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Docket Number:	16-RPS-02		
Project Title:	Appeal by Los Angeles Department of Water & Power re Renewables Portfolio Standard Certification Eligibility		
TN #:	213411		
Document Title:	Expert Declaration of Benjamin Schlesinger Ph.D in 16-RPS-02 (08.30.16)		
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STATE OF CALIFORNIA

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:)	Docket No. 16-RPS-02
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Appeal by LADWP re)	RE: Expert Declaration of Benjamin
RPS Certification or Eligibility)	Schlesinger, Ph.D. in 16-RPS-02
)	-
)	

<u>Declaration of Benjamin Schlesinger, Ph.D., Pipeline Expert In 16-RPS-02</u>

- I, Benjamin Schlesinger, Ph.D., declare as follows:
- I am one of North America's leading independent energy consultants, specializing in gas and electricity marketing, pricing, gas pipeline and distribution infrastructure, energy trading practices, strategic planning, and power plant development worldwide. I have over four decades of experience in managing and carrying out engineering and economic analyses of complex energy issues, policies and programs, commodity movements, and pricing and values. I am a former vice-president of the American Gas Association, and have testified before the U.S. Congress, the Federal Energy Regulatory Commission ("FERC"), the U.S. Department of Energy, the U.S. Environmental Protection Agency, as well as before utility regulators in 16 states and provinces, including California, on major gas industry economic and regulatory issues, such as the direction of gas supply and pipeline infrastructure.

- 2) I am familiar with the administrative proceeding involving the City of Los Angeles, acting by and through its Department of Water and Power ("LADWP") and the California Energy Commission ("CEC") and declare as follows:
- 3) Exhibit 344 is a true and correct copy of my Curriculum Vitae (Bates Nos. LA001662-LA001678).
- Exhibit 345 is a true and correct copy of a report, dated March 26, 2014, and entitled "CEC's RPS Compliance Guidelines for Biogas and the U.S. Pipeline Network: Special Report to the Los Angeles Department of Water and Power," ("Schlesinger Report") which was prepared in support of LADWP's administrative process with the CEC (Bates Nos. LA001679-LA001708).
- 5) Exhibit 346 is a true and correct copy of a letter, dated January 21, 2016, ("Supplemental Schlesinger Report") which I prepared in support of LADWP's administrative process with the CEC (Bates Nos. LA001709-LA001715).
- The Schlesinger Report describes and analyzes LADWP's biogas contracts and the CEC's Renewable Portfolio Standard Guidebook, Third Edition that was in effect at the time LADWP entered into its biogas contracts at issue in this administrative proceeding. Also, there is an explanation as to how the CEC's RPS Guidebook, 4th Edition could be harmonized with how the pipeline industry functions, if it were to apply in this proceeding. The Schlesinger Report determined the extent to which the Shell and Atmos contracts and the CEC's guidelines conform with one another and with national policies, practices and regulatory standards governing the way natural gas pipeline capacity is

utilized, and gas supplies are transported, within the U.S. on the nation's pipeline grid.

The Schlesinger Report is incorporated herein by reference, portions of which are reiterated below for emphasis.

- 7) The Supplemental Schlesinger Report identifies examples where the CEC Staff either misunderstood or ignored parts of the Schlesinger Report in reaching their conclusions at the end of 2015 for their recommendation to the CEC's Executive Director. The Supplemental Schlesinger Report is incorporated herein by reference, portions of which are reiterated below for emphasis.
- 8) During the 1980's, following the enactment of the Natural Gas Policy Act of 1978 and ensuing regulatory reforms, U.S. gas pipelines were transformed from a set of merchant companies independent of one another, to interdependent open access carriers. During the 1990's and 2000's, the gas pipeline network strengthened its operations as open access carriers. (Schlesinger Report, p.10., Bates No. LA001691).
- 9) Today, as well as in 2008, North American gas pipelines function as an interconnected grid, under "open access" rules promulgated by FERC. They operate, essentially, as a unified grid. (Schlesinger Report, pp.10-11, Bates Nos. LA001691-LA001692).
- 10) As the pipeline system has evolved, the nation's policy regarding gas pipelines is aimed at encouraging fair market trading of gas and efficient use of pipeline capacity, rather than forcing gas along one or another prescribed path. Gas flows along its most economical routes, following complex and always-changing paths from low price hubs

to higher price points in a large number of ongoing supply auctions. (Schlesinger Report, pp.10-11, Bates Nos. LA001691-LA001692).

