

Lead Industries Association, Inc.

292 Madison Avenue

New York, N. Y. 10017

Telephone: (212) 679-6020

Sent to: Simon D. Strauss *favor*
John R. Englehorn *favor*
Robert Hendricks
Wm. G. Hewitt
W. Allen Taft, Jr. *favor*
Henry J. Whitson *favor*

July 16, 1969

SUBJECT: INDUSTRIAL BATTERIES FOR
OFF-THE-ROAD ELECTRICAL
VEHICLES

To Members of Executive Committee of
LIA Board of Directors

Dear Mr.

With special emphasis started in 1967, including the creation of LIA's most recent film, "Lift Better Electrically," we have been devoting a substantial amount of money (as authorized) and more than the full time and travel expense of LIA's Mr. Connel Baker to the creation of an atmosphere which would result in a greater industrial sales effort by the electric utility companies of the country on behalf of battery powered industrial vehicles.

From the beginning of this campaign - film, literature, rodeos, seminars, etc. - it has been our objective to inspire the utility companies to instruct their industrial salesmen to use our promotional materials and ideas and to sell harder in the specific industrial "in plant" field of battery powered vehicles. We have made frequent contacts with the Edison Electric Institute, who welcomed the LIA effort, but originally took no step to support it actively among their membership.

The LIA's program has made progress. Ninety prints of the film have been sold, mostly to individual companies. At least four public utility companies are known to have vigorous sales campaigns on an annual basis as we wish. Another 35 or 40 utilities have participated on the basis of a one time promotional effort (rodeos etc.) but have not adopted sustained programs.

The Edison Electric Institute has now become interested and proposes action as detailed in the attachment which recommends, as a first step, a professional sampling survey by a well qualified firm, Stevenson Jordan and Harrison, here in New York, to establish clearly the magnitude of the potential market according to various broad geographical areas and SIC industry classification numbers.

LIA02143

To Members of Executive Committee of
LIA Board of Directors

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July 16, 1969

The cost of this survey will be \$18,650 and EEI has asked the LIA to contribute one half of this amount to cover Phase I. of a two phase program.

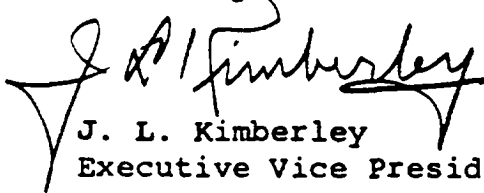
EEI believes that the existence of the data to be developed by Phase I can be used to inspire top utility management across the country to increase their effort on behalf of the market indicated substantially. Stevenson Jordan and Harrison believe that the second phase of the total program, namely to develop specific details in each utility's geographic area will be undertaken by the utility companies themselves, at their expense, with no more from LIA. Further, EEI will press for such action by the utilities when the data from Phase I is at hand.

In view of the probable effectiveness of EEI on their own members, the LIA recommends that the suggested contribution of \$9,325 be authorized. It is available in existing funds without special assessment - although it will reduce the calculated operating reserves at year end.

This matter has been discussed by Borcina and Kimberley, with the Chairman of the Industry Development Committee, J. S. Smart, Jr. and President Strauss who recommend that a decision be reached by letter ballot to and from the Executive Committee of the Board.

May we have your approval or comment of this expenditure by proper indication on the attached ballot.

Sincerely,


J. L. Kimberley
Executive Vice President

JLK:so

Enclosures:

S J & H Proposal of 5/8
Supplement " 6/20
EEI Approval " 5/29
Ballot

LIA02144

July 16, 1969

LETTER BALLOT

Study of Potential on Off-the-
Road Electric Vehicles

To Executive Committee of the
LIA Board of Directors

LETTER BALLOT

Please return to:

Mr. J. L. Kimberley
Executive Vice President
Lead Industries Association, Inc.
292 Madison Avenue
New York, N.Y. 10017

I favor (oppose) the proposed study by Stevenson, Jordan
& Harrison on off-the-road electric vehicles at a total cost of
\$18,650, with LIA and Edison Electric Institute sharing the cost
equally.

COMPANY NAME _____

DATE _____ BY _____

LIAC2145

N 3635.01

STEVENSON, JORDAN & HARRISON

MANAGEMENT CONSULTANTS, INC.

THE PAN AM BUILDING, 200 PARK AVENUE, NEW YORK, N.Y. 10017

6125 MURRAY HILL 7-1220

May 8, 1969

Mr. H.J. Young
Edison Electric Institute
750 Third Avenue
New York, New York 10017

RE: Proposed Study of Load Potential in Off-the-Road
Electric Vehicles

Dear Mr. Young:

The following is our formal proposal for a study of electric utility load potential in off-the-road vehicle applications.

