

Interim Progress Report #2 on OUSD CHPS Program / Energy & Water Plan Board

Resolutions

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May 12, 2008

Background

In Mid-May of 2007, the Oakland Unified School Board adopted two key District Resolutions in support of a "Sustainability and District-wide High Performance Schools Program, " and adoption of an "Energy and Water Plan, " aimed at developing a system-wide approach towards incorporating the Collaborative for High Performance Schools (CHPS) criteria and energy efficiency and water conservation measures throughout the District facilities. With assistance from Greenbank Associates, acting as the district CHPS Program Manager, and Gerald Colbert, the District's Energy Manager, the Division of Facilities Planning and Management has begun implementation of the CHPS design criteria into the ongoing and future Bond Program Modernization projects, which includes some new construction /portables replacement classroom projects.

The full development of any OUSD CHPS Program Guidelines has been hampered by the timing of the actual adoption of the State (DSA and OPSC) High Performance Schools (HPS) program regulations, and thus slow rollout of the State HPS program as linked to the \$100 Million set aside in incentive grants. Although originally anticipated in the Spring of 2007, the Office of Administrative Law (OAL) passed the regulations in October of 2007; however, DSA still has only a few documents posted publicly, and OPSC, as of May 2008, has yet to post any details of their required processes, with incentive grant calculations tied to CHPS criteria (points) as verified by DSA, with clarifications between New Construction and Modernization project applications, phased Increment submittals, etc.

Since the first Progress Report, in November of 2007, the District has moved forward with the design of five major CHPS- rated projects, and is planning integration of the CHPS criteria into the next batch of Bond projects. Much progress has also been made on several other fronts including: energy efficiency projects, rate schedule analysis and updates, completed and planned energy audits, collaboration with non-profits aligned with CHPS Program goals, leveraging of outside funding and free technical assistance programs, and "green cleaning," among other District CHPS responsibilities. This document fulfills requirements for bi-annual assessment reporting on the progress of the Programs and the District's plans to comply with both Resolutions.

Executive Summary

CHPS District-wide Program

Currently, the CHPS Criteria is being integrated into the design of five Bond projects: Chabot Elementary, Cox Elementary, Jefferson Elementary, Oakland High School, Increment 2, and the Urban Promise Gym. Two of the projects have been submitted to DSA and are likely on target to be assessed at between 36-46 "CHPS points." These first two projects have also been registered online in the CHPS Verified Program, to eventually be third -party certified as CHPS-rated schools, with project data shared online. DSA requires a minimum of 20 points for Modernizations and New Additions, while CHPS Verified requires 25 points. The District has set an energy performance goal of between 20-25% better than Title 24 compliance, among other mandatory credits. Pending DSA final assessment of CHPS points garnered by each of these two projects, and OPSC's grant calculations, the District anticipates between \$3,500-\$75,000 in additional incentive grants from the State funding program. The Division also has plans to integrate the CHPS Criteria into the next few major Bond projects: Highland Elementary School, Cole Middle School, Elmhurst Small Schools, and Fremont High School.

Progress in other CHPS responsibilities include selection of two District-wide Commissioning Providers, and Acoustics consultant to meet both the CHPS Prerequisites of Fundamental Building Systems Testing and Training to help ensure energy efficiency, and Minimum Acoustical

Performance, as well as additional points in Enhanced Commissioning and Improved Acoustical Performance for enhanced learning environments.

Two incentive programs have been engaged to assist design teams with maximizing energy conservation/efficiency measures into the project designs for our CHPS schools: the California Energy Commission's **Bright Schools** free technical assistance program, and the **Savings By Design** rebate/incentive program through PG&E. Rebates to the District from PG&E will be based on final audit of the project, based on performance calculated beyond 10% better than Title 24 standards. While the maximum allowed to Owners is \$500,000 for large commercial projects, it is anticipated that the rebates for each new addition project could potentially be in the range of \$10,000-\$25,000.

Current **Bright Schools Projects** are: Urban Promise Gym, and next, Jefferson Elementary. Current **Savings By Design Applications** have been submitted for: Chabot Elementary, Cox Elementary, and Urban Promise Gym, with Jefferson Elementary and Oakland High following soon.

Two non-profit groups have approached the District to collaborate in leveraging other grant funding related to issues integral to high performance schools: indoor air quality, and chemical /hazardous waste management and procurement. The Facilities Division has begun to collaborate on leveraging Williams Settlement funds and IAQ with the first group, the "Healthy Schools" consortium, led by the Ethnic Health Institute, Green Schools Initiative, and the CA Department of Health Services. As a beta test, a walk through of Oakland High, utilizing the new (July 2007) OPSC FIT assessment tool was performed, and the report is currently included in the Williams application for the site. OPSC has not yet responded to the Application for approximately \$10 Million in Emergency Repair Program funds for new mechanical systems, lighting upgrades, and improvements to indoor air quality as well as thermal comfort. The Healthy Schools group is developing a case study based on leveraging this work at Oakland High.

All major Bond projects initiated should be on target to meet minimum CHPS ratings, whether CHPS Verified, with third party certification, or CHPS Designed, self-certified. All projects that qualify for Prop 1D Modernization funding should qualify for some High Performance Schools (HPS) Incentive Grants additional funding. Pending a range of 33 CHPS points to 50 points for any one project, the District could qualify for a total of roughly \$350,000 to a little more than \$1,000,000 in HPS incentive grant funding from the State. (Neither UPA Gym nor Jefferson ES have modernization grants remaining, and therefore would not qualify for any "extra" HPS incentive grant funding; these will be CHPS Designed only.) Calculating an average of 40 points for each of the projects, the District could qualify for just under \$600,000 total. These figures represent a rough order of magnitude of potential funding, as OPSC still has not yet published its updated grant calculators for the Program, approved at the end of last year.

