

# SENATE, No. 298

## STATE OF NEW JERSEY 219th LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2020 SESSION

**Sponsored by:**

**Senator JOSEPH PENNACCHIO**

**District 26 (Essex, Morris and Passaic)**

**SYNOPSIS**

"Fusion Technology Industry Promotion Act"; establishes program to promote fusion technology industry and attract fusion technology businesses.

**CURRENT VERSION OF TEXT**

Introduced Pending Technical Review by Legislative Counsel.



1 AN ACT providing for the promotion of the fusion technology  
2 industry in the State, and supplementing P.L.1974, c.80  
3 (C.34:1B-1 et seq.).  
4

5 **BE IT ENACTED** *by the Senate and General Assembly of the State*  
6 *of New Jersey:*  
7

8 1. P.L. , c. (C. ) (pending before the Legislature as this  
9 bill) shall be known and may be cited as the "Fusion Technology  
10 Industry Promotion Act."  
11

12 2. The Legislature finds and declares that:

13 a. at the heart of fusion energy is the world's most famous  
14 equation, energy equals mass multiplied by the speed of light,  
15 squared, which captures the relationship between mass and energy;  
16 and

17 b. fusion is taking place in laboratories all over the world,  
18 including in New Jersey's Princeton Plasma Physics Laboratory,  
19 and is the process that powers the Sun and all the stars; and

20 c. fusion, unlike traditional nuclear reactors, combines small  
21 atoms together to release energy with the byproduct being helium  
22 gas; and

23 d. the key step, through engineering, is to turn this science into  
24 a commercial product to generate electrical power; and

25 e. it is important to the economy of this State that a public-  
26 private partnership be established to promote fusion technology-  
27 related industries in New Jersey and to attract fusion technology  
28 companies to the State.  
29

30 3. As used in this act:

31 "Authority" means the New Jersey Economic Development  
32 Authority, established pursuant to section 4 of P.L.1974, c.80  
33 (C.34:1B-4).

34 "Fusion industry development company" or "company" means a  
35 private corporation or limited liability company incorporated or  
36 organized for the purpose of attracting and retaining fusion  
37 technology businesses.

38 "Fusion technology business" means a business enterprise that  
39 conducts research or develops fusion technologies for commercial  
40 purposes.

41 "Limited liability company" means a company organized  
42 pursuant to the "Revised Uniform Limited Liability Company Act,"  
43 P.L.2012, c.50 (C.42:2C-1 et seq.).

44 "New Jersey Commission on Science, Innovation and  
45 Technology" means the New Jersey Commission on Science,  
46 Innovation and Technology established pursuant to P.L.1985, c.102  
47 (C.52:9X-1 et seq.).

1 "Private institution of higher education" means independent  
2 colleges or universities incorporated and located in New Jersey,  
3 which by virtue of law or character or license, are nonprofit  
4 educational institutions authorized to grant academic degrees and  
5 which provide a level of education which is equivalent to the  
6 education provided by the State's public institutions of higher  
7 education as attested by the receipt of and continuation of regional  
8 accreditation by the Middle States Association of Colleges and  
9 Schools, and which are eligible to receive State aid.

10 "Public institution of higher education" means Rutgers, The State  
11 University, the State colleges, the New Jersey Institute of  
12 Technology, Rowan University, Montclair State University, the  
13 county colleges and any other public university or college now or  
14 hereafter established or authorized by law.

15

16 4. a. The New Jersey Economic Development Authority, in  
17 consultation with the New Jersey Commission on Science,  
18 Innovation and Technology, shall establish a Fusion Technology  
19 Industry Development Program to promote the fusion technology  
20 industry in the State and to attract fusion technology businesses to  
21 the State.

22 b. The program shall: include research and information on  
23 commercial opportunities in fusion technology; provide technical  
24 and financial assistance to fusion technology businesses considering  
25 locating in New Jersey; regularly represent or assist in representing  
26 the interests of New Jersey-based firms in the national and  
27 international markets for fusion technology through conferences  
28 and seminars; provide New Jersey-based fusion technology  
29 businesses with customized technical, financial, and other  
30 assistance; and recruit capital investment in New Jersey to be  
31 applied to the fusion technology industry.

