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City of Goleta, California
May 12, 2004
BACKGROUND REPORT NO. 23

Private Utilities and Solid Waste

Two other background reports addressed the public water and sewer utilities. This report will inventory utility services provided by the private sector. These utilities include electricity, natural gas, television cable, telephone and solid waste services which is provided by both the private sector and the County of Santa Barbara. This inventory will assist in anticipating future needs and the ability of the providers to meet these needs. Since these utilities also require space to accommodate its services, the General Plan will also need to anticipate future space needs of these services.

PRIVATE UTILITIES¹

Electricity

Electrical service to Goleta and to all of southern Santa Barbara County is primarily provided by the Southern California Edison Company (SCE). SCE is a subsidiary of Edison International and is one of California's, and the nation's, largest utility companies. It distributes electricity to about 4.5 million customers throughout central and southern California, an area covering approximately 50,000 square miles.

Facilities

The Southern California Edison Company's entire system includes 13,000 circuit miles of transmission lines and 95,000 circuit miles of distribution lines. SCE also controls 5,000 megawatts of generating capacity from various nuclear, hydroelectric and fossil fuel power plants, although most of the fossil fuel facilities have been sold over the past few years due to deregulation of the industry. On an average day, SCE provides power for eleven million people in 427 communities including 5,000 large businesses and 280,000 small businesses.

As of March 1998, California opened its energy markets to competition and state investor-owned utilities, including SCE, which turned over control of the bulk of their private transmission lines to the California Independent system operator (Cal ISO). Cal ISO is a not for profit public benefit corporation that is charged with managing the flow of electricity along the state's long distance high voltage

¹ Public water and wastewater services are detailed in separate background reports.
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power lines. They are responsible for safeguarding the reliable delivery of electricity throughout a 12,500 circuit mile “electronic highway” within the state.

Electricity Shortage Procedures

Should shortages of electricity occur, Cal ISO will declare a Stage 1, 2 or 3 emergency. A Stage 1 emergency occurs if electricity reserves go below 7%. At this level, utilities urge their customers to conserve energy by voluntarily reducing demand. A Stage 2 alert creates interruptions of service to selected utility customers. A Stage 3 alert occurs when reserves go below 1 1/2% and requires rolling blackouts to keep the system from collapsing and causing widespread outages.

SCE customers have a “Rotating Outage” group number on their monthly bill that indicates the electricity block to which they are assigned. Rotating outages are designed to last approximately one hour per block to minimize the disruption and share it throughout the system. Certain facilities such as hospitals and police stations do not have their power interrupted. Special accommodations can be made for customers with medical equipment that requires a continuous flow of electricity.

Facilities in City of Goleta and Franchise Agreement

The City of Goleta contains several SCE substations including the Hollister Avenue substation and the Glen Annie substation. Sixteen kilovolt (kv) electrical distribution lines also exist in the City.

Reliant Energy also owns a “Peaking Station” on Las Armas between Hollister Ave. and the railroad tracks. It is not a regular electrical substation, but generates electrical power for the Goleta Valley only during emergencies and peak electrical use periods. Under normal energy demand conditions it is not in use. However, Reliant Energy does reserve the right to use the facility on a more continuous basis.

Southern California Edison is the first utility to successfully negotiate a franchise agreement with the City of Goleta. All others are still in process. For a term of 30 years, the City of Goleta is allowing SCE the use of city streets and property to use and construct poles, wires, conduits and other facilities necessary for the transmission and distribution of electricity within the City. In exchange, the City will receive 1% of the revenue which, for the year 2003, was estimated to total approximately \$255,000.

Rates

SCE charges are based on the amount of kilowatts used in a three tiered rate structure. Each account is given a certain number of kilowatts as a “Baseline” amount, depending upon the climate of the area. Usage over the baseline is charged at increasing amounts. The baseline is measured locally at 10.1 kilowatt hours per day.

There are both delivery and generation related charges. Between 1985 and 2001 charges per kilowatt hour for baseline service doubled, from about 6.5 cents to 13 cents. Charges over baseline are now from 15 cents up to 130% of baseline to almost 26 cents for charges over 300% of the baseline rate. The SCE website has extensive information itemizing all rates and charges on a monthly billing statement. There are also a number of special programs with lower rates for senior citizens and other customers who meet certain low income qualifications.

Energy Conservation, Renewable Energy Sources and the Innovative Building Review Committee (IBRC).

