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STATE OF CALIFORNIA
State Energy Resources
Conservation And Development Commission

In the Matter of:	Docket No.: **06-AFC-6**
APPLICATION FOR CERTIFICATION FOR THE EASTSHORE ENERGY CENTER	PREHEARING CONFERENCE STATEMENT

DATED: November 19, 2007

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PREHEARING CONFERENCE STATEMENT BY COUNTY OF ALAMEDA

In an order dated October 16, 2007, the California Energy Commission's committee overseeing the Eastshore Energy Center ("Eastshore") case directed parties to file a prehearing conference statement for the November 26, 2007 prehearing conference. The Order stated that the Prehearing Conference Statements must be filed no later than 5:00 p.m. on November 19, 2007. This document is the County of Alameda's ("the County") Prehearing Conference Statement.

1. The topic areas that are complete and ready to proceed to evidentiary hearing.

All topic areas, with exception to the land use issue identified in response no. 2 below, are complete and ready to proceed to evidentiary hearings.

2. Topic Areas that are not complete and not yet ready to proceed to evidentiary hearing, and the reasons therefore.

In the area of land use, the County does not believe that the Committee has received any information regarding the potential impact of Eastshore on the Alameda County

Redevelopment Agency's redevelopment efforts in the vicinity of the proposed facility site. The County is concerned that the construction of the Eastshore plant may limit the Redevelopment Agency's ability to implement its plans for redeveloping the areas in the immediate vicinity of the Eastshore plant as its construction may lead to depressed property values. Notwithstanding the need for further study of this issue, the County will present some evidence and testimony in this regard at the Evidentiary Hearing.

3. The topic areas that remain disputed and require adjudication, and the precise nature of the dispute for each topic

A. Air Quality

The County has several concerns and reservations regarding the adequacy of the air quality analysis, including, but not limited to the following:

- Use of emission reduction credits to offset PM_{10} emissions do not mitigate local air quality concerns. Use of emission credits older than approximately 5 years is inadequate to mitigation of more modern impacts;
- Use of average emission values in determining air quality impacts do not adequately address worst case impacts or potential health effects;
- Use of average emission values in calculating cancer rates do not adequately address worst-case impacts;
- The effects of several key pollutants, such as $PM_{2.5}$, fine particulates and acrolein, were not adequately addressed in the proceedings;
- Specific mitigation of partial funding of voluntary replacement of fireplaces in local area does not adequately guarantee appropriate reductions in PM_{10} emissions;
- Concerns and reservations about methodology and input data set numbers for calculations of local pollutant concentrations.

B. Traffic and Transportation

The Eastshore Energy Center ("EEC") does not comply with laws, ordinances, regulations, and standards ("LORS") regarding safe operations at the Hayward Executive

Airport, relative to the Alameda County Airport Land Use Commission's ("ALUC") Airport Land Use Policies.

The ALUC is mandated by State Law (PUC Article 3.5, State Aeronautics Act, § 21661.5, § 21670 et seq., and Government Code § 65302.3) to protect the public health, safety, and welfare by promoting orderly expansion of airports and adoption of land use measure by local public agencies to minimize exposure to excessive noise and safety hazards near airports. The Alameda County ALUC passed Resolution 02-2007 recommending an alternate site for the EEC at a location outside the Airport Influence Area ("AIA") for the Hayward Executive Airport.

Of particular concern is the proximity of the nearby, recently approved Russell City Energy Center ("RCEC") project and the cumulative impacts associated with both the RCEC and the EEC on Hayward Executive Airport operations. Specifically, the approval of the EEC at its currently proposed site would include the following operational characteristics and potential impacts that cannot be mitigated adequately to ensure pilot safety and the safety of those on the ground:

- The EEC project would be located 1 mile from the Hayward Executive Airport in its Southwest quadrant, and within the Airport Influence Area (AIA) for the airport as defined by the ALUC.
- The recently approved (September 26, 2007) RCEC project would be located approximately 1.5 miles from the Hayward Executive Airport in its Southwest quadrant, and within the Airport Influence Area for the airport as defined by the ALUC.
- BOTH power plants would generate invisible high-velocity, high-heat thermal plumes in the Hayward Airport airspace.
- California Energy Commission ("CEC") Staff have published a Final Staff Assessment ("FSA") on potential impacts to Hayward Airport operations which concluded that the thermal plumes from the towers will disturb airspace stability to 500 feet above ground level ("AGL") for the EEC, and above 1,000 feet AGL for the RCEC project. The thermal plumes for both power plants – and the EEC in particular – present a specific hazard to helicopters flying at lower altitudes than fixed-wing aircraft.

- The 2002 Hayward Airport Master Plan forecasts an increase in total general aviation operations (fixed-wing and helicopter aircraft) of approximately 3,350 flights per year, or 280 flights per month between 2010 and 2020 *over* current operation levels.
- The expected increase in flight operations for the Hayward Airport will result in an increase in aircraft overflight of the thermal plumes to be generated by the EEC and RCEC.
- The airspace in the vicinity of the Hayward Airport is already restricted due to
    - Noise Abatement Flight Procedures to the north and east of the airport
    - The National Security Notice to Airman (NOTAM) that will go into effect for the RCEC facility warning pilots to avoid overflights of power plants
    - The location of two major airports nearby (Oakland International and San Francisco International) that share airspace over Hayward.
- The Federal Aviation Administration (FAA) recommends against the approval of the EEC based on the same restricted airspace considerations listed here.

