

**COMMITTEE ON SCIENCE AND TECHNOLOGY
FULL COMMITTEE MARKUP
July 29, 2009**

AMENDMENT ROSTER

**H.R. 3246, the Advanced Vehicle Technology Act of 2009
H.R. 3165, the Wind Energy Research and Development Act of 2009
H.R. 3029, to establish a research, development, and technology demonstration program to improve the efficiency of gas turbines used in combined cycle power generation systems
H.R. 3247, to establish a social and behavioral sciences research program at the Department of Energy, and for other purposes**

No.	Sponsor	Description	Results
1	Mr. Peters	<p>Amendment in the Nature of a Substitute makes several technical and clarifying changes.</p> <p>Amends Section 101 to:</p> <ul style="list-style-type: none"> • Add the following new areas to the list of activities required of the vehicle research and development program: (1) advanced boosting systems; (2) hydraulic hybrid technologies; (3) predictive engineering of vehicle and transportation systems; and (4) gaseous fuels storage system integration and optimization; • Replace “domestic manufacturers and suppliers” with “companies that manufacture or assemble vehicles of components in the United States” with respect to industry participants in partnerships or collaborations under the bill; specifies that, where possible, these companies partner with firms that conduct significant and relevant research and development activities in the United States; 	<p>Passed By Voice Vote</p>

		<ul style="list-style-type: none">• Add “develop more efficient processes for transferring research findings and technologies to industry” to the list of activities required of the Secretary under subsection (c); and• Add a new subsection to require that the Secretary ensure, to the maximum extent practicable, that activities do not duplicate those of other programs within the Department of Energy or other relevant research agencies. <p>Amends Section 103 to add “produce lightweight high pressure storage systems for gaseous fuels” to the list of activities to be carried out under the vehicle manufacturing technologies and practices program.</p> <p>Amends Section 201 to:</p> <ul style="list-style-type: none">• Add the following areas to the list of activities required of the medium and heavy duty commercial and transit vehicle program: (1) on board storage technologies for compressed and liquefied natural gas; (2) development and integration of engine technologies designed for natural gas operation of a variety of vehicle platforms; and (3) hydrogen vehicle technologies, including fuels cells and internal combustion engines, and hydrogen infrastructure; and• Add “other responsibilities as determined by the Secretary, in consultation with interagency and industry partners” to the list of responsibilities required of the Director of the program.	
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		<p>Amends Section 203 to specify that the Secretary “shall” (rather than “may”) evaluate heavy duty vehicle performance using metrics other than those based on miles per gallon.</p> <p>Amends Section 204 to specify that the Secretary is required to (rather than is authorized to) undertake a pilot program of research, development, demonstration, and commercial applications of technologies to improve total machine or system efficiency for heavy duty nonroad equipment.</p>	
2	Ms. Johnson	Amends Section 3 to add “develop cost-effective advanced technologies for wide-scale utilization throughout the passenger, commercial, government, and transit vehicle sectors” to the list of objectives of the bill.	Passed By Voice Vote
	Final Passage	H.R. 3246, the Advanced Vehicle Technology Act of 2009 (Peters D-MI).	Passed By Voice Vote
3	Mr. Neugebauer	<p>Amends Section 2 to add advanced computational modeling tools to improve “understanding of the wake effect between upwind and downwind turbine operations” as an area of research and development to be focused on under the research and development program.</p> <p>Amends Section 3 to require the Secretary to ensure that: (1) the demonstration program is of sufficient “geographic diversity” to measure wind energy system performance under the full productive range of wind conditions in the United States; and (2) demonstration projects are located in various geographic areas representing various wind class regimes.</p>	Passed By Voice Vote
4	Mr. Smith	Amends Section 2 to add “technical processes to enable: (1) scalability of transmission from remotely located renewable resource rich areas; and (2) optimization of advanced infrastructure design, including high voltage	Passed By Voice Vote

