

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Schedule 13D

Under the Securities Exchange Act of 1934  
(Amendment No. 10)\*

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 28, 1999  
-----  
(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))

-----  
Page 1 of 6 Pages  
-----

-----  
CUSIP No. 284871-10-0  
-----

-----  
Page 2 of 6 Pages  
-----

-----  
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)  
-----

-----  
 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  
 -----

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7. SOLE VOTING POWER  4,101,004 [includes 375,000 warrants to purchase common stock] ----- 8. SHARED VOTING POWER  175,000 ----- 9. SOLE DISPOSITIVE POWER  3,961,004 ----- 10. SHARED DISPOSITIVE POWER 315,000 [140,000 shares are subject to a Security Agreement 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  
 4,276,004 [includes 375,000 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) 26.6% of  
 the issued and outstanding stock(1)  
 -----

14. TYPE OF REPORTING PERSON\*  
 IN  
 -----

(1) Based upon 15,728,387 shares of common stock outstanding upon the closing  
 of the 1999 Private Placement and assuming exercise of warrants to purchase  
 375,000 Shares held by Mr. Gross.

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

AMENDMENT NO. 10 TO SCHEDULE 13D

This Amendment No. 10 to the Schedule 13D 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 and the Ninth Amendment to Schedule 13D dated October 28, 1999 (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:  
 The Shares of the Issuer purchased by Mr. Gross as part of the private placement pursuant to a Stock Purchase Agreement dated December 28, 1999 were acquired at a cost of \$750,000 (the "1999 Private Placement"). The funds required for all of the foregoing Shares purchased by Mr. Gross were provided by Mr. Gross' personal funds.

Item 4. Purpose of the Transaction.  
 Item 4 of the Existing Schedule 13D is amended by adding the following paragraph:  
 Mr. Gross participated in the 1999 Private Placement primarily because of

the possibility that the Company will be successful in its business activities. Mr. Gross may make dispositions and additional purchases subject to a number of factors, including market prices of the Shares and his continuing review of the business of and the prospects for the Issuer and general market and business considerations.

Except as set forth in the preceding paragraph, Mr. Gross has no present plans or proposals which relate to, or which would result in, any changes specified in clauses (b) through (j) of Item 4 of Schedule 13D.

-----  
Page 4 of 6 Pages  
-----

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 4,276,004 Shares, or 26.6% of the Common Stock outstanding following the 1999 Private Placement (based upon 15,728,387 shares of common stock outstanding upon the closing of the 1999 Private Placement and assuming the exercise of warrants to purchase 375,000 Shares held by Mr. Gross). Of the 4,276,004 Shares beneficially owned by him, Mr. Gross has the sole power to vote 4,101,004 Shares, assuming the exercise of warrants to purchase 375,000 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) rights as to disposition for a total of 140,000 Shares granted to Madison Bank under a Security Agreement and (ii) the 175,000 Shares owned by the Foundation. 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 of Common Stock held by him.

Items 5(c) of the Existing Schedule 13D is hereby amended by adding the following paragraphs:

(c) On December 28, 1999 Mr. Gross acquired 375,000 Shares at a purchase price of \$2.00 per share in the 1999 Private Placement. In connection with the 1999 Private Placement Mr. Gross was also issued warrants to purchase 375,000 Shares.

On November 15, 1999, the Foundation made a gift of 60,000 Shares.

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:

Pursuant to a Securities Purchase Agreement dated December 28, 1999 between the Issuer and Mr. Gross, on December 28, 1999 the Issuer issued 375,000 shares of the Issuer's Common Stock, \$.01 par value per share, to Mr. Gross at a price of \$2.00 per share, and warrants to acquire 375,000 Shares, for a total purchase price of \$750,000.

