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STATEMENT
BY THE
GENERAL ELECTRIC CO.

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Public Meetings on Hudson River Reassessment Project
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General Electric Co. is pleased to have this opportunity to comment on the Phase I report of the Hudson River Reassessment Project. GE has consistently urged the Environmental Protection Agency (EPA) to use the best scientific methods and their best judgment in conducting the reassessment. This is necessary for a fair and complete understanding of all the environmental disadvantages and all the environmental benefits connected with taking any remedial action in the Hudson. Only by understanding all of these factors will the best decision be made.

It is important to note that the current reassessment follows EPA's 1984 review of the Hudson River. At that time, the agency declared dredging was not appropriate but that other actions, such as the sampling of drinking water and the capping of remnant deposits in the upper river, were necessary.

What has happened since 1984 is significant. The EPA-recommended actions now have been taken. More important, new data presented in the Phase I report and from other sources indicate that EPA's 1984 decision was correct. For example, it is clear now that there have been steady improvements in the health of the Hudson River. Additionally, data on the types of PCBs present show that the PCBs in the lower river are predominantly from lower-river sources, not the upper river. In fact, tidal flows are causing PCBs from the New York metropolitan area to move upstream toward Poughkeepsie. Finally, recent scientific investigations show that the PCBs present in the upper Hudson River have a much lower toxicity than originally thought.

Despite these encouraging findings, misconceptions about the river have persisted. GE would like to address these misconceptions and myths:

MYTH #1: The condition of the Hudson River is not improving.

In fact, the Hudson River is showing steadily improving conditions. PCBs in the water column have declined substantially. From Fort Edward to Waterford, the average water column concentration of PCBs has been found to be well below the drinking water standard. At Waterford and Poughkeepsie, communities that draw drinking water from the Hudson, no PCBs were detectable in the drinking water. In fact, the water supplies are meeting health standards even before treatment.

The upper Hudson today supports fish populations that are nearly as diverse and balanced as in the 1930s. The lower Hudson continues to be one of the most diverse fisheries on the Atlantic Coast.

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The concentrations of PCBs in fish in both the upper and lower river have decreased dramatically since the 1970s. In June 1989, an independent report for the Hudson River Foundation -- the Thomann Report -- predicted that the reopening of the lower-river commercial fishery would be possible within a few years as lower Hudson River fish begin to show PCB concentrations below the Food and Drug Administration level.

Furthermore, EPA, in its 1984 Record of Decision, found a "decreasing threat to public health and the environment." Since 1984, according to the current Phase I report, PCB concentrations in the water column of both the upper and lower Hudson have declined significantly (Page B.4-16) The Phase I report also acknowledges that PCB concentrations in fish are not rising and, in fact, that "PCB levels in all fish species appear to have declined in recent years." (B.4-30).

MYTH #2: All of the PCBs in the lower river originated in the upper river.

The majority of PCBs found today in the lower river do not come from the upper river. The Phase I report recognizes that PCBs are being discharged into the lower river from a host of sources in the New York metropolitan area. These additional PCB sources are important to consider since the higher chlorinated PCBs from New York metropolitan area sources appear to be the dominant ones currently found in the fish in the lower Hudson. (A.3-11) Tidal flow would cause not only salt water but also PCBs to move upstream toward Poughkeepsie from the New York metropolitan area.

Other investigators, including academic institutions, have found that PCBs concentrations in the sediments do not steadily decline from the upper river to the lower river, as one might expect if the upper river were the single source. All along the river are found occasional high levels of PCBs, indicating local sources associated with municipal and industrial discharges. These PCBs generally are not the type that were used by GE at the Hudson Falls and Fort Edward plants, evidence that again points to local sources.

Moreover, the kinds of PCBs and other chemicals found in fish in the lower river are the higher chlorinated forms, which are different from the ones found in the upper river. PCBs and other chemicals found in the migratory species of fish, such as striped bass, appear to have come *not* from the Hudson River, but from outside waterways, such as New York Harbor and Long Island Sound.

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MYTH #3: PCBs have been shown to be highly toxic.

Scientists are now re-evaluating the potential toxicity of PCBs. New information shows PCBs pose much lower risks to public health and the environment than originally thought.

Recent scientific information supplied to EPA by an independent research organization showed that different types of PCBs have different toxicity. In particular, PCBs with lower amounts of chlorine, similar to the ones that were used by GE at Hudson Falls and Fort Edward, were not shown in laboratory tests to cause cancer. EPA uses these tests to determine if a chemical should be treated as a carcinogen.

