ing statement will show the difference in power required at the central station.

	Storage.	Overhead.
Average electrical H. P. required at car motors.....	150	150
Maximum in storage battery and overhead wire.....	150	300
Loss in batteries and overhead wires when engines are working at maximum	37.5	33
Total E. H. P. required.....	187.50	333

The above shows the difference in the systems, supposing the efficiency of the engines, generators and motors to be the same in each case.

In this statement all the cars on both systems are giving the same constant efficiency, in practice this is not always done, the E. H. P. for many overhead lines being not much, if any, above the average power required to move the cars.

Placing the maximum E. H. P. at 15 instead of 20 E. H. P. per car for the overhead system—supposing the cars to run 17 hours per day, with coal at $8 per ton and engine consumption at 3lb per H. P. hour—this would show a saving in favor of the storage battery of $12.75 per day.

In taking 15 H. P. per car as the maximum for the overhead system, it is evident that at times the individual cars will not be as efficient as those of the storage system, for instance when a number of the cars are started, or have any other heavy work to do at the same time.

It has been seen that for 15 cars and 10 miles of track the cost of storage batteries and overhead wires is about the same, say $25,000 each.

The cost of maintenance of the overhead wires being 10 per cent., and of the storage batteries 40 per cent., the difference in favor of the overhead system per day would be $20.54.