-----  
Page 5 of 6 Pages  
-----

Pursuant to the terms of the Securities Purchase Agreement, Mr. Gross has agreed that for a period of five (5) years from the Closing Date, neither Mr. Gross nor his Affiliates, as defined in the Securities Act, directly or indirectly or in conjunction with or through any Associate (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), will (i) solicit proxies with respect to any capital stock or other voting securities of the Issuer under any circumstances, or become a "participant" in any "election contest" relating to the election of directors of the Issuer (as such terms are used in Rule 14a-11 of Regulation 14A of the Exchange Act) or (ii) make an offer for the acquisition of substantially all of the assets or capital stock of the Issuer or induce or assist any other person to make such an offer or (iii) form or join any "group" within the meaning of Section 13(d) (3) of the Exchange Act with respect to any capital stock or other voting securities of the Issuer for the purpose of accomplishing the actions referred to in clauses (i) and (ii) above other than pursuant to the Voting Rights Agreement described below.

The Voting Rights Agreement, dated as of September 30, 1996 (the "Voting Rights Agreement") was amended by Amendment No. 1 to Voting Rights Agreement on December 28, 1999 (the "Voting Rights Agreement Amendment") in connection with the transactions contemplated by the Securities Purchase Agreement. Pursuant to the Voting Rights Agreement Amendment, each of Lawrence M. Miller (or, if applicable, Alternate Director), Robert S. Ehrlich, Yehuda Harats and one person to be designated for nomination by the 1999 Investors (so long as the 1999 Investors collectively own 1,200,000 shares of the Common Stock) shall serve as members of the Board. The remaining terms of the Voting Rights Agreement were not changed by the Voting Rights Agreement Amendment.

The foregoing descriptions of each of the Securities Purchase Agreement and the Voting Rights Agreement Amendment are qualified in their entirety by reference to the full text of the Securities Purchase Agreement and the Voting Rights Agreement Amendment, copies of which are included as exhibits hereto and are incorporated by reference herein.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 - Securities Purchase Agreement

Exhibit 2 - Voting Rights Agreement Amendment

-----  
Page 6 of 6 Pages  
-----

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.

1/12/00  
- -----  
Date

/s/ Leon S. Gross  
- -----  
Leon S. Gross

ELECTRIC FUEL CORPORATION

SECURITIES PURCHASE AGREEMENT

December 27, 1999

TO THE PURCHASERS SET FORTH ON EXHIBIT A

Ladies and Gentlemen:

Electric Fuel Corporation, a Delaware corporation (the "Company"), proposes to sell (the "Offering") to the purchasers set forth on Exhibit A (the "Purchasers") 1,800,000 shares (the "Shares") of its common stock, \$.01 par value per share (the "Common Stock") and warrants to purchase 1,800,000 shares of Common Stock (the "Warrants", and together with the Shares, the "Securities"), in the amounts and for the price set forth opposite each Purchaser's name on Exhibit A. In connection with and in consideration for the sale and purchase of the Securities, the Company and the Purchasers agree to abide by the mutual covenants contained herein.

1. Sale and Purchase of the Securities. On the basis of the representations, warranties and agreements contained in, and subject to the terms and conditions of, this stock purchase agreement (the "Agreement"), the Company agrees to sell to the Purchasers, and the Purchasers agree to purchase from the Company, the Securities. The Purchasers will purchase the Shares at a price of \$2.00 per share. Of the Warrants, Warrants to purchase 1,200,000 shares shall have an exercise price of \$1.25 per share and shall expire on the date which is six months after the Closing Date, and Warrants to purchase 600,000 shares shall have an exercise price of \$4.50 per share and shall expire on the first anniversary of the Closing Date. The Warrants shall be in the form attached hereto.