Therefore, it is the County's assertion that the cumulative impact of the presence of two power plants within 1 and 1.5 miles in the southwest quadrant of the Hayward Executive Airport airspace would present an unmitigable series of hazards to safe aircraft operations which will pose an unacceptable level of risk to people on the ground and in the air.

C. Land Use

The Eastshore Energy Center (EEC) does not comply with laws, ordinances, regulations, and standards (LORS) regarding safe operations at the Hayward Executive Airport, relative to the Alameda County Airport Land Use Commission's (ALUC) Airport Land Use Policies.

D. Socioeconomic Issues

When considered in conjunction with the Russell City Energy Center to be constructed down the street from the proposed Eastshore facility site, the Eastshore plant imposes an unfair

burden on residents, students, and businesses in the nearby affected area. The County does not believe that a single area should have to shoulder the burden of two power plants.

4. The identity of each witness sponsored by each party; the topic area(s) which each witness will present; a brief summary of the testimony to be offered by each witness; qualifications of each witness; and the time required to present direct testimony by each witness;

At this time, the County is able to identify the witnesses who follow. The County reserves the right to modify this list depending on the representations of the Staff, the applicant, and intervening parties during the course of the Prehearing Conference. Please be advised that the County will make every effort to provide written testimony well in advance of the Evidentiary Hearing; however, the County is unlikely to have all written testimony available at the Prehearing Conference.

- Dr. Paolo Zannetti, QEP, President, EnviroComp Consulting, Inc., on the topic of air quality impacts. This witness is familiar and experienced with the models used for the air quality analysis, and has strong reservations about the data set used for input to the models. Dr. Zannetti's qualifications may be found at the end of this document. It is estimated that the expected testimony and examination would last approximately 30 minutes.
- Dave Needle, Commissioner, Alameda County Airport Land Use Commission ("ALUC"), on the topic of land use, as well as traffic and transportation, as it relates to the Hayward Executive Airport located adjacent to the proposed Eastshore facility site. Mr. Needle's qualifications may be found at the end of this document. It is estimated that the expected testimony and examination would last approximately 20 minutes.
- Larry Berlin, Aviation Consultant, on the topic of traffic and transportation, as it relates to the Hayward Executive Airport located adjacent to the proposed Eastshore facility site. Mr. Berlin holds the following credentials:
    - Is an FAA-certified "Gold Seal" (highest rating) Flight Instructor
    - Is an FAA-certified Ground Instructor – Advanced and Instruments

- Retired after working for 32 years for the Port of Oakland in Airport Operations; North Filed Manager since 1996.

It is estimated that the expected testimony and examination would last approximately 60 minutes.

- Eileen Dalton, Redevelopment Director, Alameda County Redevelopment Agency, on the topic of the potential negative impact of the EEC on the County's redevelopment efforts. Ms. Dalton will apprise the Committee of the nature and extent of the County Redevelopment Agency's redevelopment plans, and the impact the Eastshore plant may have on those plans. Ms. Dalton's qualifications may be found at the end of this document. It is estimated that the expected testimony and examination would last approximately 20 minutes.
- Gail Steele, Member, Alameda County Board of Supervisors, on the topic of the socioeconomic impact of Eastshore on the community. Supervisor Steele's qualifications may be found at the end of this document. It is estimated that the expected testimony and examination would last approximately 15 minutes.

5. Topic areas upon which a party desires to cross-examine witnesses, a summary of the scope of such cross-examination, and the time desired for such cross-examination.

The County requests the opportunity to cross-examine all witnesses giving testimony on land use, traffic and transportation, air quality, and socioeconomic issues.

6. A list identifying exhibits and declarations that each party intends to offer into evidence and the technical topics to which they apply.

The County has identified the exhibits below that it intends to offer into evidence. The County reserves the right to amend this list prior to the Evidentiary Hearing.

Exhibit	Topic Area
1. Alameda County ALUC Resolutions: • 01-2007 – Russell City Energy Center (RCEC), adopted August 15, 2007 • 02-2007 Eastshore Energy Center (EEC), adopted October 17, 2007.	Land Use; Traffic and Transportation
2. County Redevelopment Agency redevelopment plans and maps (Due to holiday vacation schedules, the County will be unable to identify or provide specific documents at the time of the Prehearing Conference. The County will update this list in the form of a supplement prior to the Evidentiary Hearing).	Land Use
3. Alameda County Airport Land Use Commission (ALUC) staff reports from the following meetings: • July 18, 2007 – Russell City Energy Center (RCEC) • August 15, 2007 - RCEC • September 19, 2007 – Eastshore Energy Center (EEC) • October 17, 2007 - (EEC)	Land Use; Traffic and Transportation
4. Email Correspondence dated August 15, 2007 from Joanne Gardiner regarding comparison with Blythe Airport and Hayward Airport and similar plume issues from power plants near both airports.	Land Use; Traffic and Transportation
5. Email Correspondence dated August 15, 2007 from Cindy Horvath to members of the ALUC documenting official comments from Dave Needle, ALUC Commissioner. These were officially entered into the record at the August 15, 2007 ALUC meeting.	Land Use; Traffic and Transportation

