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# Pennacchio Bill Supporting the Development of Fusion Energy in NJ Advances

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Legislation sponsored by Senator Joe Pennacchio and passed today by the Senate Economic Growth Committee would establish the New Jersey Fusion Technology Industry Commission to focus on the development of the promising clean energy in the state.



A Senate Committee cleared Sen. Joe Pennacchio's legislation that would establish the New Jersey Fusion Technology Industry Commission to focus on the development of the promising clean energy in the state. (SenateNJ.com)

“As advancements in research and technology make the reality of safe, clean, limitless and affordable fusion energy more likely, it becomes crucial for New Jersey to position itself as a major player in the field,” said Pennacchio (R-26). “The 11-person commission launched by this bill will help New Jersey navigate the challenges and hurdles, and guide efforts to develop, perfect and promote fusion power.”

Pennacchio has been the leading advocate for New Jersey's fusion interest since hosting a symposium on the fusion's exciting potential in 2019. A powerhouse guest list of energy experts from national laboratories, businesses, and research organizations in fusion energy and technology shared their insight into what could be the most significant energy development in history.

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“The potential is real, and by capitalizing on the diverse fusion-related experience and backgrounds of its members, this commission can reveal steps the State can take to help bring the promise to fruition,” Pennacchio noted. “We can’t afford to sit back and wait for fusion; we have a responsibility to play an active role in its progress.”

Fusion, unlike current nuclear fission, is a reaction occurring when two light nuclei smash together and fuse, creating a heavier nucleus and releasing energy in the process. Fusion is safe, and cleaner, too, producing only a fraction of the dangerous waste nuclear fission produces.

The energy created through fusion is three to four times greater than fission produces.

Pennacchio’s measure advanced today, [S-992](#), is one of five fusion-related bills sponsored by the Senator.

Other bills include:

- [S-217](#): Includes fusion within the definition of Class I renewable energy as defined in the “Electric Discount and Energy Competition Act.” Other Class I renewable energies include energy produced from solar technologies, wind energy, etc. Enacted in 1999, the Electric Discount and Energy Competition Act fundamentally changed the way residential and commercial consumers of electricity pay for their services. It separates the cost of generating and supplying power from the cost of delivering it. Under this bill, consumers would be able to purchase fusion energy when it becomes available.
- [S-218](#): To attract top-level scientists to the field, Pennacchio’s bill requires New Jersey’s Higher Education Student Assistance Authority (HESAA) to administer a scholarship program for graduate students and postdoctoral researchers studying or conducting research in fusion energy and plasma physics. The bill cleared the Senate Higher Education Committee in June of this year.
- [S-219](#): Provides that fusion energy and fusion technology companies are eligible to receive benefits under certain economic incentive programs. Under the bill, the New Jersey Economic Development Authority (EDA) is required to adopt rules and regulations for the administration of economic incentive programs to provide that any reference or stipulation under a program related to the development or production of renewable energy, the development of emerging technologies, or to the expansion of targeted industries in this State connected to the award of a benefit or incentive to a company is deemed to include the development or production of fusion energy or fusion technology in this State. The Senate passed the bill with a vote of 39-0 on June 29, 2022.
- [S-220](#): Requires the New Jersey Economic Development Authority (EDA), in consultation with the New Jersey Commission on Science, Innovation and Technology, to establish a Fusion Technology Industry Development Program to promote the fusion technology industry in the State and to attract fusion technology businesses to the State. Requires the EDA to provide technical and financial assistance to fusion technology businesses considering locating in New Jersey and to invest moneys from business assistance programs administered by the EDA, as may be available.

Pennacchio also sponsored a resolution urging Congress to increase funding for fusion energy research. [SR-14](#) passed the Senate in June 2020 and was filed with the Secretary of State.

