

Los Angeles: Stop Investing in Fossil Fuels!

Los Angeles should be investing in genuine renewable energy. Instead, the city's electric utility is doubling down on fossil fuels by pouring billions of dollars into natural gas plants that may not be needed but that definitely contribute to climate change and pollute surrounding neighborhoods — many of which are lower-income, Latino and African-American communities. It is time for the city to put its money behind real renewable energy instead of perpetuating the demand for more dirty natural gas infrastructure like the disastrous Aliso Canyon facility and pipelines as well as the nationwide push for more fracking.



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Over the coming years, the Los Angeles electric utility (Los Angeles Department of Water and Power, or LADWP) intends to rebuild aging units at three natural gas power plants.⁷ Certain units at the Harbor, Haynes and Scattergood generating stations are being completely replaced. These “peaker units” are designed to power up quickly to supplement electricity generation at times of large demand spikes.⁸ It is not clear that these new units are needed.

LADWP is rebuilding these power plants because the current units rely on ocean-water cooling systems that harm aquatic life and damage aquatic habitat.⁹

These plant upgrades have been in the works since about 2010, but they are not expected to be completed until 2029.¹⁰ Some of the rebuilding has already occurred; the projects at four units have just begun; and six units are not scheduled for rebuilding to begin until after 2020 (see Table 1). LADWP has stated that it wants to pursue “system upgrades to move toward a 100 percent clean energy future.”¹¹ The first step to reducing fossil fuel dependence — and achieving compliance on ocean-water cooling — should be to shut down the four units at Haynes and Scattergood, not to rebuild them.

The utility has sufficient electric generation capacity without these four units. California has a significant power overcapacity — it is expected to generate 21

percent more electricity than it needs by 2020.¹² The units slated for rebuilding at Haynes and Scattergood currently produce a maximum capacity of about 740 megawatts (MW).¹³ Shutting down these four units would only reduce LADWP’s typical electricity capacity from 7,531 MW to 6,791 MW.¹⁴ Even without these four units, there would be more than sufficient power to meet the forecasted 6,182 MW typical peak demand through 2021 — and this capacity is well above the highest demand day in 2015 (6,234 MW).¹⁵ These units can and should be shut down.

Haynes, Scattergood Pollute Vulnerable Communities

Reinvesting in these plants exacerbates climate change and perpetuates the disproportionate pollution in lower-income and minority communities. The Haynes and Scattergood units that are being rebuilt already emit nearly 1.5 billion pounds of carbon dioxide each year.¹⁶ And escaping methane from the oil and gas industry that fuels these units — including fracking, pipelines and storage facilities like Aliso Canyon — is the leading human-caused source of methane pollution in the United States.¹⁷ Pound-for-pound, methane is over 86 times more potent than

carbon dioxide at trapping heat over 20 years, and more than 34 times more potent over 100 years.¹⁸

Beyond climate pollutants, natural gas-fired power plants are major emitters of nitrogen oxides, which contribute to ground-level ozone, acid rain and smog.¹⁹ Exposure to nitrogen oxides has been linked to respiratory irritation and infection; it can cause or worsen bronchitis, emphysema and existing heart disease, as well as cause labored breathing (especially in asthmatics) and reduced life expectancy.²⁰ The Haynes and Scattergood units under reconstruction emit more than 2,000 pounds of nitrogen oxides each year.²¹

The disproportionate siting of polluting facilities near lower-income neighborhoods and communities of color worsens exposure to toxic pollution and results in public health and environmental burdens.²² The Haynes and Scattergood plants are near several predominantly Latino, African-American and lower-income neighborhoods in South Bay and The Harbor that already face increased environmental health risks (see Table 2).²³ Shutting down these plants would reduce the pollution and environmental health burden faced by the people living in these neighborhoods.

TABLE 1. LOS ANGELES PEAKER UNIT REBUILDING PLAN			
	Completed	In Progress	Not Begun
Harbor			3 units (planning to begin in 2020, with completion expected in 2026) ¹
Haynes	2 units (rebuilt into 6 new units in 2013) ²	2 units (planning began in 2015, with completion expected in 2023) ³	3 units (planning to begin in 2021, with completion expected in 2029) ⁴
Scattergood	1 unit (rebuilt in 2015) ⁵	2 units (planning began in 2014, with completion expected in 2020) ⁶	
Total	3 units	4 units	6 units

TABLE 2. SELECTED DEMOGRAPHICS OF NEIGHBORHOODS NEAR HAYNES AND SCATTERGOOD

		Average Pollution Burden Index	Neighborhood Census Tract Population Averages				
			% Latino	% African American	% Asian	% Senior Citizen	> 200% poverty level
Scattergood	Inglewood	79%	53%	41%	2%	10%	49%
	Hawthorne	83%	52%	25%	8%	8%	44%
	Lennox	91%	92%	4%	2%	5%	62%
Haynes	Long Beach	66%	39%	13%	14%	11%	43%
	Signal Hill	72%	31%	12%	21%	9%	32%

SOURCE: The pollution burden index reflects average census tract scores in neighborhoods relative to all California census tracts, with higher scores reflecting higher potential exposures to environmental pollutants and hazards, prevalence of health conditions such as asthma, and socioeconomic indicators. California Environmental Protection Agency. Office of Environmental Health Hazard Assessment. CalEnviroScreen 3.0. 2017. Percentages reflect census tract averages within each neighborhood.²⁴

Instead of Spending Billions Rebuilding Scattergood and Haynes, Invest in Clean Energy

Rebuilding the pending Haynes and Scattergood units could cost \$2 billion. This money would be better spent investing in genuine clean energy, large-scale battery storage and energy efficiency upgrades.