Exhibit	Topic Area
6. Correspondence from Joe Rodriguez, Supervisor, Environmental Planning and Compliance Section, FAA dated October 9, 2007 to Bill Pfanner, CEC Project Manager. Letter states that the cumulative impacts to aviation and airport operations at the Hayward Executive Airport are significant, and proposed mitigations unreasonable and unattainable.	Land Use; Traffic and Transportation
7. Correspondence from Gary Cathay, Chief, Office of Airports, Caltrans Division of Aeronautics dated November 1, 2007 to James Adams, CEC Staff. Letter reiterates and elaborates on CEC staff concerns regarding potential impacts of thermal plumes on low-level flights.	Land Use; Traffic and Transportation
8. CEC Final Staff Assessment (FSA) – Land Use. November 9, 2007. Testimony of Shaelyn Strattan and Jim Adams.	Land Use; Traffic and Transportation
9. CEC Final Staff Assessment (FSA) – Traffic and Transportation. November 9, 2007. Testimony of Shaelyn Strattan and Jim Adams.	Land Use; Traffic and Transportation

7. Proposals for briefing deadlines, vacation schedules, and other scheduling matters.

The County is presently aware of the Prehearing Conference set for November 26, 2007, and the Evidentiary Hearing set for December 17 and 18, 2007. Representatives for the County will be available for both sets of hearings, with the exception of Cindy Horvath, who will be unavailable for the public comment period for the Prehearing Conference. The County will have other representatives present in Ms. Horvath's absence and do not require any accommodation at this time.

The County is concerned that the present two-day schedule for the Evidentiary Hearing may not be sufficient to accommodate its needs given the intervention of several new parties. If the

new parties' petitions to intervene are granted, the County requests the Committee consider extending the Evidentiary Hearing beyond the existing two days.

The County would request at a minimum two weeks for any supplemental briefing, the time running from the date of availability of transcripts.

8. For all topics, the parties shall review the proposed Conditions of Certification listed in the Final Staff Assessment (FSA) for enforceability, comprehension, and consistency with the evidence, and submit any proposed modifications.

The County's proposed modifications, if any, will be set forth in testimony or supplied through additional exhibits filed during the Evidentiary Hearing.

DATED: November 19, 2007

RICHARD E. WINNIE, County Counsel in and for the County of Alameda, State of California

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EDUCATION AND TITLES

- *Qualified Environmental Professional (QEP),* Institute of Professional Environmental Practice (IPEP) www.ipep.org
  Certificate #029440029 (2/1994) – Recertified on 7/2007

- *Doctoral Degree in Physics,* University of Padua, Italy (12/1970)
  www.unipd.it

- *Diploma of Maturita' Scientifica,* Scientific Lyceum Ippolito Nievo, Padua, Italy (7/1965)

PROFESSIONAL EXPERIENCE

- ***President*, EnviroComp Consulting, Inc. (4/2001 – present)**
  www.envirocomp.com

  - *President and Founder*, EnviroComp Institute (10/1996-present) www.envirocomp.org

  - *Regional Coordinator* for the Institute of Professional Environmental Practice (IPEP) in the San Francisco Bay Area (9/1997- present); www.ipep.org

  - *Visiting Professor*, Wessex Institute of Technology, Southampton, UK (1991-present); www.wessex.ac.uk

  - *Visiting Professor*, Polytechnic University of Bari-Taranto, Italy (1999 – present)
    www.poliba.it/Taranto/TARAS_1.htm

  - *Peer-Reviewer*, Kuwait Institute of Scientific Research, Kuwait. Wessex Institute of Technology, Southampton, UK (2002-present); http://www.kisr.edu.kw/

- ***Principal Scientist*, Exponent, Inc., Menlo Park, California (11/1991-4/2001)**
  www.exponent.com

  - *Instructor*, University Extension, University of California, Berkeley (10/1992-7/1997); www.unex.berkeley.edu:4243

- ***Department Manager*, AeroVironment, Inc., Pasadena/Monrovia, California (10/1979-11/1991)**
  www.aerovironment.com

  - *Consultant*, IBM Semea, Milan, Italy (1-10/1991; on leave of absence from AeroVironment)

  - *Head, Environmental Sciences*, IBM Scientific Center, Bergen, Norway and *Leader, Environmental Sciences Activities of IBM Europe* (3-12/1990; on leave of absence from AeroVironment)

  - *Consultant*, Research Center of the Italian National Electric Power Company (CRTN/ENEL), Milan, Italy. (3-10/1984; on leave of absence from AeroVironment)

  - *Project Manager*, Kuwait Institute for Scientific Research (KISR), Kuwait

(2/1982-2/1984; on leave of absence from AeroVironment); www.kisr.edu.kw

- ***Researcher,*** **IBM Scientific Center, Venice, Italy (8/1971-10/1979)**
  - *Visiting Scientist,* Department of Statistics, Stanford University, California (1/1978-3/1979; on assignment from IBM Italy)
  - *Visiting Scientist,* IBM Scientific Center, Palo Alto, California (1/1978-3/1979; on assignment from IBM Italy)
  - *Assistant Professor,* Department of Civil Engineering, University of Padua, Italy (1974-78); www.unipd.it
- ***Systems Analyst,*** **UNIVAC/Sperry Rand, Milano, Italy (3-7/1971)**

