

EXHIBIT G

Legislative Task Force on Sustainable Building Design and Practices November-13, 2006

Current reported costs for utilities from 275 K-12 School Districts for fiscal year 2004-2005 were \$59,286,028.97 (see attached spread sheet provided by the Dept. of Education). Fiscal year 2005-2006 current reported costs utilities are \$72,850,880.57. This is a 22.9% increase year on year and there are few signs that these pricing pressures are easing.

School Districts have a significant impact on the State's consumption and supply of energy and the economic stability of the communities they serve. Therefore, it is incumbent upon and fiscally responsible for the State to identify, recommend, and adopt reasonable policies for eliminating wasted energy, improvement of energy efficiency, and reduction in the environmental impact of school facilities. These facility improvements will enable and foster academic gains leading to continued growth and economic development.

The following list of recommendations to improve energy efficiency and building performance in K-12 schools was presented to the Task Force at the August 7, 2006 meeting. Further information follows providing rationale for each.

- A) Create and maintain a position of Energy Manager and staff.
- B) Institute measurement of baseline utility consumption and performance by District, possibly through APSCAN.
- C) Support and join efforts to establish an interim study of consolidated construction project plan review.
- D) Provide incentives for Districts to utilize a design process that results in a balance of first cost, life cycle costs as well as health and productivity.
- E) DPSAFT shall update project application forms to identify and inform Districts of all approved project delivery methods
- F) DPSAFT shall review the current legislation, Rules and Regulations for conflicts and or omissions of energy related content.

Supporting Rationale

- A) It is recommended that the Division of Public School Facilities and Transportation creates and maintains a position of Energy Manager with provisions for additional staff to develop, coordinate and implement a state-wide program designed to promote the implementation of cost effective improvements yielding long-term utility and operating cost reductions in K-12 facilities. This position and staff should be filled in addition to any currently open positions required to support compliance with legislative requirements. Funding of these open positions is a top priority, but not the direct focus of this task force.
 - 1) Benefits of an Energy Manager (staff):
 - i) Provides a trained professional to facilitate the installation and management of a statewide utility cost and consumption tracking system where individual buildings/district energy consumption can be evaluated for potential energy improvements
 - ii) Establishes and provides coordination for ongoing maintenance and operational training, as it relates to energy efficiency for K-12 facility management
 - iii) Provides an impartial resource to Districts to facilitate their understanding of the benefits of implementing energy efficiency measures and systems through either self generated or 3rd party generated projects using currently approved project delivery methods
 - iv) Provides construction oversight to add further assurance that projects are designed and installed to achieve code compliance for new construction and renovations in existing building.

- B) Institute measurement of baseline utility consumption and performance. School District expenditures for energy represent a tremendous drain on education dollars (typically the 2nd largest expense after personnel). A sizeable portion of these costs, which were \$59,286,028.97 for fiscal year 2004-2005 and \$72,850,880.57 for fiscal year 2005-2006, a 22.9% YOY increase (data provided by the Arkansas Public Schools Computer Network (APSCAN)), can be captured through building system and operational efficiency improvements and perhaps redirected toward more important educational needs.
- 1) Energy-efficient schools are important to school administrators, not only because they use less energy and are more comfortable, but also because administrators want to be good stewards of taxpayer funds. The typical questions are:
 - i) How can administrators know that their schools are energy efficient?
 - ii) Where and what are the cost effective opportunities?
 - iii) How and where do I start?
 - 2) The first step toward energy efficiency should be interaction between the district and their utilities for a rate structure and billing review.
 - 3) Another method of identifying marginal and poor performing buildings without rigorous evaluation is through utility tracking. Utility tracking provides visibility and allows management of a individual building s utility use and expenditures (i.e. water, sewer, gas, propane, coal, electricity). Utility tracking also facilitates energy benchmarking; comparing a school s energy performance to other similar schools as defined by the Energy Star Target Finder.
 - 4) Where many administrators or districts lack the time or expertise to administer a utility tracking system, a central system supported by state staff presents the opportunity to oversee and assist in converting energy-use data into useful information. This information helps school districts determine how well each building is performing and highlight the best and worst energy users, thus revealing which buildings in a school district may be the best candidates for implementing energy conservation measures.
 - 5) Benefits of a Utility Tracking System:
 - i) Provides immediate accessibility to data and accurate and detailed utility information
 - ii) Provides ability to compare the relative efficiency of individual buildings
 - iii) Provided potential to immediately find billing errors
 - iv) Identifies potential consumption problems requiring maintenance
 - v) Assists in forecasting and budgeting utility costs
 - vi) Provides data that can be used to assist districts in evaluating the effectiveness of water and energy efficiency measures or strategies implemented within facilities.
 - 6) Examples of Utility Tracking Programs commonly used:
 - i) The California Energy Commission s Public Interest Energy Research (PIER) program recently developed a benchmarking system that can be copied by districts across the country. It was created by researchers from the Massachusetts Institute of Technology (MIT) in cooperation with the West Contra Costa Unified School District (WCCUSD) and Pacific Gas and Electric Co. (PG&E). The system included analyzing energy consumption information from 39 elementary schools, five middle schools and five high schools.
 - ii) **EPA Energy Star - Portfolio Manager** Online software tool to help businesses continually track and compare energy use, critical to successful energy management. Portfolio Manager also provides a comparative 1-to-100 rating of energy use for the following office buildings, K-12 schools, hospitals, and more soon.
http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager
 - iii) The Task Force is aware of a benchmarking, utility tracking program called, UtilityDirect from School Dude (www.SchoolDude.com).
 - iv) UM-Pro Currently used at Camp Robinson by the Energy Manager.
 - v) <http://www.savemoresources.com/solutions/inhouse.php> Easily automates the transfer of utility data to the EPA's **ENERGY STAR®** National Energy Rating System and tracks all utility costs: electricity, gas, propane, water, steam, recycling, sewer, refuse, etc.

