



# CITY OF SACRAMENTO

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## CITY PLANNING DEPARTMENT

725 "J" STREET

SACRAMENTO, CALIF. 95814  
TELEPHONE (916) 449-5604

MARTY VAN DUYN  
PLANNING DIRECTOR

May 8, 1980

City Council  
Sacramento, California

Honorable Members in Session:

**SUBJECT:** Appeal of Planning Commission's ratification of the Negative Declaration and approval of a Special Permit (P-8970) to develop a 40,000+ square foot data processing center with an on-site satellite earth station on 7+ vacant acres in the OB(PUD) Office Building (Planned Unit Development) Zone.

**LOCATION:** East side of Freeport Boulevard, 1,300+ feet north of River Bend Road

### SUMMARY

The General Telephone and Electronics Corporation (GTE) is proposing to establish a regional data processing center. A satellite earth station to transmit and receive data is required as part of the project. The City Council heard an appeal of the City Planning Commission's denial of the rezoning request and approved the rezoning for a portion of the subject property as OB(PUD). The Council's action required additional entitlements, such as the establishment of a PUD and Special Permit.

A Negative Declaration was filed on these additional entitlements. The Planning Commission ratified the Negative Declaration and approved the Special Permit. An appeal was filed based on possible detrimental biological effects of microwave radiation emitted by the satellite ground station antenna. The staff recommends the appeal be denied.

### FILED BACKGROUND INFORMATION By the City Council

On December 15, 1979, the Planning Commission denied the applicant's proposal to rezone the 13+ vacant acres from Agricultural to Office Building to construct the data processing center. The applicant, GTE, appealed the Planning Commission's decision to the City Council. On

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January 29, 1980, the City Council granted the appeal by rezoning the eastern half of the site to Office Building (Planned Unit Development). The Council's action required additional entitlements such as the establishment of a PUD and Special Permit to construct the 40,000 square foot, one-story building. The applicant applied for the additional entitlements and the Environmental Coordinator determined the proposed project would not have a significant effect on the environment (Negative Declaration). On March 27, 1980, the City Planning Commission ratified the Negative Declaration and approved the Special Permit to develop the data processing center.

An appeal was filed on April 3, 1980 against the Commission's action. The appellant's grounds for appeal are 1) the possible detrimental biological effects of microwave radiation emitted by the satellite ground station antenna; and 2) the State EIR Guidelines (Section 15084 b and c) require the preparation of an EIR "whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant effect on the environment," and "when there is serious public controversy concerning the environmental effect of a project."

In researching the validity of the appellant's concern over the biological hazards of microwave radiation associated with reception and transmission of data via satellite, staff contacted various professionals and regulatory agencies in the field of satellite communications systems and radiological health (see Attachment C-7). In addition, staff obtained information from several documents and books published on the subject. The following is a summary of staff's findings while a detailed analysis is provided (see Attachment B).

The GTE microwave satellite earth station antenna is 10 meters in diameter and has a transmitter rated at 25 watts. The antenna sends and receives signals from a satellite with a 4-meter antenna orbiting 22,250 miles above the equator. GTE indicates the signal density for the center of the main signal beam is 0.12 mW/cm<sup>2</sup> (milliwatts per square centimeter). This microwave signal, 0.12 mW/cm<sup>2</sup>, is below the 10 mW/cm<sup>2</sup> allowed as a maximum exposure level established by the U.S. Occupational Safety and Health Administration in 1971 and approved by the Food and Drug Administration in 1974.

The antenna's elevation angle can vary between 28° to 45° from the ground. Therefore, the signal beam should not come in contact with future residents. The effect of contact with the signal beam would be subject to frequency and duration of exposure. The earth satellite transmission and reception has not been subject to extensive research. Literature on this subject does not indicate adverse effects but does not exclude possible impacts. The general finding is that the low power density utilized by GTE in the transmission and reception data offers no significant biological hazards. The

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Negative Declaration contained operational characteristics of the satellite earth station prepared by GTE personnel. The applicant requested the additional information be provided to the Council. This information represents the applicant's research effort on this matter. In summary, this information concludes that there does not appear to be much hard data relating to high frequency radiation effects and concern in the scientific community for the GTE facility is minimal.

Attached for the Council's information are:

1. Appellant's Appeal - Attachment A
2. Detailed Analysis - Attachment B
3. Persons Consulted/References - Attachment C
4. Negative Declaration - Attachment D
5. Correspondence - Attachment E
6. Applicant's Information - Attachment F
7. Findings of Fact

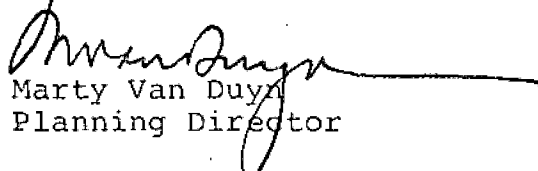
#### VOTE OF COMMISSION

The City Planning Commission, on April 3, 1980, by a vote of eight ayes and one no, ratified the Negative Declaration, approved the Special Permit, and recommended approval to establish a PUD designation for 13+ acres in the OB(PUD) and A(PUD) Zones, and to designate a PUD Schematic Plan for office building and open space land uses for 13+ acres.

#### RECOMMENDATION

The staff and Planning Commission recommend that the City Council deny the appeal and adopt the attached Findings of Fact.

Respectfully submitted,

  
Marty Van Duyen  
Planning Director

FOR CITY COUNCIL INFORMATION  
WALTER J. SLIPE  
CITY MANAGER

MVD:CC:jm  
Attachments  
P-8970

May 13, 1980  
District No. 8

NOTICE OF APPEAL OF THE DECISION OF THE SACRAMENTO CITY PLANNING COMMISSION

APR - 3 1980

RECEIVED

DATE: April 3<sup>rd</sup>, 1980

TO THE PLANNING DIRECTOR:

I do hereby make application to appeal the decision of the City Planning Commission of March 27<sup>th</sup>, 1980 when: (Date)

Rezoning Application

Variance Application

Special Permit Application

NEGATIVE DECLARATION

was:  Granted,  Denied by the Commission

GROUNDS FOR APPEAL: Guidelines of the California Environmental Quality Act, Section 15084, paragraphs (b) and (c), the significance and costliness of the project as it relates to (a) land use options and (b) the microclimate/bioclimate. I also hereby appeal for the need/prepact of an Environmental Impact Report.

PROPERTY LOCATION: E side of Fungot Blvd., 1200 ± N of Line Road

PROPERTY DESCRIPTION: Vacant Agricultural Land

ASSESSOR'S PARCEL NO. 119 - 010 - 33

PROPERTY OWNER: Frank Reese

ADDRESS: 3545 Vista Court, Carmichael, CA

APPLICANT: Mrs. Kenneth, Holland, Schwartz, Miller

ADDRESS: 555 Capitol Mall Sacramento

APPELLANT: Richard A. Monahan (owner & owner's)  
(SIGNATURE)

ADDRESS: 476-1<sup>st</sup> Ave. Sacramento California, 95817 (527-1111)

FILING FEE: \$50.00. Receipt No. 15135 CC.

FORWARDED TO CITY COUNCIL ON DATE OF: April 14, 1980

P- 8977

(4 COPIES REQUIRED)

## DETAILED ANALYSIS

Radiation can be divided into two basic types: ionizing and nonionizing. Ionizing radiation can strip electrons from atoms and thereby create electrically charged ions that can disrupt life processes (Lacy, 1977). In the case of microwaves (electromagnetic waves), the radiation produced is nonionizing. Nonionizing radiation does not have the ability to create ions, but it can increase molecular vibrations and rotation, thus generating heat. Either type of radiation can cause serious bodily harm (Lacy, 1977). In determining the degree of biological damage from microwave radiation, both frequency and power level play a significant part.

Other factors influencing the effects of microwave radiation include (Kincaid, 1976):

- a. Period of time exposure
- b. Air currents and environment temperature
- c. Body weight, type, or mass in relation to the exposed area
- d. The irradiation cycle rate, referring to the individual on-off periods during a unit time interval (a minute), when total time of irradiation per minute is kept constant
- e. Orientation or position of individual influencing resonant conditions and standing waves
- f. Difference in sensitivity of organs and tissues
- g. Effect of reflections.

The known biological effects of microwave radiation include whole-body heating (such as overexposure), cataract formation, and testicular damage (Kincaid, 1976).

The U.S. Occupational Safety and Health Administration and the Food and Drug Administration have jurisdiction over the safety limits for exposure to microwave and radio frequency radiation. Title 29, Section 1910.97 of the OSHA specifies these levels:

1. For frequencies from 10MHz to 100 GHz exposure shall not exceed  $10\text{mW}/\text{cm}^2$  (milliwatts per square centimeter) as averaged over any possible 0.1 hour period. This means the following:
  - power density:  $10\text{mW}/\text{cm}^2$  for periods of 1 hour or more
  - energy density:  $1\text{mW-h}/\text{cm}^2$  (milliwatt hour per square centimeter) during any 0.1 hour period.
2. This guide applies whether the radiation is continuous or intermittent, or whether whole body or partial body radiation is involved.

Microwave frequencies range from 300 megahertz to 300 gigahertz.\* GTE indicated that this facility's frequencies will range between 3,700 to 6,400 MHz (3.7 to 6.4GHz) with a power density of 0.12mW/cm<sup>2</sup> at the center of the main beam. This power density of 0.12mW/cm<sup>2</sup> clearly does not exceed the 10mW/cm<sup>2</sup> standard set by OSHA. The applicant states that the signal density just outside the main beam decreases very rapidly with distance such that the fence line enclosing the site, at 25 feet away from the antenna, the signal strength will diminish to less than .012mW/cm<sup>2</sup>. When asked to interpret these statistics, the general consensus among the professionals in the field of satellite communications and radiologic health is that the power densities being utilized by GTE are so far below the national standard that any biological effects are highly improbable. Numerous experiments have been conducted with laboratory animals for exposure to much higher power densities but it is difficult to translate or extrapolate the results to human exposure limits because of obvious physiological differences (Michaelson, 1980). There is no conclusive evidence that the low power densities associated with the GTE facility will cause any biological harm.

In addition to the very low power density, GTE indicates that their antenna will transmit and receive via a very narrow directional beam (.32° to .46°) pointed skyward at an angle of at least 28° above the horizon (see attached Diagram). Ordinary radio and television signals pose a greater threat than the GTE installation in that radio and television transmit stronger signals that are omnidirectional. The projection of GTE's beam is such that human contact with main beam at close proximity to the antenna is virtually impossible.