EDITORIAL RESPONSIBILITY

- Editor of the Book Series "Environmental Sciences and Environmental Computing"
  www.envirocomp.org/esec
- Editor and co-Author of the Book Series "Air Quality Modeling - Theories, Methodologies, Computational Techniques, and Available Databases and Software"
  www.envirocomp.org/aqm
- Member of the Editorial Board of "Environmental Forensics" (AEHS) (2003-present)
- Founder and President (since 1996) of the EnviroComp Institute - The International Institute of Environmental Sciences and Environmental Computing (www.envirocomp.org)
- Founder and Editor-in-Chief (1986-93) of the quarterly journal *Environmental Software*, published by Computational Mechanics Publications since June 1986 and by Elsevier Applied Science since September 1991. Currently Founding Editor.
- Founder and Director of the biennial ENVIROSOFT Conference - Computer Techniques in Environmental Studies (conferences have been held every two years since 1986).
- Founder and Co-Director of the first two AIR POLLUTION Conferences - Computer Techniques in Environmental Studies (1993-94). Currently Member of the Conference Board.

- Associate Editor/Member of the Editorial Board, *Atmospheric Environment*, published by Pergamon Press (1987-1999).

- Member of the Editorial Board, *Ecological Modeling*, published by Elsevier Applied Science (since 1992).

- Member of the Editorial Board, *ENVIRONews*, published by FiatLux Publications (1993-1998); www.envirocomp.org/html/news/flpub.htm

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MEMBERSHIPS

- Member, International Scientific Advisory Committee, AIR POLLUTION Conference Cycle, Wessex Institute of Technology, UK. (since 2000)

- Member of the "SATURN Specialist Group" (http://aix.meng.auth.gr/lhtee/saturn.html), subproject of EUROTRAC-2 (http://www.gsf.de/eurotrac) dealing with urban air pollution (since 1998)

- San Francisco Bay Area Regional Coordinator for the Institute of Professional Environmental Practice (IPEP) (since 1997)

- Athens 2004 Committee (1997-2000)

- Reviewer group for the Center for Indoor Air Research (CIAR), 1995-1999.

- International Scientific Advisory Committee, Environmental Engineering and Management Conference, Barcelona, Spain. October 1998.

- International Scientific Advisory Committee, Environmental Engineering, Education and Training Conference (EEET96), Southampton, UK, April 1996.

- Scientific Advisory Board, International Congress on Modelling and Simulation (MODSIM 93 and MODSIM 95), Modeling and Simulation Society of Australia Inc.

- International Federation for Information Processing (IFIP), Working Group WG 5.11 (Computers and Environment), (1992-1997)

- ISATA Programme Committee (1992-1994)

- Scientific Committee of the Technological Consortium THETIS (Venice, Italy), (1991)

- Board of Directors, MONDOMETANO, published by RES Editrice srl. (1989-92).

- European Association for the Science of Air Pollution (EURASAP), (1987-94)

- EPA-ASRL pool for the review of U.S. Environmental Protection Agency publications, (1987-96)
- American Meteorological Society (AMS) (1978-1985)
- Air and Waste Management Association (AWMA), since 1978 (originally Air Pollution Control Association, APCA)

MISCELLANEA

- Italian Citizen by birth. U.S. Citizen since 1989.
- Languages: English, Italian, French, plus understanding of Spanish

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HONORS

- Medal award from Computational Mechanics, Ashurst, England, in recognition of contribution to the development of Environmental Modeling (11/1994)
- Plaque award from the South Coast Air Quality Management District, in recognition of contribution to the Toxic Symposium at Caltech, Pasadena, California (7/1986)

PUBLICATIONS

Books

B.23 Zannetti, P., D. Al-Ajmi, and S. Al-Rashied, Eds. (2007) AMBIENT AIR POLLUTION. Published by The Arab School for Science and Technology (ASST) and The EnviroComp Institute. (www.envirocmp.org/asst)

B.22 Zannetti, P., Ed. (2005) Air Quality Modeling - Theories, Methodologies, Computational Techniques, and Available Databases and Software. Vol II – Advanced Topics. Book Series published by the EnviroComp Institute and the Air & Waste Management Association. (www.envirocomp.org/aqm)

B.21 Zannetti, P., Ed. (2004) Environmental Sciences and Environmental Computing, Vol II. Electronic book (on CD-ROM), The EnviroComp Institute (www.envirocomp.org/esec)

B.20 Zannetti, P., Ed. (2003) Air Quality Modeling - Theories, Methodologies, Computational Techniques, and Available Databases and Software. Vol I – Fundamentals. Book Series published by the EnviroComp Institute and the Air &

Waste Management Association. (www.envirocomp.org/aqm)

B.19 C. A. Brebbia and P. Zannetti, Eds. (2002) Development and Application of Computer Techniques to Environmental Studies IX. WIT Press (www.witpress.com).

