastructure accordingly Create at least a 10 year plan Consider transmission alternatives Include construction timeline Submit plan annually

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REZ and/or Green Transmission Requirements	<ul style="list-style-type: none"> • Policy purpose is to support development of new renewable energy generation, including location-constrained • Plans shall consider the location of generation and potential generation development • Secretary of Energy will conduct nationwide location-constrained resources assessments. The first will be completed within 180 days of enactment of the Act • This IS NOT a REZ requirement but it does suggest that potential renewable energy resources must be considered in planning 	<ul style="list-style-type: none"> • Tariff rebate for renewable energy generation 	<ul style="list-style-type: none"> • Secretary of DoE will identify areas with significant potential for development of location-constrained resources, HOWEVER, this is not a REZ process 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 75% of line capacity must be available to renewable resources (can be adjusted for reliability) • W/in 90 days for West and 270 days for East, President must designate REZs • REZs include areas with: 1GW potential renewable energy with: significant portion generated on federal or rural land; insufficient transmission capacity to achieve potential; and ability to support renewable generation facility • President may use existing processes that designate REZs • Establishes federal solar energy reserve program
Siting	<ul style="list-style-type: none"> • If FERC finds that the proposed project is a high-priority national transmission project then it can issue it a designation of eligibility. • All projects must first attempt to site through state processes • FERC can preempt the state's siting authority if the state: "fails to approve" the project w/in 1 year, rejects application, or imposes unreasonable conditions on the permit • An entity applying for a certificate from FERC must complete a detailed study of the alternatives to the high-priority project and show that such alternatives would not provide a more expedient alternative. • If a state reject or fail to act on a high-priority projects and FERC has siting authority, FERC shall give due weight to the environmental record and results of the state siting process • Provides for eminent domain for holders of certificates issued by FERC 	<ul style="list-style-type: none"> • FERC has exclusive authority to site the superhighway • FERC "shall use a siting preference that utilizes existing ... rights-of-way." • FERC will "oversee" siting of "each" secondary line connection to the superhighway to ensure all applicable siting standards are met • FERC has backstop siting authority for all secondary lines • Oversee integration with the bulk electric system of the U.S. • Support the integration of the interconnections 	<ul style="list-style-type: none"> • FERC has exclusive jurisdiction to site Clean Energy Superhighway facilities • States designate an agency to coordinate with FERC, and identify state siting constraints and mitigation measures • Pre-filing process • Certificate of Public Convenience and Necessity issued by FERC • CPCN must incorporate state constraints and mitigation measures unless they are inconsistent with the superhighway • FERC will establish a Siting Dispute Resolution Board • Dispute resolution board will hear all appeals of state constraints and mitigation 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • FERC, after consultation with states, will issue permits to facilities included in the green transmission grid project plan or proposed by developer to integrate renewable energy from REZs at developer's risk • Developers not precluded from seeking state siting permit • Need is assumed for green transmission plan project • FERC must make finding of public convenience and necessity • States may identify siting constraints and mitigation measures, which FERC shall include in permit, unless the measure is inappropriate or the state in question did not participate in the planning process
Federal Funding	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Federal government will share in the funding of up to 90% of the superhighway. • No individual project funding level specified. 	<ul style="list-style-type: none"> • Funds from American Recovery and Reinvestment Act of 2009 may be used for regional planning 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Up to \$500 million in federal grant money for plan implementation • Grant money to come from American Recovery and Reinvestment Act of 2009 or sale of carbon allowances from subsequent climate legislation
Cost recovery	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • "core transmission facilities" can recover costs of incremental transfer capability for facilitating development or transmission of renewable resources 	<ul style="list-style-type: none"> • Planning cost recovery will be done via a federal transmission surcharge • Surcharge for planning cost recovery is not to exceed \$80 million per year 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Recovery of planning costs through a federal transmission surcharge not to exceed \$80 million in any year

