



**OPERATIONS COMMITTEE
FEBRUARY 19, 2004**

**SUBJECT: SUSTAINABLE DESIGN AND ENVIRONMENTAL
LEADERSHIP POLICY FOR DESIGN AND
CONSTRUCTION OF METRO CAPITAL PROJECTS**

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file report on the development of a Sustainable Design and Environmental Leadership Policy to be used as a guideline during design and construction of all applicable Metro Capital Projects, including the new West Los Angeles Transportation Center to be developed as part of the Division 6 Land Exchange Project.

ISSUE

During the December 2003 Board meeting, Director Hahn introduced a motion directing staff to explore the possibility of developing a Sustainable Design and Environmental Leadership Policy which will apply to the design and construction of all applicable Metro Capital Projects. Such a policy would include Metro adopting the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) building rating system, increasing Metro's renewable energy portfolio by usage of renewable solar energy, and implementation of Best Management Practices (BMP's) to improve the quality and reduce the amount of storm water runoff from Metro facilities.

BACKGROUND

The LEED Building Rating System is a national consensus-based and market-driven system developed by the USGBC to provide guidelines to building designers and architects for incorporation of sustainable design principles in the design and construction of new buildings. Numerous governmental and private entities have developed design policies requiring usage of LEED in building design and construction, such as the United States General Services Administration, the Armed Forces, the City of Los Angeles, the Los Angeles Community College District, Ford,

Sprint, Toyota, and Steelcase (to name just a few). As of September 2003, 948 projects, representing 140 million square feet of space, were registered in the program.

LEED is divided into six categories related to citing of buildings, water conservation, energy, building materials, indoor environmental quality, and innovation in design. Each category contains a specific number of points that can be obtained. A project that earns enough points (26) can become “LEED Certified”, on up the ladder to “Silver” (33), “Gold” (39), and “Platinum” (52 and up).

The LEED system also includes credits for both renewable energy and management of storm water, which were specifically mentioned in the motion by Director Hahn. In addition to the LEED credits that can be obtained, the City of Los Angeles Department of Water and Power (LADWP), Southern California Edison (SCE), and the Gas Company offer incentives and rebates to help offset the capital cost of solar panel installation. These rebates can pay up to 85% of the costs of solar panel installation. Given the availability of rebates, as well as the operational savings gleaned from reduced electrical bills, the costs of solar panel installations can be recovered within an average of one to three years, dependent on size.

Aside from the LEED system, management, control, and treatment of storm water runoff from facilities is a requirement of increasingly stringent Federal, State, and Local regulations. Incorporation of BMP’s to control and treat storm water runoff prior to discharge into the watershed is required during the design and construction of new facilities, as well as the retrofitting of existing parking lots or maintenance yards. Examples of BMPs include on-site storm water retention systems, vegetated swales, and water treatment systems.

DISCUSSION

Metro staff from Facilities-Operations and Construction Project Management have formed a working group to develop the policies requested by Director Hahn. This working group, including facilities and environmental engineers, has been tasked to develop this policy that will later be forwarded to the Board for review and approval.

It is intended that this policy will mandate that all new Metro buildings and facilities to be designed and constructed will: (1) comply with the LEED building rating system attaining a minimum LEED rating of “Certified”, (2) incorporate renewable energy systems, such as solar panels, in the design and construction of all applicable Metro facilities, and (3) that all Metro facilities to be constructed must comply with all Federal, State, and Local storm water regulations by incorporation of innovative BMPs to control and treat storm water.

Although a policy for Sustainable Design and Environmental Leadership is currently in process and has not yet been formally developed, staff would like to take this

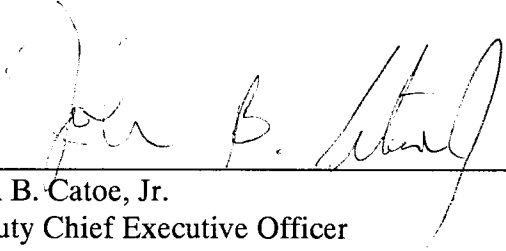
opportunity to inform the Board of selected projects currently in design and/or construction that comply with the intent of Director Hahn's motion.

- West Los Angeles Transportation Center – This project includes the construction of new bus operations and maintenance facility in West Los Angeles. The project is currently in the beginning stages of design and environmental clearance. The facility will be designed and constructed as a state-of-the-art maintenance facility and will, at minimum, achieve a LEED rating of “Certified”. Generation of renewable energy and incorporation of storm water BMPs such as on-site retention and treatment will be incorporated into the design of the facility.
- Division 9 Transportation Building – Facilities-Operations staff and the San Gabriel Valley Service Sector are currently in the preliminary engineering phase of a design/build project for construction of a new transportation building at Division 9 in El Monte, California. The facility will be LEED certified, and solar panels will be installed on the roof structure for generation of renewable energy.
- Division 8 and 15 Solar Generation Project - This project includes the installation of solar panels on the roofs of the maintenance buildings, transportation buildings, and fuel islands of both bus operating divisions. As currently designed, the total size of the solar panel system at each site will be 200 Kilowatts, which will be capable of generating approximately 25% of the daily electrical usage for each facility. Utilizing rebates from LADWP and the Gas Company, Metro will be rebated approximately 75% of the capital costs of installation, and the payback for the project will be approximately two years. After payback, Metro will see electrical bills at these facilities reduced by 25%. This project is currently in procurement, and is scheduled to be complete by August 2004.
- San Fernando Valley Metro Rapidway - This project is currently in construction and numerous sustainable design principles are included, such as drought tolerant landscaping, storm water BMPs during construction and operation, erosion and sediment control, storm water treatment via vegetated bioswales, light pollution reduction, usage of recycled water for landscape irrigation, and usage of building materials with recycled content

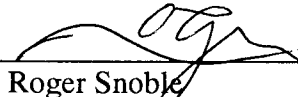
NEXT STEPS

Staff has formed a multi-disciplinary working group tasked with development of Metro's Sustainable Design and Environmental Leadership Policy. The policy will be developed and forwarded to the Board for review and approval within 180 days of this report.

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