LADWP has estimated that it will cost \$2.2 billion to rebuild all of the generating units at Harbor, Haynes and Scattergood.²⁵ But the total costs will probably be much higher. LADWP has already spent about \$1.5 billion to complete the first three rebuilds (see Table 1), suggesting that it could cost \$2 billion just to complete the pending Haynes and Scattergood projects.²⁶

Because solar prices have been declining, LADWP could spend less money installing new utility-scale solar than it plans to spend rebuilding Haynes and Scattergood.

If LADWP spent \$790 million on utility-scale solar, it could generate the same amount of power as the four Haynes and Scattergood units being rebuilt, and if another \$1 billion were spent on battery storage (what Southern California Edison is spending to replace an entire Long Beach gas-fired power plant), the utility would likely have enough power and reliability to provide zero-emissions electricity.²⁷ This would save the utility and ratepayers over \$200 million.

Act Now for a Renewable Future Today

We cannot afford to lock in more dirty energy for years to come. Climate chaos demands immediate and significant investment in clean, renewable energy in order to achieve 100 percent renewable energy and zero emissions by 2035. Urge Mayor Garcetti and the Los Angeles City Council to halt the rebuilding of the Haynes and Scattergood power plants here:

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Endnotes

- 1 Los Angeles Department of Water and Power (LADWP). "2016 Power Integrated Resource Plan." December 2016 at 43, 139 and F-2 to F-3.
- 2 LADWP. [Press Release]. "LADWP Begins Rebuilding Scattergood Power Plant to Eliminate Ocean Water Cooling, Reduce Emissions and Improve Reliability." August 29, 2013; LADWP (2016) at 43.
- 3 LADWP (2016) at 43, 139 and F-2 to F-3.
- 4 *Ibid.*
- 5 LADWP (2013); LADWP (2016) at 43.
- 6 LADWP (2016) at 43, 139 and F-2 to F-3.
- 7 *Ibid.* at 42, ES-7 and C-14 to C-15.
- 8 LADWP. [Press Release]. "LADWP Breaks Ground on Modernization of Haynes Generating Station." September 29, 2011; California Energy Commission (CEC). "Once-Through Cooling Phase-Out." March, 2017 at 3; LADWP (2013).
- 9 LADWP (2016) at 42; CEC (2017) at note 2 and 3 at 2.
- 10 CEC (2017) at 1.
- 11 LADWP (2016) at 40.
- 12 Penn, Ivan and Ryan Menezes. "Californians are paying billions for power they don't need." *Los Angeles Times*. February 5, 2017.
- 13 LADWP (2016) at 43, 95 and 139.
- 14 *Ibid.* at 95 and 96. This is LADWP's Net Dependable System Capacity; the figure includes the lower hydroelectric power production in the winter, meaning that during the higher-demand summer season, the systemwide capacity likely exceeds 7,531 MW.
- 15 *Ibid.* at 72.
- 16 Food & Water Watch analysis of U.S. Environmental Protection Agency (EPA). Average annual emissions 2010 to 2015. 2015 Greenhouse Gas Reporting Program data. Facility-level information on greenhouse gases tool. Available at <https://ghgdata.epa.gov/ghgp/main.do#>. Accessed April 2017.
- 17 EPA. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014." April 15, 2016 at ES-6.
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- 21 Food & Water Watch analysis of EPA data. Average annual emissions 2010 to 2015. 2015 Greenhouse Gas Reporting Program data. Facility-level information on greenhouse gases tool. Available at <https://ghgdata.epa.gov/ghgp/main.do#>. Accessed April 2017; Solomon, Susan et al. (Eds.). *Climate Change 2007: The Physical Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. New York: Cambridge University Press at 212.
- 22 Morello-Frosch, Rachel et al. "Environmental justice and regional inequality in Southern California: Implications for future research." *Environmental Health Perspectives*. Vol. 110, Suppl. 2. April 2002 at 149; Pastor, Manuel et al. Center for Justice, Tolerance & Community. University of California Santa Cruz. Prepared for the Bay Area Environmental Health Collaborative. "Still Toxic After All These Years. Air Quality and Environmental Justice in the San Francisco Bay Area." February 2007 at 6; Wilson, Sacoby M. et al. "Assessment of the distribution of toxic release inventory facilities in metropolitan Charleston: An environmental justice case study." *American Journal of Public Health*. Vol. 102, No. 10. October 2012 at 1976.
- 23 EPA. Environmental Justice Screening and Mapping Tool. Available at <https://ejscreen.epa.gov/mapper/>. Accessed April 2017; Cal. EPA. Office of Environmental Health Hazard Assessment. California Environmental Health Screening Tool: CalEnviroScreen 3.0. Available at <https://oehha.maps.arcgis.com/apps/webappviewer/index.html?id=4560cfbce7c745c299b2d0cbb07044f5>. Accessed April 2017; Pastor et al. (2007) at 6; Wilson et al. (2012) at 1976.
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- 25 LADWP (2016) at 42.
- 26 LADWP (2011); LADWP. "Fiscal Year 2012-13 Preliminary Budget." Presentation to Board of Water and Power Commissioners. March 27, 2012 at 9; LADWP (2013); LADWP. "Preliminary Budget Fiscal Year 2013-2014." Presentation to Board of Water and Power Commissioners. March 19, 2013 at 10; LADWP. "FY 15-16 Final Budget." Presentation to Board of Water and Power Commissioners. May 19, 2015 at 18 and 40.
- 27 Fu, Ran et al. National Renewable Energy Laboratory. "U.S. Solar Photovoltaic System Cost Benchmark: Q1 2017." September, 2017 at iv to v. Estimate based on average per-watt cost for fixed-tilt and one-axis-tracking utility-scale systems; Cardwell, Diane and Clifford Kraus. "A big test for big batteries." *New York Times*. January 14, 2017.