SCE has a number of different programs to assist customers to save energy and lower their monthly electricity bills. The company offers rebates for purchasing energy efficient appliances, energy audits to determine how to use less electricity and programs to assist in purchasing and installing renewable energy systems for homes and businesses which can generate electricity through wind and solar energy. In some cases, customers who install such systems may generate so much electricity that the meter will “run backward”. SCE has an energy “buy back” program which will credit those customers with the extra electricity that their systems generated.

The County Planning and Development Department initiated a free “Innovative Building Review Program” (IBRP) to assist applicants of development projects. A panel made up of contractors, architects, engineers and planners provides ideas on how to make buildings more energy efficient. County Planning and Development encourages participation in the program through certain incentives including expedited project review and a 50% reduction in the plan check fee. The better the energy saving design is, the more the project receives an increased number of incentives. The goal is a project which exceeds California Energy Efficiency Standards (Title 24) and may also use recycled building materials, drought tolerant landscaping and alternative energy systems.

The City of Goleta does not have a program similar to the IBRP at this time. Zoning regulations which guide the design and placement of solar and wind systems are enforced through project review by planners and the City’s Design

Review Board. Conditions of approval may require drought tolerant landscaping and recycling bins for construction materials.

NATURAL GAS

Natural gas service is provided by The Gas Company with headquarters in Los Angeles, a division of Sempra Energy. The Company is the nation's largest natural gas distribution utility serving 19 million people through 5.4 million gas meters in more than 530 communities. The service area encompasses 23,000 square miles throughout most of Central and Southern California.

The company operates the largest natural gas pipeline system in the United State with approximately 48,000 miles of transmission and distribution pipelines and 44,000 miles of service pipelines. Through these lines the company delivers almost 1 trillion cubic feet of natural gas annually, about 5% of all delivered in the United States.

The Company does not produce natural gas, but buys from producers throughout the United States at the market commodity rate which is recalculated each month. Price swings in the market are offset through the arrangement of long term contracts which reserve space on interstate pipelines and through the use of four vast underground storage fields which the company owns. Total storage capacity is 105 billion cubic feet of gas, enough to meet the needs of "Core customers" for about 16.5 weeks during the non-winter months or 11 weeks during the winter.

"Core customers" are residential and small commercial and industrial accounts. These customers use about 30-40% of the natural gas which flows through the Company's pipelines and account for 89% of the company's operating profits. The remaining 60-70% of natural gas is purchased and owned by gas marketers and very large users, such as power plants and large manufacturing facilities.

Southern California Gas is an investor-owned utility and is regulated by the California Public Utilities Commission. The Gas Company produces revenue through their delivery rates which are based on costs related to maintaining their pipeline system, safety and inspection programs, customer service, metering and billing. The commodity rates charged are the same as what the company pays for the gas – there is no mark-up in the price.

Charges for natural gas are measured in therms and BTUs or British Thermal Units. A BTU is the quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. A therm of natural gas is equivalent to 100,000 BTUs.

Effective March 1, 2004 there was a price decrease compared to the year previously. The procurement component decreased about 25% primarily due to

an 11% decrease in commodity prices. Combined with the transportation rate, core residential and C&I sales customers will see about a 4% decrease from February '04 rates.

Locally, the Gas Company owns property in the Goleta Valley between More Mesa, Hwy 217 and Goleta Beach which contains a gas storage facility. Four high pressure lines from the underground storage unit are used to bring gas in for storage and to transport it out for customer use. Three lines go south to Ventura/LA and one goes north across airport property and then along Hollister and Calle Real towards Gaviota.

The transmission lines are rated for up to 1,000 pounds per square inch (psi). These lines normally operate between 500 and 1,000 psi. Distribution lines are usually operated at 35 to 45 psi. The Venoco Oil and Gas Processing plant also pipes gas from their facility directly into the Southern California Gas Company pipeline which runs along Highway 101, passing through odorant and metering stations prior to reaching the main sales gas pipeline.

The Gas Company recently discovered a significant untapped source of natural gas within its Goleta storage facility property. The Company is now seeking permission to drill a well to produce this gas. Discussions are active between the Gas Company, the County Energy Division and the California Public Utilities Commission regarding the required process and permits for this project.