		transmission” as an area of research and development to be focused on under the research and development program.	
5	Ms. Johnson	Adds a new section that requires the Secretary of Energy to coordinate with the Office of Minority Economic Impact and with the Office of Small and Disadvantaged Business Utilizations, and provide special consideration to applications submitted by institutions, businesses, or entities containing majority representation by individuals identified in section 33 or 34 of the Science and Engineering Equal Opportunities Act (i.e., women, minorities, persons with disabilities).	Passed By Voice Vote
6	Mr. Bartlett	Adds a new section that requires that awards under Section 2 and Section 3 be made on a competitive basis with an emphasis on technical merit.	Passed By Voice Vote
7	Mr. McCaul	Adds a new section that requires the Secretary of Energy, to the maximum extent practicable, to coordinate activities under the bill with other programs at the Department of Energy and other Federal research programs.	Passed By Voice Vote
	Final Passage	H.R. 3165, the Wind Energy Research and Development Act of 2009 (Tonko D-NY).	Passed By Voice Vote
8	Mr. Bilbray (032)	Amends subsection (b) to specify that the program is to support first-of-a-kind engineering and detailed gas turbine design for “megawatt-scale” electric power generation, in addition to utility-scale electric power generation.	Passed By Voice Vote
9	Mr. Bilbray (001)	Adds a new subsection to require that funding under the bill be provided on a competitive basis with an emphasis on technical merit.	Passed By Voice Vote
10	Ms. Kosmas	Amends subsection (d) to require the Secretary to solicit grant and contract proposals from “industry, universities, and other appropriate parties” for activities under the bill.	Passed By Voice Vote
	Final Passage	H.R. 3029, to establish a research, development, and technology	Passed By

		demonstration program to improve the efficiency of gas turbines used in combined cycle power generation systems (Tonko D-NY).	Voice Vote
11	Ms. Edwards (039)	<p>Amends Section 1 to add “ensure that the research program and the application of research results address the diversity of geographic, climatic, cultural, and socioeconomic factors that influence consumer choices in different communities within the United States and its territories” to the list of duties required of the Director of Social and Behavioral Research.</p> <p>Amends Section 3 to add “identify mechanisms to ensure that the research program and the application of its results address the diversity of geographic, climatic, cultural, and socioeconomic factors that influence consumer choices in different communities within the United States and its territories” to the list of areas to be covered in the research plan.</p>	Passed By Voice Vote
12	Ms. Edwards (040)	<p>Amends Section 2 to define “eligible entity” as an institution of higher education, a minority serving institution, a Department of Energy National Laboratory, or any other research organization with experience and expertise in social and behavioral science research.</p> <p>Amends Section 4 to specify that the Secretary is to provide grants to “eligible entities”.</p>	Passed By Voice Vote
13	Mr. Inglis	Amends Section 4 to require the Secretary to coordinate with the Director of the National Science Foundation when preparing solicitations and awarding research grants.	Passed By Voice Vote
14	Mr. Akin	Amends Section 4 to state that entities currently under investigation for fraud, waste, or abuse of government grants, monies, or other funding received previously are not eligible for grants.	Passed By Voice Vote

15	Mr. Diaz-Balart	Adds a new section to require the Secretary, to the maximum extent practicable, to coordinate the activities under the bill with other programs of the Department of Energy and other Federal research programs, and to ensure that those activities do not duplicate efforts and programs within the Department of Energy or other relevant research agencies.	Passed By Voice Vote
16	Mr. Olson (012)	Amends Section 3 by striking the requirement that the Director of Social and Behavioral Research review the research plan every 5 years and revise the plan as appropriate. Adds a new section that requires the Secretary, in coordination with the Director of the National Science Foundation, to review the activities carried out under the bill 24 months after the date of enactment and terminate such activities 36 months after enactment if the Secretary determines that such activities are no longer necessary.	Failed 10-22
17	Mr. Olson (013)	Adds a new section which states that the bill ceases to have effect on October 1, 2015.	Failed 10-22
18	Mr. Broun	Strikes the term “social and behavioral sciences” throughout the bill; in most instances, replaces it with “market forces” or “research conducted under this section.” Strikes Section 5.	Failed 10-22
	Final Passage	H.R. 3247, to establish a social and behavioral sciences research program at the Department of Energy, and for other purposes (Baird D-WA).	Passed 22-10