B.18 Ibarra-Berastegi, G., C.A. Brebbia, and P. Zannetti, Eds. (2000) Development and Application of Computer Techniques to Environmental Studies VIII. WIT Press (www.witpress.com).

B.17 Zannetti, P. and Y.Q. Zhang, Eds. (1998) Environmental Sciences and Environmental Computing, Vol I. Electronic book (on CD-ROM), FiatLux Publications and EnviroComp Institute (www.envirocomp.org/esec)

B.16 Pepper, D.W., C.A. Brebbia, and P. Zannetti, Eds. (1998) Development and Application of Computer Techniques to Environmental Studies. Proceedings of the ENVIROSOFT 98 Conference, Las Vegas, Nevada, November. WIT Press - Computational Mechanics Publications, Southampton.

B.15 Zannetti, P., Ed. (1996) *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume III.* Computational Mechanics Publications, Southampton.

B.14 Zannetti, P. and C. Brebbia, Eds. (1996) *Development and Application of Computer Techniques to Environmental Studies VI.* Proceedings of the ENVIROSOFT 96 Conference, Como, Italy, September. Computational Mechanics Publications, Southampton.

B.13 Zannetti, P., Ed. (1994) *Pollution Modeling.* Volume I of the Proceedings of the ENVIROSOFT 94 Conference, San Francisco, November. Computational Mechanics Publications, Southampton.

B.12 Zannetti, P., Ed. (1994) *Environmental Systems.* Volume II of the Proceedings of the ENVIROSOFT 94 Conference, San Francisco, November. Computational Mechanics Publications, Southampton.

B.11 Baldasano, J.M., C.A. Brebbia, H. Power, and P. Zannetti, Eds. (1994) *Computer Simulation.* Volume 1 of the Proceedings of the Second International AIR POLLUTION Conference, Barcelona, Spain, September 1994. Computational Mechanics Publications, Southampton.

B.10 Baldasano, J.M., C.A. Brebbia, H. Power, and P. Zannetti, Eds. (1994) *Pollution Control and Monitoring.* Volume 2 of the Proceedings of the Second International AIR POLLUTION Conference, Barcelona, Spain, September 1994. Computational Mechanics Publications, Southampton.

B.9 Zannetti, P., Ed. (1994) *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume*

II. Computational Mechanics Publications, Southampton.

B.8 Zannetti, P., C.A. Brebbia, J.E. Garcia Gardea and G. Ayala Milian, Eds. (1993) *Air Pollution.* First International Conference on Air Pollution, Monterrey, Mexico, February. Computational Mechanics Publications, Southampton, and Elsevier Science Publishers, London.

B.7 Zannetti, P., Ed. (1993) *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume I.* Computational Mechanics Publications, Southampton, and Elsevier Science Publishers, London.

B.6 Zannetti, P., Ed. (1992): *Computer Techniques in Environmental Studies IV.* Proceedings of the Fourth International Conference ENVIROSOFT 92. Computational Mechanics Publications, Southampton, and Elsevier Applied Science, London.

B.5 Melli, P. and P. Zannetti, Eds. (1992): *Environmental Modelling.* Computational Mechanics Publications, Southampton, and Elsevier Applied Science, London.

B.4 Zannetti, P. (1990): *Air Pollution Modeling - Theories, Computational Methods and Available Software.* Computational Mechanics Publications, Southampton, and Van Nostrand Reinhold, New York. 450 pp. (http://www.amazon.com/Pollution-Modeling-Theories-Computational-Available/dp/0442308051)

B.3 Zannetti, P., Ed. (1990): *Computer Techniques in Environmental Studies III.* Proceedings of the Third International Conference ENVIROSOFT 90. Computational Mechanics Publications, Southampton, U.K.

B.2 Zannetti, P., Ed. (1988): *Computer Techniques in Environmental Studies.* ENVIROSOFT 88 - Second International Conference, Porto Carras, Greece, September. Ashurst, United Kingdom: Computational Mechanics Publications.

B.1 Zannetti, P., Ed. (1986): *ENVIROSOFT 86.* Proceedings of the International Conference on Development and Application of Computer Techniques to Environmental Studies, Los Angeles, USA, November 1986. Ashurst, United Kingdom: Computational Mechanics Publications.

Book Chapters

BC.14 Freedman, F. and P. Zannetti. 2007. Global Warming and Climate Change: State of the Science. Chapter 5 of AMBIENT AIR POLLUTION (P. Zannetti, D. Al-Ajmi, and S. Al-Rashied, Editors). Published by The Arab School for Science and Technology (ASST) and The EnviroComp Institute (http://www.envirocomp.org/)

BC.13 Daly, A. and P. Zannetti. 2007. Air Pollution Modeling – An Overview. Chapter 2

of AMBIENT AIR POLLUTION (P. Zannetti, D. Al-Ajmi, and S. Al-Rashied, Editors). Published by The Arab School for Science and Technology (ASST) and The EnviroComp Institute. (http://www.envirocomp.org/asst)

BC.12 Daly, A. and P. Zannetti. 2007. An Introduction to Air Pollution – Definitions, Classifications, and History. Chapter 1 of AMBIENT AIR POLLUTION (P. Zannetti, D. Al-Ajmi, and S. Al-Rashied, Editors). Published by The Arab School for Science and Technology (ASST) and The EnviroComp Institute (http://www.envirocomp.org/asst)

BC.11 Byun, Daewon W., Avraham Lacser, Robert Yamartino, and Paolo Zannetti (2005) Eulerian Dispersion Models. Chapter 10 of AIR QUALITY MODELING - Theories, Methodologies, Computational Techniques, and Available Databases and Software. Vol. I - Fundamentals (P. Zannetti, Editor). Published by The EnviroComp Institute and the Air & Waste Management Association. (www.envirocomp.org/aqm)

BC.10 Zannetti, P. (2004) Air Pollution Dispersion Modeling. Section 16.6 of The CRC Handbook of Mechanical Engineering, Second Edition, Eds., Kreith, F. and D. Yogi Goswami. CRC Press.