Television Cable Services

Cox Communications provides both cable television and internet services to the South Coast as part of its service area which provides cable TV service to 6.5 million customers including 1.4 million Internet access subscribers. Cox Communications is the sole provider of cable television service in Santa Barbara County. In the Goleta area, some individual homeowners also have their own satellite receivers or rooftop antennas for television reception independent of the cable provider. Rates vary depending upon the level of service desired.

Telephone

Verizon provides the local “land line” telephone service, although long distance services may also be obtained from a number of other providers, as well. In addition, a number of companies provide wireless or “cell” phone services.

Planning Implications of Private Utilities Services

The Goleta Community Plan EIR stated there were no future natural gas supply problems and that local distribution lines could be expanded for future development without disrupting existing service. The EIR also indicated that no significant cumulative impacts were anticipated – even including future

development at UCSB and the Airport. Those statements have proven accurate, as there have been no supply or distribution problems associated with natural gas delivery in the Goleta area since the Plan was adopted. The Gas Company still does not anticipate any problems with supplying natural gas to any future development projects in this area.

The Community Plan also stated that there were no problems anticipated in the provision of adequate electricity to the area. Local facilities could be designed and upgraded to provide adequate capacity for future growth. In the past ten years local facilities have proven more than adequate to expand to meet the needs of a larger population. Problems with the supply of electricity on the statewide level have required the planning for possible rolling blackouts if electricity reserves fall below certain levels during periods of peak usage.

The cost of all utilities continues to rise each year. These charges consume a larger percentage of a family's monthly expenses, making it more critical that homes and businesses conserve energy as much as possible. The City of Goleta should strongly encourage such conservation whenever possible in General Plan policies and development standards. The City should also consider encouraging the use of renewable energy sources, particular solar systems, through the use of various incentive programs.

There are a number of locational considerations associated with these facilities. Since these utility services are generally provided through service lines within City right of ways, management of City right of ways will need to anticipate the maintenance and development of utility lines. As the use of cell phones increase there will be a need to anticipate requests for additional cell phone towers within and around the City. In the past satellite receivers were a significant design issue in residential areas because of the design and appearance of these receivers. Since such satellite receivers have become much smaller in recent years this has become a much less significant issue.

The potential development and expansion of the nearby natural gas resources at the storage facility near Goleta Beach will involve potential hazard considerations near the site and along the transmission lines serving the resource.

SOLID WASTE



Tajiguas Landfill, Gaviota Coast, Geoslov LLC Tajiguas website

Solid waste services are currently provided by the private and public sectors. Collection services are provided by the private sector, while disposal services are provided by Santa Barbara County.

History

Until about twenty years ago, trash haulers provided pick up service once or twice a week for all types of commingled waste material which was then taken to a landfill site and buried. The only materials which had to be disposed of separately were any hazardous materials that the landfill would not accept.

As the nation's population grew, landfills reached capacity more quickly and it became increasingly difficult to find locations for new ones. By the 1980s there was a growing sentiment to "reduce, reuse and recycle." In 1989 the California legislature passed the landmark "California Integrated Waste Management Act." The law required all jurisdictions in the state to divert 25% of all waste by 1995, based on amounts generated in 1990. By the year 2000, 50% of all waste would have to be diverted from landfills. Jurisdictions failing to meet these requirements could be fined up to \$10,000 per day.

To assist in reaching these goals, the state required that by July 1991 each city and county produce a Source Reduction and Recycling Element (SRRE). The diversions were to be achieved by the following techniques (in decreasing order of priority): source reduction, recycling and composting, and transformation. Santa Barbara County passed an SRRE in 1990 and amended the County's Environmental Thresholds and Guidelines Manual in the same year.

The County implemented this mandate by instituting several programs. Curbside recycling became available in 1990. Residents sorted recyclables by type into different containers for separate pick up. Other diversion programs were initiated including backyard composting, voluntary commercial sector recycling and aggressive educational outreach programs. Private companies began to divert construction and demolition debris. The success of these programs allowed the County to exceed the state requirements and attain a 28% diversion rate by 1995.

Determining that up to 35% of the residential wastestream was made up of organic material such as kitchen and yard waste, the County augmented waste collection programs to include the collection of separated yard waste by 1997. This allowed the three different types of waste to be handled separately. Organic materials could be delivered to a facility to be ground into mulch and used for weed suppression and soil and water conservation projects. Recyclables could be delivered to a processing facility to be sorted, baled and sold to recycling companies for reprocessing and reuse. The remaining trash would then be the only waste to be buried in the landfill. Due to the success of these programs the County was also able to exceed the 50% requirement by 2000.

