GAS TURBINE FLUIDS - TURBINOL

Due to several serious fires, in 1958 a large gas transmission company decided to use a fire resistant lubricant in their gas turbines. They chose OS-81, containing PCB's, because it gave them maximum fire resistance and good lubrication. Both properties are exceedingly important. A turbine installation many times will cost over a million dollars and, since they are pumping natural gas in 30+ inch lines at up to 1000 psi, an explosion can kill and mutilate over a wide area, cause tremendous property damage and disrupt vital gas service to homes and industry.

The ~~follow-up product to OS-81 was Turbinol 153, 88% PCB's~~. In 1970, our sales of Turbinol 153 were 325 M pounds and through July, 1971 were 92 M pounds. It should be pointed out that Turbinol 153 has served its function well since to date there are over 400,000 operating hours on the fluid with no instances of fire, explosion or death.

~~We choose to stay in this market because~~ with care the user can control any fluid losses to the environment and ~~because~~ it would be very difficult and expensive to convert to another fluid. Gas turbine lubricant systems are closed loop. Any Turbinol 153 that might possibly leak past seals and into the gas stream is removed with other liquids in regularly installed pipeline knock-out traps. Major leaks would be quickly detected since low lubricant level automatically shuts the turbine down. Note also that once a turbine

Transcontinental
EXHIBIT NO. 174
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TRAN 003826

is broken in on one fluid, it is not advisable to change to another. If we withdrew Turbinol 153 from the market, users would be forced to perhaps rebuild their turbines and revert back to flammable and explosive petroleum oil.

We believe the ease with which Turbinol 153 can be controlled, the relative safety it brings to hazardous pipeline operations and the dependability and reliability of continued gas supply it offers to the ultimate users more than justify our continuing to supply Turbinol 153.

TRAN 003827

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