I. BACKGROUND OF THE PROBLEM

Off-the-road electric vehicles which are now in use - such as lift trucks, security vehicles, delivery vehicles and golf carts - offer considerable load building potential to the electric utility industry. An electric lift truck, for example, consumes as much electricity annually as a total electric home. In addition, because battery operated vehicles are normally charged at night when demand is at its lowest, they are exceptionally profitable loads.

Some utilities have recognized the sales and profit potential in off-the-road vehicle applications and have promoted them vigorously, if intermittently. The majority of electric utility companies, however, have not made a strong load building effort in this area. The reason for this situation, it appears, is that the top managements of electric utilities as a whole are not sufficiently aware of:

- a) the load potential in each type of off-the-road electric vehicles in the total United States
- b) the load potential in these applications within each utility's own service area.

LIAC2146

N 3635.02

May 8, 1969

1. OBJECTIVE

The objective of the proposed study program is to produce reliable estimates of the load potential in such applications as:

- lift trucks
- security/personnel carriers
- delivery vehicles
- golf carts

so that top managements of utility companies will clearly understand the load potential of these vehicles in applications which exist in their own service areas, and so that they will then put their full support behind programs to promote electric vehicles in these applications.

III. PREMISE

Our premise is that to achieve the EER's ultimate objective - the full effort of electric utilities in the promotion of electric off-the-road vehicle applications it will be necessary to state the potential in highly concrete terms. The more specific we can be in identifying service areas, the more likely they are to respond. For example:

If we were to say that companies in Standard Industry Classification No. 20 - Food and Kindred Products - use an average of two electric lift trucks per plant, the utility may be interested in this fact, but many will probably be uncertain as to what this means in their service areas.

On the other hand, if we say, hypothetically, that companies in SIC 203 - Canned Foods - use an average of 4.9 trucks per hundred employees, the utility managements can see the point clearly and know how to respond. Whereas the "Food Industry" is so general, utilities can visualize the canner, the industry midst. Given meaningful data, salesmen should be able to decide how much per employee, the canner, the general

May 8, 1969

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the big cannery employing 800 people the eight canneries in the service area which employ 100 people each and so on in the principal categories of manufacturing, wholesaling and transportation which the findings of the proposed study indicate to be the prime prospects for electric off-the-road vehicles.

IV. THE SURVEY TECHNIQUE PROPOSED BY SJ&H

A number of techniques could be used to collect the industry-by-industry data on potential of electric off-the-road vehicles The simplest - but certainly the most expensive approach - would be to conduct a mail census among some 450 categories of manufacturers. Even if the census were limited to establishments employing 25 or more people, about 90,000 costs of such a survey would easily exceed \$100,000.

SJ&H believes that a mail census of this type is not only extremely expensive but unnecessary for the survey. We propose a two-phase approach as follows: Your purposes. We

PHASE ONE

Through a series of personal and telephone interviews, develop estimates of total U.S. potential of the major types of off-the-road electric vehicles including the identification of specific vehicles which utilize such vehicles. This phase of the program would be sponsored by the EET.

PHASE TWO

Using the information developed in Phase One plus additional vehicle utilization information on a county-by-county basis, develop information on potential areas and estimates for specific utilization. This phase of the program would be sponsored by individual

Mr. H.J. Young

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May 8, 1969

The specific steps that would be involved in each Phase are outlined in greater detail below.

PHASE ONE

- A. Develop reliable estimates of total U.S. potential for each class of off-the-road electric vehicle by means of personal interviews among appropriate vehicle manufacturers, trade associations and trade publications.
- B. Based on information developed in the preparation of this proposal, we estimate that 12 major industry categories represent over 75 percent of vehicle usage. On the basis of interviews among vehicle manufacturers, trade associations and trade publications, we would determine those three-digit S.I.C. categories which comprise the major potential categories within those industries.
- C. Conduct a telephone survey among the three-digit S.I.C. categories selected in Step B above to provide reliable, up-to-date information on current and prospective usage of electric off-the-road vehicles, and a basis of projecting this vehicle usage to load potential within specific plant types (i.e., 3 digit S.I.C. definition) of 20 or more employees in size. This survey will be accomplished by conducting 1,000 complete telephone interviews, selected on a statistically projectable basis throughout the United States.
- D. To supplement the vehicle utilization data provided by the telephone interviews and to provide more insight into the attitudes of prospective users of electric off-the-road vehicles, we shall also conduct in-depth interviews among approximately 50 off-the-road vehicle users.

At the conclusion of Phase One, we would be able to estimate 1) total U.S. usage of off-the-road vehicles, 2) the percentage of total usage which is now electric, and 3) the total annual load for each class of vehicle on an industry-by-industry basis among plants of 20 or more employees in size within the major industry classifications studied.