Other researchers have come to similar conclusions. For instance, Dr. Edward Burger, director of the Institute for Health Policy Analysis, wrote in an article published last year in *Daedalus: The Journal of the American Academy of Arts and Sciences:*

"PCBs are described as cancer-causing agents, yet no scientific evidence justifies this reputation."

MYTH #4: PCBs persist in the environment and therefore are dangerous.

PCBs break down naturally. They do not persist in the environment, as was once believed. They are broken down naturally by organisms that live in the river. GE reviewed 1,000 sediment sample results obtained by the Department of Environmental Conservation in 1984 in the Fort Edward area. In 70 percent of the samples, significant biodegradation was found. Evidence of some biodegradation was presented in 90 percent of the samples. PCBs mixtures found in upper Hudson sediments 20 years ago had an average of 3.5 chlorines per PCB molecule. Today, the PCBs in those sediments have only two chlorines per molecule, which is further evidence that the existing anaerobic bacteria in the river have extensively dechlorinated PCBs. GE scientists have demonstrated in the laboratory techniques to accelerate the biodegradation of PCBs. This summer, the company has been conducting a first-of-its-kind, in-river experiment to gather data on the rate at which PCB biodegradation can be accelerated in nature.

MYTH #5: Nothing has been done about PCBs in the Hudson.

Significant steps have been taken since 1984 to promote improvements in the river's condition. Since 1984, GE has spent $15 million capping the remnant deposit

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sites, the places where PCBs collected along river banks, near Moreau. By some estimates, the capping process alone has reduced transport of PCBs by more than 30 percent. In addition, GE has continued a major, nationally recognized research effort into PCBs and has committed to spending $50 million on projects at our own facilities and at a half-dozen university centers. This summer, GE began an experiment in the Hudson River to further document the rate at which PCBs break down naturally in the river. We have constructed a $2-million research station in the upper Hudson, where we are testing biodegradation data developed during years of laboratory work.

MYTH #6: Dredging will solve the river's problems.

The natural recovery process is the best answer for the river. Dredging will cause ecological harm and community disruption and will not significantly accelerate improvements in the river's condition. EPA's 1984 Record of Decision emphasized the potential harm from dredging and rejected dredging as an appropriate remedy. EPA said "bank-to-bank dredging would be environmentally devastating to the river ecosystem and cannot be considered to adequately protect the environment." Even if the negative impacts of dredging could be eliminated, EPA determined that disposal of the contaminated sediments would not be practical or cost-effective. EPA noted that dredging just the "hot spots" would have a limited impact on water column concentrations of PCBs. Any positive impact would depend on the extent to which the PCBs could be controlled. EPA concluded that the "technology and methodology of (hot spot) dredging in a dynamic, riverine environment is unproven and uncertain." (1984 ROD, Page 7)

EPA also reasoned that any form of dredging would require construction of a landfill near the dredging site, but said "the likelihood of such a site being available in the near future is highly questionable." (1984 ROD, Page 8)

Dredging would require the removal of thousands of tons of sediment, mainly along shorelines where PCBs have collected, in the very areas where fish propagate, vegetation grows and the ecosystem is supported. Dredging would disturb the fish population and remove plants, dramatically disrupting the healthy ecosystem that now exists in the river.

Nothing in the current Phase I report suggests that dredging technology has advanced since 1984 to mitigate or eliminate the harms that EPA said dredging posed. The Phase I report fails to discuss the significant adverse consequences of dredging, especially harm to the ecology of the river and long-term disruption of the community.

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With respect to the lower river, local sources of PCBs appear to be the problem. Dredging of upper-river sediments would have little or no impact on lower-river sediments. To impact the PCB problem in the lower river will require that lower-river sources be controlled.

Conclusion

Based on information EPA has presented in the Phase I report and other studies, it is apparent EPA's 1984 decision was correct. The data collected since 1984 documents the continued improvement in conditions in the river. The recently completed capping of remnant deposits should have a measurable impact on river quality. Additionally, the new scientific evidence on the lower toxicity of PCBs and the occurrence of widespread natural biodegradation reinforce EPA's 1984 decision.

It is also apparent that PCBs in the lower Hudson River are not derived from the upper Hudson but rather from local sources within the lower Hudson River Valley. The data presented by EPA do not show that dredging technologies have improved nor that impacts due to dredging have been significantly reduced. The lack of benefits from dredging, particularly in the lower river, point to natural restoration as the appropriate remedy.

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