

1 [Resolution Requesting that the SFPUC Study Maritime Alternatives to land-based siting of
2 City-owned Combustion Turbines]

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4 **Resolution requesting that the San Francisco Public Utilities Commission Study**
5 **Maritime Alternatives to land-based siting of City-Owned Combustion Turbines.**

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7 WHEREAS, The City and County of San Francisco acquired four combustion turbines
8 as the result of settlement of lawsuit involving the Williams Companies, that arose from a
9 dispute over alleged manipulation of the California wholesale electric market; and,

10 WHEREAS, As a result of that settlement in 2002, the San Francisco Public Utilities
11 Commission (SFPUC) touted the acquisition as the opportunity to develop the four
12 combustion turbine generators into operating electrical power plants that were to have
13 allowed for the permanent closure of the Hunters Point power plant.

14 WHEREAS, The Hunter’s Point Power plant was closed by PG&E after completion of
15 upgrades to and installation of additional capacity of electrical transmission lines from
16 peninsula sources and not from the installation of the combustion turbines to provide in-city
17 generation; and,

18 WHEREAS, The Mirant power plant at Potrero Hill has long been a source of
19 pollutants which the adjacent neighborhoods and broader community have long been trying to
20 close down and the SFPUC now argues that installing the combustion turbines as a power-
21 generating facility is the sole alternative for shutting down the Mirant plant; and

22 WHEREAS, The intended installation of the city-owned combustion turbines adjacent
23 to the Mirant power plant site continues to create controversy especially as to the relative
24 pollution that will continue to be generated from the designated site; and,

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1 WHEREAS, Maritime deployment of power generation capacity is a mature technology
2 as power barges were initially developed in 1940, further refined during the course of World
3 War II and are now available through turnkey firms specializing in design and manufacturing
4 of either stock or custom-designed systems; and

5 WHEREAS, According to the website of the Power Barge Corporation (“PBC”): power
6 barges continue to be produced today because they provide faster deliveries and higher
7 quality construction resulting in an increased availability and reliability as they are
8 manufactured in controlled environments by highly skilled technicians in a five to fifteen
9 month timeframe depending on configuration; and,

10 WHEREAS, Power barges offer the advantages modularization and are thus
11 unconstrained by power generation equipment size and weight or by desired capacity, can be
12 utilized as single units or in networked complexes, and can be located in existing port facilities
13 requiring little or no land acquisition or can be anchored offshore; and,

14 WHEREAS; Power barges can accommodate state-of-the-art combustion turbines
15 including pollution control and scrubbing devices and offer great flexibility of generation as
16 they are capable of simple or combined cycle service for peaking, intermediate and base load
17 markets; and,

18 WHEREAS, Power barges can be self-contained, are not fixed to one location, and are
19 by their nature easily transported between sites creating flexibility to respond to demand
20 growth or contraction all of which make them an ideal platform to be used in power
21 emergencies or as temporary replacement of generation capacity lost to natural disasters
22 throughout the San Francisco Bay and Sacramento River Delta; and,

23 WHEREAS; The City and County of San Francisco has initiated plans to replace 51%
24 of is current electrical demand with renewable energy within the next ten years thereby
25 making a long-term investment in a static, fossil fueled power plant inadvisable; and

1 WHEREAS, Power Barges are a proven, reliable technology that could satisfy the
2 California Independent System Operator’s requirement for in-city generation until such time
3 as the planned in-city renewables can replace the required capacity under the City’s
4 renewable energy program; and,

5 WHEREAS; the SFPUC currently projects the cost of construction of a tri-CT power
6 plant at \$230 Million while the estimated cost, according to PBC, of a twin CT power barge is
7 approximately \$36 million; and

8 WHEREAS; A preliminary feasibility study should indicate that a power barge
9 integrated into the existing grid near the San Francisco Airport would be as reliable as any
10 land-based power plant with the added advantage of immunity from seismic activity; and,

11 WHEREAS, Power barges, according to PBC, have no more environmental impact
12 than any other docked vessel and can be fitted with the same state of the art emission
13 controls available to traditional power plants; and,

14 WHEREAS, The City-owned General Electric model LM 6000 combustion turbines are
15 in high demand in states like Texas with a current value of approximately \$15 million each—
16 two could be sold thereby allowing the city to build a 100 MW power barge for a net expense
17 to the city of \$6 million; and,

18 WHEREAS, Power barges, after temporarily serving the power demand of the City,
19 could then be leased, sold or held in reserve for the future thereby providing either an
20 additional revenue source to the city, recouping the capital expense or provide a contingency
21 for power in an emergency; now, therefore, be it

22 RESOLVED, That Board of Supervisors of the City and County of San Francisco
23 hereby requests that the San Francisco Public Utilities Commission study the feasibility of
24 maritime alternatives to static combustion turbine power plants; and, be it

1 FURTHER RESOLVED, That the Board of Supervisors of the City and County of San
2 Francisco additionally requests that the San Francisco Public Utilities Commission consider
3 forbearing entering into any contracts regarding installation of its combustion turbines prior to
4 complying with the requests made herein.

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