2. Delivery and Payment.

(a) On the Closing Date, the Purchasers will pay to Yigal Arnon & Co., as escrow agent (the "Escrow Agent"), for the benefit of the Company an aggregate of U.S.\$3,600,000 (the "Purchase Price") and the Company shall deliver the Securities to the Escrow Agent for the benefit of the Purchasers. Payment of the Purchase Price shall be made by wire transfer in immediately available funds in U.S. dollars or by delivery of a check for U.S. dollars to the Escrow Agent in accordance with the wiring or delivery instructions provided below, provided, however, that the Purchasers may, at their option wire or deliver New Israeli Shekels in lieu of U.S. dollars at the Bank HaPoalim U.S. dollar cash sell rate (i.e. the rate at which the bank sells to buyers) as of the close of business on December 26, 1999. Notwithstanding the foregoing, the Purchasers agree that \$18,000 shall be paid to the Company in accordance with the wire transfer instructions set forth on Annex I hereto. To the extent that monies are wired to the Escrow Agent, they should be wired as follows: to account number 716383 in the name of Yigal Arnon & Co. Trust Account, at Israel Discount Bank, Shlomzion Hamalka Branch, branch number 11-063, and to the extent that payment is made via check, delivery should be made to the attention of Barry Levenfeld, Adv. c/o Yigal Arnon & Co., 22 Rivlin Street Jerusalem 91000, Israel. The Closing of the Offering shall take place at the offices of the Company, Western Industrial Zone, Bet Shemesh, Israel on December 27, 1999 or at such place and time on such other date as shall be agreed upon by the Company and the Purchasers. The day on which the Closing takes place shall be referred to herein as the "Closing Date."

(b) Pursuant to the terms of an Escrow Agreement to be entered into in connection with the Closing in form and substance reasonably satisfactory to the Company, the Purchasers and the Escrow Agent (the "Escrow Agreement"), the Escrow Agent shall pay the Purchase Price to the Company and deliver the Securities to the Purchasers upon receiving written notice from the Company to the effect that the Securities and Exchange Commission has declared effective a Form S-3 registration statement (the "Form S-3") filed by the Company to register the resale of the Shares, the Warrants and the shares of Common Stock issuable upon exercise of the Warrants (the "Effective Date") pursuant to the terms of Section 8 below. The Escrow Agent shall hold the Purchase Price and the Securities in escrow until the Effective Date.

(c) Notwithstanding anything in this Agreement to the contrary, the Parties agree that the amount of Securities to be sold under this Agreement may be reduced if without such reduction the Offering would require approval of the Company's stockholders. In the event such reduction is required, the amount of Securities by which the size of the Offering shall be reduced shall be apportioned pro rata among the Purchasers.

3. Offering of Common Stock. The Common Stock will be offered and sold to the Purchasers without being registered under the Securities Act of 1933, as amended (the "Securities Act"), in reliance on the exemption therefrom provided by Section 4(2) of the Securities Act.

2

Immediately after the Closing, the Company shall file the Form S-3 in accordance with Section 8 below. At the Closing, the Company will also amend the voting rights agreement by and among the Company, Leon S. Gross, Robert S. Ehrlich and Yehuda Harats dated as of September 30, 1996 so as to amend such agreement as of the Closing Date (the "Amended Voting Rights Agreement"). Pursuant to the Amended Voting Rights Agreement, the Purchasers shall be entitled to have one designated nominee elected to the Board of Directors of the Company so long as the Purchasers hold in the aggregate 1,200,000 shares of Common Stock. This Agreement, the Escrow Agreement and the Amended Voting Rights Agreement are hereinafter referred to collectively as the "Operative Documents."

4. Representations and Warranties of the Company. The Company hereby represents and warrants to the Purchasers as follows:

(a) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the state of Delaware. The Company's wholly-owned Israeli subsidiary, Electric Fuel (E.F.L.) Limited ("EFL"), is duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation. Each of the Company and EFL is qualified and in good standing as a foreign corporation in each jurisdiction in which the character or location of its assets or properties (owned, leased or licensed) or the nature of its business makes such qualification necessary, except for such jurisdictions where the failure to so qualify, individually or in the aggregate, would not have a material adverse effect on the assets or properties, business, results of operations or financial condition, taken as a whole, of the Company and EFL.

(b) All necessary corporate action has been duly and validly taken to authorize the execution, delivery and performance of the Operative Documents by the Company. This Agreement has been duly and validly authorized, executed and delivered by the Company and constitutes the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles. The Escrow Agreement and the Amended Voting Rights Agreement have been duly and validly authorized, and when executed and delivered, will constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.

