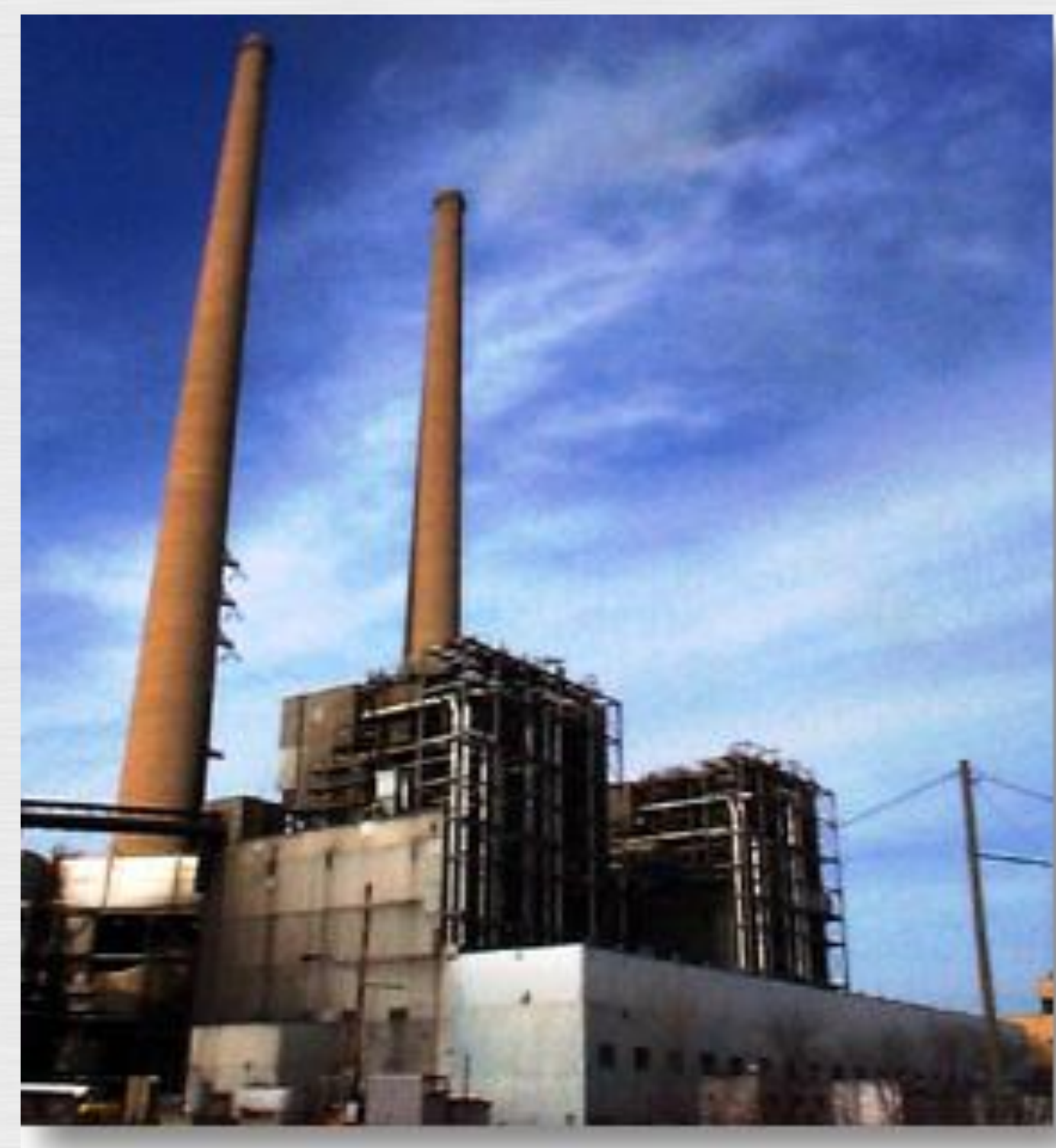


### Objective

Advanced Research program desires a tool for tracking technology develop goal against system application needs



#### The software tool provides the following:

- Maintains performance/specification of current technology and on-going research
- Repository for selected application program needs
- Supports the mapping of application needs to technology development
- Supports a methodology for evaluating technology gaps and justifying program research
- Provides a systematic approach to assess new technology insertion

### Technology Goal Tracking

- **Technology Class Attributes**
  - Major Technology Category: Sensor, Materials, Computational...
  - Parameter Type: Temperature, Pressure ...
  - Technology Type: Optical, Thermocouples, Accelerometers, ...
- **Technology Performance Goals**
  - Range, Accuracy, Type, Output
  - Measured Approach
  - Threshold Limits
- **Matrix Intersection**
  - Potential applications and supporting rationale
  - Researcher provides first draft to applications

### Application Needs Tracking

- **Application Class Attributes**
  - System: Gasifier, Turbine, Fuel Cell, USC Boiler
  - Subsystem: Combustor, Compressor, HRSG
  - Component: Blades, Seals, Bearings ...
- **Applicant Design Needs**
  - Similar to Technology Goals
  - Range, Accuracy, ...
  - Threshold/Design Limit Needs
- **Matrix Intersection Confirmation**
  - System's Designer assesses potential matches
  - Rates intersection on meeting application needs
  - Provides rationale for decisions and feedback for improving technology goals to become viable candidate