32

33 5. a. (1) The authority shall, notwithstanding any law to the  
34 contrary, invest moneys from business assistance programs  
35 administered by the authority, as may be available and which the  
36 authority deems appropriate for the purposes of P.L. ,

37 c. (C. ) (pending before the Legislature as this bill), in a  
38 fusion industry development company, provided that the authority  
39 investment in the fusion industry development company shall equal  
40 the amount of investments in the company that are received from all  
41 other sources. The fusion industry development company is to be  
42 incorporated or organized in a manner consistent with the  
43 provisions of P.L. , c. (C. ) (pending before the Legislature  
44 as this bill). The authority's investment, together with investments,  
45 which may be made in the stock or interest of the company, by  
46 other public and private entities involved in fusion technology  
47 development shall, however, be at a minimum amount to be

1 determined by the authority. Other public and private entities  
2 contributing to the minimum amount required and determined by  
3 the authority may include, but not necessarily be limited to, the  
4 Princeton Plasma Physics Laboratory, Princeton University and  
5 other private institutions of higher education, public institutions of  
6 higher education, and energy businesses. The moneys invested by  
7 the authority and other public entities shall be used for the purchase  
8 of stock or an interest in the company, provided that the class of  
9 stock or interest purchased by the authority and other public entities  
10 shall be of a type and character as to require the company to repay  
11 the investment of funds from the authority and other public entities  
12 prior to the repayment of funds from private sources, but in no  
13 event shall the amount of stock or interest purchased by the  
14 authority and other public entities exceed 59 percent of the total  
15 outstanding stock or total shared interest of the company. The  
16 authority is authorized in its discretion to sell or otherwise dispose  
17 of the stock or interest purchased by the authority, as shall be in the  
18 interest of the authority, but the authority shall sell or otherwise  
19 dispose of its stock or interest no later than 10 years after the date  
20 of purchase.

21 (2) Nothing in this act shall be construed to preclude the  
22 company from being organized as a limited liability company or to  
23 preclude the authority and other public entities involved in fusion  
24 technology development from purchasing an interest in a limited  
25 liability company provided that the interest purchased by the  
26 authority and other public entities shall not exceed 59 percent of the  
27 total shared interest of the company, and provided that the operating  
28 agreement of the company grants the authority and any other public  
29 entity the right to resign and receive a distribution, representing the  
30 fair value of the authority's or public entity's interest in the  
31 company, prior to the resignation of and distribution to any private  
32 members.

33 (3) In order to qualify as a fusion technology development  
34 company eligible to be the subject of an investment by the authority  
35 and by the other public entities involved in fusion technology  
36 development, a company shall:

37 (a) Have a board of directors or board of trustees appropriate to  
38 the form of incorporation or organization of the company consisting  
39 of: (i) the Chief Executor Officer of the authority, who shall serve  
40 ex officio; and (ii) representatives of fusion technology companies,  
41 fusion research institutions, and representatives of the private  
42 sector, who shall be selected by private stockholders or members,  
43 and who shall constitute the majority of the membership of the  
44 board.

45 (b) Retain the services of an independent commercial auditor to:  
46 (i) determine the extent to which funds made available to the  
47 company for its purposes have been expended in a manner that is

1 consistent with the purposes of this act and the charter or operating  
2 agreement of the company; and (ii) prepare and submit to the  
3 Legislature, the State Treasurer, the authority and other public  
4 entities participating in the purchase of stock or an interest in the  
5 company, an independent certified statement annually containing  
6 the findings and determinations of the auditor.

7 (4) In connection with the investment of authority moneys in a  
8 company pursuant to P.L. , c. (C. ) (pending before the  
9 Legislature as this bill), the company shall solicit other forms of  
10 support, such as grants from the federal government or from other  
11 public and private sources, and make available its stock or a shared  
12 interest for purchase by private entities.

13 b. (1) The company shall, as its purpose, attract fusion  
14 technology businesses to this State and work to retain, and provide  
15 services to, fusion technology businesses with operations in the  
16 State.

17 (2) The company shall also provide other development services  
18 to fusion technology businesses, as the company's board may from  
19 time to time approve.

20 (3) The company shall also be authorized to enter into  
21 agreements with academic, research, and financial institutions, to  
22 the extent feasible, in order to assist in the work of the company.

23 (4) The company shall actively solicit, to the extent feasible, the  
24 involvement of academic institutions, research institutions, private  
25 banks, other lending institutions, and the private insurance market  
26 to assist the company in providing the fusion technology industry  
27 development-related services required by eligible fusion technology  
28 businesses.

