Dow Chemical to Sell Substitute for PCBs In Power Capacitors

By a WALL STREET JOURNAL Staff Reporter

NEW YORK—Dow Chemical Co. disclosed plans to market a new insulating fluid that it said could replace the controversial chemicals known as polychlorinated biphenyls or PCBs, in high-voltage power capacitors.

These capacitors account for perhaps one-fifth of PCB use. PCBs, produced by Monsanto Co., have been identified as an environmental contaminant, and concern has mounted of late over their possible toxic effects to man as well as to plants and animals.

Dow and McGraw-Edison Co., a maker of capacitors, jointly disclosed the new insulating fluid at a conference here. They said it was developed by Dow and found to be effective by McGraw-Edison. The fluid is known chemically as monochloro-butylated-diphenyloxide, a Dow official said.

Dow said the new fluid could replace perhaps six to eight million of the estimated 40 million pounds of PCBs produced in the U.S. annually. It said it will have an initial production capacity of one million pounds early next year.

Other substances have been used as electrical insulating fluids but PCBs, because of their high stability and other properties, are considered best at preventing fires and explosions in transformers and capacitors.

Previously, Dow Corning Corp., a joint unit of Corning Glass Works and Dow Chemical, said it had developed a substitute for PCBs in transformers. In addition, RTE Corp. said it is developing a new insulating fluid for use in transformers and could have a product on the market next year.

The Environmental Protection Agency, meantime, has been considering possible courses of action against the use of PCBs. PCBs formerly were widely used in nonelectrical applications, but environmental and health concerns have restricted their use largely to electrical equipment where they are considered essential. But all restrictions so far have been voluntary and they haven't been very effective.

A complete ban on PCBs is thought probable if proposed substitutes prove effective but avoid the problems created by PCBs.

Dow and McGraw-Edison claimed the new Dow product is "environmentally safe." They said its toxicity, biodegradability and other relevant characteristics had been evaluated, leading to the conclusion that the product would have a "far lower potential impact on health and the environment" than PCBs.