\*1 Hz (hertz) means 1 cycle per second of frequency  
1 KHz (kilohertz) means 1,000 cycles per second  
1 MHz (megahertz) means 1 million cycles per second  
1 GHz (gigahertz) means 1,000 million cycles per second

# GTE ANTENNA

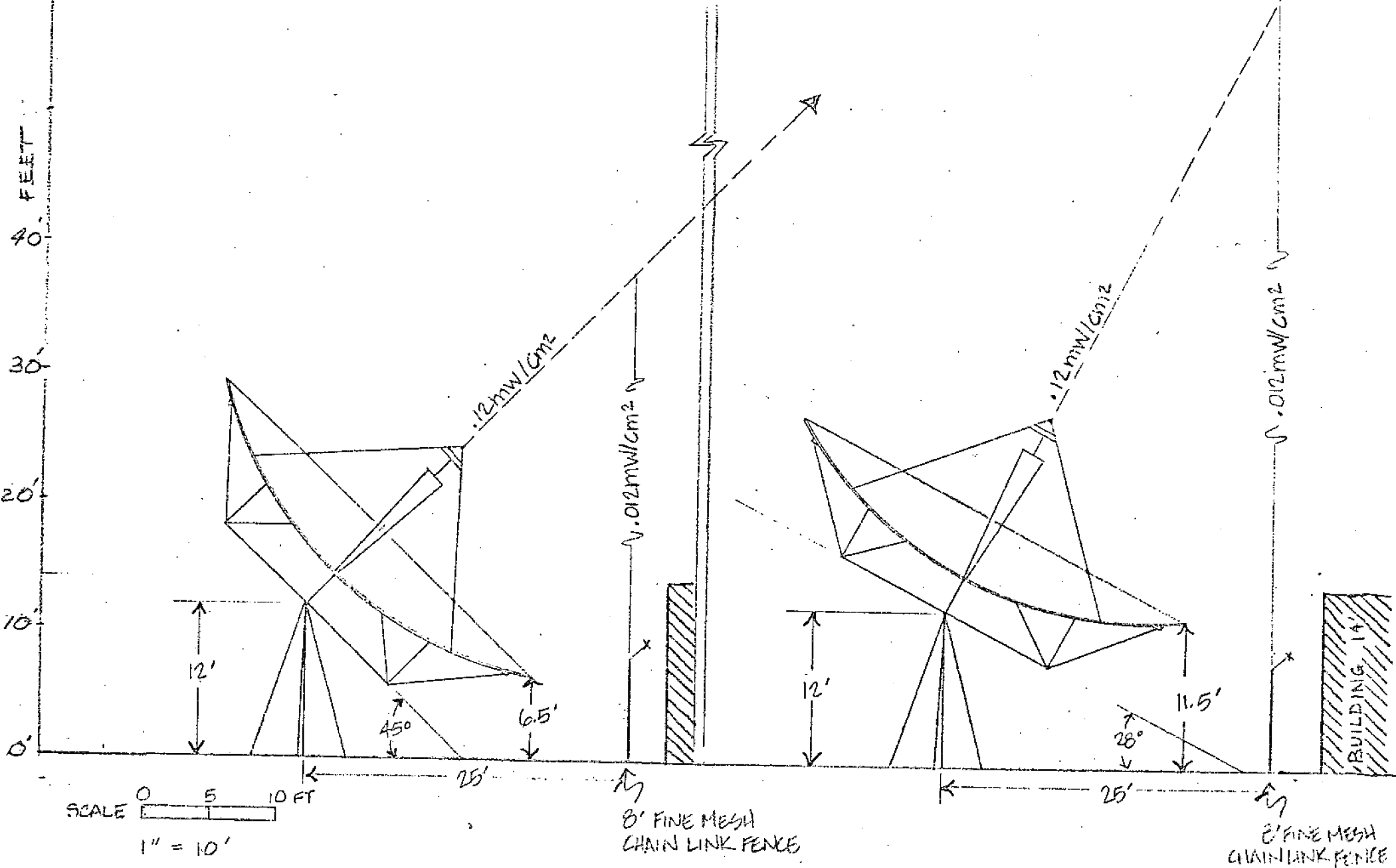
## WEST ELEVATION

← NORTH

SOUTH →

PROJECTION OF BEAM AT 45°

PROJECTION OF BEAM AT 28°



PERSONS CONSULTEDFEDERAL AGENCIES

1. Health, Education and Welfare -- Radiological Health  
Morgan Ceal, Radiological Health Representative  
San Francisco, CA (415) 556-2211
2. Federal Aviation Administration
  - a. Donald Brink, Area Coordinator for Northern California  
San Francisco, CA (415) 876-2796
  - b. Gerald Goren, Training Relief  
Sacramento, CA (916) 440-2348
  - c. John Kemper, Chief of Frequency and Leased Communications  
Los Angeles, CA (213) 536-6164
  - d. Ken Pire, Assistant Sector Manager for San Francisco Area Facilities  
San Francisco, CA (415) 876-2780
3. Occupational Safety and Health Review Commission, Region IX  
Ceny Poblete, Administrative Assistant  
Burlingame, CA (415) 876-9292

STATE AGENCIES

4. Health Services - Radiologic Health  
Don Honey, Supervising Health Physicist  
Radiologic Materials Control  
Sacramento, CA (916) 322-2073
5. Resources Agency - Fish & Game  
Dick Daniels, Environmental Services  
Sacramento, CA (916) 355-7030
6. University of California, Davis  
Marvin Goldman, PhD, Director of Laboratory for Energy-Related Health Research  
Davis, CA (916) 752-1341

REFERENCES

1. Kincaid, Caleb B. (1976), Radiation Safety Handbook for Ionizing and Nonionizing Radiation, U.S. Department of Health, Education and Welfare, Public Health Service, Food and Drug Administration.
2. Lacy, Edward A. (1977), Handbook of Electronic Safety Procedures, Prentice-Hall, Inc. Englewood Cliffs, New Jersey.
3. Martin, James (1978), Communications Satellite Systems, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
4. Michaelson, Sol M. (1980), Microwave/Radiofrequency Protection Standards: Concepts, Criteria, and Applications, U.S. Department of Energy, University of Rochester, Department of Radiation Biology and Biophysics, Report No. UR-3490-1622.
5. Title 29, Labor, Occupational Safety and Health Administration, Section 1910.97 (1979).





# CITY OF SACRAMENTO

## NEGATIVE DECLARATION

The Environmental Coordinator of the City of Sacramento, California, a municipal corporation, does prepare, make, declare, and publish this Negative Declaration for the following described project:

P-3970 Establish PUD for 13+ vacant ac. in the Office Building (Planned Unit Development) OB(PUD) and Agriculture (Planned Unit Development) A(PUD) zones. Designate PUD Schematic Plan for Office Bldg. & Open Space land uses for 13+ vacant ac. Special Permit to develop 40,000+ sq. ft. office bldg. on 7+ vacant ac. in the Office Bldg. (Planned Unit Development) OB(PUD) zone. Loc: E side of Freeport Blvd., 1,300+ N of River Bend Rd. APN: 119-010-23

The City of Sacramento Planning Department has reviewed the proposed project and determined that the project will not have a significant affect on the environment. This conclusion is based on information contained in the attached Initial Study.

The following mitigation measures have been included in the project to avoid potentially significant effects: \_\_\_\_\_

*NONE REQUIRED*

An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Division 13 of the Public Resources Code of the State of California).

This environmental review process and Negative Declaration filing is pursuant to Division 6, Title 14, Chapter 3, Article 7, Section 15083 of the California Administrative Code and pursuant to the Sacramento Local Environmental Regulations (Resolution 78-172) adopted by the City of Sacramento and pursuant to Sacramento City Code, Chapter 63.

A copy of this document may be reviewed/obtained at the Sacramento City Planning Department, 725 "J" Street, Sacramento, CA 95814.

Marty Van Duyn  
Environmental Coordinator of the  
City of Sacramento, California,  
a municipal corporation

By \_\_\_\_\_

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CITY CLERK'S OFFICE  
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CITY OF SACRAMENTO

Planning Department
915 I St., Room 308
Sacramento, CA 95814
Tel. 916 - 449-5604.

INITIAL STUDY

BACKGROUND

- 1. Name of Proponent W. HOLLIMAN
2. Address and Phone Number of Proponent: 555 CAPITOL MALL Suite 950
3. Date of Checklist Submitted Jan CA 95814 17 MAR 80
4. Agency Requiring Checklist Sacramento City Plan. Dept.
5. Name of Proposal, if applicable GTE

ENVIRONMENTAL IMPACTS

Table with 4 columns: Question, YES, MAYBE, NO. Contains 14 items related to Earth, Air, and Water impacts.

Table with 4 columns: Question, YES, MAYBE, NO. Contains 14 items related to Water, Plant Life, and Animal Life impacts.

	YES	MAYBE	NO
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	—	—	✓
d. Deterioration to existing fish or wildlife habitat?	—	—	✓
6. <u>Noise</u> . Will the proposal result in:			
a. Increases in existing noise levels?	—	—	✓
b. Exposure of people to severe noise levels?	—	—	✓
7. <u>Light and Glare</u> . Will the proposal produce new light or glare?	—	—	✓
8. <u>Land Use</u> . Will the proposal result in a substantial alteration of the present or planned land use of an area?	—	—	✓
9. <u>Natural Resources</u> . Will the proposal result in:			
a. Increase in the rate of use of any natural resources?	—	—	✓
b. Substantial depletion of any nonrenewable natural resource?	—	—	✓
10. <u>Risk of Upset</u> . Does the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	—	—	✓
11. <u>Population</u> . Will the proposal alter the location, distribution, density, or growth rate of the human popula-	—	—	✓
12. <u>Housing</u> . Will the proposal affect existing housing, or create a demand for additional housing?	—	—	✓
13. <u>Transportation/Circulation</u> . Will the proposal result in:			
a. Generation of substantial additional vehicular movement?	—	—	✓
b. Effects on existing parking facilities, or demand for new parking?	—	—	✓
c. Substantial impact upon existing transportation systems?	—	—	✓
d. Alterations to present patterns of circulation or movement of people and/or goods?	—	—	✓

	YES	MAYBE	NO
e. Alterations to waterborne, rail or air traffic?	—	—	✓
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	—	—	✓
14. <u>Public Services</u> . Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	—	—	✓
b. Police protection?	—	—	✓
c. Schools?	—	—	✓
d. Parks or other recreational facilities?	—	—	✓
e. Maintenance of public facilities, including roads?	—	—	✓
f. Other governmental services?	—	—	✓
15. <u>Energy</u> . Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	—	—	✓
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	—	—	✓
16. <u>Utilities</u> . Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Power or natural gas?	—	—	✓
b. Communications systems?	—	—	✓
c. Water?	—	—	✓
d. Sewer or septic tanks?	—	—	✓
e. Storm water drainage?	—	—	✓
f. Solid waste and disposal?	—	—	✓
17. <u>Human Health</u> . Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?	—	—	✓
b. Exposure of people to potential health hazards?	—	—	✓

	YES	MAYBE	NO
18. <u>Aesthetics.</u> Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	---	---	✓
19. <u>Recreation.</u> Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	---	---	✓
20. <u>Archaeological/Historical.</u> Will the proposal result in an alteration of a significant archaeological or historical site, structure, object or building?	---	---	✓
21. <u>Mandatory Findings of Significance.</u>			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	---	---	✓
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	---	---	✓
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	---	---	✓
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	---	---	✓

DISCUSSION OF ENVIRONMENTAL EVALUATION

The applicant's Environmental Questionnaire is attached as supplemental information.

SEE ATTACHED SHEET FOR DISCUSSION.

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.
- I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Date 17 Apr 80 [Signature]  
 (Signature)

## DISCUSSION OF ENVIRONMENTAL EVALUATION (P-8970)

The requested entitlements are pursuant to City Council action of January 29, 1980 on a previous project (P-8826), which was to develop a 66,000 sq. ft., one-story data processing center. The original project (P-8826) had requested the rezoning of thirteen vacant acres from Agricultural to Office Building zone. The City Planning Commission denied the rezoning, but the City Council approved the rezoning with conditions. The City Council's conditions regarding the approval of the GTE facility were:

1. The rezoning request, plan and noise element amendments are to be designated OB (PUD) for the eastern half of the subject property and the west half of the subject property be designated A (PUD).
2. Delete the widening of Freeport Boulevard for the south and north bound turn lanes into the facility.
3. Delete the right-of-way requirement for a divided four lane roadway for Freeport Boulevard.
4. Retain a right-of-way easement for a north/south public street on the subject property for a possible future Freeport Boulevard bypass alignment.
5. That Freeport Boulevard not be widened to a four-lane road, and, in the event it may become necessary to widen, that the Traffic Engineer use his discretion to determine the minimum right-of-way necessary subject to final approval by Council.

