

Mr. VIVIAN. I would like to ask a question since we have large taconite ore supplies in my State of Michigan, and these supplies happen to be a long distance away from where the cars are made, used and fall apart. The question I have is, why is it advantageous to put the taconite—

Dr. HIBBARD. I am not hearing you.

Mr. VIVIAN. Why is it advantageous to put the taconite, which is found far away from where the automobiles are junked, together with the junked automobiles in one blast furnace or equivalent device instead of putting them into separate furnaces at separate locations and transporting less material around the country?

Dr. HIBBARD. One of the things that we are doing is making a junk automobile survey so we will know in what locations the population of junk cars are and what the problems are with transporting them and other information of this sort.

We believe that the solution to the problem is not going to be a single one; there must be a menu of solutions, so to speak, so that you will have one that will fit the economics of each area where there are large concentrations of cars. We believe the taconite approach is one solution.

Mr. VIVIAN. Just a minute. Before you say this is a solution, is this solution any better than melting down the cars in one place, preparing the taconite material some other place, and later mixing them in a furnace some distance away from both locations? What is the advantage of this joint process? Chemically and technically?

Dr. HIBBARD. I see what you mean. I think the logistics, the optimization of logistics haven't been really worked out. It might well be that a different location of the plant might be more fruitful. However, in general, since the taconites are low in iron, you would tend to minimize the transportation of the lowest value raw material of the process, and that would be the nonmagnetic taconites themselves, so you would tend to minimize the transportation of low value material and maximize the transportation of the high value material. Following that principle you would put it near the taconites. This may not be correct when we have all the economics.

Mr. VIVIAN. I really have difficulty seeing this. Michigan is a major taconite State. But it seems strange to take the cars which are junked in Chicago or Detroit and other places where the bulk of the population lies, put them aboard a lake freighter and haul them up to the northern part of the State which is, I suppose, 600 miles away by water, then mix them with taconite derivative materials obtained locally, and ship them all back down. It is not obvious to me that you have added any benefit to the furnaces that wasn't there in the first place.

Dr. HIBBARD. The furnaces as they now exist cannot just use the junk automobile scrap because, with the advent of the basic oxygen furnace, these furnaces do not use No. 2 bundles which are the old automobiles.

Secondly, the furnaces cannot use the low-grade nonmagnetic taconites as they now exist because they are too low in iron. These are taconites that are 20, 25 percent iron, large amount of silicates and impurities. So, by combining two things which the furnaces can-