- 11) Since the transformation of the pipeline system to an open access system, tracing the movement of molecules of natural gas, including biomethane, has been all but impossible, and commercially irrelevant. (Schlesinger Report, p.10., Bates No. LA001691).
- 12) Section 284.1(a) of FERC's regulations defines transportation to include "storage, exchange, backhaul, displacement, or other methods of transportation." Each of these identified contractual vehicles and other commercial mechanisms constitute valid transportation on the natural gas pipeline grid, including from an injection point to Kern River, such as we have in this case. Kern River is a natural gas pipeline system that is in the region of the Western Electricity Coordinating Council ("WECC"). (Schlesinger Report, pp14-16, Bates Nos. LA001695-1697).
- 13) Pipeline contracts determine the appropriate rate to charge, under provisions of the pipeline's FERC Gas Tariff, for providing transportation and delivery services. The interstate pipeline system, through pipeline transportation contracts and delivery services; however, does not ensure that any particular molecule of gas is delivered anywhere. Once a gas pipeline accepts biomethane deliveries, the biomethane is indistinguishable with other gas in the pipeline, i.e., fungible, as explained in the Schlesinger Report. (Supp. Schlesinger Report, p.2, Bates No. LA001710).

- 14) Pipeline quality and heat content standards require that biogas injected into pipelines be identical to, and interchangeable with natural gas in all respects.

 (Schlesinger Report, p.3, Bates No. LA001711). Once accepted into the pipeline, the gas is transported as a fungible commodity throughout the interstate pipeline system and delivered according to FERC rules. This arrangement differs physically from oil pipelines, which are able to "batch" different supplies.
- 15) If the CEC RPS staff believes that exchanges and backhauls are "necessarily excluded" from contract paths, (CEC TN#207128, page 14 of the Memorandum dated November 30, 2015, Bates No. LA002406) then that belief is contrary to, and inconsistent with, the regulatory and contractual constructs for gas transportation in the United States. Pipelines and shippers use the pipeline grid to route gas among buyers and sellers in the most economical way, which includes contracting with pipelines to provide any of a number of services, such as firm, interruptible, backhaul, exchange, storage, and many others. (Supp. Schlesinger Report, p.1, Bates No. LA001709). Backhauls and exchanges of gas are commercial arrangements that nonetheless involve delivery guarantees, as well as costs to shippers. (Schlesinger Letter, p.2, Bates No. LA001710).
- Regardless of the mechanism, commitments to deliver gas using one or another means reside in enforceable agreements, such as the 2009 Shell and Atmos contracts. (Supp. Schlesinger Report, p.2, Bates No. LA001710).

- 17) The CEC's Staff's position to disallow biomethane delivered to LADWP under the 2009 Shell and Atmos contracts because there was no demonstrated "contract path" is artificial, superfluous, and is inconsistent with the way the gas industry operates under the open access system promulgated and encouraged under federal regulation. (Supp. Schlesinger Report, p.2, Bates No. LA001710).
- 18) However, ensuring the Environmental Attributes flow to California is critical to the 2009 Shell and Atmos contracts, which they do in this case. (Schlesinger Letter, p.3, Bates No. LA001711).

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19) From a policy perspective, what is also important is that biomethane is recovered

and injected into the pipeline grid to reduce the release of methane gas into the

atmosphere. Data from the Environmental Protection Agency suggests that the

biomethane market has chilled since June 2013. The demand that California could place

via its RPS program could materially reduce the volume of methane gas in the

atmosphere by using biomethane from landfills in the U.S. Methane gas is a powerful

greenhouse gas. However, this policy of reducing methane gas from landfills

throughout the U.S. is, unfortunately, discouraged by California with its current RPS

construct.

I declare under penalty of perjury under the laws of the State of California that the

foregoing is true and correct to the best of my knowledge and that this declaration was

executed on August 30, 2016 at Bethesda, Maryland.

/s/Benjamin Schlesinger, Ph.D.

BENJAMIN SCHLESINGER, PH.D.

Benjamin Schlesinger and Associates LLC

7