BC.9 Calamari, D., K. Jones, K Kannan, A. Lecloux, M. Olsson, M. Thurman, P. Zannetti (2000) Monitoring as an Indicator of Persistence and Long-Range Transport. Chapter 6 of Evaluation of Persistence and Long=Range Transport of Organic Chemicals in the Environment, Edited by G. Klecka et al. – SETAC Press (www.setac.org).

BC.8 Zannetti, P. (1998) Air Pollution Dispersion Modeling. Section 16.6 of The CRC Handbook of Mechanical Engineering, Ed., Kreith, F. CRC Press

BC.7 Zannetti, P. (1996) Environmental Modeling: Today and Tomorrow. Chapter 1 of *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume III*, Zannetti, P., Ed., Computational Mechanics Publications, Southampton.

BC.6 Zannetti, P. (1994) Introduction to Environmental Modeling. Chapter 1 of *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume II*, Zannetti, P., Ed., Computational Mechanics Publications, Southampton.

BC.5 Zannetti, P. (1993) Introduction and Overview. Chapter 1 of *ENVIRONMENTAL MODELING - Computer Methods and Software for Simulating Environmental Pollution and its Adverse Effects - Volume I*, Zannetti, P., Ed., Computational Mechanics Publications, Southampton, and Elsevier Science Publishers, London.

BC.4 Zannetti, P. (1993) Numerical Simulation Modeling of Air Pollution: An Overview. Section of *Ecological Physical Chemistry*, Bonati, L., U. Cosentino, M. Lasagni, G. Moro, D. Pitea, and A. Schiraldi, Eds., Elsevier Science Publishers, London. Also

published in *Air Pollution*, Zannetti, P., C.A. Brebbia, J.E. Garcia Gardea and G. Ayala Milian, Eds. (1993), First International Conference on Air Pollution, Monterrey, Mexico, February. Computational Mechanics Publications, Southampton, and Elsevier Science Publishers, London.

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BC.2 Zannetti, P. (1989): Simulating Short-Term, Short-Range Air Quality Dispersion Phenomena. Chapter V of *Library of Environmental Control Technology,* Volume 2, Air Pollution Control, P.N. Cheremisinoff, Ed., Houston, Texas: Gulf Publishing.

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More than 200 Technical Reports

More than 50 Short Communications

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  www.envirocomp.org/html/publish/CDROM/Athens/flyer.pdf

- **EnviroNews**, a bimonthly environmental newsletter publisher by FiatLux Publications (1993-2000)
  www.envirocomp.org/html/news/flpub.htm

UNPUBLISHED WORKS

Doctoral Degree Thesis

Zannetti, P. (1970) Riconoscimento a mezzo di elaboratore elettronico di caratteri numerici manoscritti. [Computer pattern recognition of handwritten digits] Relatori: Profs. L. Mezzetti and D. Toniolo. University of Padua, Faculty of Science (Physics).

Poster Papers

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C.32 Zannetti, P. (2004) Fluid Pollution Modeling. Engineering Faculty, Taranto, Italy. October 2004.

C.31 Zannetti, P. (2003) Fluid Pollution Modeling. Engineering Faculty, Taranto, Italy. May 2003.

C.30 Zannetti, P. (2002) Fluid Pollution Modeling. Engineering Faculty, Taranto, Italy. September 2002.

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C.28 Zannetti, P. (2001) Accidental Chemical Releases - Accident Reconstruction, Air Dispersion Modeling, Source Identification, and Allocation of Responsibility. Environmental Litigation: Advanced Forensics and Legal Strategies. April 4-5, San Francisco, CA.

C.27 Zannetti, P. (2000) Fluid Pollution Modeling. Engineering Faculty, Taranto, Italy. October 9-12.

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C.16 Zannetti, P. (1992): Air Pollution Modeling and Software. Computational Mechanics Institute, Ashurst (Southampton), England, September.

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C.10 Pielke, R., J. Seinfeld, I. Tombach, and P. Zannetti (1988): A Short Course on Air Pollution: Simulation Modeling and Measurement Strategies. Monrovia, California, March.

C.9 Pielke, R., J. Seinfeld, I. Tombach, and P. Zannetti (1987): Air Pollution - Simulation Modeling and Measurement Strategies. AeroVironment, February.

C.8 Zannetti, P. (1986): Air quality modeling and software. Computational Mechanics Institute, Ashurst (Southampton), England, June.