These conditions require additional entitlements before construction of the proposed facility.

This Negative Declaration assesses the other entitlements necessary to construct the building and determines that these entitlements as a project, do not create any new impacts not previously identified in the December 3, 1979 Negative Declaration, except for the entrance, size and location of the water line. The City limits are about ten feet east of Freeport Boulevard. Consequently, the applicant will have to obtain a driveway permit from Caltrans. Caltrans will determine whether turning lanes on Freeport Boulevard are necessary and the retainment of the trees since the trees are in Caltrans right-of-way. The City Water Department has determined that a fourteen foot water main is necessary to meet fire suppression requirements.

The location of this water main shall be along Freeport Boulevard and under GTE's driveway to the northeast corner of the site for a total length of about 3,200 feet.

The City Council required an alternate alignment for Freeport Boulevard. Consequently, the designated 200' right-of-way easement for a 80' to 110' north/south public street on the western portion of the subject property will provide for a possible future Freeport Boulevard bypass alignment that could protect the town of Freeport from a major street through the town and the subsequent traffic. Refer to Initial Study P-8826 for specific assessment and the attached information on the health impacts of the satellite station.

COTE

RESPONSE TO QUESTIONS FROM SACRAMENTO, CA. PLANNING BOARD

The following data is preliminary and is based on current state of the art antenna design. All reasonable and prudent measures to ensure the safety of personnel and the general public, and to comply with the provision of OSHA will be taken.

A. Please give the following information for each device:

- 1. Does the device receive?      Yes      No
- 2. Does the device send?        Yes      No
- 3. What is the size of the beam?   Give Width     .32° Tran.  
  Give Length   .46° Rec.  
  23,334 Miles
- 4. What is the beam Wavelength?   5-7 cm.  
  3700-4200 MHz Rec.
- 5. What is the beam Frequency?     5900-6400 MHz Tran.
- 6. What is the direction of the beam?   122°-202° Azimuth, 28-45°  
  Elev. Above Horiz.

The antenna at this location will send and receive signals to a geosynchronous satellite currently in orbit 22,250 miles above the equator and rotating at the same speed as the earth. A satellite in this orbit, therefore, appears to be fixed in space to an earth station on the ground. The elevation angle of the antenna at this location will vary between 28° and 45° above the horizon depending on the satellite it is working with. The azimuth angle can vary between 122° and 202° from north. This antenna will receive signals in the 3700-4200 MHz frequency band and transmit in the 5900-6400 MHz frequency band (wavelength 5-7 cm). The beam width is approximately .32 degrees during the transmit mode and .46 degrees during the receive mode. The distance from the antenna to the satellite is approximately 23,334 miles.

- 7. What is the Intensity or Strength of the beam?   Approximately  
  .00012 Watts/  
  cm<sup>2</sup>

Studies were conducted to predict the levels of non-ionizing radiation associated with the 10 meter antenna proposed at this location. The signal density predicted for the center of the main beam is .12 mw/cw<sup>2</sup> which is well below the 10 mw/cw<sup>2</sup> allowed as a maximum exposure level established by the U.S. Occupational Safety and Health Administration in 1971 and approved by the Food and Drug Administration in 1974

The signal density just outside the main beam decreases very rapidly with distance such that the fence line enclosing the site (25 feet away), the signal strength will be less than .012 mw/cm<sup>2</sup>.

At this same location, the receive level from the satellite is approximately .018 picowatts/w<sup>2</sup>. (One picowatt equals 1/10<sup>12</sup> watts).

- B. 1. Does the applicant anticipate any thermal effects on man?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know
2. Does the applicant anticipate any athermal effects on man?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know
- C. 2. Does the applicant anticipate any athermal effects on wildlife in the area?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know

The high elevation angles of this antenna (greater than 28° above the horizon) will make it virtually impossible for any 4 legged animal to come in front of the antenna beam. At the 28° elevation angle the lower edge of the antenna will be 9 ft. above the ground. At the fence line, the lower edge of the main beam will be 14 ft. above the ground. Even if the animal were able to climb on the antenna and intercept the main beam, the low power density would have no anticipated thermal effects. For additional safety, the antenna site will be surrounded with an 8 ft. high chain link fence to keep children and animals off the premises. All equipment room doors will be kept locked to ensure that access to transmission equipment is possible only by authorized personnel.

- C. 1. Does the applicant anticipate any thermal effects on wildlife in the area? Include birds, fish, rodents, mammals, etc.    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know

The power densities of approximately .012 mw/cm<sup>2</sup> or less in the main beam at distances of 25 feet or more from the antenna are so low that no measureable thermal effects are anticipated with birds while flying through the main antenna beam. The max. power level on the antenna surface is .12 mw/cm<sup>2</sup>.

- D. 1. Does the applicant anticipate any effects on human/or artificial pacemakers?  Yes  No  Maybe  Don't know.

Any interaction between microwaves and pacemakers is primarily a function of the signal power density in the vicinity of the pacemaker. The signal levels along the fence line are approximately  $.12 \text{ mw/cm}^2$  or less and are very unlikely to have any effects on people with a cardiac pacemaker. The only location in which a cardiac pacemaker might be affected is the main antenna beam for a distance along the beam of 25 feet. Since the antenna is normally operated at elevation angle of 28 degrees or higher, no person would ever normally enter the main beam. The power density ( $.12 \text{ mw/cm}^2$ ) in the main beam is also well below the  $10 \text{ mw/cm}^2$  allowed as a maximum permissible exposure level established by the U.S. Occupational Safety and Health Administration (OSHA).

- D. 2. Does the applicant anticipate any effects on human and/or artificial hearing organs/devices?  Yes  No  Maybe  Don't Know

The very low power density anticipated outside the fence enclosure should have no effect on hearing aids or audiometric devices.

The antenna system itself will make no audible noise. The only site noise anticipated will be caused by small blowers associated with the environmental control systems required by the equipment building.

- E. Does the applicant anticipate any effects on the migratory paths of birds, fish, or other wildlife in the area due to the device?  Yes  No  Maybe  Don't Know

Experiments recently reported in Scientific American indicate radio signals have no measureable affect on the homing instinct of pigeons. During this series of experiments, a small transmitter was taped to the leg of a pigeon to determine if the close proximity of a radio signal source would confuse the bird or make the bird lose its homing instinct. No such effect was noticed. It is reasonable to believe that radio signals from a ground based transmitter will also have no measureable effects on the paths of migrating birds.



- F. 1. Does the applicant anticipate any biologic teratogenic effects?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know
2. Does the applicant anticipate any biologic carcinogenic effects?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know
3. Does the applicant anticipate any biologic mutagenic effects?    \_\_\_ Yes     X  No    \_\_\_ Maybe    \_\_\_ Don't Know

The National Association of Broadcasters (NAB) retained a consultant Mr. Neil Smith of Smith & Powstenko, Washington, D. C. to evaluate the published literature concerning the biological and carcinogenic effects of microwave radiation on human beings. The result of this study is that the 10 mw/cm<sup>2</sup> standard is clearly adequate for the biological protection of human beings based on any real data that anybody has ever come up with to date. "Research of the available data indicates no-one has ever been bothered in any permanent way, or even in any long-term temporary way from microwave radiation at or below the 10 mw/cm<sup>2</sup> standard"

In review of this literature, no reliable evidence was discovered to indicate that any ill effects will result from long term exposure to the very low power densities likely to occur along or outside the enclosing fence (calculated to be approximately .012 mw/cm<sup>2</sup>).

No biologic mutagenic effects are anticipated due to the very low power densities outside the enclosing fence.



CITY OF SACRAMENTO

Planning Department
915 "I" St., Rm. 308
Sacramento, CA 95814
Tel. 916 - 449-5604

ENVIRONMENTAL QUESTIONNAIRE

This document is part of an Initial Study that will facilitate environmental assessment by identifying potentially adverse environmental impacts and analyzing proposed mitigation measures that may reduce significant environmental impacts.

1/10/80
1/10/80
ADK

FOR OFFICE USE ONLY

CPC No. 0376 Rec'd. by CC On 2-11-80 CPC Hearing Date 3-27-80
Gen. Plan (Exist) Amend to:
Comm. Plan (Exist) Amend to:
Rezone
Special Permit
Variance
Subdivision Modification
Tentative Map
Other PUD Done Admin Plan

\* PLEASE PRINT OR TYPE \*

PROJECT PROPOSAL: Regional Data Center

PROJECT ADDRESS: East of Freeport Blvd. & North of River Bend Road near the Assessor's Parcel No. 119/010/33 I-5 Meadowview Rd. Interchange.

OWNER: Mr. Frank Pease Telephone

Mailing Address: 3545 Verla Court, Carmichael, CA 95608

APPLICANT/AGENT: GTE Data Services Incorporated, by William G. Holliman, Jr. McDonough, Holland, Schwartz, & Allen, A Prof. Corp. Telephone

Mailing Address: 555 Capitol Mall, Suite 950, Sacramento, CA 95814 City (Zip Code)

USE A SEPARATE SHEET, IF NECESSARY, TO EXPLAIN ANY OF THE FOLLOWING:

- I. Existing Conditions: Total 7 acre/OB PUD
A. Project Land Area (sq. ft. or acres) 13.34 acres 6 acre/A PUD
B. Project Parcel: Present Zoning OB PUD Proposed
C. Project Site Land Use: Undeveloped (vacant) X Developed
If developed, briefly describe extent (type & use of structures: photograph acceptable) N/A
D. Existing surrounding land uses & zoning within 300 feet (type, intensity, height, setback)

Table with 2 columns: Land Use, Zoning. Rows: North Undeveloped R-1, South " " A, East I-5 A, West " R-1

II. A. Slope of Property: \*  Flat or Sloping  Rolling  
 Hilly  Steep  
 \*Submit contour map, or show contours on site plan.

B. Are there any natural or man-made drainage channels through or adjacent to the property: YES. If yes, show on site plan and explain: See topographical survey.

C. Describe changes in site contours resulting from site grading plans: Building Pad Raised Approximately 4'

D. Type and amount of soil to be moved: Minor  
 Location moved to or from: Est. 10,000 yds. import fill

III. A. Number, location and type of existing trees on project parcel (show on site plan) See survey.

B. Number, size, type, and location of trees being removed (show on site plan) None.

IV. A. Number and type of structures to be removed as a result of the project: \*\* None

B. Are any structures occupied? No. If yes, how many N/A

C. If residential units are being removed, indicate number of dwelling units included: N/A

\*\* Show all structures on site plan by type, and whether occupied. Also indicate those to be removed.

V. A. Will the project require the extension of or new municipal services: i.e.,

Water	No	Yes	<u>X</u>	City/County Health	No	<u>X</u>	Yes
Sewer	No	<u>X</u>	Yes	Police	No	<u>X</u>	Yes
Drainage	No	<u>X</u>	Yes	Fire	No	<u>X</u>	Yes
Parks	No	<u>X</u>	Yes	School	No	<u>X</u>	Yes
				Waste Removal	No	<u>X</u>	Yes

B. If any of the above are "yes", then submit report detailing how adequate capacity will be achieved. If "no", then submit clearance memo from appropriate agency/department (use copies of attached form)<sup>1</sup>.

