

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 2273 Session of
1991

INTRODUCED BY CARONE, BELARDI, BROUJOS, CAWLEY, DALEY, GEORGE,
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VEON, CESSAR, FARGO, HARLEY, REINARD, STURLA, B. SMITH, LLOYD
AND RICHARDSON, DECEMBER 10, 1991

REFERRED TO COMMITTEE ON CONSERVATION, DECEMBER 10, 1991

AN ACT

1 Providing for the establishment of an Electromagnetic Field
2 Exposure Avoidance Program; imposing duties on the
3 Pennsylvania Public Utility Commission, the Department of
4 Health and the Department of Environmental Resources;
5 providing for the creation of a power line siting fee;
6 further providing for statements of issues and agency
7 reports; and creating an Electromagnetic Field Exposure
8 Avoidance Fund.

9 The General Assembly of the Commonwealth of Pennsylvania
10 hereby enacts as follows:

11 Section 1. Short title.

12 This act shall be known and may be cited as the
13 Electromagnetic Field Exposure Avoidance Act.

14 Section 2. Legislative declaration and findings.

15 The General Assembly finds and declares as follows:

16 (1) Recent research results in biology and public health
17 have led to public concern about the electric and magnetic
18 fields associated with electric power facilities. This
19 concern has been enhanced by widely publicized scientific
20 research that suggest that human exposure to 60 Hz

1 alternating electric and magnetic fields is a threat to
2 public health.

3 (2) Although no conclusive scientific data has been
4 presented indicating at what levels electric and magnetic
5 fields may pose certain human health risks, the results of
6 numerous biological studies suggest that under certain
7 conditions low-frequency magnetic fields can interact with
8 and produce changes in biological systems. Furthermore, the
9 results of epidemiological studies suggest that human
10 exposure to such fields may promote the development of
11 certain cancers, including nervous system cancer and
12 leukemia.

13 (3) Until the scientific community provides information
14 which will permit the adoption of specific risk management
15 regulations, the General Assembly recognizes the need to
16 provide interim guidance to electric utilities for the
17 purpose of limiting public exposure to the electric and
18 magnetic fields emanating from electric power lines.

19 (4) The General Assembly finds that the inconclusiveness
20 of scientific understanding of the biological effects of
21 human exposure to electromagnetic fields makes it necessary
22 to develop and implement strategies of prudent avoidance.
23 Prudent avoidance suggest that, within some appropriate
24 bounds of costs and inconvenience, efforts be taken to avoid
25 human exposure to electric and magnetic fields until the
26 accumulation of scientific knowledge provides a clear and
27 concise understanding of the relationship between human
28 exposure to such fields and adverse health effects.

29 (5) By enacting this legislation, the General Assembly
30 is neither affirming nor denying at this time the existence

1 of a causal relationship between public exposure to electric
2 and magnetic fields and adverse human health. The General
3 Assembly recognizes, however, that the scientific evidence
4 suggesting a link between exposure and adverse health is
5 significant and cannot be ignored. Therefore, until the
6 scientific community provides information which will permit
7 the adoption of specific risk management regulations, it is
8 the intent of the General Assembly to implement strategies of
9 prudent avoidance. These strategies will serve to protect the
10 health and safety of the citizens of this Commonwealth from
11 the electric and magnetic fields associated with transmission
12 and distribution lines.

13 Section 3. Definitions.

14 The following words and phrases when used in this act shall
15 have the meanings given to them in this section unless the
16 context clearly indicates otherwise:

17 "Agency." The Department of Environmental Resources and the
18 Department of Health of the Commonwealth.

19 "Commission." The Pennsylvania Public Utility Commission.

20 "Corridor." The strip of land, as proposed by a public
21 utility, upon which a transmission line right-of-way is or will
22 be located.

23 "Distribution line." An electric power supply line of
24 intermediate voltage.

25 "Electric field." A representation of the forces that fixed
26 electric charges exert on other charges at a distance.

27 "Electromagnetic field." A field made up of a combination of
28 electric and magnetic fields.

29 "Exposure zone." The distance from the center line of a
30 transmission line right-of-way as measured in feet.

