CITY COUNCIL AGENDA STATEMENT

ITEM NO.: 16

MEETING DATE: 05/29/01

ITEM TITLE:	**REPORT ON THE CITY'S STRATEGIC ENERGY PLAN** **A. RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ADOPTING THE CITY OF CHULA VISTA ENERGY STRATEGY AND ACTION PLAN** **B. URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ESTABLISHING THE CITY OF CHULA VISTA AS A MUNICIPAL UTILITY** **4/5THS VOTE REQUIRED** **C. ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ESTABLISHING THE CITY OF CHULA VISTA AS A MUNICIPAL UTILITY**
SUBMITTED BY:	**COMMUNITY DEVELOPMENT DIRECTOR** LH for CS
REVIEWED BY:	**CITY MANAGER**

4/5THS VOTE: YES [X] **NO** [ ]

BACKGROUND

At the April 24 City Council meeting, (following an April 17 City Council Workshop), staff presented a report summarizing the findings and recommendations for a City Energy Strategy and Action Plan ("Strategy"). The findings and recommendations were based upon staff analysis of an energy management options report prepared by the City's consultant, MRW and Associates. Council accepted the report and directed staff to return with the implementing resolution adopting the Strategy.

One major staff recommendation which emerged as part of the overall energy strategy, was for the City of Chula Vista to take the initial steps necessary to more specifically assess the costs and benefits of forming and operating as a municipal utility. The first initial step in this process is to present for Council consideration an ordinance establishing the City as a municipal utility.

This report serves to present the Strategy and municipal utility ordinance for Council approval.

RECOMMENDATION

Adopt the Urgency Ordinance declaring the City of Chula Vista a municipal utility; place the regular form of the ordinance on first reading; and adopt the resolution approving the City of Chula Vista Energy Strategy and Action Plan.

BOARDS/COMMISSIONS RECOMMENDATION

Not applicable.

DISCUSSION

As indicated, the City Council previously accepted the report on energy management options and staff's recommendations on a broad-based Strategy. The eight (8) major components of the strategy are outlined below along with the assigned staff that will be responsible for managing and supporting each component within the specified timeframes. The Strategy document that will be used for distribution is attached.

Energy Strategy

The overall Energy Strategy has been summarized into the eight major components provided below.

1. **Monitor the energy market and legal restrictions and; be prepared to enter into an Electrical Services Contract with an Energy Services Provider (ESP) or power generator as allowed by law.**
   - Subject to removal of existing legal restrictions, seek Council authorization to negotiate contract within the following parameters:
     - Pledge up to City's entire load (14MW)
     - Term: Shortest time possible, but not to exceed 3 years
     - Price: Establish a maximum fixed price beneath which staff has the authority to negotiate
     - Give authority to explore different pricing mechanisms and energy derivatives

Staffing:	**Lead:**	City Manager's Office - Administration
	Support:	Administration – Special Operations Administration – Legislative
Timeframe:		Ongoing
Update:		None

2. Pursue Distributed Generation and "district" generation[1] opportunities for specific facilities and technologies.

- Solicit site specific proposals for:
  a) City Facilities (New Corporation Yard; Civic Center/Police Facility; Library and Recreation facilities)
  b) Economic Development Opportunities (Goodrich Co.; Maxwell Road site; LandBank site)
- Pursue Solar Energy and Distribution Generation Grant Program offered through California Energy Commission (CEC) and other sources
- Monitor CPUC proceedings and encourage decisions that facilitate the program

Staffing:	**(City facilities)**	**Lead:**	Administration – Special Operations
		Support:	Public Works – Operations Administration – Special Operations Administration – Legislative
	(Econ. Dev.)	**Lead:**	Community Development – Administration
		Support:	Administration – Special Operations

Timeframe: Six (6) months for City facilities
Ongoing for Economic Development opportunities due to general real estate development uncertainties.

Update: Staff has met with a number of alternative energy and fossil fuel generation agencies to scope the feasibility of energy generation at City facilities. Staff has used CA Integrated Waste Management Funds and City Household Hazardous Waste (HHW) funds to install one small residential sized solar panel at the new HHW facility located at the Corp. Yard.

3. Partner with a third-party to build and operate power generation facilities.

- Monitor discussions and negotiations between the Port District and their operating contractor (Duke Energy) and continue positive and proactive negotiations with them regarding terms for the redevelopment of the South Bay Plant
  - Initial areas for investigation and analysis include but may not necessarily be limited to:
    - Project description and scoping
    - Site planning; issue definition

[1] "Distributed Generation" refers to small power generation units (generally up to 30 MW) located at or near load centers that could include multiple end users through "over the fence" transactions. Technologies include simple cycle gas turbines, fuel cells and photovoltaics. "District" Generation refers to the efficient cogeneration and distribution of hot water, steam or cold water between consumers as an alternative to electricity or gas fired hot water or air conditioning services to a number of businesses.

- Shared risks and benefits

Staffing:	**Lead:**	City Manager's Office - Administration
	Support:	Community Development – Administration Administration – Special Operations
Timeframe:		Ongoing
Update		Staff will continue to meet with the Port District and Duke on an as needed basis and will keep Council updated as significant developments occur.

4. Develop an emissions offsets program based on mobile sources

- Work with air quality officials to realize the benefits of any City investment in alternative fuel vehicles
- Work with future generators and the APCD to ensure any mitigation funds generated are invested locally
- Develop portfolio of potential offset projects to make available to new generation sources requiring offsets

Staffing:	**Lead:**	Administration – Special Operations
	Support:	None
Timeframe:		Six (6) months
Update:		Staff is now inserting language in all of its comments regarding South Bay facilities that mitigation funds be spent locally. Staff will develop a list of potential projects and priorities over the next fiscal year while making preliminary contacts with the APCD and institutions that may need offset mitigation projects.

5. Take initial steps to more specifically assess the costs and benefits of forming and operating as a Municipal Utility to own/operate all or portions of the local distribution system

- Present ordinance to declare City a Municipal Utility
- Commence negotiations with SDG&E to identify mutually beneficial partnerships
- After formal Council approval of a consultant contract, conduct preliminary appraisal and pre-feasibility consultant services necessary to evaluate rough facility acquisition costs and other related studies that will provide a business model to test the economics of City ownership and operation (estimated $50,000). The pre-feasibility analysis is the first major step necessary to begin the formal process of establishing an integrated municipal utility.
- Coordinate any effort on this strategy with other jurisdictions

Staffing:	**Lead:**	City Manager's Office – Administration
	Support:	Community Development – Administration Administration – Special Operations
Timeframe:		Consultant selection – three (3) months Pre-feasibility analysis completed – six (6) months
Update:		Ordinance proposed. RFQ should be distributed by July 1, 2001.