VI. Project Characteristics

A. Building size (in sq. ft.) 40,200 sq. ft. Initial 66,672 sq. ft. ultimate

B. Building height 17.5 ft., 1 story

C. Building site plan: (1) building coverage 6.6 %  
 (2) landscaped area 67 %  
 (3) surfaced area 26 %  
 Total..... 100%

D. Exterior Building colors <sup>2</sup> Earth tones- See Rendering

E. Exterior Building materials <sup>2</sup> Brick

*signed*

<sup>1</sup>If waiver form is signed, clearance(s) from agency/department is not necessary for "no" answers at this time.  
<sup>2</sup>Must also be shown on submitted plans.

- F. 1. Proposed construction starting date May, 1980  
 estimated completion date May, 1981
2. Construction phasing (if the project is a component of an overall larger project, describe the future phases or extension. Show all phases on site plan). N/A
- 
- G. Total number of parking spaces required 100 Provided 74 initial  
102 ultimate
- H. What type of exterior lighting is proposed for the project (height, intensity): Building area: None  
 Parking area: 15' High Light Standard - 1FC
- I. Estimate the total construction cost for the project \$3.5 million

VII. Residential Project - ONLY!

Total Dwelling Units \_\_\_\_\_

Total Lots \_\_\_\_\_

- A. Number of dwelling units:  
 Single family \_\_\_\_\_ Two Family \_\_\_\_\_  
 Multiple family \_\_\_\_\_ Condominium \_\_\_\_\_
- B. Number of dwelling units with:  
 One bedroom \_\_\_\_\_ Two bedrooms \_\_\_\_\_  
 Three bedrooms \_\_\_\_\_ Four or More Bedrooms \_\_\_\_\_
- C. Approximate price range of units: \$ \_\_\_\_\_ to \$ \_\_\_\_\_
- D. Number of units for Sale \_\_\_\_\_ Rent \_\_\_\_\_

VIII. Commercial, Industrial, Institutional, or other project (if project is only residential, do not answer this section).

- A. Type of use(s) Computer Data Processing Center  
 Oriented to: Regional x City \_\_\_\_\_ Neighborhood \_\_\_\_\_
- B. Hours of operation 24 Hours
- C. If fixed seats involved, how many N/A
- D. If assembly area without fixed seats, state designed capacity:  
 Sq. Ft. of sales area N/A  
 Describe loading facilities Internal Loading Dock fully enclosed.
- E. Total number of employees 60 initial future + 30
- F. Anticipated number of employees per shift Max 45
- G. Community benefits derived from the project  
Tax Base & Employment; Attractive, clean, low intensity use of land.

- IX. A. Why is the project justified now rather than reserving the option for other alternatives in the future? (e.g. economic condition, community demand) The project is required to provide additional data processing services to GTE Telephone companies in California, Washington, and Hawaii as part of a nation-wide computer network. Project site is centrally located.
- B. Objectives of proposed project. To construct a regional data processing center to serve the GTE telephone companies in the Company's Western Region.

C. If this project is part of another project for which a Negative Declaration of EIR has been prepared, reference the document below (include date and project number if applicable).  
See EIR, Freeport Shores Project P-7838

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D. List any and all other public approvals required for this project. Specify type of permit or approval, agency/department, address, person to contact, and their telephone number.

<u>Permit or Approval</u>	<u>Agency</u>	<u>Address</u>	<u>Contact Person</u>	<u>Phone No.</u>

X: To the best of the applicant's knowledge, evaluate the project's impacts in regard to the following questions:

A. Will the Project:	No	Yes	If yes, discuss degree of effect
1. Be located in or near an environmental or critical concern area (i.e. American or Sacramento River; scenic corridor; gravel deposits or pits; drainage canal, slough or ditch; existing or planned parks, lakes, airports)? .....	X		
2. Directly or indirectly disrupt or alter an archaeological site over 200 years old; an historic site, building, object or structure?.....	X		
3. Displace, compact, or cover soils?.....		X	Engineered fill
4. Be developed upon fill or unstable soils?.		X	
5. Reduce "prime" agricultural acreage?.....	X		
6. Affect unique, rare or endangered species of animal or plant?.....	X		
7. Interfere with the movement of any resident or migratory fish or wildlife species (e.g. birds, anadromous fish, etc.?.....	X		
8. Change the diversity of species, change the number of any species or reduce habitat of species (e.g. fish, wildlife or plants)?...	X		
9. Modify or destroy any unique natural features (e.g. mature trees, riparian habitat)? ....	X		
10. Expose people or structures to geologic hazards (e.g. earthquakes, ground failures or similar hazards)? .....	X		
11. Alter air movement, moisture, temperature, or change climate either locally or regionally? .....	X		
12. Cause flooding, erosion or siltation which may modify a river, stream or lake? .....	X		
13. Change surface water movement by altering the course or flow of flood waters? .....	X		
14. Alter existing drainage patterns, absorption rate or rate and amount of surface water runoff? .....		X	Structure and Parking Lot
15. Alter surface water quality (e.g. temperature, dissolved oxygen or turbidity)? .....	X		
16. Interfere with an aquifer by changing the direction, rate, or flow of groundwater? ..	X		

X. A. Will the Project: (contd.)

	No	Yes	If yes, discuss degree of effect
17. Encourage activities which result in the increased consumption of water or use of water in a wasteful manner? .....	X		
18. Contribute emissions that may violate existing or projected ambient air quality standards? .....	X		
19. Expose sensitive receptors (children, elderly, schools, hospitals) to air or noise pollutants? .....	X		
20. Increase the existing noise levels (traffic or mechanical) or adversely impact adjacent areas with noise?.....	X		
21. Generate additional vehicular traffic beyond the existing street capacity thus creating a traffic hazard or congestion on the immediate street system, or alter present circulation patterns? .....	X		(employees only)
22. Increase traffic hazards to motor vehicles, bicyclists or pedestrians?.....	X		
23. Affect existing parking facilities or generate demand for additional parking?....	X		
24. Affect existing housing or generate a demand for additional housing?.....		X	30 employees
25. Induce substantial growth or alter the location distribution, density or growth rate of the human population of an area?	X		
26. Result in the dislocation of people?....	X		
27. Result in a substantial alteration of the present or planned land use of an area?.	X		
28. Increase demand for municipal services (police, fire, solid waste disposal, schools, parks, recreation, libraries, water, mass transit, communications, etc.	X		
29. Require the extension or modification of water, storm drainage or sewer line/plant capacity to serve the project at adequate service levels? .....		X	Extension of 12 water main for 1800'
30. Produce significant amounts of solid waste or litter? .....	X		
31. Violate adopted national, state, or local standards relating to solid waste or litter control? .....	X		

X.A. Will the Project: (Contd).

	No	Yes	If yes, discuss degree of effect
32. Involve the use, storage or disposal of potentially hazardous material such as toxic, flammable, or explosive substances, pesticides, chemicals or radioactive materials? .....	X		
33. Encourage activities which result in the use of large amounts of fuel or energy, use fuel or energy in a wasteful manner, or substantially increase consumption (of electricity, oil, natural gas)?.....	X		Self Generating Capacity (1,000 KVA)
34. Increase the demand upon existing energy distribution network (SMUD, PG&E)? .....		X	
35. Obstruct a scenic view open to the public or create an aesthetically offensive site open to public view? .....	X		
36. Have substantially, demonstrable negative aesthetic effect? .....	X		
37. Disrupt or divide the physical arrangement of an established community? .....	X		
38. Have any significant impact upon the existing character of the immediate area(i.e. scale, patterns, impair integrity of neighborhoods, etc. ....	X		
39. Have any detrimental effect on adjoining areas or neighboring communities during an/or after construction? .....	X		
40. Generate dust, ash, smoke fumes, or create objectionable odors in the project's vicinity? .....	X		
41. Produce glare or direct light where it is not intended? .....	X		
42. Expose people to or create any health hazard or potential health hazard (excluding mental health)? .....	X		
43. Affect the use of or access to existing or proposed recreational area or navigable stream? .....	X		
44. Conflict with recorded public easements for access through or use of property with in this project? .....	X		
45. Result in an impact upon the quality or quantity of existing recreational opportunities? .....	X		
46. Conflict with established recreational, educational, religious or scientific uses of the area? .....	X		



X. A. Will the Project: (Contd)

	No	Yes	If yes, discuss degree of effect
47. Generate public controversy? .....	X		
48. Conflict with adopted plans and environmental goals of the City (i.e. general, specific, community plans or elements)?		X	
49. Have the potential to degrade the quality of the environment (i.e. land, air, water, plants, animals)? .....	X		
50. Achieve short-term environmental goals to the disadvantage of long-term environmental goals (e.g. leap-frog development or urban sprawl)? .....	X		
51. Have a cumulative impact on the environment when related to existing or future projects? .....	X		
52. Have environmental effects which will cause adverse effects on human beings, either directly or indirectly? .....	X		

B. List any and all mitigation measures proposed to reduce environmental impacts (as identified in the above questions) for the project.

Extensive Landscaping - Use of Attractive Brick Exterior. Sound deadening materials fully insulated walls. Employee traffic only. 3 shifts with max. shift of 45 employees - (initial)

C. List proposed measures to limit or reduce consumption of energy.

Heat recovery mechanical systems. Emergency power generation system to be used during critical energy shortages.  
(Negligible use of glass-less than 5%)

D. Are there alternatives to the project which would eliminate or reduce an adverse impact on the environment (lower density, change in land use, move building on site, no project, etc.)?

There are no adverse impacts. It is a non-polluting, quiet, energy efficient use which is compatible with surroundings.

NOTE: Yes or no answers do not necessarily imply that an EIR will be required for this project.

I hereby state that, to the best of my knowledge, the above answers and statements are true and complete.

February 11, 1980  
DATE

William J. Hollins  
SIGNATURE



# CITY OF SACRAMENTO

## NEGATIVE DECLARATION

The Environmental Coordinator of the City of Sacramento, California, a municipal corporation, does prepare, make, declare, and publish this Negative Declaration for the following described project:

P-8826

Amend 1974 General Plan for 13 vacant ac from Residential to Office Building land use. Amend 1965 Meadowview Community Plan for 13 vacant ac from Light Density Residential to Office Building land use. Amend 1976 Noise Element to waive noise standards for an Office Building adjacent to a freeway. Rezone 13 vacant ac from Agriculture to Office Building OB to construct a 67,000 sq.ft. one story data processing center. Loc: Eside of Freeport Blvd approx. 1200 ft N of River Bend Rd. APN: 119-010-33

The City of Sacramento Planning Department has reviewed the proposed project and determined that the project will not have a significant affect on the environment. This conclusion is based on information contained in the attached Initial Study.

The following mitigation measures have been included in the project to avoid potentially significant effects: \_\_\_\_\_

SEE REVERSE SIDE.

An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Division 13 of the Public Resources Code of the State of California).

This environmental review process and Negative Declaration filing is pursuant to Division 6, Title 14, Chapter 3, Article 7, Section 15083 of the California Administrative Code and pursuant to the Sacramento Local Environmental Regulations (Resolution 78-172) adopted by the City of Sacramento and pursuant to Sacramento City Code, Chapter 63.

A copy of this document may be reviewed/obtained at the Sacramento City Planning Department, 915 I Street, Room 308, Sacramento, CA 95814.

Ethan Browning, Jr.  
Environmental Coordinator of the  
City of Sacramento, California,  
a municipal corporation

By \_\_\_\_\_

Dec 3 8 47 AM '79  
CITY OF SACRAMENTO  
CITY CLERK'S OFFICE  
RECEIVED

8826

Rev. 5/78

Required mitigation measures:

1. Dedicate sufficient right-of-way for a divided four lane roadway with bikelanes, etc. as determined by the City Traffic Engineer.
2. Widen Freeport Blvd. for a south and northbound turn lanes to the specification of the City Traffic Engineer and the California Department of Transportation.
3. The facility's entrance from Freeport Blvd shall be a maximum of 35 feet, the driveway shall be a minimum of 30 feet, and shall include a road looped around the building or change access to provide for fire equipment within 150 feet of all portions of the building.
4. Install a 12 inch water main from the northeast corner of the site to a transmission line (approximately 3000 feet) near I-5 and Freeport Blvd.
5. Provide a 12 foot easement from the drainage canal and install a six foot chain link fence between the easement and the property.



