

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 2)*

Electric Fuel Corporation

(Name of Issuer)

Common Stock, \$0.01 par value per share

(Title of Class of Securities)

284871 10 0

(CUSIP Number)

Robert S. Ehrlich, c/o Electric Fuel Limited, P.O. Box 641
Western Industrial Park, Beit Shemesh, Israel 99000, +972-2-990-6666

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

January 12, 2001

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on
Schedule 13G to report the acquisition that is the subject of
this Schedule 13D, and is filing this schedule because of
(S)240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the
following box:

Note: Schedules filed in paper format shall include a signed
original and five copies of the schedule, including all
exhibits. See (S)240.13d-7 for other parties to whom copies
are to be sent.

*The remainder of this cover page shall be filled out for a
reporting person's initial filing on this form with respect to
the subject class of securities, and for any subsequent
amendment containing information which would alter the
disclosures provided in a prior cover page.

The information required in the remainder of this cover page
shall not be deemed to be "filed" for the purpose of Section
18 of the Securities Exchange Act of 1934 ("Act") or otherwise
subject to the liabilities of that section of the Act but
shall be subject to all other provisions of the Act (however,
see the Notes).

Persons who respond to the collection of
information contained in this form are not
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NAMES OF REPORTING PERSONS

1. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Robert S. Ehrlich

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2. (a)
(b)

3.

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4.

00

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5.

CITIZENSHIP OR PLACE OF ORGANIZATION

6.

USA/Israel

SOLE VOTING POWER

7.

NUMBER OF

1,340,567

SHARES

SHARED VOTING POWER

BENEFICIALLY

8.

0

OWNED BY

SOLE DISPOSITIVE POWER

EACH

9.

REPORTING

1,340,567

PERSON

SHARED DISPOSITIVE POWER

WITH

10.

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11.

1,340,567

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

12.

(SEE INSTRUCTIONS)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.

6.2%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14.

IN

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This Statement relates to the beneficial ownership by Robert S. Ehrlich of shares (including shares issuable upon the exercise of options exercisable within 60 days) of the common stock of Electric Fuel Corporation.

Item 1. Security and Issuers.

This Statement relates to the common stock, \$0.01 par value, of Electric Fuel Corporation, a Delaware corporation (the "Issuer") having its principal executive offices at 632 Broadway, Suite 301, New York, New York 10012.

Item 2. Identity and Background.

Mr. Ehrlich is and has been Chairman and Chief Financial Officer and a director of the Issuer. From May 1991 until January 1993, Mr. Ehrlich was Vice Chairman of the Board of the Issuer. Mr. Ehrlich has been a director of Eldat, Ltd., an Israeli manufacturer of electronic shelf labels, since June 1999. Since 1987, Mr. Ehrlich has served as a director of PSCX, and, since April 1997, Mr. Ehrlich has been the chairman of the board of PSCX.

Mr. Ehrlich's business address is c/o Electric Fuel Ltd., P.O. Box 641, Western Industrial Park, Beit Shemesh, Israel 99000. During the past five years, Mr. Ehrlich has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors). During the past five years, Mr. Ehrlich has not been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction which resulted in a judgment, decree or final order enjoining Mr. Ehrlich from future violations of, or prohibiting or mandating activities by Mr. Ehrlich subject to, Federal or State securities laws or

effected any transaction in the Common Stock in the past 60 days. To the best of Mr. Harats's knowledge, no other person has the right to receive or the power to direct the receipt of dividends from, or proceeds of the sale of, the shares of Common Stock held by him.