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6. Become a municipal "aggregator"[2] and acquire electricity at negotiated rates for City facilities and participating residents/business customers

- Support legislation that preserves consumer choices and authorizes "opt out" aggregation programs and be prepared to further analyze the potential risk and benefits of pursuing such a program

Staffing:	**Lead:**	City Manager's Office – Administration
	Support:	Administration – Special Operations Administration – Legislative
Timeframe:		Ongoing
Update:		Staff and the City's legislative advocate have continued to monitor and comment on legislation that supports or erodes the City's ability to participate in the market at its discretion. Staff has also worked with the California League of Cities which has taken a lead on some of this legislation as it progresses.

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7. Continue / expand energy conservation projects for City facilities and promote energy efficient and renewable energy programs for businesses and residents

Staff has prepared a separate Information Memo for the May 29, 2001 agenda packet updating the Council on actions staff have taken and are planning to take to implement the broad-based recommendations provided below.

City Facilities

- Provide additional energy design, management and funding support to the City Facilities Project Team.

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[2] Municipal aggregation allows a municipality to procure electric power on behalf of their residents and businesses under the presumption that consolidating or pooling numerous individual purchasers into a single purchasing "load" will command more favorable rates on the energy commodity market.

- Coordinate grant and other funding sources to implement energy savings and alternative energy for City facilites.
- Establish a process that encourages the City's design and build partners to present energy conservation and alternative energy options that exceed title 24 standards, and where appropriate, install comparable energy conservation measures in existing City facilities.
- Coordinate efforts with energy service providers, the San Diego Regional Energy Office, the California Energy Commission and other agencies to take advantage of public facility programs and obtain energy conservation certifications for new and remodeled facilities.
- Establish a modified work schedule for City employees, such as a 9/80 schedule. **(Not recommended at this time.)**

  NOTE: As indicated in the memo, staff is not requesting that Council take action to implement a 9/80 work schedule as part of the effort to reduce energy consumption during peak summer demand. Staff has concluded that the schedule needed to generate the energy benefits needed to meet the ten percent (10%) conservation goal would be too disruptive to public services. Additionally, there is not enough time to provide families with sufficient notice to adjust to the changes that would need to occur to the planning and promotion that has gone into summer programs for seniors, children and other potentially dependent members of the community that rely on those public services. Staff believes strongly that there is merit in the 9/80 plan from conservation and other important perspectives but more planning is needed to fully take advantage of those benefits and minimize the potential impacts to service. Staff will work with all City departments and Council to develop alternative energy conservation measures to replace the energy savings that are needed to meet the State recommended goals that would have accrued under 9/80 plan.

Residents and Businesses

- Distribute free energy saving retrofits for existing residences.
- Develop matching fund programs to assist local businesses with energy retrofits.
- Analyze available options to provide incentives to businesses that utilize renewable sources of energy (i.e. solar panels, wind power, distributive, etc.)
  - City matching funds
  - Grants or low interest loans (Sec. 108, CDBG, CEC Solar Energy Grant Program)
  - Rebates (in partnership with SDG&E)
  - Free publicity
- Identify and support state and federal grant opportunities that encourage businesses to further develop or bring-to-market new energy-related technologies (i.e. wave technology, fuel cell, etc.)
- Provide public education, information and assistance to residents and businesses so they may take advantage of rebate, loan and grant programs that assist energy conservation. This could include developing an Energy Conservation Resource Guide.

- Include energy resource information on the City's website with links to relevant energy assistance websites (i.e. U.S. Dept. of Energy, SDG&E Small Business Services, San Diego Regional Energy Office, etc.)
- Conduct business outreach workshops inviting guest speakers from various consulting groups and service organizations/agencies to provide information on energy conservation, renewable/sustainable sources of energy, and government programs that provide funding/rebates to support these efforts.
- Partner with other service/community organizations to broadcast energy saving resources and tips to businesses via newsletters, information pamphlets and websites and coordinate efforts with the Planning Department.
- Continue to utilize MRW to assist companies with contract negotiations as well as with general energy-related inquiries.

Staffing:	**Lead:**	Administration – Special Operations
	Support:	Community Development – Economic Development
Timeframe:		Ongoing
Update:		See Council Information Memo – May 29, 2001

8. DEVELOP AND IMPLEMENT A LEGISLATIVE STRATEGY THAT FACILITATES THE CITY'S OVERALL ENERGY PLAN

Add a new category to the City's existing Legislative Program that embodies the City's goals in such key areas as environmental protection, electrical supply costs, transmission reliability, natural gas supply and availability, photovoltaic and other alternative power sources and power plant siting. This category would include the following:

Support measures that:

1. Assist the City and its energy consumers improve supply/demand conditions and enhance conservation measures.
2. Preserve local options to control and fund the supply and distribution of energy (including the formation of a municipal utility district) or that fund conservation programs.
3. Enhance the City's ability to enter into distributed generation agreements without having to pay stranded transmission or distribution charges.
4. Impose "fair and reasonable" wholesale price caps.
5. Repeal the provision in AB1X that suspends customer choice, and pass a favorable bill for customer choice (SB 27X or a similar one).
6. Make municipal aggregation programs available on an "opt-out" basis.
7. Allow public agencies (not just municipal utilities) such as the City to participate in state power supply programs.
8. Encourage use of real time metering.

9. Increase incentives for photovoltaic and other alternative energy sources.

Oppose measures that:

1. Impinge on or restrict the City's ability to exercise land use review/control with respect to the generation or transmission of power.
2. Erode the City's ability to acquire/generate power from alternative sources, operate as a municipal utility, or enter into aggregation and/or distributed generation arrangements.

Staffing:	**Lead:**	Administration – Legislative Administration – Special Operations
	Support:	Community Development – Economic Development
Timeframe:		Ongoing
Update:		Staff will continue to monitor the special legislative session(s) and provide support or opposition to those proposals that fall within the parameter of these legislative guidelines. The first extraordinary session was brought to a close on May 15 to allow non-urgency bills, such as the bond sale, to go into effect as soon as possible. A second extra-ordinary session has been convened and those bills that were introduced in the first extra-ordinary session will be re-submitted for consideration by the legislature. All bills from the initial session not signed by the Governor are deemed to be dead and must be resubmitted.

Municipal Utility Ordinance

One major staff recommendation is for the City to take the initial steps necessary to assess the cost and benefits of forming and operating as a municipal utility. The first step is for the City to adopt an ordinance establishing the City as a municipal utility. The proposed ordinance is presented for Council's approval.