CITY OF SACRAMENTO

Planning Department
915 I St., Room 308
Sacramento, CA 95814
Tel. 916 - 449-5604

INITIAL STUDY

BACKGROUND

- 1. Name of Proponent GTE DATA SERVICES INC. by Wm. Holliman
2. Address and Phone Number of Proponent: 555 CAPITOL MALL Suite 950 Sac CA 95814
3. Date of Checklist Submitted 30 NOV 79
4. Agency Requiring Checklist Sacramento City Plan. Dept.
5. Name of Proposal, if applicable GTE DATA CENTER

ENVIRONMENTAL IMPACTS

(Explanations of all "yes" and "maybe" are provided)

P-8826

- 1. Earth. Will the proposal result in:
a. Unstable earth conditions or in changes in geologic substructures? YES NO X
b. Disruptions, displacements, compaction or overcovering of the soil? X
c. Change in topography or ground surface relief features? X
d. The destruction, covering or modification of any unique geologic or physical features? X
e. Any increase in wind or water erosion of soils, either on or off the site? X
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake? X
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards? X
2. Air. Will the proposal result in:
a. Substantial air emissions or deterioration of ambient air quality? X
b. The creation of objectionable odors? X
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? X

- 3. Water. Will the proposal result in: YES MAYBE NO
a. Changes in currents, or the course or direction movements, in either marine or fresh waters? X
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff? X
c. Alterations to the course of flow of flood waters? X
d. Change in the amount of surface water in any water body? X
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? X
f. Alteration of the direction or rate of flow of ground waters? X
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? X
h. Substantial reduction in the amount of water otherwise available for public water supplies? X
i. Exposure of people or property to water related hazards such as flooding or tidal waves? X
4. Plant Life. Will the proposal result in:
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)? X
b. Reduction of the numbers of any unique, rare or endangered species of plants? X
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species? X
d. Reduction in acreage of any agricultural crop? X
5. Animal Life. Will the proposal result in:
a. Change in the diversity of species, or number of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)? X
b. Reduction of the numbers of any unique, rare or endangered species of animals? X

	YES	MAYBE	NO		YES	MAYBE	NO
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	—	—	X	e. Alterations to waterborne, rail or air traffic?	—	—	X
d. Deterioration to existing fish or wildlife habitat?	—	—	X	f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	X	—	—
6. <u>Noise</u> . Will the proposal result in:				14. <u>Public Services</u> . Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Increases in existing noise levels?	X	—	—	a. Fire protection?	X	—	—
b. Exposure of people to severe noise levels?	—	X	—	b. Police protection?	X	—	—
7. <u>Light and Glare</u> . Will the proposal produce new light or glare?	X	—	—	c. Schools?	X	—	—
8. <u>Land Use</u> . Will the proposal result in a substantial alteration of the present or planned land use of an area?	X	—	—	d. Parks or other recreational facilities?	—	X	—
9. <u>Natural Resources</u> . Will the proposal result in:				e. Maintenance of public facilities, including roads?	X	—	—
a. Increase in the rate of use of any natural resources?	X	—	—	f. Other governmental services?	—	X	—
b. Substantial depletion of any nonrenewable natural resource?	—	—	X	15. <u>Energy</u> . Will the proposal result in:			
10. <u>Risk of Upset</u> . Does the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	—	—	X	a. Use of substantial amounts of fuel or energy?	—	—	X
11. <u>Population</u> . Will the proposal alter the location, distribution, density, or growth rate of the human population?	—	—	X	b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	—	—	X
12. <u>Housing</u> . Will the proposal affect existing housing, or create a demand for additional housing?	X	—	—	16. <u>Utilities</u> . Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
13. <u>Transportation/Circulation</u> . Will the proposal result in:				a. Power or natural gas?	—	—	X
a. Generation of substantial additional vehicular movement?	—	X	—	b. Communications systems?	—	—	X
b. Effects on existing parking facilities, or demand for new parking?	X	—	—	c. Water?	X	—	—
c. Substantial impact upon existing transportation systems?	—	—	X	d. Sewer or septic tanks?	—	X	—
d. Alterations to present patterns of circulation or movement of people and/or goods?	X	—	—	e. Storm water drainage?	—	—	X
				f. Solid waste and disposal?	—	—	X
				17. <u>Human Health</u> . Will the proposal result in:			
				a. Creation of any health hazard or potential health hazard (excluding mental health)?	—	—	X
				b. Exposure of people to potential health hazards?	—	—	X

	YES	MAYBE	NO
18. <u>Aesthetics.</u> Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	—	X	—
19. <u>Recreation.</u> Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	—	—	X
20. <u>Archaeological/Historical.</u> Will the proposal result in an alteration of a significant archaeological or historical site, structure, object or building?	—	—	X
21. <u>Mandatory Findings of Significance.</u>			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	—	—	X
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	—	—	X
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	—	X	—
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	—	—	X

#### DISCUSSION OF ENVIRONMENTAL EVALUATION

The applicant's Environmental Questionnaire is attached as supplemental information.

**SEE ATTACHED SHEET FOR DISCUSSION.**

#### DETERMINATION

On the basis of this initial evaluation:

I find the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **NEGATIVE DECLARATION WILL BE PREPARED.**

I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

Date

03 Dec 79

(Signature)

*C. Carstens*

DISCUSSION OF ENVIRONMENTAL EVALUATION (P-8826)

Remarks

- 1b. Minor excavation for building, roadway and parking lot foundation.
- 1c. Minor change in topographic relief for proper drainage.
- 1e. Possible soil erosion during construction from adverse weather conditions.
- 1g. Earthquake shaking and possible soil liquification will be considered in building design and structural analysis.
- 2a. A minor incremental cumulative impact on local air quality, and slight impact on regional air quality resulting from the additional vehicle trips per day generated by this project.
- 3b. The rate and amount of surface water level will slightly increase due to impervious areas; however, the existing infrastructure can accommodate this increase.
- 3i. Flooding from the Sacramento River and the adjacent drainage canal to the north is a possibility, but is not considered significant because the site is protected by a levee along the Sacramento River and pumps control the drainage canal water level.
- 4a/c. The subject site is presently in agricultural uses and has three large Elm and two large Black Walnut trees along Freeport Boulevard. The City's Traffic Engineer has recommended turning lanes be provided on Freeport Boulevard for access into the proposed office building. The installation of turning lanes will require the removal of the five trees. The agricultural uses will change to urban landscape (lawn and trees). New Plants will be introduced but the landscape plan does not provide specific species.
- 4d. Slight reduction in agricultural lands which is an interim land use because the General and Community Plans indicate residential land uses. Interim agricultural use provides some crop production. Urbanization of the site would reduce particulate pollutants from plowing, planting, and harvesting.
- 5a. Displacement or loss of agricultural animals (rodents) will not be a significant impact.
- 6a. Mobile and stationary noise generators will have an insignificant increase to the area's ambient noise level. Stationary noise generators should comply to the City's Noise Ordinance in order to not impact planned residential land use adjacent to the subject site.
- 6b. The subject site's eastern property line is adjacent to Interstate 5. The California Department of Transportation's 1995 Noise Contour Projection Map (June 1974) for I-5 indicates this property could

be exposed to 80 dBA noise emissions. The City's 1976 Noise Element exterior standard for office buildings adjacent to freeways is 75 dBA. The applicant did not propose any noise mitigation measures but has requested a waiver from the Noise Element exterior standards. This waiver would affect a person when between the proposed building and the freeway. Noise from the freeway may impact office workers, depending on type of construction techniques and building materials.

7. An insignificant amount of light with the possibility of glare from street windows, security and parking lights.
8. In 1978, a 765 acre planned unit development, known as Freeport Shores, was proposed south of this subject site. The proposed land use adjacent to the site's southern property line was commercial (boat/trailer storage and sales). However, during the City Planning Commission hearing on the PUD, the applicant withdrew land use between I-5 and Freeport Boulevard, but the Planning Commission recommended that area be designated as a PUD without any specific land use. At a subsequent hearing, the City Council did not designate that same area as a PUD because a PUD designation could be interpreted as an indication for urbanization.  
  
The General and Community Plans indicate the site for residential. The request for office building zoning is a substantial alteration of the present land use which is agriculture and planned land use which is residential.
- 9a. Slight use of wood, sand, etc. will have an incremental impact on renewable material resources.
12. Minor demand for housing from new employees which can be provided by available housing in the Meadowview and South Pocket areas.
- 13a. This project (first phase) is estimated to generate approximately 1200 VPD and second phase would generate an additional 800 VPD. Freeport Boulevard, at this particular segment, has an "ideal capacity" of 10,000 VPD and in 1978 had approximately 5,000 VPD. There have not been any traffic counts made on Freeport Boulevard since the opening of Interstate 5, consequently the volume probably is slightly less. The proposed project would not have a significant impact to the existing street system. However, the rezoning of the total site allows a substantial amount of office building space that could significantly increase traffic on Freeport Boulevard.

The planned land use is light density residential, which ranges from R-1 (7 un/ac) to R-2 (16.7 un/ac). The land use for this site (13 ac) would generate 1800 VPD and 2600 VPD respectfully. The rezoning of the total site could, under a worse case, be developed to a maximum of 390,000 square feet of office space with 975 required (1/400) parking spaces, driveways, and landscaping. The 390,000 square foot office space could generate 11,700 VPD. Consequently, if the site was developed to the maximum OB potential, then the rezoning would significantly impact the existing street system.



13b. The project proposed to provide a total of 227 on-site parking spaces for the 66,700 square foot ultimate building, which is 1/300 where the City standard is one parking space per 400 square feet of office building space.

13d. Freeport Boulevard, as a result of the Delta Shores PUD EIR, was designated by the City Traffic Engineer as a major street. The Traffic Engineer has requested the dedication of sufficient right-of-way for a divided four-lane roadway with bike lane, etc.

13f. The driveway location to Freeport Boulevard could create a hazardous vehicular situation because Freeport Boulevard has a slight bend in the roadway that results in a blind corner for southbound vehicles. Vehicles traveling southbound will not have adequate sight distance for vehicles turning into the site. To mitigate this situation the applicant shall construct turning lanes to the specification of the City Traffic Engineer and the California Department of Transportation. Since Freeport Boulevard is State Route 160, the State will maintain the roadway so there is no additional City maintenance cost.

The project's site plan indicates a wide mouth, three lane entrance which could be perceived as a high speed corner and result in vehicles not negotiating the turning movement necessary to enter the facility. The Traffic Engineer recommends to mitigate this potential situation that the driveway entrance be limited to a maximum of 35 feet width. In addition, to provide adequate emergency access, the Fire Department recommends the driveway be a minimum of 30' wide and include a road looped around the building or change access to provide for fire equipment within 150 feet of all portions of the ultimate building.

14. There will be an incremental increase for municipal services but demand is anticipated to be less than significant.

14e. The subject site is adjacent to a major City drainage canal. The City Engineer requests a 12 foot maintenance easement from the existing edge of the canal to provide and allow for the City to maintain this canal. In addition, the applicant should install a six foot chain-link fence between the easement and the subject property.

16c. City water is not available at this site. The applicant will have to extend a 12" water main from the subject site's northeast corner along the drainage canal and along Freeport Boulevard to a water transmission line north of Interstate 5 which is approximately 3000 feet.

