"Breakthrough" System Promises Low Cost Electricity

A promising "breakthrough" in the search for low cost electrical power for farms and ranches is slated for commercial introduction this summer by Redel Research and Development, headquartered at Temple, Texas.

The revolutionary self-contained system is designed to produce 1,500 kilowatt hours of electricity per month at a cost of only 50°. What's more, it can be built for double the output with the same operating cost of only 50° per month.

Specific details on manufacturing and marketing the revolutionary system are expected to be announced in a month or two. Meanwhile, FARM SHOW has learned that the self-contained system a farmer or rancher would buy will cost "in the neighborhood of about \$1,200 for the component parts, but not including installation costs".

The system uses a continuous cycle of water to create electricity and has three main parts — a pump, tower and turbine. It operates on the weight and pressure of water. The force of water activates the pump, with recycled water serving as the fuel supply.

The self-contained 18 hp. pump raises water to a small tower which has a small tank on top about the size of a small television set. Gravity flow carries water through a pipe, across a turbine, and back to a ground tank where Burke's self-contained pump again pushes the water to the tower tank. Increasing size of the pump can double the system's output from 1500 to 3000 kilowatt hours of electricity per month. The entire system occupies no more than 36 sq. ft. of space. Self-contained systems can be used in multiple to provide as much power as a farmer or a rancher needs for his particular operation. You would be able to use existing electric motors, wiring, etc. without having to do any "retooling"

In addition to supplying electricity for use in the home and around the headquarters area, the self-contained power system can be used in remote areas to power irrigation systems or any other farm equipment that uses electricity. Here again the operating cost would only be about 50 a month. "That's what I figure the oil for the bearings will cost," says Burke, "and you won't have to start oiling them until the first 9 to 12 months are up. More good news is that component parts of the selfcontained power system are expected to last 20 years or longer.

Mid American Dairymen Inc., headquartered at Springfield, Mo., has purchased stock in Burke's company. "Mid-Am's 24 man Board of Directors voted unanimously to invest in the project after a 7 month study of Burke's work," according to Joe Grant, director of engineering services. "Burke's inventions and concepts are new and quite a bit advanced of our time. We decided to

work with him because we saw great potential in the inventions and concepts he has already worked out. His work is really a combination of known laws of physics and some unique innovations. We see opportunities in his work to use energy in different ways and to tap some unused sources of energy. He has done away with some of the limitations we have had in the past."

"The possibilities for this new system are tremendous," says Larry Everett, president of Redel and a partner of Arnold Burke, inventor and developer of the new system for generating low cost power for farms and ranches.

In addition to his system for generating low cost electrical power, Burke has triggered world-wide attention with still another of his inventions — a 94 hp. prototype engine that has no intake and no exhaust. Instead, it has a recycling system which allows the engine to use its original "fuel supply" over and over again.

The prototype, set up on a Ford transmission, runs with a quiet, steady hissing sound and has been in research and development for about 5 years. Although it's a V8 with pistons, a drive shaft and a series of 'fuel' lines, it operates completely different than conventional internal combustion engines.

For example, it uses no gasoline or other fossil fuel. Instead, a 50-50 mixture of oxygen and nitrogen is mixed with small amounts of a synthetic catalyst, which Burke also invented, to cause rapid expansion. Force from the expansion drives the moving parts of the machine.

"This expansion is similar to the principal of the steam engine," ex-

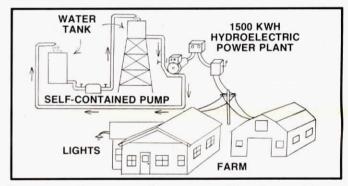
plains Burke. Heat creates the steam and causes expansion. The tremendous pressure causes the steam engine to operate. Once you have released the steam pressure, nothing is going to stop that piston, yet there is no actual combustion or explosion."

Burke's unit mixes the catalyst with the oxygen and nitrogen and causes expansion internally within the chamber. Therefore, no outside combustion is required, he explains. Because there is no explosion - no burning of fuel - the oxygen-nitrogen gases are not destroved. They can be used again, or even breathed. Thus, Burke's engine incorporates a recycling system, making the unit totally selfcontained. The only item that must be replaced is the catalyst, and the engine runs about 100 hours on 50° worth of that.

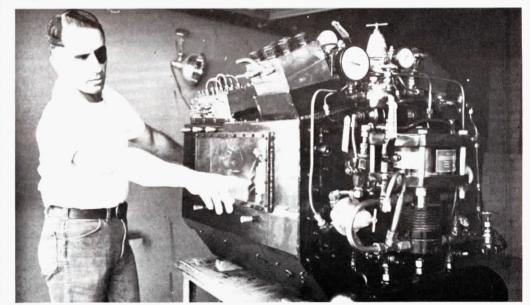
Burke's prototype engine has triggered worldwide interest. Visitors from Israel and other foreign countries have viewed it. Paul Harvey has commented on it in his news broadcasts and it has been featured on Network Television in the United States and Great Britain. The engine is being studied by energy groups of the Texas Legislature. Burke has also received calls from the California Energy Commission and other interested agencies.

Even so, working models of the engine must yet be built as production models (rather than the larger prototype), and it may be months, perhaps a few years, before it's available commercially.

We'll keep you posted in future issues of FARM SHOW on latest developments with both of Burke's inventions — the engine and the revolutionary system of using recycled water to generate low-cost electrical power for farms and-ranches.



Inventor Arnold Burke says his new system will supply 1,500 kilowatt hours of electricity per month at a cost of about 50 cents (for bearing oil). By enlarging the pump's manifold, kilowatt hour output can be doubled. The first-of-its kind system requires no outside energy or fuel source.



Arnold Burke, pictured, has survived 112 explosions in perfecting his revolutionary engine. One of the explosions destroyed vision in his left eye. Production models of the engine will be half the size of prototype pictured.