Currently, between 55% and 62% of the County's waste is recycled. This exceeds the statewide diversion rate of 42%. Additional County programs may increase the diversion rate even further. Recent programs include a comprehensive construction and demolition recycling program and a required recycling program for commercial and industrial businesses and multi-family housing.

Current Collection Services and Rates

The City of Goleta is served by two companies which provide waste disposal and recycling services to the area. Marborg Industries, a local company, provides service to Goleta south of Hollister Avenue. Browning Ferris Industries (BFI), a large national company, provides service to areas north of Hollister.

Marborg Industries minimum service charge is \$23.34 per month for weekly pickup of two containers plus a recyclables container. Customers provide their own containers except for the recyclables, which Marborg provides. There are extra charges for pickup of additional containers.

BFI's minimum service charge is \$23.33 per month for pick up of two 32 gallon trash containers plus recyclables container. They also have higher rates for additional containers. BFI provides customers with a 32-gallon can for greenwaste only. BFI collects trash and yard waste separately on a weekly basis. Cans must be placed within 100 feet from the curb or a distance charge will be assessed. Curbside recycling is provided every other Week.

For both companies, recyclable materials are commingled in one container and may include aluminum foil and pie plates, aluminum, steel, tin and bimetal cans, glass containers, bottles and jars, mixed paper of all types and colors including "junk mail" and magazines, and #1 PETE and #2 HDPE plastic containers.

The greenwaste "organics" containers can contain grass clippings, leaves, small branches and prunings, palm fronds, ivy, ice plant, yucca and cactus plants, but no trash, plastic bags, dirt, rocks, manures and food waste.

The South Coast Transfer Station and the Tajiguas Landfill



Tajiguas Landfill, Gaviota Coast, Geoslov LLC Tajiguas website

All non-hazardous solid waste generated in Goleta and the surrounding south coast area is handled at two local facilities – the Recycling and Transfer Station and the Tajiguas Landfill.² Both sites are owned and operated by the Santa Barbara County Public Works Department. The money to operate the facilities is self-generated through the collection of fees.

The South Coast Recycling and Transfer Station is located near the County Sheriff's department at 4430 Calle Real within the unincorporated area between Santa Barbara and Goleta. The facility opened in 1967 and acts as a central collection center. It can process up to 550 tons of waste per day which is brought in by commercial "roll-off" containers, small, non-franchised haulers and private residents. The Transfer station also houses a recycling center that processes about 200 tons per day of recyclable materials including electrical appliances and electronic items, automobile batteries and tires and construction, demolition, wood and yard waste. Fees vary depending upon the type of load. The facility is open every day, except Sundays and major holidays.

The trash which remains after the sorting out of recyclable and organic materials at the Transfer Station is taken to the Tajiguas Landfill. Franchised haulers take their loads directly to the Landfill. Tajiguas is located at 14470 Calle Real on the Gaviota Coast and processes about 650 tons of trash per day. It is also open every day except Sundays and major holidays. Tajiguas is one of five landfills currently operating in the County and handles approximately half of the total amount of solid waste coming into all of the facilities.³

Tajiguas, located in a fairly broad seaside canyon accessed at Highway 101, has been in continual use since it opened in 1967. It is permitted as a Class III municipal solid waste landfill and can take up to 1,500 tons per day of municipal solid waste. Fill operations take place about one quarter mile inland in an area not visible from the highway. Although the site itself is several hundred acres, extending north to the Los Padres National Forest boundary, the original permit restricted the landfill operations to an 80 acre area.

The landfill's initial planned lifespan was for about one hundred years. However, by the late 1990s the County estimated that Tajiguas would reach its permitted capacity by the year 2005 if it were not expanded or an additional site for a new landfill located. Costs for the Tajiguas expansion project were estimated at about \$30 million. The costs to eventually close Tajiguas and maintain it for thirty years as mandated by State law was estimated at \$13 million in the year 2000.

² Hazardous waste such as paints, solvents and motor oil must be taken to designated collection centers.

³ The County has no transformation facility and does not send any waste out of the county to such a facility elsewhere. Correspondingly, no non-hazardous waste was exported out of the county nor any waste from elsewhere imported to any County landfill. Hazardous waste is exported to a special landfill near Kettleman City in central California.