1 "Fund." The Electromagnetic Field Exposure Avoidance Fund
2 created in section 9.

3 "Local government." Any city, borough, town, township or
4 county directly affected by the location and construction of a
5 transmission line.

6 "Magnetic field." A representation of the forces that a
7 moving charge exerts on other moving charges because they are
8 moving.

9 "Per-capita exposure fee." The exposure fee in dollars per
10 person residing in an exposure zone, as established by the
11 Pennsylvania Public Utility Commission.

12 "Program." The Electromagnetic Field Exposure Avoidance
13 Program established in section 4.

14 "Prudent avoidance." Any measures or strategies that within
15 appropriate balance of costs and convenience provide public
16 utilities with an economic incentive to locate and construct
17 electric power lines in areas that avoid the most people.

18 "Public utility." Persons or corporations in this
19 Commonwealth owning or operating equipment or facilities for
20 generating, transmitting, distributing or furnishing electricity
21 for the production of light, heat or power to or for the public
22 for compensation. The term shall not include the following:

23 (1) A person or corporation not otherwise a public
24 utility who or which furnishes service only to himself or
25 itself.

26 (2) A bona fide cooperative association which furnishes
27 service only to its stockholders or members on a nonprofit
28 basis.

29 "Total exposure fee." The total power line siting fee
30 assessed a public utility for locating or constructing a

1 transmission line within a corridor.

2 "Transmission line." Any electrical transmission line
3 extending from, but not including, an existing or proposed
4 substation, generating unit or power plant to, but not
5 including, an existing or proposed transmission network or
6 rights-of-way or substation to which the public utility intends
7 to connect which defines the end of the proposed project.

8 "Transmission line right-of-way." A right enjoyed over the
9 property of another subject to certain conditions which arise by
10 reason of one of the following:

11 (1) A lease.

12 (2) An easement.

13 (3) A right-of-use or license.

14 (4) An option to buy with right of possession.

15 (5) Ownership in fee simple absolute, or any lesser
16 estate of land, obtained for the purpose of constructing or
17 maintaining a transmission line.

18 Section 4. Electromagnetic Field Exposure Avoidance Program.

19 (a) Authorization.--The Pennsylvania Public Utility
20 Commission is hereby authorized to develop and implement rules,
21 regulations and statements of policy for an Electromagnetic
22 Field Exposure Avoidance Program which shall be based on the
23 concept of prudent avoidance and designed to eliminate, reduce
24 or control public exposure to the electric and magnetic fields
25 associated with electric power lines.

26 (b) Program.--The commission, in conjunction with the
27 Department of Health, shall hold public hearings, after notice,
28 for the purpose of identifying measures that constitute prudent
29 avoidance of electric and magnetic fields. The commission shall
30 use information gained from public hearings to develop and

1 implement guidelines for a program based on the concept of
2 prudent avoidance which, at moderate cost and convenience, will
3 provide public utilities with an economic incentive to locate
4 and construct transmission lines in areas that avoid the most
5 people.

6 (c) Standards.--The commission may adopt standards for
7 maximum electric and magnetic fields at transmission lines,
8 rights-of-way and some minimum acceptable rights-of-way widths.
9 These standards shall be in addition to the program and shall
10 not be used by the commission or public utilities as prudent
11 avoidance measures.

12 Section 5. Power line siting fee.

13 (a) General rule.--The commission shall collect a power line
14 siting fee from any public utility that receives authorization
15 to locate and construct a transmission line, or any portion
16 thereof, within a corridor in this Commonwealth in accordance
17 with the provisions of 52 Pa. Code Ch. 57 Subch. G (relating to
18 commission review of siting and construction of electric
19 transmission lines). Every public utility authorized by the
20 commission to locate and construct a transmission line shall be
21 subject to the one-time payment of a siting fee for such lines
22 located and constructed after December 31, 1991. No public
23 utility shall be required to pay a siting fee for any
24 transmission line located and constructed before December 31,
25 1991. The commission may further require a public utility to pay
26 a siting fee for any distribution line located and constructed
27 in any area of this Commonwealth after December 31, 1991.

