BOILER SERVICE PROGRAM

VALUE-ADDED SERVICES

Regular Onsite System Sampling
This includes analysis of all pretreatment, boiler, and condensate return systems during each service visit. A written service report will confirm all service activities that were conducted and include any technical recommendations.

Elution Studies On Ion Exchange Equipment
These tests will be conducted on the pretreatment equipment to determine the efficiency of the regeneration cycle. The data collected will be evaluated by drawing an elution curve. This information will reveal the regenerant concentrations at all stages of the cycle.

Deaerator Oxygen Analysis
This study determines the oxygen removal efficiency of the deaerator. The data collected will assist us in predicting the potential of oxygen related problems in the feedwater and boiler system(s).

Corrosion Studies on the Feedwater and Condensate Systems
This study enables us to determine the corrosion rates of the preboiler systems. The data collected will provide information relating to the corrosion protection.

Embrittlement Analysis
This is a study of embrittling characteristics of the boiler water. Aqua Science, Inc. will provide the equipment necessary to conduct this analysis. A complete report will confirm the results after the specimen has been sent to a metallurgical laboratory.

Quantitative Deposit Analysis
The analysis will be performed by a certified laboratory and Aqua Science, Inc. will absorb the charges.

Resin Analysis
Resin analysis will be performed by the manufacturer. Aqua Science, Inc. will ship the sample and coordinate the results with the testing center. A report on the condition of the resin and a photomicrograph of the resin beads will accompany each analysis.

Control Charts
Control charts with limits based on ASME guidelines will be provided and reviewed with operating personnel. These charts will specify the recommended control ranges and a contingency plan of action for periods when the system is out of proper control.

In-Plant Log Sheets
The results of daily testing will be recorded by operating personnel. These test results will be reviewed by an Aqua Science representative during each service visit. Copies of the log sheets will be sent to our office for further review and file reference.

Program Organization
Aqua Science, Inc. will provide all of the product information for the recommended treatment materials. This will include several sources for purchasing each product as well as the pricing and delivery information.

Safety Information
Aqua Science, Inc. will provide material safety data sheets (MSDS) for each product that is recommended. In addition to the MSDS postings, safety seminars will be conducted on an ongoing basis to review and inform everyone involved with the program of the proper handling procedures.

Equipment Inspections
An Aqua Science representative will attend every equipment shutdown. The equipment will be marked, dated, and photographed. A complete written report will follow each inspection.

Operator Training
Training seminars are an integral portion of this program. Aqua Science, Inc. has a complete training series that will be administered on a continual basis.

Management Review
An annual meeting with management is requested to review the specific strengths and weaknesses of the program. Topics covered include results, costs, services performed, and future plans for program development. This meeting is an opportunity for the plant management personnel to be very candid in evaluating the “product” received from Aqua Science, Inc.