29  
30 6. In order to effectuate the purposes of P.L. , c. (C. )  
31 (pending before the Legislature as this bill), the authority, in  
32 consultation with the New Jersey Commission on Science,  
33 Innovation and Technology, shall analyze on an ongoing basis the  
34 state of the fusion technology industry in New Jersey, including, but  
35 not limited to, its strengths and weaknesses, opportunities and risks,  
36 emerging technologies, processes, and market niches, the  
37 commercialization of technologies, capital availability, education  
38 and training needs, and infrastructure needs.

39  
40 7. a. The authority shall annually report to the Governor and,  
41 pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the  
42 Legislature. Each report shall set forth a complete operating and  
43 financial statement covering the operations of the authority under  
44 the program and audit information received from the fusion industry  
45 development company.

46 b. With the initial annual report, and every third year  
47 thereafter, the New Jersey Commission on Science, Innovation and

1 Technology shall report to the Governor and, pursuant to section 2  
2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature, on its  
3 recommendations on how this State can better attract and retain  
4 fusion technology businesses.

5  
6 8. This act shall take effect immediately.

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9 STATEMENT

10  
11 This bill requires the New Jersey Economic Development  
12 Authority (EDA), in consultation with the New Jersey Commission  
13 on Science, Innovation and Technology (commission), to establish a  
14 Fusion Technology Industry Development Program to promote the  
15 fusion technology industry in the State and to attract fusion  
16 technology businesses to the State.

17 The bill requires that the program: include research and  
18 information on commercial opportunities in fusion technology;  
19 provide technical and financial assistance to fusion technology  
20 businesses considering locating in New Jersey; regularly represent  
21 or assist in representing the interests of New Jersey-based firms in  
22 the national and international markets for fusion technology through  
23 conferences and seminars; provide New Jersey-based fusion  
24 technology businesses with customized technical, financial, and  
25 other assistance; and recruit capital investment in New Jersey to be  
26 applied to the fusion technology industry.

27 Under the bill, the EDA is required to invest moneys from  
28 business assistance programs administered by the EDA, as may be  
29 available and which the EDA deems appropriate for the purposes of  
30 the bill, in a fusion industry development company. The bill  
31 requires the EDA to invest in the company an amount that is equal  
32 to the investments in the company received from all other sources.  
33 The EDA's investment, together with investments by other public  
34 and private entities involved in the fusion technology development  
35 company, are to be at a minimum amount to be determined by the  
36 EDA. Other public and private entities contributing to the  
37 minimum amount may include, but not necessarily be limited to, the  
38 Princeton Plasma Physics Laboratory, Princeton University and  
39 other private institutions of higher education, public institutions of  
40 higher education, and energy businesses.

41 The moneys invested by the EDA and other public entities are to  
42 be used for the purchase of stock or an interest in the company,  
43 provided that the class of stock or interest purchased by the EDA  
44 and other public entities are to require the company to repay the  
45 investment of funds from the EDA and other public entities prior to  
46 the repayment of funds from private sources. The bill specifies that  
47 the amount of stock or interest purchased by the EDA and other

1 public entities is not to exceed 59 percent of the total outstanding  
2 stock or total shared interest of the company. The bill also provides  
3 that the EDA may sell or otherwise dispose of the stock or interest  
4 purchased by the EDA, and further requires the EDA to sell or  
5 dispose of the stock or interest in the company no later than 10  
6 years after the date of purchase.

7 The fusion technology development company is required to have  
8 a board of directors or board of trustees and retain the services of an  
9 independent commercial auditor. In connection with the investment  
10 of EDA moneys in the company, the company is required to solicit  
11 other forms of support, such as grants from the federal government  
12 or from other public and private sources, and make available its  
13 stock or a shared interest for purchase by private entities.

14 The EDA, in consultation with the commission, is to analyze on  
15 an ongoing basis the state of the fusion technology industry in New  
16 Jersey, including, but not limited to, its strengths and weaknesses,  
17 opportunities and risks, emerging technologies, processes, and  
18 market niches, the commercialization of technologies, capital  
19 availability, education and training needs, and infrastructure needs.

20 The EDA is to annually report to the Governor and, the  
21 Legislature. Each report is to set forth a complete operating and  
22 financial statement covering the operations of the authority under  
23 the program and audit information received from the fusion industry  
24 development company. With the initial annual report, and every  
25 third year thereafter, the commission is report on its  
26 recommendations on how the State can better attract and retain  
27 fusion technology businesses.