(c) Neither the execution, delivery and performance of the Operative Documents by the Company nor the consummation of any of the transactions contemplated hereby or thereby (including, without limitation, the issuance

3

and sale by the Company of the Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any material lien, charge or encumbrance upon any properties or assets of the Company pursuant to the terms of, any material indenture, mortgage, deed of trust or other agreement or instrument to which the Company is a party or by which the Company or any of its properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company, or violate any provision of the charter or by-laws of the Company or EFL, except for such consents or waivers that have already been obtained and are in full force and effect, or, except for in connection with the Form S-3, require any consent, approval, authorization or other order of or registration or filing with, any court, regulatory body, administrative agency or other governmental body, agency or official, or such consents or waivers the failure to so obtain would not individually or in the aggregate, have a material adverse effect upon the assets or properties, business, results of operations or financial condition, taken as a whole, of the Company and EFL.

(d) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, the Company's Form 10-Qs for the fiscal periods ended March 31, 1999, June 30, 1999 and September 30, 1999 and all documents

filed with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") (such documents are hereinafter referred to as the "Exchange Act Documents") were filed in a timely manner and, when they were filed (or, if any amendment with respect to any such document was filed, when such amendment was filed), conformed in all material respects to the requirements of the Exchange Act, and the rules and regulations thereunder, and did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. Subsequent to the respective dates as of which information was given in the Exchange Act Documents, except as described therein, there has not been any material adverse change, and, to the Company's knowledge, no event has occurred which with notice or lapse of time or both, that would constitute such a material adverse change, in the assets or properties, business, results of operations or financial condition of the Company taken as a whole.

(e) There are no claims for brokerage commissions or finder's fees on similar compensation in connection with the transactions by this Agreement based on any arrangement or agreement made by or on behalf of the Company other than as previously disclosed to the Purchasers, and the Company agrees to indemnify and hold the Purchasers harmless against any damages incurred as a result of any such claims.

4

5. Representations and Warranties of the Purchasers. Each Purchaser represents and warrants to Company that:

(a) Such Purchaser has full power and authority to execute, deliver and perform each of this Agreement, the Escrow Agreement and the Amended Voting Rights Agreement. This Agreement constitutes a valid and legally binding obligation of such Purchaser, enforceable against such Purchaser in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.

(b) The Securities to be received by such Purchaser will be acquired for investment for such Purchaser's own account, and not with a view to the distribution of any part thereof. Such Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. Such Purchaser does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer, or grant participation to such person or to any third person, with respect to any of the Securities.

(c) Such Purchaser understands that the Securities may not be sold, transferred, or otherwise disposed of without registration under the Securities Act, or an exemption therefrom, and that in the absence of an effective registration statement covering the Securities or an available exemption from registration under the Securities Act, the Securities must be held indefinitely. In the absence of an effective registration statement covering the Securities, such Purchaser will sell, transfer, or otherwise dispose of the Securities only in a manner consistent with its representations and agreements set forth herein.

(d) Such Purchaser understands that until the Securities are registered under the Securities Act, the certificates evidencing the Securities may bear substantially the following legends:

(i) "THE SECURITIES EVIDENCED HEREBY WERE ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER SECTION 5 OF THE SECURITIES ACT OF 1933 (THE "SECURITIES ACT") AND APPLICABLE STATE LAW, AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM (IN EACH CASE BASED UPON DOCUMENTATION SATISFACTORY TO THE COMPANY, INCLUDING AN OPINION OF COUNSEL SATISFACTORY TO IT

5

THAT REGISTRATION UNDER THE SECURITIES ACT AND ANY APPLICABLE STATE LAWS IS NOT REQUIRED) OR PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT."

(ii) Any legend required by the Escrow Agreement, the Amended Voting Agreement or any applicable law.