16d. The site lacks City sewer services but the applicant will have to obtain permission from the State to use this State sewer that passes along the eastern side of the site.

18. The subject site's access is from Freeport Boulevard, which is State Route 160 and is a designated Scenic Route by the California Department of Transportation. The City has not developed any specific Scenic Corridor Plan for this scenic route. Freeport Boulevard is a tree-lined street creating a "tunnel" effect and

the removal of the five large trees will disrupt the aesthetic effect. In addition, this office building with its satellite earth station will be the first urbanization in a largely agricultural area and could be considered aesthetically offensive. The building and satellite station will be about 100 feet from I-5 and visible to approximately 32,000 ADT in 1995.

- 21c. The proposed project has individually limited impacts which could be cumulatively considerable. The rezoning of 13 acres of agricultural to office building would introduce a new land use in an area designated residential. The introduction of office building land use could induce additional request of an office building zoning and induce planned and unplanned urbanization prematurely. If additional property was zoned for office building, especially to the south, this could significantly affect the town of Freeport's existing visual and social character. The following impacts; traffic, vehicular emissions and noise, demand for public services (e.g. water, police, fire, schools) may be significant when cumulatively considered.

## REFERENCES

- Sacramento City General Plan and EIR, 1974  
Sacramento City Zoning Ordinance, November 1978  
Sacramento City Floodplain Ordinance, 1978  
Sacramento City American River Parkway Plan, 1975  
Sacramento City Bikeway Plan and EIR, 1976  
Sacramento River Parkway Plan, 1975  
SRAPC Regional Land Use Plan 2001, 1976  
SRAPC Regional Energy Conservation Plan, 1977  
SRAPC Regional Transportation Plan, 1977  
SRAPC Air Quality Maintenance Plan, 1978  
Sacramento Central City 1990 Comprehensive Plan EIR, 1977  
Sacramento South Pocket Specific Plan and EIR, 1977  
Sacramento South Natomas Community Plan and EIR, 1978  
Sacramento Delta Shores PUD EIR, 1979  
Sacramento Old City- A Preservation Program, 1977  
Seven Lakes PUD Negative Declaration, 1977  
Capitol Park Project EIR, 1974  
Commercial Development in the Point West PUD (Woolco) EIR, 1977  
Discovery Oaks Residential Development Negative Declaration, 1977  
Johnston Industrial Park Unit #4 EIR, 1976  
Meadow Gate I and II EIR, 1974  
Norwood/ I-880 Industrial Park EIR, 1975  
River City Commons Negative Declaration, 1977  
Tsakopoulos Borrow Operation Draft EIR, 1976  
Tsakopoulos Mobile Home Park EIR, 1975  
University Park Negative Declaration, 1979
- Sacramento County Environmental Studies: Methods for Environmental Management, Vol I; Sacramento County's Physical Environment, Vol. II, 1972
- At the Crossroads, A Report on California Endangered and Rare Fish and Wildlife. California Resources Agency and Department of Fish and Game, 1972
- Soils of Sacramento County, CA. Walter Weir, Divisions of Soils, U.C. Berkeley, 1950
- Eleventh Progress Report on Trip Ends Generation Research Counts, California Department of Transportation, 1976

N.D.



# CITY OF SACRAMENTO

Planning Department  
915 "I" St., Rm. 308  
Sacramento, CA 95814  
Tel. 916 - 449-5604

## ENVIRONMENTAL QUESTIONNAIRE

This document is part of an Initial Study that will facilitate environmental assessment by identifying potentially adverse environmental impacts and analyzing proposed mitigation measures that may reduce significant environmental impacts. More definitive and factual information will assist the Planning Department in evaluating the project's impacts. Additional information may be required to complete an Initial Study.

### FOR OFFICE USE ONLY

CPC No. P8826 Rec'd. by 63 On 10-12-79 CPC Hearing Date 11-21-79

Gen. Plan (Exist) Real  Special Permit  
 Amend to: Comm and Spec  Variance  
 Comm. Plan (Exist) It Dens Real  Subdivision Modification  
 Amend to: Office Building; also add  Tentative Map  
 Rezone from Building as a category to plan  Other

\* PLEASE PRINT OR TYPE

PROJECT PROPOSAL: Regional Data Center

INITIATE REZONE  
NOT A PROJECT  
EXEMPT 15037

PROJECT ADDRESS: East of Freeport Blvd & North of River Bend Road near the  
I-5/Meadowview Road Interchange  
Assessor's Parcel No. 119/010/33

OWNER: Mr. Frank Pease

Telephone

Mailing Address: 3545 Verla Court, Carmichael, CA 95608

APPLICANT/AGENT: GTE Data Services Incorporated, by William G. Holliman, Jr.,  
McDonough, Holland, Schwartz, & Allen, A Prof. Corp.  
City (Zip Code)  
Telephone

Mailing Address: 555 Capitol Mall, Suite 950, Sacramento, CA 95814  
City (Zip Code)

USE A SEPARATE SHEET, IF NECESSARY, TO EXPLAIN ANY OF THE FOLLOWING:

#### I. Existing Conditions:

- A. Project Land Area (sq. ft. or acres) 13.34 acres
- B. Project Parcel: Present Zoning A Proposed BT OB
- C. Project Site Land Use: Undeveloped (vacant) x Developed       
If developed, briefly describe extent (type & use of structures: photograph acceptable) N/A

- D. Existing surrounding land uses & zoning within 300 feet (type, intensity, height, setback)

	Land Use	Zoning
North	<u>Undeveloped</u>	<u>R-1</u>
South	<u>"</u>	<u>A</u>
East	<u>I-5</u>	<u>A</u>
West	<u>"</u>	<u>R-1</u>

- II. A. Slope of Property: \*  Flat or Sloping           Rolling  
    Hilly                                         Steep  
   \*Submit contour map, or show contours on site plan. Attached
- B. Are there any natural or man-made drainage channels through or adjacent to the property: Yes. If yes, show on site plan and explain: See topographical survey
- C. Describe changes in site contours resulting from site grading plans: Building Pad Raised Approx. 4'
- D. Type and amount of soil to be moved: Minor  
 Location moved to or from: Est. 10,000 yds import fill

- III. A. Number, location and type of existing trees on project parcel (show on site plan) See Survey
- B. Number, size, type, and location of trees being removed (show on site plan) None

- IV. A. Number and type of structures to be removed as a result of the project: \*\* None
- B. Are any structures occupied? No. If yes, how many N/A
- C. If residential units are being removed, indicate number of dwelling units included: N/A  
 \*\* Show all structures on site plan by type, and whether occupied. Also indicate those to be removed.

- V. A. Will the project require the extension of or new municipal services: i.e.,
 

Water	No <u>      </u> Yes <u>X</u>	City/County Health	No <u>X</u> Yes <u>      </u>
Sewer	No <u>X</u> Yes <u>      </u>	Police	No <u>X</u> Yes <u>      </u>
Drainage	No <u>X</u> Yes <u>      </u>	Fire	No <u>X</u> Yes <u>      </u>
Parks	No <u>X</u> Yes <u>      </u>	School	No <u>X</u> Yes <u>      </u>
		Waste Removal	No <u>X</u> Yes <u>      </u>
- B. If any of the above are "yes", then submit report detailing how adequate capacity will be achieved. If "no", then submit clearance memo from appropriate agency/department (use copies of attached form)<sup>1</sup>.

- VI. Project Characteristics
- A. Building size (in sq. ft.) 40,000 sq. ft.
- B. Building height 17.5 ft., 1 story
- C. Building site plan:
 

(1) building coverage	<u>6.6</u>	<u>      </u>	<u>%</u>
(2) landscaped area	<u>67</u>	<u>      </u>	<u>%</u>
(3) surfaced area	<u>26</u>	<u>      </u>	<u>%</u>
	Total.....		<u>100%</u>
- D. Exterior Building colors Earth tones - See Rendering
- E. Exterior Building materials <sup>2</sup> Brick

<sup>1</sup>If waiver form is signed, clearance(s) from agency/department is not necessary for "no" answers at this time.  
<sup>2</sup>Must also be shown on submitted plans.

- F. 1. Proposed construction starting date Jan. 1980  
 estimated completion date Jan. 1981
2. Construction phasing (if the project is a component of an overall larger project, describe the future phases or extension. Show all phases on site plan). N/A
- G. Total number of parking spaces required 100 Provided 107
- H. What type of exterior lighting is proposed for the project (height, intensity): Building area: None  
 Parking area: 25' High Light Standard - 1FC
- I. Estimate the total construction cost for the project \$2.5 Million

VII. Residential Project - ONLY!

Total Dwelling Units \_\_\_\_\_

Total Lots \_\_\_\_\_

- A. Number of dwelling units:  
 Single family \_\_\_\_\_ Two Family \_\_\_\_\_  
 Multiple family \_\_\_\_\_ Condominium \_\_\_\_\_
- B. Number of dwelling units with:  
 One bedroom \_\_\_\_\_ Two bedrooms \_\_\_\_\_  
 Three bedrooms \_\_\_\_\_ Four or More Bedrooms \_\_\_\_\_
- C. Approximate price range of units: \$ \_\_\_\_\_ to \$ \_\_\_\_\_
- D. Number of units for Sale \_\_\_\_\_ Rent \_\_\_\_\_

VIII. Commercial, Industrial, Institutional, or other project (if project is only residential, do not answer this section).

- A. Type of use(s) Computer Data Processing Center  
 Oriented to: Regional X City \_\_\_\_\_ Neighborhood \_\_\_\_\_
- B. Hours of operation 24 Hours
- C. If fixed seats involved, how many N/A
- D. If assembly area without fixed seats, state designed capacity:  
 Sq. Ft. of sales area N/A  
 Describe loading facilities Internal Loading Dock fully enclosed
- E. Total number of employees 60
- F. Anticipated number of employees per shift Max 30
- G. Community benefits derived from the project \_\_\_\_\_  
Tax Base & Employment: Attractive, clean, low intensity use of land.

- IX. A. Why is the project justified now rather than reserving the option for other alternatives in the future? (e.g. economic condition, community demand) The project is required to provide additional data processing services to GTE Telephone companies in California, Washington, and Hawaii as part of a nation-wide computer network. Project site is centrally located.
- B. Objectives of proposed project. To construct a regional data processing center to serve the GTE telephone companies in the Company's Western Region.

C. If this project is part of another project for which a Negative Declaration of EIR has been prepared, reference the document below (include date and project number if applicable).

See EIR, Freeport Shores Project P-7838

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D. List any and all other public approvals required for this project. Specify type of permit or approval, agency/department, address, person to contact, and their telephone number.

