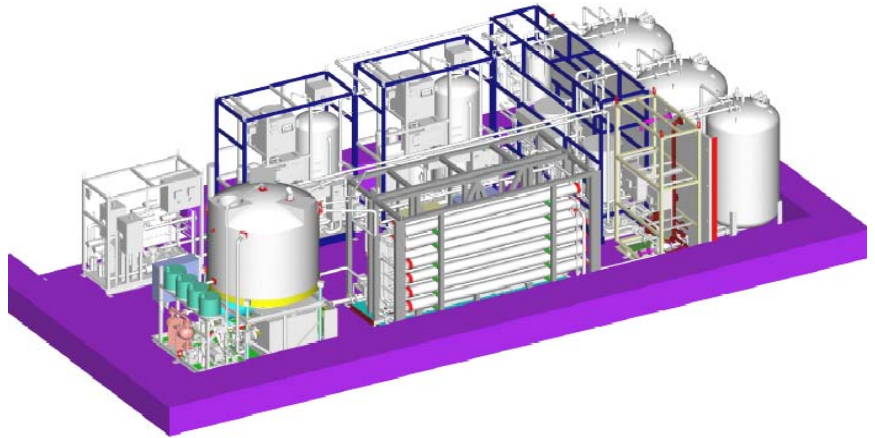




*Integrated Systems
for Water, Waste-
water and Wet Waste
Treatment*



Streamlined approach using standardized and proven technologies minimizes cost and schedule while providing guaranteed performance without capital expense.

FEATURES

- ✓ No capital required
- ✓ Avantech personnel performs all operations and maintenance activities
- ✓ Guarantee performance
- ✓ Staffing 100% dedicated to successful operations
- ✓ DBO service is applicable to a wide range of treatment technologies

BENEFITS

- ✓ Minimizes enduser capital budget
- ✓ Dedicated personnel improves reliability
- ✓ Consistent product quality and compliance
- ✓ Improved operational results
- ✓ Service can be custom tailored to meet nearly all water and waste applications

END-USER SPECIFIES

- Process stream characteristics
- Product requirements (*water quality, waste acceptance criteria, etc.*)
- Utilities available (*power, water, air, steam, etc.*)
- Resources available (*site/facility space, support equip., tanks, etc.*)
- Define all regulatory and code requirements
- Payment terms (*price/volume, price/weight, fixed monthly rates, etc.*)

SUPPLIER PROVIDES

- Process equipment, instrumentation and controls (*capital equipment*)
- Staffing (*management, tech support, operations, etc.*)
- Consumables (*filters, ion exchange resin, chemicals, etc.*)
- Maintenance (*parts, tools, labor, etc.*)
- Analyses (*process and product characteristics*)
- Infrastructure (*procedures, QC/ QA, training, etc.*)

Design, Build, Operate



KEY VARIABLES INFLUENCING DECISIONS

At one time it was a given that industrial and government facilities would own and operate all their ancillary equipment, but today these choices are made on a case-by-case basis. A few of the key factors influencing decisions are:

- Cost is a key factor that drives the decision to either own or lease water or waste treatment systems. *Avantech has implemented a number of cost saving initiatives such as standardized design and manufacturing of process components, remote monitoring and personnel multi-tasking (one person operates the equipment, performs maintenance, etc.) that have reduced the cost of outsourcing below that of the traditional approach.*
- Increasing treatment requirements (quality, regulatory, etc.), but little corresponding budget. *Avantech can provide all the capital for financing of new equipment, thus facilitating upgrades that were not in the enduser's long term capital budget.*
- Lack of qualified in-house personnel to operate and maintain the processing equipment. *Performance and reliability are improved through implementation of a time-tested employee training and safety program that focuses on specific aspects of water and waste processing, including; equipment maintenance, theory and principles, operation compliance, configuration control and regulatory compliance.*

RECENT EXPERIENCE SUMMARY

River Bend Station 1040 MWe Boiling Water Reactor (BWR), operated by Entergy Nuclear. Avantech installed new equipment under a DBOO contract for treatment and recycling of liquid radioactive waste. The new equipment, which incorporates Avantech's proprietary Ultrex™ ozonation and reverse osmosis processes, became fully operational in June 2004. Since installation, River Bend has experienced the following benefits:

- Reduced solid radioactive waste generation associated with liquid waste processing by a factor of ~10 from 2200 to 231ft³ (62.3 to 6.5 m³)
- Increased processing rate from 50 to 150 gpm (11.36 to 34.10 m³/hr)
- Improved quality of recycled water (Salts <2 ppb; Organics <20 ppb; Radionuclides <1E-06 µCi/ml)

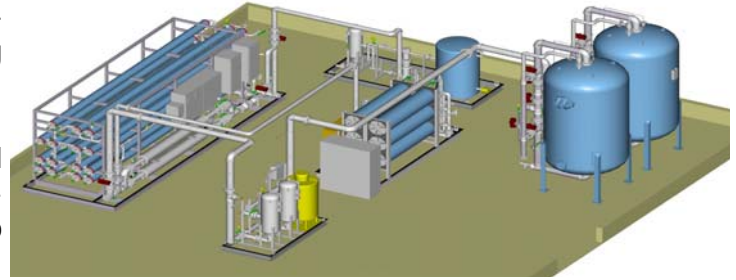


Avantech operates, maintains and provides all consumables associated with this equipment, thus allowing RBS personnel to focus on in-plant systems associated with power production.

Puerto Rico—Power Plant Makeup Water Treatment System Gas turbine generating facility in Mayaguez, P.R. A Design/Build contract was awarded to Avantech to design, build and commission a makeup water treatment system for purification of well water. The system is rated at 366 gpm (~83 m³/hr) and consists of multi-media filtration, cartridge filtration, anti-scalant addition, reverse osmosis, electrodeionization and clean-in-place equipment. Avantech's scope of work requires complete integration of the make-up



treatment facility including; automated controls, interconnecting piping, and start-up support services. The system design, engineering, and fabrication will be validated with a full system test at Avantech's manufacturing facility in Columbia, SC prior to site delivery and startup.



Sellafield Sludge Conditioning Under a contract with Jacobs UK Limited, Avantech completed a FEL-1 assessment associated with the stabilization and packaging of B30 and SIXEP sludges for long term storage and/or disposal. The sludge treatment process consisted of three major steps: 1) Sludge receipt, settling and dewatering, 2) Sludge conditioning/ stabilization (thermal or chemical), and 3) mixing and encapsulation with grout. Significant accomplishments of the assessment included:

- Use of an innovative chemical process that reduced ILW over 1,000 m³
- Lifecycle cost savings of £90 Million
- Use of existing/ underpinned technology
- A viable and highly flexible process that can treat widely varying sludge types
- Remote operation and materials handling

The project is currently awaiting approval for FEL-2



WE'RE AVAILABLE

For additional information on this and other AVANTech products and services, please contact us at the office nearest you or at our web site.

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