The City's authority to form a municipal utility derives from Article XI, Section 9 of the California Constitution. This Section provides that "a municipal corporation may establish purchase and operate public works to furnish its inhabitants with light, water, power, heat, transportation, or means of communication." This authority is carried out at the local level through Section 200 of the City Charter. Section 200 generally provides for the City's exercise of power and control over all "municipal affairs".

City Council approval of the proposed ordinance would have the effect of establishing a municipal utility for the City of Chula Vista. It would also have the effect of setting up the framework for future City Council actions that could implement some or all of the utility's authority to actually deliver utility services. The types of utility services authorized include water, transportation, telecommunications, electricity, natural gas, and related services. Potential service areas include areas within and outside the City's boundaries. Partnerships with other public or

private utilities are also contemplated. At this time, however, the ordinance does not pre-commit the City to any particular utility service or service area. The ultimate structure of the municipal utility entity, the kinds of facilities it controls, and the kinds of utility services it delivers would all need to be the subject of future City Council action. In the meantime, the City Council will oversee and direct the City's municipal utility activities. Per Council direction, staff's initial focus will be on assessing the feasibility of becoming involved in the generation and distribution of electricity, natural gas, and related energy products. As the City Council may direct, staff will also be pursuing other forms of utility services.

The City does have some limited experience with municipal utility formation. Back in 1982 the City established itself as "Municipal Solar Utility" in order to facilitate the delivery of federal and state tax credits to investors in solar energy facilities. This utility has been dormant for some time and does not appear to have been used to great effect.

The City's establishment of itself as a municipal utility is categorically exempt from CEQA pursuant to CEQA Guidelines Section 15320.

FISCAL IMPACT

Adoption of the proposed resolution and ordinance does not have an immediate and direct fiscal impact other than the significant staff time necessary to implement the proposed actions as identified in both the staff report and Strategy. After receipt of proposals for the consultant services necessary to conduct preliminary appraisal and pre-feasibility studies for acquisition of necessary electrical facilities to consider becoming a municipal utility, staff will return to Council requesting an appropriation and approval of the necessary agreements and contracts.

ATTACHMENTS

A – Energy Strategy and Action Plan
B – Executive Summary
C – Information Memo dated 5/24/01 regarding Update on the Implementation of Energy Conservation Measures

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Energy Strategy and Action Plan

CITY OF
CHULA VISTA

276 Fourth Avenue
Chula Vista, CA 91910

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Background and Overview

In light of the State's energy crisis, the City of Chula Vista secured the services of MRW and Associates to provide an assessment of energy management options which may allow the City to gain a measure of control over the City's demand and supply of energy as well as the financial costs of the City's energy use over time. MRW provided broad general options/recommendations with staff recommending a variety of action items to implement or advance them to the extent possible or feasible. The MRW report along with the staff analysis, formed the basis for this adopted City of Chula Vista Energy Strategy and Action Plan ("Energy Strategy"). Included as Exhibit A, is the staff prepared Executive Summary of the MRW report. Included as Exhibit B, is the final Assessment of Chula Vista's Energy Management Options report prepared by MRW.

The Energy Strategy consists of eight (8) broad-based efforts that collectively seek to take proactive steps to advance the interests of the City of Chula Vista and its residents and businesses in the areas of energy conservation, supply, and procurement. The broad-based efforts include individual short-term action plans and the assigned staff responsible for implementing them.

Staff's recommendations attempt to make progress, to the extent the City can, on both the demand and supply sides of the energy market. Certainly the City has the ability to immediately affect the demand side to a much greater degree than the supply side; particularly in the short run. The recommendations reflect the City's commitment to expand our strong record in energy conservation and the promotion and use of renewable energy sources.

Relative to the supply side, it is important to note that there are a significant number of new plants, both major power plants and smaller peaker plants, in various stages of development and approval that will make a tremendous difference on supply statewide over the next several years. The California Energy Commission (CEC) is currently reporting that it has in its application process, 13 projects expected to deliver a net capacity amount of 6,187 MW of new power supply. This includes the 510 MW Otay Mesa plant. Additionally, CEC reports that there are currently 29 peaker plant applications statewide being processed under the Governor's emergency siting authority. These peakers are expected to deliver a total of 3,219 MW of peak load generation capacity including the Otay Mesa Larkspur project (90 MW) and the proposed second peaker on Main Street in Chula Vista (57 MW). However, these plants will be primarily utilizing natural gas and therefore further taxing the limited supply of natural gas to the State and San Diego region (Section 2.6 of report). Long-term supply issues need to address natural gas supply, and in the process, could pave the way for greater market potential for renewable energy sources.

It is important to note that the Energy Strategy does not contain an easy or quick solution to the energy crisis for Chula Vista. If such a solution exists, it lies in the hands of state and federal authorities, not the City. The Energy Strategy does include however, the best-known options at this time to respond to the unique opportunities and needs for Chula Vista. It is hoped that through these efforts, as well as future efforts that may emerge, the City can prevent energy from being a limiting factor in the economic future and sustainable growth of our community.

1. Monitor the energy market and legal restrictions and; be prepared to enter into an Electrical Services Contract with an Energy Services Provider (ESP) or power generator as allowed by law.

Rationale

- AB1X currently prohibits direct energy purchases for as long as the state has outstanding long-term contracts. This law needs clarification, and may be overturned, but for now, has squelched this market opportunity.
- There is some risk that if market conditions improve in the next 1-3 years, a long-term commitment to an ESP will burden the City with higher cost electricity.

- Subject to removal of existing legal restrictions, seek Council authorization to negotiate contract within the following parameters:
  - Pledge up to City's entire load (14MW)
  - Term: Shortest time possible, but not to exceed 3 years
  - Price: Establish a maximum fixed price beneath which staff has the authority to negotiate
  - Give authority to explore different pricing mechanisms and energy derivatives

Staffing:	**Lead:**	City Manager's Office - Administration
	Support:	Administration – Special Operations Administration – Legislative
Timeframe:		Ongoing

2. Pursue Distributed Generation and "district" generation[1] opportunities for specific facilities and technologies.

Rationale

- Distributed generation can be used as a source of energy at peak periods when power is most expensive.
- Some types of distributed generation offer significant environmental benefits to the local area.
- Because distributed generation can be accomplished with a low capital investment (relative to large-scale power plants), the financial risk to the City of this option is more manageable than pursuing the development of a City-financed power plant.
- Current and proposed funding and incentive programs that are available for distributed generation projects enhance the attractiveness of this option vis-à-vis other options. In particular, the Legislature's Special Session could lead to new funding for distributed generation and potentially an easing of regulatory and market barriers to distributed generation.
- Distributed generation can power just City facilities, or, depending upon capacity and location, could be utilized with adjacent industrial sites in an "over-the-fence" transaction. The City also should identify potential landfill gas resources and explore development of those resources, as has been done in the County at the Miramar, Sycamore and Otay landfills that use landfill methane gas to manufacture energy. In a hypothetical application of distributed generation at the Chula Vista Police Department, a best-case scenario for distributed generation provides power to the Police Department at about 7-8 cents per kWh at historical natural gas prices and 11-13 cents per kWh at current elevated prices.