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Based on information available to the public, Mr. Gross beneficially owns 4,187,862 shares of Common Stock, or 19.6% of the Common Stock outstanding, which includes 35,000 shares issuable upon the exercise of options exercisable within 60 days. Of the 4,187,862 shares of Common Stock beneficially owned by him, Mr. Gross has the sole power to vote 4,012,862 shares of Common Stock, assuming the exercise of the options to purchase 35,000 shares of Common Stock. The remaining 175,000 shares of Common Stock are held jointly by Mr. Gross and Lawrence M. Miller in their capacities as Co-Trustees of the Rose Gross Charitable Foundation (the "Foundation"), a charitable foundation founded by Mr. Gross by Agreement of Trust dated May 28, 1997. Mr. Gross has sole power to dispose of all shares of Common Stock beneficially owned by him, except for (i) the 175,000 shares of Common Stock owned by the Foundation, (ii) 834,542 shares of Common Stock that are held in a margin account with Salomon Smith Barney, (iii) 799,462 shares of Common Stock that are held in a margin account with Donaldson, Lufkin & Jenrette, (iv) 145,000 shares of Common Stock that are held in a margin account with Merrill Lynch, and (v) 200,000 shares of Common Stock that have been pledged to Wilmington Trust of Pennsylvania. To the best of Mr. Gross' knowledge, no other person has the right to receive or the power to direct the receipt of dividends from, or proceeds of the sale of the shares of Common Stock held by him.

Messrs. Ehrlich, Harats and Gross are parties to a Voting Rights Agreement relating to the common stock and described in Item 6 below.

Messrs. Ehrlich and Harats are parties to a Voting Agreement relating to the common stock and described in Item 6 below.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Mr. Ehrlich is party to an employment agreement with the Issuer. Pursuant to his employment agreement, Mr. Ehrlich has demand and "piggyback" registration rights covering shares of the Issuer's common stock held by him.

Mr. Ehrlich and Mr. Yehuda Harats and are parties to a Voting Agreement pursuant to which each of the parties agrees to vote the shares of the Issuer's common stock held by that person in favor of the election of Messrs. Ehrlich and Harats (or their designees) as directors.

Pursuant to a voting rights agreement dated September 30, 1996 and as amended December 10, 1997, between Mr. Ehrlich, Yehuda Harats, Leon S. Gross and the Issuer, Lawrence M. Miller, Mr. Gross's advisor, is entitled to be nominated to serve on the Issuer's board of directors so long as Mr. Gross, his heirs or assigns retain at least 1,375,000 shares of common stock. In addition, under the voting rights agreement, In addition, under the voting rights agreement, a "group" within the meaning of Section 13(d) (3) of the Exchange Act was formed. Messrs. Gross, Ehrlich and Harats agreed to vote and take all necessary action so that Messrs. Ehrlich, Harats and Miller shall serve as members of the Issuer's board of directors until the earlier of December 10, 2002 or the Issuer's fifth annual meeting of stockholders after December 10, 1997. In addition, so long as Mr. Miller serves as a director, Mr. Gross, who shall succeed Mr. Miller should he cease to serve on the board (unless Mr. Gross is then serving on the board, in which case Mr. Gross may designate a director), shall be entitled to attend and receive notice of board meetings.

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On December 3, 1999, Mr. Ehrlich purchased 125,000 shares of the Issuer's common stock out of its treasury at the closing price of the common stock on December 2, 1999. Payment was rendered by Mr. Ehrlich in the form of a recourse promissory note in the amount of \$167,975, secured by certain compensation due Mr. Ehrlich upon termination. The other terms of these notes are similar to the terms of the previous notes as described above.

On February 9, 2000, Mr. Ehrlich exercised 131,665 stock options. Mr. Ehrlich paid the exercise price of the stock options and certain taxes that the Issuer paid on his behalf by giving the Issuer a non-recourse promissory note in the amount of \$789,990, secured by the shares of the Issuer's common stock acquired through the exercise of the options.

The foregoing description of the Voting Agreement and the Voting Rights Agreement is qualified in its entirety by reference to the full text of such

agreements, a copy of each of which was included as an exhibit to the Schedule 13D.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 - Voting Agreement (previously filed).

Exhibit 2 - Voting Rights Agreement (previously filed).

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

April 2, 2001

Date

/s/ Robert S. Ehrlich

Signature

Robert S. Ehrlich

Name/Title