28 (b) Determination of power line siting fee.--The commission
29 shall establish a power line siting fee by taking into
30 consideration the factors, as identified by the commission in

1 conjunction with the Department of Health, that constitute
2 prudent avoidance. The siting fee shall be proportional to a
3 weighted sum of the number of housing units in the exposure zone
4 and the number of square feet of commercial property in the
5 exposure zone. The following criteria shall be used to calculate
6 the fee:

7 (1) The per-capita exposure fee in dollars per person
8 exposed.

9 (2) The width of the exposure zone from the center line
10 of the transmission line, as defined in terms of distance
11 from lines of alternate design in each voltage class.

12 (3) The occupancy of housing units in persons per house.

13 (4) The line length in miles.

14 (5) The density of housing units in the exposure zone in
15 housing units per square mile.

16 (6) The occupancy of commercial properties in persons
17 per square foot.

18 (7) The density of commercial property in the exposure
19 zone in square feet per square mile.

20 (c) Accounting restrictions.--The power line siting fee
21 established in this section shall not be used by a public
22 utility to generate income. The siting fee shall be treated as
23 an expense by the public utility and shall not be added to or
24 calculated, in any manner, as a percentage of the public
25 utility's approved rate base.

26 (d) Duration of siting fee.--The commission, in conjunction
27 with the Department of Health, shall, from time to time, review
28 all available scientific evidence on the biological effects of
29 human exposure to electric and magnetic fields for the purpose
30 of determining the position of the scientific community on the

1 public health risks of electric and magnetic fields and any
2 scientific consensus regarding such risks. The commission shall
3 use the information gained from the review to determine the
4 duration of the siting fee or as a basis for increasing or
5 decreasing the siting fee.

6 Section 6. Power and duties of commission.

7 The commission shall adopt, promulgate and prescribe any
8 rules, regulations, guidelines, statements of policy and forms
9 necessary to enforce the provisions of this act and to insure
10 continued compliance with the conditions of siting and
11 construction of electric transmission lines as set forth in 52
12 Pa. Code Ch. 57 Subch. G (relating to commission review of
13 siting and construction of electric transmission lines).
14 Whenever the commission is required to approve an application
15 for the location and construction of a transmission line in this
16 Commonwealth, the commission shall:

17 (1) Analyze testimony from public hearings to ensure
18 that the location and construction of the transmission line
19 or any portion thereof is in the public and economic interest
20 of the citizens of this Commonwealth.

21 (2) Consider the effect of the transmission line on the
22 environment and establish such conditions as may be desirable
23 or necessary to minimize adverse environmental impact.

24 (3) Ensure that the location and construction of the
25 transmission line adheres to the standards set forth in the
26 National Electrical Safety Code. The commission shall, upon
27 receipt of a written complaint concerning the lack of
28 compliance with these standards in the construction or
29 location of a specific transmission line, investigate the
30 complaint and, if appropriate, exercise its authority to

1 enforce adherence to the standards.

2 (4) Upon the request of a public utility, electric
3 cooperative, local government, concerned person, group or
4 association, or upon its own motion, schedule public
5 hearings, after notice, to determine the need for the
6 transmission line and if the proposed line is in the public
7 and economic interest of the citizens of this Commonwealth,
8 and to ensure that the corridor the line is to follow will
9 reasonably minimize adverse impact on the scenic assets and
10 environment of the concerned area. The notice shall be
11 arranged and paid for by the public utility seeking
12 authorization to construct or locate a transmission line.
13 Notification shall be published at least 45 days before the
14 date set for the hearing and shall be published in newspapers
15 of general circulation within counties crossed by the
16 proposed transmission line corridor. The required newspaper
17 notices shall be one-half page in size in a standard size
18 newspaper or a full page in a tabloid size newspaper and
19 published in a section of the newspaper other than the legal
20 notices section. These notices shall include a map generally
21 depicting all proposed transmission corridors. A newspaper of
22 general circulation shall be the newspaper within a county
23 crossed by a proposed transmission line corridor which has
24 the largest daily circulation in that county and has its
25 principal office in that county. If the newspaper with the
26 largest daily circulation has its principal office outside
27 the county, then the notices shall appear in both the
28 newspaper having the largest circulation in that county and
29 in a newspaper authorized to publish legal notices in that
30 county.

