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April 25, 2023

The Honorable City Council
c/o Holly L. Wolcott
City Clerk
Room 360, City Hall

COUNCIL FILE NO. 21-1039: Relative to developing a Building Decarbonization Work Plan for the City's existing building stock and identifying City facilities for near-term installation of distributed energy generation systems

BACKGROUND:

The City has a large municipally-owned building portfolio with over 1200 existing buildings, excluding facilities owned by proprietary departments such as the Los Angeles Department of Water and Power (LADWP), the Port of Los Angeles (POLA), and Los Angeles World Airports (LAWA). It is widely understood that building operations are one of the largest contributors to greenhouse gas emissions. In Los Angeles, municipal buildings account for about 32% of the City's municipal emissions. The City's Building Decarbonization Workplan that the Bureau of Engineering (BOE) is developing is a multi-year plan to move towards a carbon-neutral future for all existing municipal facilities owned by non-proprietary departments by 2035, with the goal of providing all energy from renewable sources and reducing operating energy costs.

The purpose of this report is to inform the City Council of the status of the Building Decarbonization Workplan and the status of the funded pilot projects, as well as related activities by BOE.

DISCUSSION:

Status of the BOE Building Decarbonization Workplan:

On May 27, 2022, the City Council approved the allocation of \$500,000 of Unappropriated Balance (UB) Renewable funds to develop a Building Decarbonization Workplan for



existing municipal facilities. On December 9, 2022, the City Council allocated an additional \$250,000 for Workplan database maintenance and other related costs associated with the Decarbonization Workplan.

On June 22, 2022, the BOE distributed Task Order Solicitation (TOS) No. 65 for the City of Los Angeles Building Decarbonization Workplan to all 24 consultants on the Pre-Qualified On-Call Wastewater and Environmental Engineering Services Consultants List. Tetra Tech, Inc. (Tetra Tech) was the selected consultant based on demonstrated experience with similar work in scope and scale, a thorough understanding of project deliverables, and a qualified and experienced project team. A Task Order amount of \$400,000 was agreed to with Tetra Tech.

On March 24, 2023, the Board of Public Works authorized the City Engineer to issue TOS No. 65 to Tetra Tech with a budget authority of \$436,300, including contingency. As of April 2023, a Notice To Proceed (NTP) has been issued and workplan development with the consultant has been initiated.

Status of Pilot Decarbonization and Distributed Energy Generation Systems Projects:

On May 27, 2022, City Council approved the allocation of \$28,589,000 of UB Renewable funds from Fiscal Year 2021-2022 to fund building decarbonization work for nine (9) pilot City facilities. Subsequently, on December 9, 2022, the City Council allocated an additional \$2,407,965 to address recent construction cost escalation.

The scope of work for these projects is a combination of full building electrification, solar photovoltaic (PV) installations, battery energy storage installations, lighting upgrades, building envelope upgrades, new roofing, and ADA compliance where applicable. BOE anticipates a typical project timeline of 4-months in pre-design for discovery, followed by a 6-month design phase and a 6-month bid & award phase. Construction completion will vary based on the final project design and can range from 6 to 12 months in duration.

The City's target is to touch a building once when possible, for optimal usage of City resources. During the pre-design phase for this group of pilot projects, discoveries were made of non-energy efficient lighting, extremely inefficient window systems, deteriorating roofing systems, and minor accessibility compliance issues. Many of these added scopes of work will trigger new code compliance efforts, such as Title 24 energy recalculations due to necessary lighting and building envelope upgrades. BOE commenced work in July 2022, with the design start dates staggered to meet in-house staff availability.

The selection process of the pilot projects included consideration of projects with high community value, an initial assessment of project feasibility, special priority to buildings in disadvantaged communities, the potential for additional Los Angeles Department of Water and Power (LADWP) investments, immediate maintenance needs, and solar

potential. Of the nine projects approved, BOE is responsible for the project delivery of eight facilities, and the Los Angeles Zoo is responsible for delivering the LA Zoo Solar PV System project.

Following is the current status of the nine Phase I Pilot projects.