Note: In terms of downside risk, there is some risk the CPUC will rule in favor of the utilities' position on distribution stranded costs or other issues that could limit the financial attractiveness of distributed generation.

[1] "Distributed Generation" refers to small power generation units (generally up to 30 MW) located at or near load centers that could include multiple end users through "over the fence" transactions. Technologies include simple cycle gas turbines, fuel cells and photovoltaics. "District" generation refers to the efficient use of hot water, steam or cold water between entities to reduce consumption of electricity or gas.

- Solicit site specific proposals for:
    a) City Facilities (New Corporation Yard; Civic Center/Police Facility; Library and Recreation facilities)
    b) Economic Development Opportunities (Goodrich Co.; Maxwell Road site; LandBank site)
- Pursue Solar Energy and Distribution Generation Grant Program offered through California Energy Commission (CEC) and other sources
- Monitor CPUC proceedings and encourage decisions that facilitate the program

Staffing:	**(City facilities)**	**Lead:**	Administration – Special Operations
		Support:	Public Works – Operations Administration – Special Operations Administration – Legislative
	(Econ. Dev.)	**Lead:**	Community Development - Administration
		Support:	Administration – Special Operations

Timeframe: Six (6) months for City facilities
Ongoing for Economic Development opportunities due to general real estate development uncertainties.

3. Partner with a third-party to build and operate power generation facilities.

Rationale

- The City has an excellent opportunity to pursue this option with Duke Energy as part of the modernization of the South Bay plant.
- A partnership can be structured in numerous ways to share the risks and benefits of development and operation, and to leverage what each party brings to the table. For example, in consideration for facilitating the redevelopment of the South Bay plant, the City could obtain rights to receive a dedicated share of the plant's capacity, a share of plant revenues, and/or other public benefits such as Bayfront infrastructure, City facility energy projects, etc.
- Proposed legislation may expedite the licensing and permitting process for new power plants (primarily peaking plants) and for the repowering of existing power plants. Because this legislation will likely have sunset provisions (i.e., dates upon which they expire), the next one to three years may provide an ideal window to push through the development and siting of a power plant.
- Competing legislation may reduce the attractiveness of owning or sharing in the development of a power plant. For example, legislation, if passed, may require the owner of a power plant to sell its electricity only to in-state customers, limiting the potential market for the plant's output (legislation pushing for this "California First" policy has been softened in latest versions and now is framed in terms of price parity for California vis-à-vis out of state customers). A more draconian measure proposed in new legislation would make any owner of a power generation facility a public utility subject to the jurisdiction of the CPUC (although the legal validity of such legislation is uncertain).
- California's electricity market structure is still in a state of flux and there is considerable uncertainty as to how the market will operate in the future. This regulatory uncertainty is significant.

- Monitor discussions and negotiations between the Port District and their operating contractor (Duke Energy) and continue positive and proactive negotiations with them regarding terms for the redevelopment of the South Bay Plant
  - Initial areas for investigation and analysis include but may not necessarily be limited to:
    - Project description and scoping
    - Site planning; issue definition
    - Shared risks and benefits

Staffing:	**Lead:**	City Manager's Office - Administration
	Support:	Community Development – Administration Administration – Special Operations
Timeframe:		Ongoing

4. Develop an emissions offsets program based on mobile sources

Rationale

- Some City Conservation programs could be utilized to obtain emission offset credits from conversion of diesel/gasoline-powered vehicles to Natural Gas power. These could be sold or utilized to facilitate local alternative sources of power generation or fund the conversion of City fleet vehicles to cleaner air vehicles.

- Work with air quality officials to realize the benefits of any City investment in alternative fuel vehicles
- Work with future generators and the APCD to ensure any mitigation funds generated are invested locally
- Develop portfolio of potential offset projects to make available to new generation sources requiring offsets

Staffing:	**Lead:**	Administration – Special Operations
	Support:	None
Timeframe:		Six (6) months

5. Take initial steps to more specifically assess the costs and benefits of forming and operating as a Municipal Utility to own/operate all or portions of the local distribution system

Rationale

- A municipal utility has preferential access to cheap federal hydropower (but there is a "waiting list" for access to this power) and potentially other alternative power supply sources. It does not pay federal income taxes, and it has access to tax-exempt debt to finance capital projects.
- A municipal utility may be able to provide distribution services at a lower cost than the incumbent utility. Note, however, distribution costs are not the primary driver of current high power costs.
- By operating the distribution system the City would have the ability to structure rates in a manner that rewards conservation, encourages the use of off-peak power, and provides the City with control over how and where "public benefit," conservation funds are invested.
- With the structure of California's electricity market in flux, the outlook for a municipal utility is uncertain. It is unclear at this stage whether municipal utilities, particularly ones yet to be established, will be able to buy power from DWR. If they cannot, a City utility would have to procure power on the open market.
- Lassen Municipal Utilities District is the most recent example in California of a formation of a new municipal utility. LMUD now faces significant rate increases due to power procurement decisions that, with hindsight, were ill advised. SMUD also is planning to raise its electricity rates; however, this will be the first rate increase in ten years and rates will still be lower than PG&E's electricity rates before this recent round of PUC approved rate increases.

- Present ordinance to declare City a Municipal Utility
- Commence negotiations with SDG&E to identify mutually beneficial partnerships
- After formal Council approval of a consultant contract, conduct preliminary appraisal and pre-feasibility consultant services necessary to evaluate rough facility acquisition costs and other related studies that will provide a business model to test the economics of City ownership and operation (estimated $50,000). The pre-feasibility analysis is the first major step necessary to begin the formal process of establishing an integrated municipal utility.
- Coordinate any effort on this strategy with other jurisdictions

Staffing:	**Lead:**	City Manager's Office – Administration
	Support:	Community Development – Administration Administration – Special Operations
Timeframe:		Consultant selection – three (3) months Pre-feasibility analysis completed – six (6) months

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6. Become a municipal "aggregator"[2] and acquire electricity at negotiated rates for City facilities and participating residents/business customers

Rationale

- Municipal aggregation offers the potential for lower electricity costs and certain non-price benefits as minimal initial capital investment.
- The City of Palm Springs saved customers in its aggregation program $88,000 in only two years. (The program has since been suspended.)
- Current law requires procedures whereby local residents and businesses must affirmatively "opt in" to an aggregation plan. This dramatically reduces participation, and therefore the benefits of aggregation. However, there is legislation currently under discussion to change this provision and allow municipal aggregation programs to be done on an "opt-out" basis. If there is a change in the law, this option is more promising in terms of the potential benefits such a program could provide to Chula Vista's residents and businesses.
- Although the risk to the City under this option is less than the above two options, municipal aggregation is likely to yield very minimal benefits while burdening the City with administrative and contractual responsibilities.