1 (5) Hold at least one public hearing in the areas of
2 this Commonwealth affected by construction or location of the
3 proposed transmission line for the purpose of receiving
4 public comment.

5 (6) Prescribe, in collaboration with other Commonwealth
6 agencies, the means for monitoring the economic effects,
7 including the decline in property values or subsequent
8 medical costs, which may arise from the location of the
9 transmission line corridor and the construction and
10 maintenance of the transmission lines.

11 (7) Establish, or cause to be established, a per-capita
12 exposure fee which shall be an amount in dollars for every
13 person living within the exposure zone of a proposed
14 transmission line. When establishing the per-capita exposure
15 fee, the commission shall take into consideration the factors
16 that constitute prudent avoidance.

17 (8) Establish, or cause to be established, the width of
18 the transmission line exposure zone in terms of distance.
19 When establishing the exposure zone, the commission shall
20 promulgate a single value for transmission lines in each
21 voltage class.

22 (9) Calculate the power line siting fee and collect the
23 fee from any public utility receiving approval to locate and
24 construct a transmission line or, if the commission so
25 requires, a distribution line.

26 (10) Prepare, or cause to be prepared, an analysis of
27 research studies on the possible health effects resulting
28 from human exposure to 50/60 Hz electromagnetic fields.

29 (11) Convene, or cause to be convened, any scientific
30 panel, board or group for the purpose of coordinating

1 research studies, reviewing scientific studies on the
2 biological effects of electromagnetic fields and making
3 recommendations to the General Assembly on risk management
4 regulations and policy.

5 (12) Prepare, or cause to be prepared, public
6 information programs, particularly about the nature of
7 electric and magnetic fields and the current status of
8 ongoing research programs.

9 (13) Ensure that any rural nonprofit electric generation
10 and transmission cooperative or any municipally owned or
11 operated electric system operating in a service territory
12 crossed by a proposed transmission line have access to
13 transmission facilities or the opportunity to purchase joint
14 ownership interest in the transmission line on equitable and
15 reasonable terms, unless it is determined that the access or
16 joint ownership is not technically feasible.

17 (14) Adopt rules specifying the content of notices
18 required by this act.

19 (15) Provide an avenue for registering complaints from
20 the public and for mitigating, at the public utility's
21 expense, any complaint from present or future homeowners,
22 farmers and business owners.

23 Section 7. Notifications.

24 Upon filing an application by a public utility to the
25 commission for authorization to locate and construct a
26 transmission line or any portion thereof, the public utility
27 shall, within seven days of the filing, serve a copy of the
28 application by registered or certified mail to the Department of
29 Health and, as promulgated in 52 Pa. Code § 57.74 (relating to
30 filing and service of application and notice of filing), the

1 Department of Environmental Resources, Bureau of Environmental
2 Planning, and the chief executive officer, the governing body
3 and the body charged with the duty of planning land use in each
4 city, borough, town, township and county in which any portion of
5 the transmission line is proposed to be located. The public
6 utility shall, in such manner and at such time as shall be
7 prescribed by the commission, notify every homeowner and every
8 owner of an agricultural or commercial enterprise who lives or
9 operates the enterprises within 500 feet of the proposed
10 transmission line right-of-way. Upon request, the public utility
11 shall make the application available to any person or owner of a
12 business or agricultural enterprise for review.

13 Section 8. Preliminary statements of issues and reports.

14 (a) Preliminary statements.--The Commonwealth agencies
15 receiving an application in accordance with section 7 shall
16 submit a preliminary statement of issues to the commission and
17 the public utility no later than 60 days after distribution of
18 the application. The statement of issues shall be made available
19 to each local government directly affected by the transmission
20 line for use as information for public hearing held under
21 section 6(4). The failure to raise an issue in a preliminary
22 statement of issues shall not preclude the issue from being
23 raised in the agency's report.

24 (b) Reports.--

25 (1) Each agency shall prepare a report as provided below
26 and shall submit the report to the commission and the public
27 utility within 90 days after distribution of the application:

28 (i) The commission shall prepare a report as to the
29 impact of each proposed transmission line or corridor as
30 it relates to matters within its jurisdiction.