(e) Such Purchaser is an "accredited investor" as such term is defined in Rule 501(a)(1) promulgated pursuant to the Securities Act.

(f) Such Purchaser's financial condition is such that he is able to bear the risk of holding the Securities for an indefinite period of time.

(g) Such Purchaser has such knowledge and experience in financial and business matters and in making high risk investments of this type that he

is capable of evaluating the merits and risks of the purchase of the Securities.

(h) Such Purchaser has been furnished access to the business records of the Company and such additional information and documents as such Purchaser has requested and has been afforded an opportunity to ask questions of and receive answers from representatives of the Company concerning the business, operations, market potential, capitalization, financial condition and prospects, and all other matters deemed relevant by such Purchaser.

(i) There are no claims for brokerage commissions or finder's fees or similar compensation in connection with the transactions contemplated by this Agreement based on any arrangement or agreement made by or on behalf of such Purchaser, and such Purchaser agrees to indemnify and hold the Company harmless against any damages incurred as a result of any such claims.

(j) Such Purchaser acknowledges that the Company will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements and agrees that, if any of the acknowledgments, representations and agreements are no longer accurate, he shall promptly notify the Company.

6. Conditions of the Purchaser's Obligations. The obligation of the Purchasers to purchase the Securities is subject to each of the following terms and conditions:

(a) The representations and warranties of the Company contained in this Agreement shall be true and correct when made and on and as of the Closing Date as if made on such date and the Company shall have performed all covenants and agreements and satisfied all the conditions contained in

6

this Agreement required to be performed or satisfied by it at or before the Closing Date.

(b) The Company shall have executed and delivered the Escrow Agreement and the Amended Voting Rights Agreement and delivered the Securities to the Escrow Agent.

7. Conditions of the Company's Obligations. The obligation of the Company to sell the Securities is subject to each of the following terms and conditions:

(a) The representations and warranties of the Purchasers contained in this Agreement shall be true and correct when made and on and as of the Closing Date as if made on such date and the Purchasers shall have performed all covenants and agreements and satisfied all the conditions contained in this Agreement required to be performed or satisfied by it at or before the Closing Date.

(b) Receipt by the Escrow Agent of the Purchase Price from the Purchasers and receipt by the Company of \$18,000.

(c) The Purchasers shall have executed and delivered the Escrow Agreement and the Amended Voting Rights Agreement.

8. Registration Rights. Promptly following the Closing, the Company shall file and use its reasonable best efforts to have declared effective, the Form S-3 registering for resale the Securities issued pursuant to this Agreement. The Company shall use its reasonable efforts to maintain the effectiveness of the Form S-3 until the date that is eighteen months after the Closing.

9. Covenant of the Company. The Company covenants and agrees as follows:

The Company shall use its reasonable best efforts to do and perform all things required or necessary to be done and performed under this Agreement by the Company prior to the Closing Date, and to satisfy all conditions precedent to the delivery of the Common Stock.

10. Covenants of the Purchaser. The Purchasers covenant and agree as follows:

(a) The Purchasers shall use their reasonable best efforts to do and perform all things required or necessary to be done and performed under this Agreement by the Purchasers prior to the Closing Date, and to satisfy all conditions precedent to the delivery of the Securities.

(b) The Purchasers agree that from the date hereof until the fifth anniversary of the Closing Date, they will not, and will not permit any of his Affiliates, as defined in the Securities Act, to directly or indirectly or in conjunction with or through any Associate (as defined in Rule 12b-2 of the Exchange Act), (i) solicit proxies with respect to any capital stock



or other voting securities of the Company under any circumstances, or become a "participant" in any "election contest" relating to the election of directors of the Company (as such terms are used in Rule 14a-11 of Regulation 14A of the Exchange Act) or (ii) make an offer for the acquisition of substantially all of the assets or capital stock of the Company or induce or assist any other person to make such an offer or (iii) form or join any "group" within the meaning of Section 13(d)(3) of the Exchange Act with respect to any capital stock or other voting securities of the Company for the purpose of accomplishing the actions referred to in clauses (i) and (ii) above other than pursuant to the Amended Voting Rights Agreement.

