

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Schedule 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 13)*

Electric Fuel Corporation

(Name of Issuer)

Common Stock \$0.01 Par Value

(Title of Class of Securities)

284871-10-0

(CUSIP Number)

Steven M. Plon, Esquire, Buchanan Ingersoll Professional Corporation
Eleven Penn Center, 14th Floor, Philadelphia, PA 19103, (215) 665-3608

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

December 18, 2000

(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 which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b) (3) or (4), check the following box / /.

Check the following box if a fee is being paid with the statement / /. (A fee is not required only if the reporting person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the claim of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

Note: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d1(a) for other parties to whom copies are to be sent.

*The remainder of this coverage page shall be filed 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 disclosures provided in a prior cover page.

The information required on 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 action of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following page(s))

CUSIP No. 284871-10-0

1. NAME OF REPORTING PERSONS
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS
Leon S. Gross S.S. No. ###-##-####

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a)

(b)

3. SEC USE ONLY

4. SOURCE OF FUNDS* PF

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEM 2(d) or 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION
United States of America

7. SOLE VOTING POWER
4,012,862
[includes 35,000 options to purchase common stock]

8. SHARED VOTING POWER
175,000

9. SOLE DISPOSITIVE POWER
2,033,858 [includes 35,000 options to purchase common
stock]

10. SHARED DISPOSITIVE POWER
2,154,004 [1,779,004 are held in a margin
accounts, 200,000 are pledged to Wilmington
Trust of Pennsylvania and 175,000 are held
jointly as a Co-Trustee of the Rose Gross
Charitable Foundation].

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
4,187,862 [includes 35,000 warrants to purchase common stock]

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES
CERTAIN SHARES*

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
19.6% of the issued and outstanding stock (1)

14. TYPE OF REPORTING PERSON*
IN

(1) Based upon 21,296,032 shares of common stock outstanding as reported in
Electric Fuel Corporation's Current Report filed on Form 8-K which was filed on
November 17, 2000 and assuming exercise of options to purchase 35,000 Shares
held by Mr. Gross.

*SEE INSTRUCTIONS BEFORE FILLING OUT!

AMENDMENT NO. 13 TO SCHEDULE 13D

This Amendment No. 13 to the Schedule 13D originally dated February 23,
1996, as amended by the First Amendment to Schedule 13D dated April 30, 1996,
the Second Amendment to Schedule 13D dated September 1, 1996, the Third
Amendment to Schedule 13D dated October 11, 1996, the Fourth Amendment to
Schedule 13D dated December 27, 1996, the Fifth Amendment to Schedule 13D dated
May 12, 1997, the Sixth Amendment to Schedule D dated December 3, 1997, the
Seventh Amendment to Schedule 13D dated September 28, 1998, the Eighth Amendment
to Schedule 13D dated October 14, 1999, the Ninth Amendment to Schedule 13D
dated October 28, 1999, the Tenth Amendment to Schedule 13D dated January 12,
2000, the Eleventh Amendment to Schedule 13D dated June 26, 2000 and the Twelfth
Amendment to Schedule 13D dated October 20, 2000 (the "Existing Schedule 13D"),
is being filed by the undersigned in accordance with Rule 13d-2(a) of the
general rules and regulations under the Securities Exchange Act of 1934, as
amended (the "Exchange Act"), and amends the Existing Schedule 13D to the extent
set forth below. Terms defined in the Existing Schedule 13D are used herein as
so defined.

Item 3. Source and Amount of Funds or Other Consideration.

Amend Item 3 of the Existing Schedule 13D by adding the following paragraph:

Mr. Gross acquired 30,660 of his Shares as a result of his cashless exercise of a Warrant for 125,000 Shares on December 18, 2000. The Shares represented by the Warrant had an exercise price of \$562,500, or \$4.50 per Share. Pursuant to the terms of the Warrant, Mr. Gross surrendered his right to 94,340 of the Shares in his cashless exercise of the Warrant, for a net acquisition of 30,660 Shares.

Item 5. Interest in Securities of the Issuer.

The third paragraph of Items 5(a) and (b) of the Existing Schedule 13D is hereby amended to read as follows:

Mr. Gross beneficially owns 4,187,862 Shares, or 19.6% of the Common Stock (based upon 21,296,032 shares of common stock outstanding as reported in Electric Fuel Corporation's Current Report filed on Form 8-K which was filed on November 17, 2000 and assuming the exercise of options to purchase 35,000 Shares held by Mr. Gross). Of the 4,187,862 Shares beneficially owned by him, Mr. Gross has the sole power to vote 4,012,862 Shares, assuming the exercise of options to purchase 35,000 Shares. The remaining 175,000 Shares 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 beneficially owned by him, except for (i) the 175,000 Shares owned by the Foundation, (ii) 834,542 Shares which are held in a margin account with Salomon Smith Barney, (iii) 799,462 Shares which are held in a margin account with Donaldson, Lufkin & Jenrette, (iv) 145,000 Shares which are held in a margin account with Merrill Lynch, and (v) 200,000 Shares which have been pledged to Wilmington Trust of Pennsylvania. To the best of Mr. Gross' knowledge, except as expressly set forth herein, 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 held by him.

Item 6. Contracts, Arrangements, Understanding or Relationship with Respect to Securities of the Issuer.

Item 6 of the Existing Schedule 13D is hereby amended by adding the following paragraphs:

(b) Since the filing of the Existing Schedule 13D, Mr. Gross has added to and moved Shares among the margin accounts he has with the following Brokerage Firms. As of December 18, 2000, Mr. Gross' Shares are pledged to the Brokerage Firms as follows:

Brokerage Firm -----	Number of Shares -----
Donaldson, Lufkin & Jenrette	799,462
Merrill Lynch	145,000
Solomon Smith Barney	834,542

In addition, in October, 2000, Mr. Gross pledged 200,000 Shares to Wilmington Trust of Pennsylvania as partial collateral for a line of credit.

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.

January 16, 2001

Date

/s/ Leon S. Gross

Leon S. Gross