C.7 Zannetti, P., J.C.R. Hunt and A.G. Robins (1985): Air Pollution Modeling Course. Computational Mechanics Centre, Ashurst (Southampton), England, September.

C.6 Gopalakrishnan, T.C., and P. Zannetti (1983): Numerical Modeling Course. Kuwait Institute for Scientific Research, Kuwait, December.

C.5 Zannetti, P., and J.C.R. Hunt (1983): Air Pollution Modeling Course. Computational Mechanics Centre, Ashurst (Southamplon), England, May.

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C.1 Zannetti, P. (1977): 1) Statistical models and their application to data collected in Venice. 2) Statistical programs application to meteorological and air quality data (Computer practical exercise). EURATOM CCM Courses, Modeling and Simulation of Ecological Processes, Ispra, Italy, October.

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2981 Northwood Drive Alameda, CA 94501 (510) 522-7391 dave@davenmargo.com

Synopsis

Experienced system architect and project manager. Strengths in team management, hardware design, user interface design, embedded software, hardware and software prototyping, IP protection, design for manufacturing, and engineering and manufacturing test systems.

President (2001-present)

GSD Group, Inc. **Alameda, CA**

GSD is an engineering services company with proven skills in the architecture, design, prototyping, and manufacturing setup for low-cost hardware and software products. The GSD staff includes senior hardware and software engineers, and calls on its industry contacts for documentation, mechanical, and other engineering needs.

I am the senior hardware engineer and architect. My skills include engineering team management, IP protection, digital ASIC design, FPGA design, PCB layout, micro controller software development, Visual Basic tools, and manufacturing test fixture design and development.

I am also experienced as an Expert Witness for IP protection.

Chairman, CTO (1996-2001)

Jovial Test Equipment, Inc. **Alameda, CA**

Founded JTE in 1996 to develop test equipment and home automation products. Initial products included 2 and 8 wire cable testers, and telephone interface devices. Created technology for low-cost and high-performance TDR based cable testers. We sold the company to our largest customer, Harris Corporation.

Vice President (1993-1996)

The 3DO Company, Inc. **Redwood City, California**

Joined 3DO as part of the sale of NTG to 3DO. I completed the transfer of the system knowledge to the 3DO engineering staff and then started the development of the next generation system. Additionally, I was responsible for protecting the intellectual property through patent grant.

Vice President (1989-1993)

New Technologies Group, Inc. **Palo Alto, California**

Founded, along with two partners, to invent, make ready for manufacture, and license products for mass market consumer entertainment. Our high performance game system was the overwhelming leader at the time of its license to SMSG (later to become The 3DO Company). Soon after, NTG was purchased by The 3DO company.

Director of Hardware Engineering (1987-1989)

Epyx Inc. **Redwood City, California**

Was Co-architect (with the software director) and leader of the 14 member hardware design team for the first color programmable hand-held game system. It was later sold to Atari who released it as the Lynx.

Principal Engineer (1986-1987)

Apple Computer, Inc. **Cupertino, California**

One of 3 engineers in an 8 member team that created the architecture for, designed, built and tested 15 prototypes of a 5 MIPS RISC based low cost personal computer. The system had a complete multitasking OS, compilers, editors, graphics, and peripherals. The project was completed in less than 1 year.

Hardware System Architect (1983-1986)

Commodore-Amiga, Inc. **Los Gatos, California**

First as a consultant, then as an employee, I was a key contributor to the Amiga personal computer project. In addition to some of the hardware design, I was responsible for the engineering aspects of the manufacturing start-up. I was part of the management team that completed the sale of Amiga to Commodore.

Principal (1982-1984)

Software and Hardware Innovative Technologies **Alameda, California**

My two partners and I provided hardware and software consulting services to companies developing computer controlled video products. We also designed and sold three arcade video games.

Architect/Team Leader (1978-1982)

Tandem Computers **Cupertino, California**

I was the hardware architect and project leader for the first Tandem display terminal. I led the technical team through design and then pilot production.

Project Engineer (1974-1978)

Naval Air Rework Facility **Alameda, California**

I was the leader of the development and support team for two types of automatic test equipment. The team consisted of 4 engineers and several technicians.

Engineer (1969-1974)

PRD Electronics **Syosset, New York**

I designed computer controlled test equipment for the department of defense. I later transferred to site manager for the systems located aboard the USS Enterprise.

Education:

B.E.E. City College of New York, 1969

Community Involvement:

Commissioner - Alameda County Airport Land Use Commission, President - Fernside Homeowners Association, Chair – Oakland Airport Settlement Agreement Oversight Committee, Co-chair – City of Alameda Airport Operations Committee, Representative - Oakland Airport Master Plan Stakeholder Committee

Hobbies:

Golf, Quantum Physics, Turtles, Combat Robots

Eileen Dalton Marrama

7035 Hemlock Street · Oakland, CA 94611 · (510) 339-3855

Experience

ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

Redevelopment Manager (Contract), December 1997- Present

Manger responsible for program, policy, and fiscal management of the Alameda County portion of a joint City/County redevelopment project area. Staff to Redevelopment Citizens Advisory Committee and Merchant's Association. Developed successful Brownfields Program grant, prepared Streetscape Master Plan and Underground Utility District, manage facade improvement program, and coordinate consultant work and contracts.

RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY

Deputy Director, August 1996 - August 1997

Senior manager responsible for program, policy, and fiscal management of the Riverside County Redevelopment Agency. The Agency's ten project areas consist of 53,000 acres and $6 million in annual tax increment and $29 million in tax allocation bonds. Also responsible for developing and administering the county's economic development strategic plan including business retention, expansion and attraction, Enterprise Zone and Recycling Market Development Zone administration and marketing. Developed and implemented new Fast Track Permit Processing program for commercial and industrial development. Made written and oral presentation to the Riverside County Board of Supervisors, Planning Commission, other local elected boards and commissions and community groups.

RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY

Senior and Principal Development Specialist, August 1993 - August 1996

Redevelopment and economic development manager for northwest Riverside County responsible for redevelopment, business attraction, expansion and retention. Successfully managed the adoption of an 11,000 acre post-AB1290 redevelopment project area expansion including formation and management of Project Area Committee. Project manager with responsibilities including all phases of redevelopment capital facilities project planning and budgeting; authorship and administration of Owner Participation Agreements and other legal agreements; negotiation of business incentives with eligible applicants; analysis of Agency policy and procedure; coordination of redevelopment and economic development projects with other local, state and federal agencies; presentations to and interaction with community groups on Agency activities and projects. Marketing and administration responsibilities for Enterprise Zone and Recycling Market Development Zone which includes coordination with multi-jurisdictional joint powers authority.

RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY

Development Specialist I/II/III, November 1988- August 1993

Responsible for coordinating Fast Track permit processing with all development related County agencies while serving as project liaison for developer. As staff to the Airport Land Use Commission, duties included review of all development related activities surrounding all public use airports in Riverside County, preparation and presentation of staff reports to Commission, and coordinated land use considerations with Planning Department. Conducted economic research, including preparation of specialized reports for County financial transactions, marketing and special events. Administered Mortgage Credit Certificate program for first-time homebuyers including interfacing with mortgage brokers and homebuyers, evaluation of applications, and management of program funds. Gained extensive knowledge of word processing, desk-top publishing, and spreadsheet software programs.

Education

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Bachelor of Science, Business Administration - June 1988

Coursework in: Economics, Statistics, Finance, Accounting, Marketing

Board of Supervisors

Gail Steele

- Alameda County Supervisor, Second District, first elected June, 1992

- President of the Board of Supervisors, January, 1995 -January, 1997; January, 2003 - January, 2005

- Hayward City Councilmember, 1974 - 1982

ALAMEDA COUNTY POSITIONS

- Board Committees: Social Services, Chair; Public Protection
- Alameda County Mental Health Advisory Board, 1973-80, 1990-present; Chair, 1979-80, Children's Advocacy Committee Chair, 1990-present
- Alameda Alliance for Health, Past Chair
- Alameda County Children's Memorial Grove and Flag Committee, Chair
- ICPC (Interagency Children's Policy Council)
- OUR KIDS, Founder, a collaborative project to help kids at risk in the Oakland/Hayward schools
- ABAG (Association of Bay Area Governments) Executive Committee
- ACTA (Alameda County Transportation Authority)
- ACTIA (Alameda County Transit Improvement Authority)
- EBRPD (East Bay Regional Parks District) Liaison Committee
- LAFCO (Local Agency Formation Commission), Past Chair
- JPA (Oakland-Alameda County Coliseum/Arena Joint Powers Authority), Past President

COMMUNITY INVOLVEMENT

- Eden Youth & Family Center Board of Directors, President, 2005-Present
- Hayward Volunteer Recognition Dinner Committee, Co-Chair
- Donated $100,000 for scholarships for foster care children
- St. Rose Foundation Board of Directors

AWARDS

- Board Leadership Award, Western Region, Child Welfare League of America, 1998
- Civic Contribution Award, Oakland League of Women Voters, 1997
- Outstanding Elected Official, California Association of Library Trustees and Commissioners, 1993
- Legislator of the Year, Alameda County Democratic Party, 1993
- Salute to Women, for individual achievement, YWCA Oakland, 1993

- Humane Society Award, Hayward, Hayward Friends of Animals Humane Society, 1993
- John George Community Service Award, Alameda County Mental Health Contractors' Association, 1991
- Mayor's Award, City of Hayward, 1987
- James Mann Award, Lincoln Children's Center, 1986
- Outstanding Achievement Award, California Association of Mental Health, 1978

EMPLOYMENT

- Eden Youth Center, Hayward: founder, 1977 and Executive Director, 1979-92

EDUCATION

- Master of Public Administration, University of San Francisco, 1989
- Bachelor of Arts, Sociology, University of California, Berkeley, 1959

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE EASTSHORE ENERGY CENTER IN CITY OF HAYWARD BY TIERRA ENERGY	**Docket No. 06-AFC-6** **PROOF OF SERVICE** **(Revised 11/14/2007)**

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 06-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

DOCKET
06-AFC-6
DATE NOV 14 2007
RECD. NOV 15 2007

APPLICANT

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DECLARATION OF SERVICE

I, Dalia Liang, declare that on November 19, 2007, I deposited copies of the attached Prehearing Conference Statement in the United States mail at Oakland with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of the California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

Dalia Liang
Signed by