1 (ii) The Department of Environmental Resources shall
2 prepare a report as to the impact of each proposed
3 transmission line or corridor on matters within its
4 jurisdiction, including the environmental effects of the
5 transmission line on State gameland, wildlife, farmland
6 and farm animals.

7 (iii) The Department of Health shall prepare a
8 report as to the impact of each proposed transmission
9 line on public health and other matters within its
10 jurisdiction. The report shall include an analysis of
11 available research on the possible health effects
12 resulting from human exposure to electric and magnetic
13 fields and recommendations for compensating persons
14 living within the transmission line right-of-way for any
15 subsequent health problem directly attributable to the
16 transmission line.

17 (2) Each local government may prepare a report as to the
18 impact of the proposed transmission line or corridor on
19 matters within its jurisdiction, including the consistency of
20 the proposed transmission line or corridor with all
21 applicable local ordinances, regulations, standards or
22 criteria that apply to the proposed transmission line or
23 corridor, including local community development plans, zoning
24 regulations and land development regulations.

25 (3) Each agency and local government shall initiate the
26 activities required by this section no later than 15 days
27 after the application is filed or received and shall keep the
28 public utility and the commission informed as to the progress
29 of its studies and any issues raised thereby.

30 (4) The commission shall prepare a written analysis

1 which contains a compilation of agency and local government
2 reports and summaries of the material contained therein. The
3 analysis shall include:

4 (i) The reports required by this section.

5 (ii) Comments received from any other agency,
6 person, group or association.

7 (iii) The recommendations of the commission as to
8 the disposition of the application, of exceptions,
9 conditions, exemptions or other relief identified by any
10 party, and of any proposed conditions of certification
11 which the commission believes should be imposed.

12 (c) Failure to file statement or report.--The failure of any
13 agency or local government to submit a preliminary statement of
14 issues or a report, or to submit its preliminary statement of
15 issues or report within the specified time, shall not be grounds
16 for extending any time limitation set forth in this section. The
17 preliminary statement of issues and reports provided for in this
18 section may be used by the commission to condition or modify the
19 application of a public utility to locate and construct a
20 transmission line. Neither the failure to submit a preliminary
21 statement of issues or a report nor the inadequacy or
22 incompleteness of the preliminary statement of issues or report
23 shall be grounds to deny, delay or condition application
24 approval. The commission shall grant or deny a public utility's
25 application to locate and construct a transmission line in
26 accordance with 52 Pa. Code § 57.76 (relating to determination
27 and order).

28 Section 9. Electromagnetic Field Exposure Avoidance Fund.

29 (a) Creation.--There is hereby created a special account
30 within the General Fund, to be known as the Electromagnetic

1 Field Exposure Avoidance Fund, to which shall be credited all
2 payments made in accordance with the provisions of this act and
3 any other deposits or contributions from any other source made
4 available to the commission for the purposes enumerated in this
5 act.

6 (b) Use of funds.--The fund shall be used to conduct or
7 contract for, or analyze research studies on the biological
8 effects of human exposure to 50/60 Hz electromagnetic fields.
9 The commission, in collaboration with the Department of Health,
10 shall requisition from the fund such amounts as may be necessary
11 to provide adequate funds for the research studies. When
12 conducting or contracting for research studies, the commission,
13 in collaboration with the Department of Health, shall, to the
14 extent feasible, require coordination through a Federal or
15 academic research program and ensure that the studies are
16 designed to include electromagnetic field mechanism, engineering
17 and economic research to help develop measures to mitigate the
18 health risks that may be associated with exposure to electric
19 and magnetic fields. The commission shall identify, or cause to
20 be identified, priority projects and shall ensure that all
21 studies are conducted with integrity and objectivity.

22 (c) Additional use of funds.--To the extent that funds are
23 available, the General Assembly may authorize the transfer of
24 moneys from the fund for the purpose of supporting economic
25 development or educational scholarship programs in jurisdictions
26 not directly served by the transmission line or to solve field
27 exposure problems at existing facilities.

28 Section 10. Effective date.

29 This act shall take effect in 60 days.