A new sustainability/CHPS initiative introduced this year is the '**Green Cleaning Team.**' Greenbank Associates invited the Executive Directors of the Green Purchasing Institute and Green Schools Initiative, two non-profits dedicated to healthy, green schools, to the Buildings & Grounds and Maintenance (Custodial) Directors and staff. To date over four successful meetings have been held that have helped educate staff regarding the health and safety hazards of some cleaning products and the relative benefits to health related to indoor air quality for both the custodial staff handling the green cleaning products, as well as the students and staff using the buildings. The custodial staff had already been approached by several vendors, and were very open and eager to develop this Green Cleaning Team and implement change for the benefit of all involved. The Department will be beta-testing two to three sets of green cleaning products at three sites over the next few weeks. The goal is to make their decision on which set of products to utilize, phase-in the new purchases, and be ready to train all staff in green cleaning techniques for the coming Fall school year. An added bonus may be that, if one of the vendors of green cleaning products selected is the vendor for the new State Purchasing Contract, OUSD may

benefit from utilizing the new **CA State Purchasing Contract**, which allows for a discount of up to 30% for these green cleaning products, and includes staff training.

Another new initiative beginning to be developed is a renewed **District-wide recycling effort**, to be coordinated with the new waste management and recycling contract. Similar to the Green Cleaning Team process, the Division intends to work to educate the custodial and site /administration staff, as well as students about the benefits of recycling and waste minimization.

Future green /CHPS initiatives to be developed include: environmentally preferable purchasing, and possible consideration of a baseline inventory of greenhouse gas emissions, annual reporting /inventory, and development of a sustainability plan to reduce these emissions and improve health, reduce operating costs, and promote environmental stewardship. Additionally, improved coordination with the existing District Safe Routes to Schools Program, will focus on reduction of individual vehicle miles traveled by emphasizing walking, biking and public transportation.

Energy and Water Plan

The District's Energy and Utilities Manager, Gerald Colbert, has begun to coordinate the Energy and Water Plan, including management of four ongoing energy efficiency programs: **PG&E Energy Audits, PG&E Retro-Commissioning** (for existing facilities), **PG&E Rate Schedule Updating**, and implementation of **Energy Efficiency Projects** identified through either the Audit or the Retro-Commissioning Programs. . Free energy audits were performed by PG&E on six OUSD school sites and the District/city joint-use pools to identify no cost, low cost, and capital improvements with reasonable payback periods (3-10 years) for ongoing energy savings. Typical systems analyzed were: lighting, HVAC, process equipment, other equipment, and controls. With the assistance of PG&E, the Division has identified 13 more schools for a second phase of Energy Audits and 13 existing school sites (currently not scheduled to be modernized in the Bond Program,) for Retro-Commissioning to identify energy efficiency projects. Some of these projects may be eligible for rebates under current PG&E programs.

The 13 schools scheduled for PG&E's Retro-Commissioning Program include:

1. McClymonds HS
2. Castlemont HS
3. Skyline HS
4. Oakland Tech HS
5. Harper-MetWest HS
6. Webster Academy
7. International Community-Think
8. Manzanita-Seed
9. MLK
10. Garfield
11. Espreanza-Korematsu
12. Ascend
13. Acorn Woodland

The 13 Schools chosen for the 2nd Phase of PG&E Energy Audits include:

1. Brookfield
2. Franklin
3. Fruitvale
4. Lockwood
5. Maxwell Park
6. Roots-Coliseum
7. Montera MS
8. Roosevelt MS
9. Frick MS

10. Elmhurst-Alliance
11. James Madison MS
12. Westlake MS
13. Yes-Ind. Study

Bret Harte MS and Peralta Creek-Calvin Simmons were not included because they are currently undergoing modifications based on the 2005 Energy Audit Recommendations.

The first of these completed energy efficiency projects include implementing lighting retrofits from older T8 (32 watt) lamps to new second generation T8 (25 watt) lamps, at four of the six sites audited. These sites included were: Martin Luther King Elementary, Franklin Elementary, Bret Harte Middle School, and Calvin Simmons-Peralta Creek Middle Schools. PG&E rebates approximated 10% of the project cost for these four sites, totaling \$20,582. The second package of energy efficiency projects from the first audits is currently being developed for mechanical upgrades to be bid and completed this summer of 2008.

Utility rate schedules were analyzed, identifying some sites with potential for actual dollar savings through change in rate schedule and/or demand response. Those sites with a calculated savings of \$300 /year or more from rate schedule change alone were shifted to the more favorable rate schedule. Operational savings per year from these (approximately 28 sites) alone is projected to be \$ 90,000 per year. Rate schedules will be reanalyzed on an annual basis.

The Energy and Utilities Manager will continue to develop the implementation of the energy and water conservation measures outlined in District's plan, and will be coordinating with the Division Directors of Facilities, Buildings & Grounds, Operations & Maintenance, and CHPS Program Manager over the next year. The newly released East Bay MUD Regulations governing water service to EBMUD customers (eff. date 07/01/07) on water efficiency requirements will be incorporated into the plan. All new CHPS projects will comply with, or exceed these efficiencies.