

**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

Date: April 8, 2025

To: The Mayor  
The City Council

From: Matthew W. Szabo, City Administrative Officer *Malaiika Billups* for

Subject: **INNOVATION FUND RECOMMENDATION – HARNESSING THE POWER OF NATURE AND BIOLUMINESCENCE TO LIGHT OUR PATHWAYS**

## **RECOMMENDATION**

The Office of the City Administrative Officer recommends that this committee note and file this report.

## **SUMMARY**

The Innovation and Performance Commission (IPC) approved funding in the amount of \$150,000 from the Innovation Fund (IF) for the Bureau of Street Lighting (LA Lights) – Harnessing the Power Of Nature And Bioluminescence To Light Our Pathways project. As with all IPC recommendations, this report presents for your consideration the proposal LA Lights submitted and the IPC approved, along with information necessary to implement the idea as presented. However, since all IPC items are discretionary expenditures, in deference to the extraordinary budget constraints outlined in the Third (Mid-Year) Financial Status Report, this Office does not recommend funding the proposal as presented at this time.

## **SUMMARY OF PROPOSAL**

The following is a summary of LA Lights' Innovation Fund proposal, including the department's estimate of the benefits and costs of implementing the proposal:

LA Lights is proposing an Engineering "Grand Challenge" to discover, pilot, and determine the long-term feasibility and incorporation of using bioluminescent-related technologies to adequately light our city's pathways. LA Lights reasons for initiating this challenge is two-fold:

- 1) Using nature and bioluminescence may be a way to drive down growing electrical costs while advancing the LA Lights work in ensuring sustainability, resiliency, and wellness (via circadian rhythm-friendly lighting);
- 2) Deter costly issues of theft and vandalism, especially for bikeways or pedestrian pathways that strip precious copper wire out of street lighting electrical systems.

Los Angeles has a natural wealth of educational institutions and informed residents who may be able to help solve these problems. Therefore LA Lights believe that a challenge, which seeks the best answer to these questions, is the right approach, including working with the Los Angeles Cleantech Incubator, an organization already poised to help budding technologies and closely working with the City.

LA Lights is proposing to set an approximate \$100,000 for winning participants. Challenges will be organized and facilitated by current LA Lights full time staff or supportive services for the duration of the challenge, which is estimated to cost \$50,000. The pilot will measure its success through the quality of the outcome of deployed challenges, the monies saved using deployed challenges vs. traditional lighting; improving the resilience of lighting infrastructure to combat theft and vandalism, and increased public engagement through improved lighting within the City. If implemented, Los Angeles will be the first major city to do this. It is also fairly advanced in terms of sustainable and harmonious design for public infrastructure, pioneering a new bioluminescent lighting system

The IPC recommended \$150,000 for the Bureau of Street Lighting - Harnessing the Power of Nature and Bioluminescence to Light Our Pathways pilot project.

If the item is approved by this Committee, LA Lights should return to the IPC, present any changes to the scope of work and provide updates to the IPC.

### **FISCAL IMPACT STATEMENT**

The recommendation to note and file this report will have no financial impact.

If the Council approves an allocation of \$150,000 to LA Lights for the “Harnessing the Power of Nature and Bioluminescence to Light our Pathways” project, it would reduce the remaining Innovation Fund Balance, which is currently \$2,768,922.75. Savings from the Innovation Fund Balance may be used to address the current city-wide financial crisis and the overspending in the 2024-2025 fiscal year. Additionally, funding this program may incur unfunded and ongoing costs.

### **FINANCIAL POLICIES STATEMENT**

The recommendation in this report complies with the City’s Financial Policies.

*MCB:BLS: 172500010H*