Mr. H.J. Young

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May 8, 1969

PHASE TWO

This phase of the study program consists of the development of market potential estimates for electric utilities on a service area-by-service area basis. Using the findings of Phase One we can proceed, at moderate cost, to develop estimates of load potential in electric off-the-road vehicle applications for any utility which is interested in obtaining this information. Any need to develop additional local plant usage data relating to vehicle usage could be accomplished by utility personnel under our guidance.

The opportunity to cooperate in this phase of the project would be offered to individual utilities. All additional information developed in this phase can easily be introduced by EEI back into the statistical base on which Phase One estimates are developed. In this way the statistical level of confidence will be increased as the program grows.

V. ESTIMATED COSTS AND TIMING OF THE PROGRAM

PHASE ONE

Based on our detailed project planning, the costs of Phase One of the study program, including fees and out-of-pocket expenses, will total \$18,650. This includes all computer programming and data processing costs. We estimate that we can complete Phase One of the program within three to four months from time of authorization.

PHASE TWO

The charges for developing estimates of load potential in off-the-road vehicle applications for utilities on an individual basis will vary depending upon the size of the company and upon the type and quantity of data the company can make available on the breakdowns of its industrial and commercial markets by county, S.I.C. classes, and employment size classes. We estimate that charges would be in the range of \$1,200 to \$1,800 per utility for the majority of utilities. Travel and related expenses would be billed extra, but at actual cost.

LIAC2150

Mr. H.J. Young

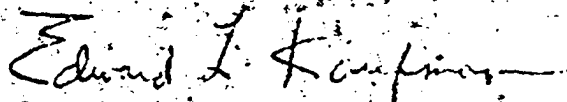
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May 8, 1969

Assuming that you are in agreement with us on our approach to the problem, the scope of the work and the costs of the project, please sign one copy of this letter in the space indicated and return it to us as our authorization to proceed in your behalf.

Cordially,

STEVENSON, JORDAN & HARRISON
MANAGEMENT CONSULTANTS, INC.



Edward L. Kaufman
Director of Techno-Economic Programs

ELK:rm

For Stevenson, Jordan & Harrison

For Edison Electric Institute



Edward H. Gube

Date: May 8, 1969

Date: _____

LIA02151

STEVENSON, JORDAN & HARRISON

MANAGEMENT CONSULTANTS, INC.

THE PAN AM BUILDING, 200 PARK AVENUE, NEW YORK, N.Y. 10017

June 20, 1969

(SIR) MURRAY HILL 7-1220

Mr. David M. Borcina
Secretary-Treasurer
Lead Industries Association, Inc.
292 Madison Avenue
New York, N.Y. 10017

Dear Dave:

In response to your letter of June 11th, this letter will constitute an amendment to our proposal dated May 8, 1969 to:

Mr. H. J. Young
Edison Electric Institute
750 Third Avenue
New York, N.Y. 10017

Re: Proposed Study of Load
Potential in Off-the-Road
Electric Vehicles

Specifically, the following information will be developed in this study for those SIC categories selected for study:

1. Number of off-the-road vehicles
2. Number of (1) above that are electric
3. Number of (1) above that are gas
4. Number of (3) above that can be converted from gas to electric

The above information will be developed in addition to the data outlined in the May 8 proposal on page 4.

LIAC2152

N 3635.03

Mr. David M. Borcina

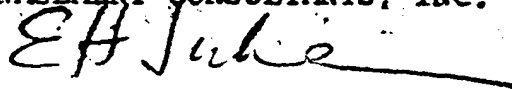
Page 2

June 20, 1969.

We trust the above will clarify this area of concern. However, if you have any additional questions, please feel free to call me.

Sincerely yours,

STEVENSON, JORDAN & HARRISON
MANAGEMENT CONSULTANTS, INC.



E. H. Jube
President

EHJ:fms

CC: Mr. H. J. Young, Edison Electric Institute
Mr. J. L. Kimberley, Lead Industries Association

LIAC2153



EDISON ELECTRIC INSTITUTE

750 THIRD AVENUE • NEW YORK 10017 • YUkon 6-4100

May 29, 1969

Mr David Borcina, Secretary
Lead Industries Association
292 Madison Avenue
New York, New York

Dear Dave

By this time you will have had a chance to read the proposal from Stevenson, Jordan & Harrison. We think it meets our requirements very well. I hope you agree.

We would like to go ahead with this project as promptly as possible and as you know our thinking has been in terms of sharing the cost of Phase I on a fifty-fifty basis with the Lead Industries Association. We would undertake to interest individual utility companies in Phase 2 of the program.

Could you let me know if you think Lead Industries Association would be willing to join us in this effort, and if so when we could get started.

Very truly yours

Jack
H J Young

mvl

LIAC2154

N 3635.04