<u>Permit or Approval</u>	<u>Agency</u>	<u>Address</u>	<u>Contact Person</u>	<u>Phone No.</u>

X. To the best of the applicant's knowledge, evaluate the project's impacts in regard to the following questions:

A. Will the Project:	No	Yes	If yes, discuss degree of effect:
1. Be located in or near an environmental or critical concern area (i.e. American or Sacramento River; scenic corridor; gravel deposits or pits; drainage canal, slough or ditch; existing or planned parks, lakes, airports)? .....	X		
2. Directly or indirectly disrupt or alter an archaeological site over 200 years old; an historic site, building, object or structure?.....	X		
3. Displace, compact, or cover soils?.....		X	Engineered fill
4. Be developed upon fill or unstable soils?..		X	
5. Reduce "prime" agricultural acreage?.....	<del>X</del>		
6. Affect unique, rare or endangered species of animal or plant?.....	X		
7. Interfere with the movement of any resident or migratory fish or wildlife species (e.g. birds, anadromous fish, etc.?.....	X		
8. Change the diversity of species, change the number of any species or reduce habitat of species (e.g. fish, wildlife or plants)?...	X		
9. Modify or destroy any unique natural features (e.g. mature trees, riparian habitat)? ....	X		
10. Expose people or structures to geologic hazards (e.g. earthquakes, ground failures or similar hazards)? .....	X		
11. Alter air movement, moisture, temperature, or change climate either locally or regionally? .....	X		
12. Cause flooding, erosion or siltation which may modify a river, stream or lake? .....	X		
13. Change surface water movement by altering the course or flow of flood waters? .....	X		
14. Alter existing drainage patterns, absorption rate or rate and amount of surface water runoff? .....		X	STRUCTURE AND PARKING LOT
15. Alter surface water quality (e.g. temperature, dissolved oxygen or turbidity)? .....	X		
16. Interfere with an aquifer by changing the direction, rate, or flow of groundwater? ..	X		



X. A. Will the Project: (contd.)

	No	Yes	If yes, discuss degree of effect
17. Encourage activities which result in the increased consumption of water or use of water in a wasteful manner? .....	X		
18. Contribute emissions that may violate existing or projected ambient air quality standards? .....	X		
19. Expose sensitive receptors (children, elderly, schools, hospitals) to air or noise pollutants? .....	X		
20. Increase the existing noise levels (traffic or mechanical) or adversely impact adjacent areas with noise?.....	X		
21. Generate additional vehicular traffic beyond the existing street capacity thus creating a traffic hazard or congestion on the immediate street system, or alter present circulation patterns? .....	X		(employees only)
22. Increase traffic hazards to motor vehicles, bicyclists or pedestrians?.....	X		
23. Affect existing parking facilities or generate demand for additional parking?....	X		
24. Affect existing housing or generate a demand for additional housing?.....		X	30 employees
25. Induce substantial growth or alter the location distribution, density or growth rate of the human population of an area?	X		
26. Result in the dislocation of people?....	X		
27. Result in a substantial alteration of the present or planned land use of an area?.	X		
28. Increase demand for municipal services (police, fire, solid waste disposal, schools, parks, recreation, libraries, water, mass transit, communications, etc.	X		
29. Require the extension or modification of water, storm drainage or sewer line/plant capacity to serve the project at adequate service levels? .....		X	Extension of 12" water main for 1800'
30. Produce significant amounts of solid waste or litter? .....	X		
31. Violate adopted national, state, or local standards relating to solid waste or litter control? .....	X		

X. A. Will the Project: (Contd).

	<u>No</u>	<u>Yes</u>	<u>If yes, discuss degree of effect:</u>
32. Involve the use, storage or disposal of potentially hazardous material such as toxic, flammable, or explosive substances, pesticides, chemicals or radioactive materials? .....	<u>X</u>		
33. Encourage activities which result in the use of large amounts of fuel or energy, use fuel or energy in a wasteful manner, or substantially increase consumption (of electricity, oil, natural gas)?.....	<u>X</u>		Self Generating Capacity (1,000 KVA)
34. Increase the demand upon existing energy distribution network (SMUD, PG&E)? .....		<u>X</u>	
35. Obstruct a scenic view open to the public or create an aesthetically offensive site open to public view? .....	<u>X</u>		
36. Have substantially, demonstrable negative aesthetic effect? .....	<u>X</u>		
37. Disrupt or divide the physical arrangement of an established community? .....	<u>X</u>		
38. Have any significant impact upon the existing character of the immediate area(i.e. scale, patterns, impair integrity of neighborhoods, etc. ....	<u>X</u>		
39. Have any detrimental effect on adjoining areas or neighboring communities during an/or after construction? .....	<u>X</u>		
40. Generate dust, ash, smoke fumes, or create objectionable odors in the project's vicinity? .....	<u>X</u>		
41. Produce glare or direct light where it is not intended? .....	<u>X</u>		
42. Expose people to or create any health hazard or potential health hazard (excluding mental health)? .....	<u>X</u>		
43. Affect the use of or access to existing or proposed recreational area or navigable stream? .....	<u>X</u>		
44. Conflict with recorded public easements for access through or use of property with in this project? .....	<u>X</u>		
45. Result in an impact upon the quality or quantity of existing recreational opportunities? .....	<u>X</u>		
46. Conflict with established recreational, educational, religious or scientific uses of the area? .....	<u>X</u>		

X. A. Will the Project: (Contd)

	No	Yes	If yes, disc. degree of eff.
47. Generate public controversy? .....	X		
48. Conflict with adopted plans and environmental goals of the City (i.e. general, specific, community plans or elements)? .		X	
49. Have the potential to degrade the quality of the environment (i.e. land, air, water, plants, animals)? .....	X		
50. Achieve short-term environmental goals to the disadvantage of long-term environmental goals (e.g. leap-frog development or urban sprawl)? .....	X		
51. Have a cumulative impact on the environment when related to existing or future projects? .....	X		
52. Have environmental effects which will cause adverse effects on human beings, either directly or indirectly? .....	X		

B. List any and all mitigation measures proposed to reduce environmental impacts (as identified in the above questions) for the project.

Extensive Landscaping - Use of Attractive Brick Exterior. Sound deadening materials, fully insulated walls. Employee traffic only.

C. List proposed measures to limit or reduce consumption of energy.

Heat recovery mechanical systems. Emergency power generation system to be used during critical energy shortages. (Negligible use of glass-less than 5%)

D. Are there alternatives to the project which would eliminate or reduce an adverse impact on the environment (lower density, change in land use, move building on site, no project, etc.)?

There are no adverse impacts. It is a non-polluting, quiet, energy efficient use which is compatible with surrounding zoning and land uses.

NOTE: Yes or no answers do not necessarily imply that an EIR will be required for this project.

I hereby state that, to the best of my knowledge, the above answers and statements are true and complete.

October 12, 1979  
DATE

William D. Holliman Jr.  
SIGNATURE

*copy file copy*

P-8970  
CITY PLANNING COMMISSION

MAR 24 1980

RECEIVED

John Harvey Carter, architect A.I.A.

*Old Firehouse No. 4*

*417 20th Street, Sacramento, Calif. 95814*

*Phone 444 6161*

March 24, 1980

Clifford Carstens  
City Planning Department  
City Hall  
Sacramento, CA 95814

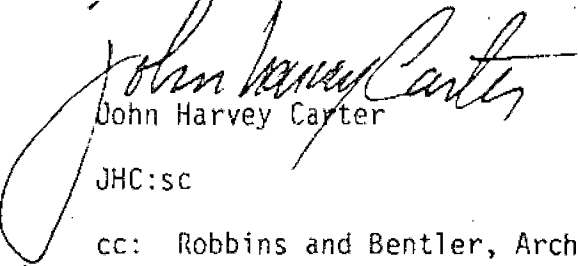
RE: GTE Data Center

Dear Cliff:

As per our telephone conversation the other day, and your request, enclosed is a copy of a portion of the G.T.E. report on the satellite disk.

This will replace Paragraph D. 1) and Page 4, which were illegible.

Very truly yours,

  
John Harvey Carter

JHC:sc

cc: Robbins and Bentler, Architects

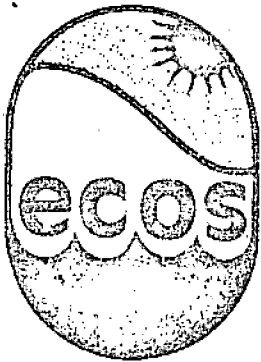
D. 1) Does the applicant anticipate any effects on human and/or artificial pacemakers?      Yes      No      Maybe      Don't know

Any interaction between microwaves and pacemakers is primarily a function of the signal power density in the vicinity of the pacemaker. The signal levels along the fence line are approximately .12 mW/cm<sup>2</sup> or less and are very unlikely to have any effect on people with a cardiac pacemaker. The only location in which a cardiac pacemaker might be affected is the main antenna beam for a distance along the beam of 25 feet. Since the antenna is normally operated at elevation angle of 28 degrees or higher, no person would ever normally enter the main beam. The power density (.12 mW/cm<sup>2</sup>) in the main beam is also well below the 10 mW/cm<sup>2</sup> allowed as a maximum permissible exposure level established by the U.S. Occupational Safety and Health Administration (OSHA).

Page 4

In review of this literature, no reliable evidence was discovered to indicate that any ill effects will result from long term exposure to the very low power densities likely to occur along or outside the enclosing fence (calculated to be approximately .012 mW/cm<sup>2</sup>).

No biologic mutagenic effects are anticipated due to the very low power densities outside the enclosing fence.



**ENVIRONMENTAL COUNCIL OF SACRAMENTO**  
**909 12th Street**  
**Sacramento, California 95814**

May 6, 1980

Sacramento City Council  
 City Hall  
 915 "I" Street  
 Sacramento CA 95814

RE: GENERAL TELEPHONE AND ELECTRONICS

Members of the Council:

The Environmental Council of Sacramento is concerned that a Negative Declaration is not an appropriate document under the California Environmental Quality Act for the General Telephone and Electronics project. The negative declaration does not evaluate the effects of microwave radiation on human health, nor on plants and wildlife.

While microwave radiation is not an issue often dealt with by local government, it poses a real human health issue which must be explored. A negative declaration does not even recognize the issue let alone propose mitigation measures.

There is public controversy surrounding the GTE project and it may have significant adverse impacts upon the human environment, both of which are red flags under CEQA triggering the necessity for an EIR - not a Negative Declaration.

ECOS respectfully requests the City Council to require an EIR on the GTE project to determine whether the risks to the community from microwave radiation are worth taking for the relatively few jobs which GTE will be providing.

Sincerely,

*Suzanne Butterfield*

Suzanne Butterfield, President  
 Environmental Council of Sacramento

CC: Planning Department

*Member Organizations*

*Audubon Society  
 Bikeways Action Committee  
 California Park & Recreation Society, Dist. II  
 Ecology Information Center  
 League of Women Voters  
 Lung Association  
 Planned Parenthood*

*L.E.A.F.  
 Sacramento County Farm Bureau  
 Sacramento Old City Association  
 A.R.C. Conservation Club  
 Save the American River Association  
 Sierra Club  
 Zero Population Growth*

Wednesday, April 2nd, 1980

16

To the City Clerk of Sacramento, Ca.

I, Michael Monasky, do hereby formally request permission to add to the Agenda of the City Council on April 8th, 1980, the item regarding the potential adverse impact of a proposed project by General Telephone and Electronics Corporation, Data Services Division.

The Planning Department numbers for this project are P-8826 and P-8970. I intend to call attention of the City Council to the Guidelines of the Cal. Environ. Qual. Act, Section 15084, paragraphs (b) and (c), relating to the significance and controversy of this project as it bears on the impact of ornithologic migratory paths, as well as the discrepant responses of the applicant to the initial study and Environmental Questionnaire. Responsibility of the lead agency, in this case, the City Council of Sacramento, will be addressed.

Please feel free to contact me at my residence. My phone # is 457-6922. I live at 4196-1st Avenue, Sacramento, 95817.

Thank you for your Consideration.

Sincerely,

*Michael P. Monasky / Michael P. Monasky*

Michael P. Monasky

P.S. Please introduce the attached note into the record of April 8th, 1980.

Ladies and Gentlemen of the Council of the City of Sacramento;

Gracious Citizens and Mr. Mayor;

We live in an era of burgeoning awareness and technology--what is held to be new and true today is discarded for the imminent and foreboding future. Our responsibility to ourselves and to future generations cannot be excluded from these considerations. It is on this note that you are addressed.