- Support legislation that preserves consumer choices and authorizes "opt out" aggregation programs and be prepared to further analyze the potential risk and benefits of pursuing such a program

Staffing:	**Lead:**	City Manager's Office – Administration
	Support:	Administration – Special Operations Administration – Legislative
Timeframe:		Ongoing

[2] Municipal aggregation allows a municipality to procure electric power on behalf of their residents and businesses under the presumption that consolidating or pooling numerous individual purchasers into a single purchasing "load" will command more favorable rates on the energy commodity market.

7. Continue / expand energy conservation projects for City facilities and promote energy efficient and renewable energy programs for businesses and residents

Rationale

- The City has a good record of implementing conservation programs in City facilities. Current high prices of electricity and improved conservation technologies make the paybacks on energy efficiency facilities even more attractive. Therefore, capital investments in this area face minimal risk and should yield near-term paybacks and they have the added benefit of complementing the City's CO^2 reduction plan.
- Energy efficient facilities will reduce consumption and therefore reduce relative ongoing energy costs regardless of the outcome of market reforms and other state or federal actions.
- Legislative initiatives will make millions of dollars of funding available to lower the financial costs of energy conservation. Again, funding assistance reduces the City's risk of pursuing energy efficiency options. Over $500 million in funding was pledged under AB 1890 to reinvigorate the renewable energy industry in California. So far, over $162 million has been paid for the development of 500 MW of new renewable resources, while customers have received about $47 million in bill credits through October 2000 for buying power from renewable energy providers.
- Making information on the power crisis readily available and supporting energy conservation or other energy management efforts may be a critical factor in convincing businesses where energy costs are a large component of an operating budget to remain located in Chula Vista. It will also help businesses remain competitive over the short run. High energy consumption businesses include high-tech and bio-tech manufacturers, refrigerated food wholesale and retailers, precision machine shops and aerospace parts manufacturers.
- Increased state funding for promotion of conservation options is likely to become available. The City is in a good position to assist residents in availing themselves of these funds.
- Conservation represents the lowest risk to the investor, and the highest benefit to the region and the environment. Every kilowatt saved or produced by an alternative source is a reduction on demand pressures that should result in lower costs for others. Conservation and alternative energy are also most productive during peak hours when they are needed most.
- Conservation and alternative energy have the added benefit of being good for the environment and complement the City's commitment to climate protection.
- An array of proactive energy programs could be critical in assisting business attraction and retention activities.

City Facilities

- Provide additional energy design, management and funding support to the City Facilities Project Team.

- Coordinate grant and other funding sources to implement energy savings.
- Establish a process that encourages the City's design and build partners to present energy options that exceed title 24 standards, and where appropriate, install comparable energy conservation measures in existing City facilities.
- Coordinate efforts with energy service providers, the San Diego Regional Energy Office, the California Energy Commission and other agencies to take advantage of public facility programs and obtain energy conservation certifications for new and remodeled facilities.
- Establish a modified work schedule for City employees, such as a 9/80 schedule. **(Not recommended at this time.)**

  NOTE: As indicated in the memo, staff is not requesting that Council take action to implement a 9/80 work schedule as part of the effort to reduce energy consumption during peak summer demand. Staff has concluded that the schedule needed to generate the energy benefits needed to meet the ten percent (10%) conservation goal would be too disruptive to public services. Additionally, there is not enough time to allow families sufficient time to adjust to the changes that would need to occur to the planning and promotion that has gone into summer programs for seniors, children and other potentially dependent members of the community that rely on those public services. Staff believes strongly that there is merit in the 9/80 plan from conservation and other important perspectives but more planning is needed to fully take advantage of those benefits and minimize the potential impacts to service. Staff will work with all City departments and Council to develop alternative energy conservation measures to replace the energy savings that are needed to meet the State recommended goals that would have accrued under 9/80 plan.

Residents and Businesses

- Distribute free energy saving retrofits for existing residences.
- Develop matching fund programs to assist local businesses with energy retrofits.
- Analyze available options to provide incentives to businesses that utilize renewable sources of energy (i.e. solar panels, wind power, distributive, etc.)
  - City matching funds
  - Grants or low interest loans (Sec. 108, CDBG, CEC Solar Energy Grant Program)
  - Rebates (in partnership with SDG&E)
  - Free publicity
- Identify and support state and federal grant opportunities that encourage businesses to further develop or bring-to-market new energy-related technologies (i.e. wave technology, fuel cell, etc.)
- Provide public education, information and assistance to residents and businesses so they may take advantage of rebate, loan and grant programs that assist energy conservation. This could include developing an Energy Conservation Resource Guide.
- Include energy resource information on the City's website with links to relevant energy assistance websites (i.e. U.S. Dept. of Energy, SDG&E Small Business Services, San Diego Regional Energy Office, etc.)
- Conduct business outreach workshops inviting guest speakers from various consulting groups and service organizations/agencies to provide information on energy

conservation, renewable/sustainable sources of energy, and government programs that provide funding/rebates to support these efforts.

- Partner with other service/community organizations to broadcast energy saving resources and tips to businesses via newsletters, information pamphlets and websites and coordinate efforts with the Planning Department.
- Continue to utilize MRW to assist companies with contract negotiations as well as with general energy-related inquiries.

Staffing:	**Lead:**	Administration – Special Operations
	Support:	Community Development – Economic Development
Timeframe:		Ongoing

8. DEVELOP AND IMPLEMENT A LEGISLATIVE STRATEGY THAT FACILITATES THE CITY'S OVERALL ENERGY PLAN

Rationale

- Energy supply and cost issues will be dramatically affected by federal and state actions. Issues such as electricity supply costs, transmission reliability, natural gas supply/reliability, municipal utility operations, distributed energy, aggregation, environmental protection, power plant siting, direct energy procurement, and aggregation are all subjects of current Legislation. Favorable state laws could enhance and facilitate numerous City Energy Plan Options.

