



JACO offers utilities a complete turn-key service.

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**THE "TILR" PROGRAM  
TRANSFORMER INVENTORY  
AND LIABILITY REDUCTION  
PROGRAM**



JACO's Transformer Inventory and Liability Reduction (TILR) program addresses two critical problem areas for electric utilities: (1) PCB Liability/Risk Management, and (2) Electrical Equipment Inventory and Preventative Maintenance.

### 1. PCB Liability/Risk Management

Both federal and state enforcement agencies have imposed stringent regulations on PCBs, resulting in the critical need to implement efficient methods to identify transformers containing PCB contamination. It is necessary to identify those transformers which pose the greatest threat to the environment, human health and to the legal/financial status of the utility.

Implementing a proactive PCB inventory program consisting of TF oil sampling, TF inspection and TF oil testing is the best solution for a utility to serve the needs of its customers, to respond to government regulations, to reduce liability exposure, and to support a cost-effective PCB management program.

Locating and identifying transformers that contain high levels of PCBs, as well as those that do not contain PCBs, can be very valuable in the event of an oil spill. This information could save thousands of dollars in cleanup costs from one spill alone!

### 2. Electrical Equipment Inventory and Preventative Maintenance

Many utilities are beginning to implement Preventative Maintenance programs for their electrical equipment. By doing so, a utility can greatly reduce the risk of unscheduled power outages and associated problems, such as – negative public opinion, possible law suits, increased regulatory oversight, decrease in equipment life span, uncontrolled system

expenditures and increased risk mitigation. To implement an effective Preventative Maintenance program, a utility should first know the condition of its electrical system.

Most utilities have equipment and structures that are deteriorating in one way or another (rusting, seeping, leaking, over-heating, rotting, woodpecker damage, vandalism, etc.) that they are not aware is happening. By knowing the condition of their system, both manpower and budget dollars can be allocated on a priority basis and workloads can be more easily balanced throughout the year(s).

### 3. TILR Program

JACO's TILR (Transformer Inventory and Liability Reduction) program addresses the prior problem areas that your utility faces. The TILR program consists of six main components:

1. Overhead and Underground Transformer Inventory (sampling oil and inspecting)
2. Electrical Equipment Inventory and Inspection (equipment and structure system inspections)
3. Management Reports
4. Update Utility Maps
5. Computer Software
6. PCB Testing

#### Overhead and Underground Transformer Inventory

- JACO has developed and patented a very cost effective and safety oriented procedure for extracting an oil sample using insulated, patented tools/equipment while a transformer is still energized. At the time crews are inspecting a transformer, they will take an oil sample or do an inspection if the transformer is certified having PCBs of 1ppm or 2ppm or less. By sampling the transformers while they are still energized, the inconveniences of power outages are eliminated and the JACO employee is

working in a safe zone. JACO personnel will then send the oil samples to the laboratory for testing.

#### Electrical Equipment Inventory and Inspection

- JACO personnel will inventory and inspect your complete electrical equipment system or will do selected areas of your system. Seals, fittings, bushings and connections are checked on every transformer. An appropriate PCB label is affixed to the transformer if JACO personnel are able to determine the PCB level from the nameplate data. An inspection form is filled out for each transformer and the pole and attached equipment.

#### Management Reports

- JACO can provide the utility with complete systems inventory reports, including inspection results and oil sample results. Reports are also done on a daily basis on critical problems as they are discovered by JACO personnel that may require immediate attention.

#### Update Utility Maps

- Utility Maps are updated by JACO personnel as inspections are completed as well as identifying the procedure taken on that transformer – tested or inspected.

#### Computer Software

- The customer can be provided with JACO's inventory tracking program with the inventory data and PCB test results obtained from the TILR program already loaded by JACO personnel.

#### PCB Testing

- JACO Analytical Laboratory, Inc. is dedicated to providing the highest quality PCB testing available.