ENERGY AND ENVIRONMENT COMMITTEE REPORT relative to negotiating an agreement with City of Long Beach and the Sanitation Districts of Los Angeles County (LACSD) for a partnership in the ownership and operation of the Southeast Resource Recovery Facility (SERRF) for the processing of municipal solid waste for the City of Los Angeles.

Recommendation for Council action:

AUTHORIZE the Executive Director, Bureau of Sanitation, to:

- a. Pursue negotiations for a partnership with the City of Long Beach and LACSD for co-ownership and operation of the SERRF.
- b. Integrate Green Conversion Systems, Inc. (Green Conversion Systems) and its best available control technology emissions control system in the proposed partnership as appropriate (The City and Green Conversion Systems are currently under contract negotiations for the development of the first alternative technology facility for the City).
- c. Report within six months with an update on the status of the negotiations.

<u>Fiscal Impact Statement</u>: The Board of Public Works (Board) reports that conducting contract negotiations does not require any funding and does not have any financial impact on the General Fund.

Community Impact Statement: None submitted.

Summary:

On October 1, 2014, your Committee considered an August 22, 2014 Board report relative to negotiating an agreement with City of Long Beach and the Bureau of Sanitation (BOS) for a partnership in the ownership and operation of the SERRF for the processing of municipal solid waste for the City of Los Angeles. According to the Board, the BOS is responsible for collecting and processing residential curbside solid waste. For operational purposes, the City is divided into six wastesheds: East Valley, West Valley, South Los Angeles, North Central, West Los Angeles, and Harbor. The City utilizes a four-bin system to collect residential curbside solid waste from over 740,000 residences: green bin (green waste), blue bin (recyclables), brown bin (horse manure), and black bin (post-source separated municipal solid waste, MSW). Over 2,700 tons per day (tpd) of green, brown, and blue bin materials collected by the BOS are recycled. Also, the BOS collects approximately 3,300 tpd of black bin material. Most of the residual MSW collected by the BOS is landfilled, with approximately 100 tpd delivered to the SERRF in the City of Long Beach for power generation.

To reduce and eventually eliminate the City's reliance on urban landfills, specifically Sunshine Canyon landfill, Council adopted the Recovering Energy, Natural Resources, and Economic Benefits from Waste for Los Angeles (RENEW LA) Plan (Council File No. 05-1273-S1). The Plan calls for maximizing recycling and reuse and converting the remaining trash that would otherwise be disposed of at landfills into clean electricity, alternative fuels, and other valuable resources.

RENEW LA calls for the establishment of seven conversion technology facilities; one facility located

in each of the six wastesheds, and a seventh facility located in the local southern California region. Additionally, the BOS commenced the Solid Waste Integrated Resources Plan (SWIRP) in 2007, a stakeholder driven process to move the City towards zero waste by 2025. One of the twelve guiding principles established by the stakeholders in 2008 called for investing in new, proven and safe alternative technologies that help accomplish the zero waste goals of SWIRP.

On February 5, 2007, the BOS released a Request for Proposals (RFP) seeking one or more Development Partner(s) for both commercial facilities capable of processing 200 to 1,000 tpd of residual MSW, and emerging facilities capable of processing up to 200 tpd of residual MSW. On August 22, 2007, the BOS received seven proposals under the commercial technology category from across the globe. Proposed technologies included mechanical, biological, and thermal technologies employing automated and manual sorting, anaerobic digestion, composting, advanced thermal recycling (second generation waste-to-energy technology), and gasification. The Evaluation Panel was comprised of experts from academia, industry, technical consultants, and City staff.

On February 17, 2011 and March 11, 2011, HDR and the Evaluation Panel reconvened to evaluate the BAFO responses from the three (3) short-listed commercial proposals. The Evaluation Panel proceeded with the scoring and ranking of the proposals. The Evaluation Panel decided to only score and rank the BAFO responses that provided the highest diversion, best financial options for the City, and a maximum facility throughput of 1,000 (tpd) as specified, under the commercial category of the RFP. The individual Evaluation Panel scores for each proposal were used to determine the final score and ranking order. On May 25, 2011, the Board authorized the BOS to begin contract negotiations with the highest ranked proposer under the commercial technology category.

SERRF is co-owned by the City of Long Beach and LACSD and is located in a heavy industrial zone in the Long Beach harbor. The City of Long Beach is the majority and operating owner with 61.5 percent ownership and Sanitation Districts of Los Angeles County owns 38.5 percent. The governance of the partnership is via a joint power agreement (JPA) with a Board of Directors. The facility began operations in the late 1980 to harvest power from solid waste. SERRF currently operates at 1,300 tpd of solid waste and generates 36 megawatts, providing electricity for approximately 35,000 Long Beach residents.

SERRF is permitted for a daily throughput of 2,220 tons of solid waste. Solid waste is received for thermal processing in high temperature furnaces to generate super-heated-steam to propel generator for the production of energy and recoverable solids. The energy generated from steam produces enough electrical power to operate the SERRF facility, and ash being an end-product of the process is recycled as road base material. SERRF is equipped with the best available control technology (BACT) to eliminate potentially harmful particulates that are generated during the thermal process and the boilers were designed to minimize the formation of trace toxic air contaminants. SERRF uses ammonia to control nitrogen oxides, lime slurry to control sulfur oxides and acid gases, and a multi-chamber fabric filter baghouse for removal of particulate matter. The flue gas is finally ready to exit the baghouse, is discharged through a 265-foot tri-flue stack where emissions are monitored by a combination of continuous monitors and periodic stack sampling.

In addition, SERRF performs "front-end" and "back-end" recycling by recovering white goods and other materials prior to combustion and collection metals removed from the boilers after combustion. Each month, an average 825 tons of metal are recycled rather than being sent to a landfill. The City has been using SERRF to process approximately 100 tpd of the City's MSW from the Harbor wasteshed, which would otherwise be trans-loaded and transported across the City to Sunshine landfill. SERRF and the City do not have long-term contract since SERRF operates on a first come

first service basis. SERRF is located in the City of Long Beach at 120 Pier S. Avenue, Long Beach, CA 90802, near the City's boundary in Council District 15.

After further consideration and having provided an opportunity for public comment, the Committee moved to recommend approval of the recommendations as contained in the August 22, 2014 Board report and detailed in the above recommendations. This matter is now submitted to Council for its consideration.

Respectfully Submitted,

ENERGY AND ENVIRONMENT COMMITTEE

MEMBERVOTEFUENTES:YESBLUMENFIELD:YESLABONGE:YESHUIZAR:YESKORETZ:YES

ARL 10/1/14

-NOT OFFICIAL UNTIL COUNCIL ACTS-