	Facility/Project Name	Scope of Work	Lead Agency & Project Phase	Current Status
CD 6	Balboa Sports Complex <i>17015 Burbank Blvd</i>	Electrification + Solar + Energy Storage	BOE: Pre-Design	Design phase to begin in June 2023.
CD 14	Benjamin Franklin Branch Library <i>2200 1st St</i>	Partial Electrification + Solar + Energy Storage	BOE: Design	Project initiated, NTP issued with design consultant.
CD 1	Cypress Park Branch Library <i>1150 Cypress Ave</i>	Electrification + Solar + Energy Storage + Energy Upgrade	BOE: Design	Design is in progress.
CD 6	Old Fire Station No. 39 <i>14415 Sylvan St</i>	Electrification + Solar + Energy Storage + Energy Upgrade	BOE: Design	Nearing design completion.
CD 9	Green Meadows Recreation Center <i>2201 E Washington Blvd</i>	Electrification + Solar + Energy Storage	BOE: Pre-Design	This project is proposed to be replaced with a new project due to recently installed HVAC systems.
CD 13	Las Palmas Senior Citizen Center <i>1820 N Las Palmas Ave</i>	Electrification + Solar + Energy Storage	BOE: Design	Project submitted for plan check review to LA Dept. of Building & Safety.
CD 13	Silverlake Branch Library <i>2411 Glendale Blvd</i>	Electrification	BOE: Pre-Design	Project initiated. Design phase to begin in June 2023.
CD 2	Valley Plaza Recreation Center <i>12240 Archwood St</i>	Electrification + Solar + Energy Storage	BOE: Pre-Design	Project initiated. Design phase begins in June 2023.
CD 4	LA Zoo Solar PV System <i>5333 Zoo Drive</i>	Solar + Energy Storage	LADWP: Pre-Design	Project initiated. Design Phase to begin in August 2023.

Various City Council Departments have requested BOE to assess building decarbonization scope for multiple projects. Such as the Climate Emergency Mobilization Office (CEMO) requested assessment of five decarbonization plus resiliency projects. Additionally, in 2022 BOE received a request from a council office to develop a project list comprised of sixteen projects for potential State of California funding. These assessments led to the development of “Potential Building Decarbonization Phase II Pilot Projects” (Attachment 1).

Summary of all Decarb-Related Funds allocated to BOE:

In addition to the funding allocated to BOE for the Decarbonization Workplan and for the nine pilot projects including the non-BOE LA Zoo project, other related funding has been allocated by the City Council. The table below itemizes all of the funding allocated via BOE’s efforts, and the distribution of the funding.

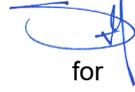
Council File	Date Approved	Description	Funds Allocated by Council	Status/ Comments
21-1039	05/03/22	Decarbonization Workplan TOS 65	\$500,000	NTP Issued
21-1039	05/03/22	Decarb Pilot Project Funds	\$26,990,000	
		<i>Balboa Sports Complex Decarbonization</i>	<i>\$2,100,000</i>	<i>In pre-design. Design to start June 2023</i>
		<i>Benjamin Franklin Library Decarbonization</i>	<i>\$2,200,000</i>	<i>In Design</i>
		<i>Cypress Park Branch Library Decarbonization</i>	<i>\$3,150,000</i>	<i>In Design</i>
		<i>Fire Station No. 39 Decarbonization</i>	<i>\$1,800,000</i>	<i>In Design</i>
		<i>Green Meadows Recreation Center Decarbonization</i>	<i>\$1,600,000</i>	<i>This project is proposed to be replaced with a new project</i>
		<i>Las Palmas Senior Citizen Center Decarbonization</i>	<i>\$3,500,000</i>	<i>In Design</i>
		<i>Silverlake Branch Library Decarbonization</i>	<i>\$1,040,000</i>	<i>In pre-design. Design to start June 2023</i>