vi) There are other companies and benchmarking, utility tracking programs that provide online utility management and reporting tools that audit, track and analyze utility consumption and costs to identify savings opportunities.

C) Support and join efforts to establish an interim task force studying the implementation of procedures, rules and regulations for state-wide, consolidated review of construction project plans. In the interim, use existing stage agencies to enforce existing requirements and investigate options to strengthen compliance (agency Project Managers to provide wish list).

- 1) Only limited portions of the AR Mechanical Code and AR Electrical Code (e.g. site utilities) undergo review during the design stage. There is no review or inspection for compliance with the AR Energy Code or the Mechanical Code for items such as ventilation.
- 2) Current Arkansas Legislation and Rules and Regulations do not fund project plan review and inspection to ensure compliance with current State Energy, Mechanical and Electrical Codes.
- 3) Traditional Code inspections are not designed to review any aspects of the Energy Code.
- 4) Since Code Inspection occurs during construction, the cost of any required modifications are significantly more expensive to the project owner than if the issue was identified during a design review.
- 5) Improved enforcement of construction codes will not only reduce a building s energy consumption but should also lead to reduced insurance premiums as the quality of buildings is more consistent throughout the state.
- 6) The consolidated plan review office/agency must have the ability to establish a revenue stream sufficient to properly sustain its operation and staffing.

D) Provide incentives for District s to utilize a design process that results in a facility that is a balance of first cost, life cycle operating costs as well as health and productivity. Research indicates that 80% of life time cost of a building is operating and maintenance costs. Therefore, it is prudent and fiscally responsible for state funded projects to consider operating and maintenance costs in addition to construction costs when evaluating a project. Several voluntary rating systems are excellent models for this integrated design process, including LEED, Energy Star, Collaborative for High Performance Schools (CHPS), and Green Globes.

- 1) Currently, there are no incentives for school districts to consider factors other than first cost as they evaluate replacement of equipment or materials or in the design process for new facilities or renovation of existing facilities. For existing buildings, incentives are an important factor in helping Districts overcome the first cost hurdle of bringing existing systems into compliance with current codes and other state guidelines (e.g. the cost of adding ventilation and changing air distribution for improved acoustics). For new facilities, incentives are an important factor in encouraging Districts to make decisions based on long term costs as well as health and productivity. It is recommended that the State:
 - i) Revamp the existing Revolving Loan Program to allow districts to finance energy conservation or building efficiency projects at a very competitive rate. Provided sufficient funding to ensure availability of funds for expected demand.
 - ii) Institute an incentive through the current Wealth Index formula where an increased variable for state match would be available to the school district for implementing projects that earn LEED, Energy Star, CHPS, or Green Globes certification; meet the state s requirements of guaranteed energy savings projects; and installation of equipment or materials meeting the ENERGY STAR criteria. These programs also provide excellent opportunity to incorporate energy efficiency into the District s educational curricula if desired.
 - iii) Institute an incentive through the current Wealth Index formula where an increase variable for state match would be available to the school district for implementing projects utilizing renewable energy sources. This program also provides an excellent opportunity for renewable energy to be incorporated into the District s educational curricula if desired.

- iv) Institute an incentive for both Districts and other public entities (city, state, county, etc.) to enter into public-public partnerships for the construction of new joint use facilities or renovation of existing facilities for joint use. These types of projects are an excellent tool to leverage public funds for the maximum benefit of the taxpayer while also conserving energy and other natural resources.
- E) DPSAFT shall update project application forms to identify and inform Districts of all project procurement methods allowed in current legislation. Current forms are structured only for the traditional plan and specification method and may discourage, through omission, Districts from seeking alternate procurement methods.
- F) DPSAFT shall with the assistance of the Legislative Research and Legislative Legal Council review the current DPSFT Legislation, Rules and Regulations and Facility maintenance requirement to identify conflicts and/or omissions of energy related content, in particular, those relevant to the previous recommendations A, B and D.
- G) Evaluation of current procurement practices where the specification of high efficiency and or recycled products would be identified. This would include but not be limited to: appliances to be ENERGY STAR rated, all incandescent light bulbs must be replaced with CFLs, LEDs, HPS (outdoor) or permanent fixtures with electronic ballasts, Watt Misers on all vending machines, waste baskets made from recycled plastics.