Strong citizen opposition was expressed to both expanding Tajiguas and to siting a new landfill. The Board of Supervisors ultimately decided to expand Tajiguas to add approximately fifteen years of use at current disposal rates, which also satisfied the minimum 15-year County disposal capacity requirements of the California Integrated Waste Management Act.

Although the decision was controversial with many members of the public, the Board reasoned that the fifteen year time frame could be used to research the full range of possible long-term solutions that would be both economically and environmentally viable.

Multi-Jurisdictional Solid Waste Task Group

In January of 2002, a Multi-Jurisdictional Solid Waste Task Group was formed to research and develop a comprehensive universal and hazardous waste management system for the County of Santa Barbara. The nineteen members participating represented all of the various jurisdictions in the county. City of Goleta representatives included Councilmembers Jonny Wallis and Jean Blois and Community Services Director, Steve Wagner.

To direct their efforts, the Task Group agreed on a number of Guiding Principles which were: Local Control, Regional Services, Waste Diversion from landfills, Economic Efficiencies, Reliability and Flexibility. The group then subdivided into smaller committees to study various aspects of both short and long term solid waste disposal options and technologies, meeting monthly for almost two years.

In February of 2004, the Task Group voted to approve their work summary and countywide Long Term Solid Waste Management Plan. The Plan divided the county into three different “wastesheds” – Santa Maria, Lompoc and Tajiguas. The new programs and facilities proposed for the Tajiguas Landfill Wasteshed are:

- Expansion of Existing Commercial Recycling Programs
- Increased Collection of Electronic Waste (Statewide Mandate)
- Development of a New Household Hazardous Waste Facility
- Consideration of Construction/Demolition Waste Recycling Ordinances
- Development of a New Clean Material Recovery Facility on the South Coast
- Development of a Food Waste Collection and Processing Program
- Development of a New Waste Conversion Facility
- Development of a Dirty Material Recovery Facility and Corresponding Composting Facility Should the Development of a Waste Conversion Facility Become Infeasible

The costs for existing waste diversion programs are not expected to change significantly. Currently, the cost of landfilling materials not captured by the existing diversion programs is approximately \$27 per ton or \$7,300,000 per year. The total net costs for new diversion programs and facilities are estimated to be between \$27 and \$42 per ton or \$7,300,000 and \$11,500,000 per year. The major variable in cost is due to the handling of electronic and household hazardous wastes.

None of the programs negate the need for a landfill, but they do extend the life of the existing site substantially. Currently, the diversion rate for Tajiguas is about 55%. If the proposed system is implemented, diversion rates could increase to 85%. The permitted life of the landfill is now 18 years, but could be extended from 41 to 53 years depending on the waste conversion technology chosen.

Generation Rates and Thresholds of Significance

The generation rates and thresholds of significance for solid waste used by the County of Santa Barbara were also adopted for interim use by the City of Goleta. A project is considered to result in significant impacts to landfill capacity if it would generate 196 tons per year of solid waste after source reduction and recycling. A project is assumed to have a cumulative adverse impact if it generates over 40 tons per year of solid waste.

The annual per capita residential waste generation rate is 0.95 tons per person which includes both interior and exterior waste products. Household size is assumed to be 3.01 persons per household for single family units and 2.65 persons per household for multi-family units.

During the year 2003, the City of Goleta averages each month about 2,200 tons - or 12% - of the solid waste which went to Tajiguas.

Planning Implications of Solid Waste Services

Although California's diversion rates have increased from 10% in 1989 to more than 50% currently, annual per capita generation rates for solid waste are still increasing. Some of this increase is due to larger rates of personal consumption and some of it is due to increases in construction debris. The state's growth rate also causes a corresponding overall increase in the waste stream from new residential and commercial development. This increase demands additional landfills and collection services, which in turn require additional vehicle miles traveled, greater fuel consumption and road impacts.

Locally, the growth of the South Coast area, including large projects under review by UCSB, the City and County of Santa Barbara and the City of Goleta, will continue to heavily impact the Tajiguas Landfill, shortening its projected lifespan unless new facilities and technologies to increase diversion rates are

implemented. Although the County is still considering options for siting a new landfill, opposition may extend the process and make it more difficult, if not ultimately infeasible. As part of the City's first general plan, Goleta will need to consider strong resource reduction and recycling programs including conditions of approval in project permitting. The City of Goleta will need to continue to participate in regional discussions regarding future options for solid waste disposal to insure that the City's needs are considered and that City obligations under various plans are proportionate to those of other participating jurisdictions.