		<i>Valley Plaza Recreation Center Decarbonization</i>	<i>\$3,600,000</i>	<i>In pre-design. Design to start June 2023</i>
		<i>LA Zoo Solar Pv System Decarbonization (not managed by BOE)</i>	<i>\$8,000,000</i>	<i>In pre-design, Design to start August 2023</i>
21-1039	05/03/22	Other Bldg Decarb Workplan Costs Including 1% for Art, BOE Staff Costs, and Program Contingency	\$1,599,000	
21-1039	11/23/22	Decarb Project Construction Cost Escalation	\$2,407,965	
21-1039	11/23/22	Database Maintenance	\$250,000	In- Progress
21-1039-S2	12/01/22	Analyze existing & future City-owned sites to be net-zero projects that maximize solar & energy storage on-site	\$50,000	In-Progress
22-0530	11/23/22	Grid Impact Study	\$100,000	In-Progress
GRAND TOTAL			\$31,896,965	

BOE Staffing:

In the approved 2022-23 City budget, two resolution authority positions, Mechanical Engineering Associate III and Electrical Engineering Associate II with 6 months funding were allocated for BOE's work to support the development and implementation of the plan for decarbonization of the City's existing facilities. The Mechanical Engineering Associate III is filled, and the Electrical Engineering Associate II is in the process of being filled. The proposed 2023-24 budget would regularize these two positions at the level of a Mechanical Engineering Associate III and an Electrical Engineering Associate III. As the City anticipates addressing decarbonization projects at many more facilities in the coming fiscal year and in the following fiscal years, BOE anticipates the need for more staff to support the work. In order to fully support the efforts of the decarbonization phase II pilot projects (Attachment 1), BOE would request the addition of four positions listed in order of priority consisting of one (1) Architect, one (1) Management Analyst I, and one (1) Civil Engineer Associate III, and one (1) Senior Architectural Drafting Tech.

Respectfully submitted,



for

Deborah Weintraub, AIA, LEEDAP
Chief Deputy City Engineer

TSA/DW/SF/ZA:ja:jgr

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21-1039_04- 24-2023.pdf

Enclosure

cc: Randall Winston, Mayor's Office
Nancy Sutley, Mayor's Office
Ryan Jackson, Mayor's Office
Michael Samulon, Mayor's Office
Aura Garcia, Board of Public Works
Teresa Villegas, Board of Public Works

ATTACHMENT 1: POTENTIAL BUILDING DECARBONIZATION PHASE II PILOT PROJECTS

COUNCIL DISTRICT	DEPARTMENT	PROJECT NAME	CITY SCOPE OF WORKS	ESTIMATED CITY PROJECT BUDGET	DWP POTENTIAL INVESTMENT
3	GSD	West Valley Municipal Building	Bldg Electri.+NEM Solar	\$ 3,300,000	\$ 1,600,000
3	LAPD	West Valley Police Station & Repair Garage	Bldg Electri.+NEM Solar	\$ 12,600,000	\$ 19,700,000
4	LAPL	Sherman Oaks Lib	Bldg Electri.+NEM Solar+Battery Storage	\$ 3,100,000	
5	LAPL	J.C. Fremont Lib	Bldg Electri.+NEM Solar+Battery Storage	\$ 3,100,000	
7	RAP	Ritchie Valens Recreation Center	Bldg Electri.+ NEM Solar	\$ 3,600,000	\$ 7,200,000
8	RAP	Harvard(Jackie Tatum) Recreation Center	Bldg Electri.+ NEM Solar	\$ 3,600,000	\$ 5,900,000
10	LAPL	Baldwin Hills Lib	Bldg Electri.+NEM Solar+Battery Storage	\$ 3,100,000	
11	LAPL	<i>Venice Lib</i>	Bldg Electri.+NEM Solar+Battery Storage	\$ 3,100,000	
12	LAPL	Northridge Lib	Bldg Electri.+NEM Solar+Battery Storage	\$ 3,100,000	
14	RAP	Evergreen Recreation Center Solar PV System (Potential MICLA Pilot)	Full Pilot- Electrification+NEM Solar	\$ 7,000,000	\$ 3,400,000
15	RAP	East Wilmington Greenbelt Community Center	Bldg Electri.+ NEM Solar	\$ 3,600,000	
			Sub Total	\$ 49,200,000	
			1% Art	\$ 492,000	
			Program Contingency	\$ 2,460,000	
			Total	\$ 52,152,000	\$37,800,000