Add a new category to the City's existing Legislative Program that embodies the City's goals in such key areas as environmental protection, electrical supply costs, transmissin reliability, natural gas supply and availability and power plant siting. This category would include the following:

Support measures that:

1. Assist the City and its energy consumers improve supply/demand conditions and enhance conservation measures.
2. Preserve local options to control and fund the supply and distribution of energy (including the formation of a municipal utility district) or that fund conservation programs.
3. Enhance the City's ability to enter into distributed generation agreements without having to pay stranded transmission or distribution charges.
4. Impose "fair and reasonable" wholesale price caps.
5. Repeal the provision in AB1X that suspends customer choice, and pass a favorable bill for customer choice (SB 27X or a similar one).
6. Make municipal aggregation programs available on an "opt-out" basis.
7. Allow public agencies (not just municipal utilities) such as the City to participate in state power supply programs.
8. Encourage use of real time metering.
9. Increase incentives for photovoltaic and other alternative energy sources.

Oppose measures that:

1. Impinge on or restrict the City's ability to exercise land use review/control with respect to the generation or transmission of power.
2. Erode the City's ability to acquire/generate power from alternative sources, operate as a municipal utility, or enter into aggregation and/or distributed generation arrangements.

Staffing:	**Lead:**	Administration – Legislative Administration – Special Operations
	Support:	Community Development – Economic Development
Timeframe:		Ongoing

Executive Summary
MRW Assessment of Chula Vista's Energy Management Options
[April 5, 2001]

Purpose of the Report

1. In light of the State's energy crisis, the City of Chula Vista secured the services of MRW and Associates to provide an assessment of energy management options which may allow the City to gain a measure of control over the City's demand and supply of energy as well as the financial costs of the City's energy use over time.

2. The report is to provide a historical perspective and analysis of California's deregulation of the electricity market (first approved in 1996), and the dramatic developments in California's power and natural gas markets. A better understanding of the events leading up to the energy crisis will help the City of Chula Vista take a proactive approach to managing energy costs and supply.

3. Based on this understanding, present a portfolio of options that help to: (a) insulate the City, its residents, and its businesses from unfair or unreasonable energy costs, (b) ensure the reliability of electricity supply, and (c) reduce adverse environmental impacts of energy production and use.

4. Assemble the best options into the City's own Energy Action Plan. Identify the steps needed to implement the plan. Begin to identify and evaluate specific projects that have the potential to create unique opportunities and advantages for the residents and businesses of Chula Vista.

Parameters of the Report

1. Electricity is the Focus

Electricity supply and cost is the primary focus of the report. Natural gas is a secondary focus albeit an important one. Environmental impacts were considered, but were not the driving factor.

2. Target Beneficiaries

City-owned and operated facilities. The City currently uses 14 MWhrs of electricity per year. 40% of that is used during off peak hours by street lights. The City's energy bill during year 2000 was $1.622 million. The February 2001 bill was $267,000 ($161,000 with a balancing account amount of $106,000). At the average rate of $267,000 per month, the City's energy bill for 2001 would double to $3.2 million.

Residents. City residents currently use an average of 287.8 MWhrs of electricity per year. The City is projecting that new housing developments will add more than 2,000 units in each of the next two years. This represents an incremental demand for electricity of 11.8 million kWh, or 4% of Chula Vista's current residential demand.

Businesses, both current and future. City businesses currently use an average of 405 MWhrs of electricity per year (commercial businesses use 304 MWhrs and industrial businesses use 101 MWhrs). Chula Vista is home to a number of manufacturing facilities where energy costs are a substantial component of overall costs. Providing these manufacturers with the means to manage energy costs will provide an incentive for the manufacturers to remain in Chula Vista, expand their operations and create new jobs. Energy incentive programs could also help attract new businesses to the City.

3. Timeframe for Benefits to be Derived from Energy Plan Actions

- *Short Term*: Benefits could be realized within the next 12 months and thereafter.
- *Medium Term*: Benefits could be realized within the next 1 to 3 years.
- *Long Term*: Benefits could be realized within the next 3 to 7 years.

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Portfolio of Options

Consistent with the above-described purposes and parameters, MRW developed a portfolio of 12 options to help the City better manage its energy needs and costs. THESE OPTIONS ARE EXPLAINED AND DISCUSSED IN GREATER DETAIL STARTING AT PAGE 7 AND ARE NOT ALL RECOMMENDED TO BE PURSUED AT THIS TIME. Additionally, each of the options listed below include specific tasks to implement.

Based on an assessment of the benefits and risks of these options, the current market situation, and the implementation time frame for each option, MRW grouped the options into the following categories:

HIGHLY RECOMMENDED *[Options with Low or Manageable Risk and Potential for Short-Term Payoff]*:

- Continue/expand energy conservation projects in existing and future City facilities.
- Continue/expand and promote energy efficiency and renewable energy programs for businesses and residents as well as provide community education.
- Monitor the market and legal restrictions and be prepared to enter into a contract with an Energy Service Provider (as permitted by law).*
- Develop and implement a legislative strategy that facilitates the City's overall Energy Plan.
- Continue/expand efforts to implement the Carbon Dioxide (CO_2) Reduction Plan and GreenStar Building Incentive Program (Staff generated; not in MRW Report).

PROMISING *[Options that Offer Significant Benefits but with Increased Risk and/or Medium Term Payoff]*:

- Pursue distributed generation opportunities for both City facilities and economic development opportunities.
- Monitor the market and legal restrictions and be prepared to enter into a bilateral agreement with a power generator.
- Partner with a third party to build and operate power generation facilities.
- Develop an emissions offsets program based on mobile sources (as permitted by law). *

HIGHER RISK: *[Options that Require Large Capital Outlays and/or Carry Significant Business Risks and have a Longer-Term Payoff]*

- Finance, own, and operate large-scale power plant to meet a portion of the City's demand for electricity. [Not recommended]
- Form a municipal distribution utility to own and operate all or portions of local distribution system.
- Become a municipal "aggregator" and acquire electricity at negotiated rates for the City, and include residents and businesses (as permitted by law).*

* The passage of AB1X and the withdrawal of major ESPs from the market make these options effectively unavailable at this time. However, proposed competing legislation and different interpretations of AB1X may reverse this situation. Legislation will be needed to clarify relationship between AB1X prohibitions and aggregation provisions. "Opt out" legislation would make this option much more attractive.

