

1 [Supporting Fuel Cell Pilot Project at Airport]

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3 **Resolution urging the Airport Director to initiate with other relevant departments a Fuel**
4 **Cell Pilot Project at San Francisco International Airport (SFIA) in conjunction with the**
5 **U.S. Department of Transportation (USDOT), Federal Aviation Administration (FAA),**
6 **and the California Public Utilities Commission (CPUC) to enhance and improve the**
7 **reliability and security of critical air traffic and airport operations at SFIA.**

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9 WHEREAS, California's energy crisis resulted in the need to rethink the manner in
10 which electric power is supplied to City facilities and services, due to the vulnerability of these
11 facilities and services to grid failure; and,

12 WHEREAS, Voters approved a charter amendment in the November 6, 2001, General
13 Municipal Election authorizing the Board of Supervisors to provide for issuance of revenue
14 bonds without further voter approval for the purpose of financing or refinancing the acquisition,
15 construction, installation, equipping, improvement, or rehabilitation of equipment or facilities
16 for renewable energy and energy conservation (Proposition H); and,

17 WHEREAS, the threat of disruption to power at SFIA due to accidents, grid failure,
18 natural disasters, and/or terrorist actions is a continuing possibility, which can result in severe
19 and detrimental social and economic repercussions for the City and Bay Area; and,

20 WHEREAS, the Board of Supervisors resolved in Resolution No. 649-01 that the San
21 Francisco Public Utilities Commission (SFPUC) and other applicable departments shall act
22 with due diligence and in a timely manner to facilitate the definition and implementation of a
23 Fuel Cell Energy Program as an alternative to grid dependence; and,

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1 WHEREAS, San Francisco desires to initiate a fuel cell pilot project to provide basis for
2 making future decisions regarding the application of fuel cell technology solutions for public
3 buildings and infrastructure;

4 WHEREAS, the President of the United States signed legislation permitting the
5 Secretary of Transportation, in cooperation with the Secretary of Energy and, where
6 applicable, the Secretary of Defense, to establish a program to improve the efficiency, cost-
7 effectiveness, and environmental performance of standby power systems at Federal Aviation
8 Administration (FAA) sites, including the implementation of fuel cell technology (Aviation
9 Investment and Revitalization Vision Act, Section 519); and,

10 WHEREAS, the Office of the Secretary of Transportation of the USDOT has
11 discretionary funds available for supporting activities such as the proposed pilot project; and

12 WHEREAS, the Airway Facilities Energy Program of the FAA has expressed interest in
13 installing and testing a one megawatt (1 MW) DFC1500 fuel cell power plant at its William J.
14 Hughes Technical Center and subsequent field testing in conjunction with FAA operations at
15 SFIA; and,

16 WHEREAS, the California Public Utilities Commission, in accordance with AB 16-85,
17 as amended, provides funding assistance for projects up to 1 MW in size incorporating
18 ultra-clean technologies (e.g., fuel cells) through the Self-Generation Incentive Program; and,

19 WHEREAS, a fuel cell pilot project developed in conjunction with the USDOT and FAA
20 at SFIA would provide an appropriate vehicle for gaining valuable knowledge and experience
21 with respect to operational safety and reliability, site application, and system integration,
22 including methods of remote operation and required control procedures and protocols of fuel
23 cell systems; and,

1 WHEREAS, expeditious implementation of a fuel cell pilot project would be both
2 desirable and beneficial to the security of critical SFIA operations and implementation of the
3 San Francisco Fuel Cell Energy Program; now, therefore, be it

4 RESOLVED, That the express desire of the Board of Supervisors is as follows:

5 Section 1. The Airport Director shall coordinate with the USDOT, FAA, and other
6 applicable Federal, State, and City departments and private corporations, as appropriate,
7 acting with due diligence and in a timely manner, to define, develop, and implement a fuel cell
8 pilot project to support FAA facilities at SFIA.

9 Section 2. The SFIA fuel cell pilot project shall consist of a commercially-proven, one
10 megawatt (1 MW) high-temperature, high-efficiency fuel cell system (DFC1500) in a combined
11 heating, cooling, and power configuration.

12 Section 3. The SFIA fuel cell pilot project shall be conceived and designed to improve
13 the efficiency, reliability, cost-effectiveness, and environmental performance of FAA facilities
14 at SFIA meeting the full power and heating and cooling needs of same with excess heating,
15 cooling, and power, as may become available, supplied to other SFIA facilities.

16 Section 4. The SFIA fuel cell pilot project shall be operational by the year 2005.

17 Section 5. Knowledge and experience gained through the SFIA fuel cell pilot project
18 shall be used by the PUC to identify for implementation other appropriate projects using fuel
19 cell technology in accordance with guidance provided by the Board relative to the Fuel Cell
20 Energy Program.

21 Section 6. Information and data obtained during planning, design, construction, and
22 operation of the SFIA fuel cell pilot project shall be used by the PUC to evaluate the practical,
23 physical, and economic feasibility and cost-effectiveness of fuel cell technology as well as the
24 applicability, performance, and reliability of fuel cell power systems for other City settings and
25 facilities, as may be identified and adopted under the Fuel Cell Energy Program.