GENERAL ELECTRIC
MARKETING AND PUBLIC AFFAIRS

570 Lexington Ave., New York, N. Y. 10022
Dial COMM 8*222-
3179

August 12, 1969

cc: D. S. Moore
J. M. Shipton
B. R. Laumeister

Mr. C. M. Heiden
Manager-New Business Development Operations
Schenectady, New York

Dear Chuck:

As you requested, I am commenting for Corporate M&PA on Appropriation Request #87-251 in the amount of $525,000 ($312,000 investment). Including previously approved funds of $247,000, total project expenditures amount to $772,000. The funds requested will provide the capacity for producing 13,000 battery-operated electric garden tractors a year, beginning in 1972.

The appropriation document itself provides no information whatsoever in support of this proposal; however, I had the benefit of close involvement in this project by Gil Gillespie and Jiggs Weldy, and of our meeting with you and Bruce Laumeister on July 31st.

The Market

There is ample evidence that the total market for garden tractors is large and growing. Future growth may be impeded by the trend toward more multiple-family dwellings and toward down-zoning lot sizes in suburban areas. The critical factor is the extent to which the electric tractor can penetrate this market and how long it will take. Your forecasts indicate that by 1972, of a total market (at manufacturers' selling price) of about $470 million, electric will get 9%, and you will sell 1/3 of the electrics or $14 million. This is a tough goal for a new organization, producing a new product, and selling to an entrenched market through a distribution channel in which the Company has absolutely no prior experience.

Competition

Your extensive field survey (interviews with over 1200 dealers to date) has given a very good feel of present market size, distribution, and competition. Leading competitors (International Harvester, John Deere, Sears Roebuck, and Simplicity) are strong, well respected, and firmly established.

Your prototype designs have demonstrated that a battery-electric-drive vehicle has significant advantages over a gasoline-engine-driven tractor; but nothing is patented or appears patentable, and competitors could market a copy in about 1 to 1 1/2 years. A key question is whether a dealer or prospective purchaser would select a GE product in preference to an equivalent offering by an old-line garden tractor producer. This is speculative, as is the question of what retaliatory action competitors will take if and when GE introduces an electric garden tractor. Our opinion is that their initial reaction will be defensive (stick to the tried and true) but that if evidence develops of market acceptance of or preference for electrics they will quickly be added to the competitors' lines. It has been recognized prudently that the GE share of electric tractors will decline rapidly, from 100% in 1970 to 20% in 1974.

Product

We would defer to our associates in Corporate Engineering and Manufacturing with regard to design features, quality, producibility, and manufacturing costs. From information presently available, we would judge that you have a marketable product and have selected the most competitive size range for an electric vehicle.

Distribution

This is a key decision target. A new product, for which a strong channel of distribution is not available, may be dead. This is illustrated by the Housewares Division's now defunct venture into multi-purpose portable-power tools. A major factor in the demise was that the basic concept was not consistent with the way householders buy and use power tools. Another important element was that major segments of the market were not covered in the Housewares distribution system. Established producers such as Skil and Black & Decker might have been able to sell the concept, but GE (a newcomer) did not have the distribution strengths or the consumer acceptance to do so in that industry.

Distribution through the Outdoor Power Equipment (OPE) dealers is sound. In the size and horsepower range selected these dealers are the channel for sales of about 75% of the present garden tractors. Your plan for one-step distribution, direct-to-dealer, is supported by the success of the International Harvester "Cadet" line of gasoline tractors. International Harvester tried unsuccessfully to distribute through their farm equipment dealers, then shifted to OPE's. Limiting your initial distribution to the Northeastern sector of the U. S. is prudent, from the point of view of dealer coverage and close product service supervision. Your use of modular electronic control components and the GE chain of small motor repair centers should keep the product service problem in hand.

The job of recruiting and training your sales manpower should not be underestimated. The three men you have in the field now are experienced (from International, Deere, Simplicity) and you expect to have a total of six within a year. A good sales training program is essential. Selling costs inevitably will be high, especially in the early years, and we would judge that a salesman must handle at least 50 OPE dealers to pay his way.

As your product line is extended, probably in the direction of lower rather than higher horsepower, consideration should be given to using the great Company strength available in the MA&TV Group distribution system.

Profitability

In this business, investment required in plant and equipment is small but, due to the seasonal nature of the market and the use of dating plans, investment in inventory and receivables is very high and has an adverse effect on cash flow.

We suspect that you may not be cost-competitive, at least in the early years. You basically will be an assembler of components, as your competitors are, but will have a smaller sales base. You must provide for high costs of sales, market development, and product development. Continuing to offer higher customer value will be essential to maintain profitability.

The information provided raises doubts that by 1974 this business will be earning for NBDO 12% net to sales and 40% return on investment; but even though these operating forecasts were cut sharply they still would exceed by a wide margin the Company average.

General Company Considerations

Aside from the profit potential in electric tractors as a separate business entity, there is a great profit opportunity for the Company in the components business. In 1974, it is estimated that net income to other Departments on their components sales to NBDO will exceed $800 thousand. The components departments should be in an excellent position to compete for the 80% of the business going to other tractor manufacturers in that year. One might ask: "Why shouldn't the Company, at lower risk and commitment of its resources, pursue the components business through outside OEM's, rather than engage in the electric tractor business itself?" We believe that development of the electric tractor market cannot be achieved by that means simply because the present manufacturers, firmly entrenched in and thoroughly familiar with gasoline tractors, probably will not tackle electric drive technology unless and until competition makes them do so.

In the final analysis, we are most favorably impressed by the prospect of this component business, which we believe will grow from your development of the market for electric tractors. This prospect outweighs the risks of a potentially unpatentable new product in that segment of a market where we have no established competitive strengths of either consumer acceptance or dealer structure.

We recommend favorable consideration of this request.

Very truly yours,

A. J. Tacy

A. J. Tacy

AJT:AC