A Timeline of Key Events in California Electric Industry Restructuring and Energy Crisis

Prior to Deregulation	Retail electricity customers purchased "bundled" transmission, distribution and generation services from monopoly utility companies. Bundled prices were regulated by the CPUC on a "cost plus" basis. The average retail price for bundled electricity during the 90's prior to deregulation was 9.5¢ per kWh.
1996	Governor Wilson signed AB 1890, putting California on course for deregulation. Theory of law is to reduce energy costs to consumers by unbundling energy services and offering access to alternative energy providers. The Independent System Operators (ISO) is created to operate (but not own) the state's transmission system. The Power Exchange (PX) is created to provide a transparent spot market for power purchases. Investor owned utilities are required to sell some of their power generation facilities and purchase their power from the PX. Power is to be sold at the highest "clearing" price bid into the market.
1997	The Public Utility Commission approves a request by San Diego Gas and Electric to sell natural gas to Mexico to power the Rosarito generating facility.
1998	On April 1 the California Power Exchange began wholesale trading of electricity. Initially, power prices were reasonable, if not low. During the first two years of operation, the PX market averaged $29 per MWh (2.9 cents per kWh). Utilities begin to divest themselves of generating assets.
1999	On July 1 the rate freeze is lifted in SDG&E's service territory. SDG&E is the first to enter into the deregulated marketplace due to its rapid recovery of its "stranded costs" (i.e., its unrecovered, pre-deregulation capital investment). Recovery of stranded costs comes from sales proceeds well above its book value for its power plants and stranded asset charges (CTCs) passed through to ratepayers. As a result, customers' rates begin to reflect the wholesale power prices paid by SDG&E, including the volatile PX market prices. Note: The rate freeze is not lifted for Pacific Gas & Electric (PG&E) and Southern California Edison ("SCE") customers setting up a situation where they cannot pass on volatile wholesale prices to customers.
2000 May	SDG&E customers' bills double from an average residential bill of $49 to $100 as the utility passes on high wholesale costs to consumers. The ISO declares the first of 36 Stage Two alerts, when power reserves drop below 5 percent.
2000 June	Rolling "blackouts" in San Francisco affect hundreds of thousands of customers. Insufficient power supplies due to several Northern California power plants shut down for maintenance cause the blackouts.
2000 August	SDG&E customers' bills have tripled. Wholesale electricity prices during the months of May through September 2000 increased dramatically in the PX and ISO markets. In June 2000 prices were 411% higher than in June 1999, increasing from $23 per MWh to $122 per MWh. (2.3¢ per kWh to 12.2¢ per kWh.)

2000 August — High wholesale prices prompt Gov. Gray Davis to call for an investigation into "possible manipulation in the wholesale electricity marketplace".

2000 September — The CPUC approves a 6.5¢/kWh rate ceiling plan for SDG&E residential and small business customers retroactive to June 1, 2000. (This action by the CPUC was preceded by the passage of AB 265, which set the 6.5 cents/kWh ceiling but needed to be implemented through a CPUC proceeding.) Larger businesses (with usage above 100 KW) continue to be susceptible to volatile wholesale prices. Electricity charges above 6.5 cents are not forgiven, but tracked in "balancing accounts" for later payment. No provision is made for the source of repayment. **September 26:** Davis signs two bills stemming from power crisis in San Diego. One would spread energy price increase for San Diego customers over several years, the other speeds up the approval process for new power plants.

2000 December — Electricity and natural gas prices for the California markets reached record highs. Spot market prices for natural gas at the California border climbed to over $72 per MMBtu at one point on December 11, compared to prices of $2 to $3 in 1998 and 1999. December 7: For the first time, the ISO declares a Stage Three emergency when power reserves fall below 1.5 percent. Officials say conservation efforts averted rolling blackouts throughout the state. December 15: Based on an investigation into the electric markets in the western United States, the Federal Energy Regulatory Commission (FERC) orders a number of changes to the California electric market. These include: (a) $150 per MWh "soft" price cap on wholesale electricity to remain in place until at least April 30, 2001; (b) an end to the utilities' obligation to buy and sell electricity in the PX market; (c) a "benchmark price" of $74 per MWh for five-year contracts; and (d) an order that the ISO governing board be replaced with a non-stakeholder board. December 26: Southern California Edison sues FERC, alleging the government body failed to ensure that wholesale electricity is sold at "just and reasonable rates". The South Bay and Carlsbad generating plants experienced 13 days of natural gas "curtailment," and were forced to run on fuel oil or shutdown.

Power generators begin to refuse to sell power into the California ISO/PX system on credit due to the increasing questionable credit worthiness of PG&E and SCE. In response, federal authorities require generators to sell their excess power into California if requested by the ISO.

2001 January — SCE and PG&E declare that they are teetering on the verge of bankruptcy. Because SCE and PG&E are unable to pass along to customers their full cost of procuring power; they have seen their financial condition worsen every month since the summer of 2000. In response, Governor Davis declares a state of emergency. Emergency legislation allows the state Department of Water Resources to buy and sell electricity up to a $400 million limit. This authority expired on February 15, but is later extended. January 2: Davis joins SCE's suit against FERC, filing a friend-of-the court brief. He says the commission "has failed in its responsibility to protect Californians from what the agency itself describes as a dysfunctional market for electricity". January 4: PUC votes 5-0 to approve rate hikes for PG&E and SCE. The increases are 9 percent for homes, and between 7 percent and 15 percent for businesses.

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2001 February 1

Governor Davis signs into law AB1X authorizing the Department of Water Resources to begin buying power to serve California. Governor Davis sets a target of $69 /MWh for a portfolio of long-term contracts. To date the electricity contract information has been kept confidential by the Governor's office. Multiple bills (discussed in the legislative update) are prepared to address the crisis. Governor Davis is negotiating the possible state acquisition of the utilities' transmission assets in an effort to restore the financial condition of the utilities.

Governor Davis signed into law AB 1X authorizing the Department of Water Resources to begin buying power to serve California. Governor Davis set a target of $69/MWh for a portfolio of long-term contracts. AB 1X also suspended direct access for California's retail electricity customers. The Legislature worked through a review of multiple bills (discussed in the legislative update) to address the crisis. Governor Davis attempted to negotiate the possible state acquisition of the utilities' transmission assets in an effort to restore the financial condition of the utilities. The Governor reached a tentative deal with SCE. Under the terms of the deal with SCE, the state reportedly will pay about $2.7 billion, or 2.3 times book value, for the IOU's transmission assets. In return for the infusion of cash from the state, SCE is agreeing to a 10-year contract at cost-plus rates for power from some of its assets. SCE also will be required to drop a federal lawsuit in which it sought to back-bill customers for past procurement costs.

2001 March

Qualified Facility (QF) owners and operators shut down plants totaling about 3,000 MW because they have not been paid by the utilities for several months for energy deliveries. QF's include dozens of small and medium sized power generators that use wind, solar, co-generation and other sources to produce power. Due in part to the shut down of QF plants, rotating blackouts affected customers in both southern and northern California on March 19 and 20. FERC ordered power suppliers to refund $69 million, ruling that power suppliers overcharged Californians by that amount in January. FERC found that overcharges for power sold in February totaled $55 million. Cal-ISO filed a report with FERC alleging power suppliers overcharged by $6.2 billion for power delivered to California customers over the period May through November 2000. March 27: The CPUC ordered a three-cent per kWh increase in electric retail rates for Southern California Edison and PG&E customers.