Mr. William Holliman, attorney for General Telephone and Electronics, was either ignorant, withheld the truth, or lied to the Council on January 29th, 1980 when he said that the GTE Data Services satellite station, proposed for the Freeport Corridor, would only receive. Information requested from the Satellite Division of GTE through the Assistant City Planner, Mr. Cliff Carstens, was inaccurate and incomplete. The Environmental Questionnaire submitted by Mr. Holliman on February 11th, 1980 is grossly incorrect. For example, in response to the question, " Will the project be located in or near an environmental or critical concern area, such as the Sacramento River, a scenic corridor, or a drainage ditch?", he answered, "No.," when in fact, this proposed project would be less than 1000 feet from the Sacramento River, is adjacent to a drainage ditch, and is part of the California State Scenic Corridor. This and multitudinous other inaccuracies were brought to the attention of the Planning Commission on March 27th, 1980.

There is absolutely no difference between the waves anticipated for use by GTE in their Satellite Station and what are known as radar beams; and the exposure level is within an intermediate, occupational level. Should we expose the inhabitants of Freeport, the wildlife of the River Bend area, and commuters on Interstate Five to these beams as well?

The Council has mandated that this area be rezoned for office building use. Since when do radar beams and microwave disks qualify as components of office buildings? Shall we ever and anon ignore the phenomenologic and potential hazards



of microwaves, simply because they are already in our midst?; or will we arise to the challenge and question those who would otherwise ignore the facts, as well as compromise our health and safety?

The people of the City of Sacramento, the town of Freeport; and the birds in the River Bend Area of the Sacramento River hearby officially request that an Environmental Impact Report (EIR) be done to answer all questions on this matter, Plans # P-8826 and # P-8970; and that further land use options be investigated by the Planning Department.

Sincerely,

*Michael Monasky*

Michael Monasky

TO: William G. Holliman, Jr.

Date: 29 April 1980

FROM: Helen O. Page

Subject: G.T.E. -- Non-ionizing Radiation

I have completed initial steps in a survey of governmental regulations and scientific materials available on non-ionizing radiation of the type incident to earth/satellite transmission and reception. I've divided the information into three categories for clarity: (1) Regulations, (2) Legislative activity, and (3) Scientific studies.

#### SUMMARY

The regulations are not complete in this area and the sources indicate OSHA is currently considering standards recommended by NIOSH (National Institute for Occupational Safety and Health).

The United States Senate Committee on Commerce, Science, and Transportation conducted over-site hearings in June, 1977, but I have not located any specific actions by Congress arising as a result of the hearings. Most of the testimony related to the inconclusive results of current studies and the need for funding. Since more research activity has occurred since the hearings, it is likely that Congress did provide some additional funding for studies in the area.

Though national and international conferences have been held on radiation topics and though many studies have been completed, the scientific community has not come to general conclusions except that (1) There are effects on humans and animals but (2) exactly what frequencies, exposure time, or power cause the effects is yet inconclusive. Some of the studies would support exposure at less than  $10 \text{ mW/cm}^2$  but the studies have not involved G.T.E. type installations which are thought to have minimal effect.

DISCUSSION: Regulations.

The Federal Communications Commission regulates installation of earth/satellite communications systems including location, possible interference with other-station operation, band width, frequency, power and similar technical matters. There is no indication in the FCC regulations that they are intended to provide protection for people or other life forms. Such protective regulations appear to be within the jurisdiction of the Food and Drug Administration and Occupational Safety and Health Administration.

Subchapter J (Radiological Health) of Title 21 of the Federal Regulations adopted by the Food and Drug Administration applies, in general, to radiation problems. Section 1000.3 provides, in part:

"As used in this Subchapter J:

(a) 'Electronic product radiation' means --

(1) Any ionizing or nonionizing electromagnetic or particulate radiation ...

(b) 'Electromagnetic radiation' includes ... microwave, radiowave, ..."

Section 1000.15 sets forth examples of "electronic products subject to the Radiation Control for Health and Safety Act of 1968" and includes "microwave power generating devices", "power generation and transmission equipment", and "communications transmitters." Since definitions are not given for any of the specific examples, it is difficult to determine under which category the G.T.E. type installation would be classified. In any event, since any of these categories might include earth/satellite transmission and reception, these Regulations are a starting point.

The specific regulations included in the remaining parts of Subchapter J relate to x-rays, manufacture of equipment and electronic projects including microwave ovens, televisions, ultra violet lamps

and other products; but, as yet, do not include the G.T.E. type installation. Because of the few specific regulations adopted and the broad general categories intended to be included in the Regulations, it is logical to infer that other regulations will be proposed and adopted at some later date. The current regulations do not apply to earth/satellite transmission and reception.

The Occupational Safety and Health Administration has adopted a guide for radiation protection involving exposure to nonionizing radiation (electromagnetic radiation). This is the source of the 10 mW/cm<sup>2</sup> (milliwatt per square centimeter) criteria referred to in the information we received from Mr. Cooper. I have attached a copy of 29 CFR §1910.97 (1979). This section was subject to an administrative challenge in 1976 which resulted in the conclusion that the section is advisory, not mandatory, and that an employer could not be cited for its violation. OSHRC No. 12715 reported at Paragraph 20,379 CCH; affirmed March 23, 1977, reported at Paragraph 21,656 (attached for your information). In addition, the U.S. Department of Health, Education, and Welfare publication entitled "Radiation Safety Handbook for Ionizing & Nonionizing Radiation" (HEW Publication (FDA) 77-8007) contains a section on microwave and radiofrequency safety procedures. The introduction states:

"Microwave energy, frequently referred to as microwave radiation, is sometimes confused with ionizing radiation. This is unfortunate since the two radiations have no important similarities as far as biologic effects are concerned. Microwaves have some of the characteristics of infrared radiation in that they produce localized heating of the skin, however, they penetrate deeper than infrared radiation. In general, the heating produced is proportional to the field intensity of this radiation.  
..."

The remaining portion of the section is attached. It sets forth the safety procedures to be followed by FDA employers and employees working with equipment utilizing microwave and radiofrequency sources.

The regulation of nonionizing radiation does not evidence a grave concern on the part of the participating agencies for possible effects on humans or animal life. It should be kept in mind that OSHA is currently considering this area for stricter control, but that no regulations have been forthcoming at this time (see below).

#### DISCUSSION: Congressional Activity.

As noted in the introduction, United States Senate Committee on Commerce, Science and Transportation held hearings in June of 1977. Representatives of Federal agencies, research institutes, universities, and the scientific community appeared at the hearings. Discussion centered around whether employees are subject to radiation, what the sources of the radiation are, what effect, if any, such radiation has on the health of employees and what should be done to protect people from radiation, if such protection is warranted. The general agreement among those who testified was that there was not sufficient data upon which to base any change in the  $10 \text{ mW/cm}^2$  guideline because sufficient attention had not been directed to effects of radiation, particularly nonionizing radiation. Many of the witnesses encouraged Congress to provide funding for research in this area. Dr. Elliott S. Harris's Testimony before the Committee is attached. I have selected this testimony from the many who presented information to the Committee since NIOSH reports have been referred to OSHA for consideration when OSHA proposes new regulations relating to radiation. Dr. Harris notes that a problem area is radiofrequency radiation (at 10-300 megahertz), an area

to which many people are exposed and for which research is limited. This radiofrequency range is far below that used at the G.T.E. installation and much more common since the low ranges are used in equipment utilized in many industries. He also notes that means of measuring effects were not developed. One can conclude after reading Dr. Harris' testimony, which is representative of that presented at the hearings, that earth/satellite transmission and reception has not been subject to extensive research because there are areas of radiation involving industrial uses of lower radiofrequencies involving the possibility of greater harm. Though I did not locate what recommendations were developed by the Committee upon completion of the hearings, other sources indicate that funding of research was expanded to encourage assessment of human effects of nonionizing radiation.

#### DISCUSSION: Scientific Studies.

##### Background.

It is interesting to note that the Western Scientific community did not question the  $10 \text{ mW/cm}^2$  safety standard until two events occurred: the bombardment of the American Embassy in Moscow with low level radio-waves in the 1960's and reports from Eastern countries and Russia that they had set lower levels for safety than the Western countries. The first incident prompted the United States government to investigate possible adverse effects and the second prompted the scientific community to begin research to validate the Eastern studies. Because the studies involve many different disciplines, national symposia have been held to provide forums for exchange of information. The first symposium was held in October, 1975, and reported in a U.S. Department of Health, Education, and Welfare publication entitled "Biological Effects of

Electromagnetic Waves (HEW Publication (FDA) 77-8010, Vols. I and II). Overall this collection of studies is not very useful for our purposes because many of the studies are based upon criteria not pertinent to high frequency earth/satellite transmission and reception. Most of the studies used lower frequency, direct exposure, and higher power (above 10 mW/cm<sup>2</sup> and consequently the data obtained are not transferrable to the G.T.E. installation and possible effects.

Mention is made of the G.T.E. type installation in the article entitled "The Biological Significance of Radiofrequency Radiation Emission on Cardiac Pacemaker Performance" (p. 212, vol. II). At page 223 the author states:

"Due to the relatively high operating frequency, short pulse duration, narrow beam width, and the fact that the intense portion of the beam traverses a fixed location rather rapidly, pacemaker interference from these systems is minimal."

It is suggested in the same article that effect upon pacemakers is, in any event, minimal and that continuing improvements indicate that it is technically feasible to produce a pacemaker which will be resistant to radiofrequency interference (pp. 226-227). Since this report was published in 1976, it seems reasonable to presume that pacemakers have been improved since that time and that interference even from emission of lower frequency radiation has been reduced.

A second article entitled "Broadcast Radiation: A Second Look" at page 363, volume II, discusses lower frequency (AM, FM, UHF and VHF) radiation. It is based on a field study and presents statistics which put the satellite/earth installation radiation problem in perspective though such sources are not included in the study. Of 3373 FM stations in the United States, only 2.6% met the initial screening criteria based on 1 mW/cm<sup>2</sup>. The report concludes:

"Broadcast stations are significant sources of RF (radio frequency) exposure in the environment; they represent the major portion of exposure from all source categories, including radar, when viewed in a macro-environment context and

can, under special circumstances, produce significant exposure levels on a specific source basis or in the micro-environment. The levels of exposure associated with broadcast stations in either situation exhibit a wide dynamic range depending on location and local source density but are generally not considered to represent a hazard. Specialized exposure circumstances, however, can imply relatively intense power densities and these situations should and are being investigated to determine the real extent of possible hazards. (page. 384).

The areas that the article suggests provide the greatest hazards involve facility repair, repairs taking place on nearby facilities at the same height as the transmitters, unknown absorption levels.

I have included this discussion on a lower frequency study to help put into perspective the concerns for radiation effects. The G.T.E. installation will not radiate over the population since it is directed skyward, unlike radio frequencies which radiate in all directions simultaneously, and G.T.E.'s power density is less than  $1 \text{ mW/cm}^2$ .

Many of the remaining articles are too technical to be of help. There are discussions of harm to people and animals but, as noted above, the laboratory circumstances do not parallel the G.T.E. installation and can easily be misread. The "Literature Survey" (page 1, Volume I) makes clear that the findings are inconclusive but does provide a good summary of the studied effects.

Subsequent papers submitted at symposia sponsored by NSNC/URSI are published as supplements to Radio Science. I have reviewed Volumes 12, 14(1) and 14(2) and though substantial data on scientific process and effect relating to non-ionizing radiation are discussed, no studies particularly relevant to earth/satellite facilities are reported. Once again the studies are, in many instances, too technical to be of any assistance.