(c) The holders of a majority of the Securities may act on behalf of the Purchasers.

11. Miscellaneous. This Agreement has been and is made for the benefit of the Purchasers and the Company, and their respective successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. The term "successors and assigns" shall not include any purchasers of Securities from the Purchasers merely because of such purchase.

All notices and communications hereunder shall be in writing and mailed or delivered or by telephone or telegraph if subsequently confirmed in writing, (a) if to the Purchasers to the address set forth on Exhibit A, with a copy to: \_\_\_\_\_; and (b) if to the Company, to Yehuda Harats, Electric Fuel Ltd., Western Industrial Zone, P.O. Box 641, Bet Shemesh 99000, Israel, with a copy to Jane D. Goldstein, Esq., Ropes & Gray, One International Place, Boston, MA 02110 and David S. Glatt, Adv., Meitar, Liquornik, Geva & Co., 16 Abba Hillel Silver Road, Ramat Gan 52506, Israel.

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to any conflicts or choice of law principles which would cause the application of the internal laws of any jurisdiction other than the State of Delaware.

This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[THE REST OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK]

Please confirm that the foregoing correctly sets forth the agreement among us.

Very truly yours,

ELECTRIC FUEL CORPORATION

By /s/ Robert S. Ehrlich

-----  
Title: Chairman & Chief Financial Officer

Agreed and accepted:

THE PURCHASERS

/s/ Leon S. Gross  
-----  
-----  
-----

AMENDMENT NO. 1 TO  
VOTING RIGHTS AGREEMENT

This Amendment No. 1 to Voting Rights Agreement (the "Amendment") made as of December 27, 1999, by and among Electric Fuel Corporation, a Delaware corporation (the "Company"), Leon S. Gross, Robert S. Ehrlich, Yehuda Harats and the purchasers listed in the Securities Purchase Agreement dated as of December 27, 1999, by and among the Company and the purchasers listed therein (the "SPA" and such purchasers, the "1999 Investors").

WHEREAS, the Company, Gross, Ehrlich and Harats (the "Original Parties") entered into a Voting Rights Agreement dated as of September 30, 1996 (the "Voting Rights Agreement"); and

WHEREAS, the Original Parties and the 1999 Investors (together, the "Parties") desire to amend the Voting Rights Agreement in connection with the closing of the SPA. Capitalized terms used herein and not defined shall have the meanings assigned to them in the Voting Rights Agreement.

NOW THEREFORE, in consideration of the premises and agreements set forth herein, the Parties agree with each other as follows:

1. Paragraph 1 of the Voting Rights Agreement shall be amended such that the penultimate sentence thereof shall read as follows:

"Subject to the terms and conditions hereof, until the later of (i) the fifth anniversary of the Closing or (ii) the fifth Meeting of Stockholders following the Closing, each Stockholder agrees to vote all shares of Common Stock or other voting securities of the Company over which such Stockholder has voting control, whether directly or indirectly, and to take other necessary or desirable actions within his or its control (whether as stockholder, director or officer of the Company or otherwise, including without limitation attendance at meetings in person or by proxy for purposes of obtaining a quorum and execution of written consents in lieu of meetings), so that each of Lawrence M. Miller (or, if applicable, Alternate Director), Robert S. Ehrlich, Yehuda Harats and one person to be designated for nomination by the 1999 Investors (so long as the 1999 Investors collectively own 1,200,000 shares of the Common Stock) shall serve as members of the Board."

2. The 1999 Investors shall become parties to the Voting Agreement by countersignature of this Amendment.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed as of the date first above written,

ELECTRIC FUEL CORPORATION

By /s/ Robert S. Ehrlich  
-----  
Title: Chairman & Chief Financial Officer

/s/ Leon S. Gross  
-----  
Leon S. Gross

-----  
Robert S. Ehrlich

-----  
Yehuda Harats

-----  
Purchasers