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FERC Authorities/ Responsibilities	<ul style="list-style-type: none"> • Coordinate regional plans • Issue planning principles • Siting “backstop” authority • Technical assistance to planning authorities • Conduct congestion studies in consultation with states and tribes 	<ul style="list-style-type: none"> • Exclusive authority to plan superhighway • Exclusive authority to site superhighway • Backstop authority on each secondary connection line if (a) state denies w/in 1 year or (b) state unable to approve • To promote renewable energy, FERC “[m]ay provide for secondary line connection to be constructed, in conjunction with secondary line connections constructed by private entities...” • Overseeing construction of superhighway 	<ul style="list-style-type: none"> • Identify regional planning entities (90 days) • Oversee planning process • Create regional plan if one cannot be certified w/in 18 mos. • Modify multiple plans w/in the interconnections to ensure plans are integrated • Provide a cost allocation plan if none is submitted or approved • Site all superhighway facilities • Prepare NEPA environmental review document • Enter into MOU with federal land agencies to create streamlined/consolidated environmental review process 	<ul style="list-style-type: none"> • Adopt planning principles w/in 1 year of enactment • Encourage coordination and cooperation of regional planning entities • Ensure that all plans are consistent with the planning principles • Offer assistance to regional planning entities, possibly in the form of funding • Assist regional planning entities to resolve conflicts 	<ul style="list-style-type: none"> • Certify regional authority • Approve transmission plans annually • Create plan if state or regional entity fails to submit a plan • Periodically evaluate projects to make sure they conform to plan • “take any necessary action to address any identified obstacles to investment, siting, and construction” of project in a plan • Serve as lead agency for environmental review • Prepare single NEPA environmental review draft
Cost Allocation	<ul style="list-style-type: none"> • FERC will establish cost allocation methodology • Costs may be allocated across all or part of a region but must be just and reasonable and must not be disproportionate to the anticipated benefits in any given area • FERC shall give deference to cost allocation proposals supported by broad agreement among states • May permit allocation to generators connected by high-priority national transmission projects 	<ul style="list-style-type: none"> • Costs shared, up to 90%, by federal government • Shared by as many states, public and private entities, including ratepayers as have “reasonable interests in, or would benefit from” the superhighway 	<ul style="list-style-type: none"> • Regional planning entities have one year to submit an interconnection-wide cost allocation plan to FERC • If no plan is submitted or approved, FERC shall allocate costs to all load-serving entities in the interconnections on a load-ratio share basis 		<ul style="list-style-type: none"> • Cost allocation plan included in transmission plan, submitted by regional entity • FERC shall approve cost allocation plan w/in 90 days unless the plan will result in discriminatory, unjust or unreasonable rates, or would inhibit renewable generation projects • If regional planning entity does not submit cost allocation plan, FERC will create one • Renewable feeder lines can be included in cost allocation plan under certain conditions
Federal Agency Coordination	<ul style="list-style-type: none"> • Dept. of Interior is lead agency for coordinating environmental review by federal agencies • States that are willing may coordinate with FERC and federal agencies • Sec. of Interior will prepare the NEPA environmental review document • For federal authorizations, fed agencies shall use existing 368 corridors or must create new corridor according to §368(c) 	<ul style="list-style-type: none"> • Amend FPA §824p(h) (“Coordination of Federal Authorizations”) to replace “Dept. of Energy” with “FERC” and “Secretary” with “Commission” 	<ul style="list-style-type: none"> • FERC determines schedule for all federal authorizations • FERC is lead agency for coordinating environmental review by federal agencies • FERC will prepare the NEPA environmental review document • NEPA review will be done 1 year after application for certificate is submitted 		<ul style="list-style-type: none"> • FERC is lead agency for coordinating environmental review by federal agencies • FERC shall enter into a memorandum of understanding with federal agencies • FERC will prepare the NEPA environmental review document

Additional Notes:

Federally owned utilities:

The Reid bill states that federally owned utilities

- Shall participate in the planning process §403(g)(1);
- Shall identify green transmission grid project facilities for construction in accordance with plan, §403(g)(2);
- Shall fund projects it has identified if no private funds are committed to the construction of the project plan facilities w/in 3 years (subject to bonding authority);
- Shall have bonding authority up to \$10 billion, §407(b);
- May recover costs from entities using the transmission facilities over a period of 50 years, §407(b)(2)

The Nelson bill will deed ownership of superhighway facilities to federally owned utilities under certain circumstances (% of federal share of cost).

Federal Power Marketing Agencies

The Reid bill states that federal power marketing agencies shall identify and take steps to promote renewable energy, §408(a). In addition, BPA and WAPA will establish wind integration programs and Geothermal Integration Programs §408(b)&(d). Each federal power marketing administration and the Tennessee Valley Authority shall create solar energy integration programs, §408(c)