2001 April

April 5: In a televised statewide address, Governor Davis dropped his opposition to increases in electricity rates and called on the state's residents to continue conserving power. The Governor outlined a proposal for increasing electricity rates that is similar to the CPUC's March decision. The Governor also said the only long-term solution to the crisis is to build more power plants. The Legislature approved a package of legislation that will make available $1.1 billion for energy conservation programs. April 6: PG&E (the regulated utility) filed for Chapter 11 bankruptcy protection after failing to come to an agreement with Governor Davis on a state takeover of its transmission assets.

16-30

Market Outlook

Next 1 to 12 Months

- The outlook for wholesale electricity prices in the short term is extremely uncertain. General market fundamentals point toward continued high and volatile prices during this time frame.
- Some 2,368 MW of new generation is scheduled to come on line by the end of 2001, but whether this along with increased conservation will be sufficient to fend off shortages is unknown (shortages appear increasingly likely to occur).
- The vast majority of the proposed new power generation is dependent on natural gas. Increased cost for natural gas has driven up the cost of producing electricity and is expected to do so until new delivery capacity is added or conservation and alternative fuel sources reduce the demand sufficiently below supply to reverse the price trends.
- Current efforts by the State of California (DWR) to secure wholesale power through long-term contracts may help to stabilize wholesale electricity prices and provide power at rates well below current wholesale spot market prices.
- Retail rates for SDG&E customers could rise if the CPUC authorizes a 2.3 cents/kWh rate surcharge requested in January by SDG&E. The request is still pending with the CPUC. SDG&E requested the increase in order to begin "buying down" the approximately $600 million in the balancing account.

Next 1 to 3 Years

- Wholesale electricity prices should begin to level off, however prices are likely to remain much higher than in 1998-1999. Price stability should result from State's procurement of longer-term contracts. Higher prices will result in part from higher input costs and in part from possible supply constraints, particularly if hydroelectric resources remain low.
- San Diego area customers may be in for a potential rate shock as a result of the accrual of large amounts of deferred power costs by the California utilities. SDG&E's rate stabilization plan is set to end in 2002. It is unclear what the CPUC or the Legislature will do if SDG&E has an uncollected balance of purchased power costs – a likely though not certain outcome. Generally speaking, it could be expected that consumers will have a balancing account of about 50% of their total annual bill.
- SDG&E's regulated distribution rates will be reviewed in 2003. This could lead to yet another increase in electricity rates.

3 to 7 Years Out

- Wholesale electricity prices should further stabilize and begin declining as new sources of electricity supply and natural gas capacity come on line and demand response continues to take hold.
- Unless new power plants are located within SDG&E's service territory with adequate natural gas to supply them, transmission constraints in the San Diego area could limit the cost and reliability benefits to the region of new sources of electric supply being added to the state's grid. Constraints on the natural gas distribution system also could contribute to prices remaining high or a tight supply – demand situation. The proposed development of the Otay Mesa plant (500 MW with potential expansion to 1,000 MW) could provide approximately half of the power the region currently needs to import during peak loads, however the plant's sole source of fuel is natural gas and that could have an impact on the South Bay and Carlsbad plants ability to receive natural gas.

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Highly Recommended Options

[Options with Low or Manageable Risk and Potential for Short Term Payoff]

1. CONTINUE/EXPAND ENERGY CONSERVATION PROJECTS FOR CITY FACILITIES. [OPTION 4, REPORT PP. 64]

A. Rationale

- The City has a good record of implementing conservation programs in City facilities. Current high prices of electricity and improved conservation technologies make the paybacks on energy efficiency facilities even more attractive. Therefore, capital investments in this area face minimal risk and should yield near-term paybacks and they have the added benefit of complementing the City's CO^2 reduction plan.
- Energy efficient facilities will reduce consumption and therefore reduce relative ongoing energy costs regardless of the outcome of market reforms and other state or federal actions.
- Legislative initiatives will make millions of dollars of funding available to lower the financial costs of energy conservation. Again, funding assistance reduces the City's risk of pursuing energy efficiency options. Over $500 million in funding was pledged under AB 1890 to reinvigorate the renewable energy industry in California. So far, over $162 million has been paid for the development of 500 MW of new renewable resources, while customers have received about $47 million in bill credits through October 2000 for buying power from renewable energy providers.

B. Next Steps

Background: Since 1993, the City's energy efficiency efforts have saved 3.7 MW of electricity and has resulted in cumulative savings of $1.15 million. The City's combined capital cost for these efforts is approximately $900,000 with about $110,000 in incentives from SDG&E. In Spring 2001, after installation of Green LED traffic signal lights, the City will have saved 4.7 MW of electricity with annual savings of $700,000/yr at slightly below current market prices (savings based on average cost of $.15/kWw-hr for electricity including transmission/distribution).

- Provide additional energy design, management and funding support to the City Facilities Project Team.
- Coordinate grant and other funding sources to implement energy savings.
- Install additional energy savings measures in future buildings and design and install, where appropriate, retrofits in existing City facilities.
- Coordinate efforts with energy service providers, the San Diego Regional Energy Office, the California Energy Commission and other agencies to take advantage of public facility programs and obtain energy conservation certifications for new and remodeled facilities.
- Establish a modified work schedule for City employees, such as a 9/80 schedule. Under a 9/80 schedule employees, with the exception of emergency services department employees, will work 9 hours a day and have every other Friday off. City services will be extended by one-hour per day on the 9 hour work days and City buildings and services will shutdown on Fridays that employees have off. One viable schedule could be from 7:00 a.m. to 5:00 p.m. with a one-hour lunch or from 7:30 a.m. to 5:00 p.m. with a half-hour lunch.

C. Fiscal Impact

Fiscal impact will be primarily from staff time in Special Operations and some capital investment in retrofits. Some staff time may be eligible for offset by grants and/or SDG&E incentives. Staff costs could also be recovered through avoided costs from energy savings.

The modified work schedule could render potential savings of up to 1 MW of City's annual non-street light electricity usage or a cost savings of up to $150,000/year based on average cost of $.15/kw-hr for electricity including transmission/distribution. The City can maximize savings from a modified work schedule by shifting as much of the workday from on-peak period (11:00 a.m to 6 p.m..) where electricity charges are highest to semi-peak period (6:00 p.m. to 11 a.m.) where charges are lower.

2. CONTINUE/EXPAND AND PROMOTE ENERGY EFFICIENT AND RENEWABLE ENERGY PROGRAMS FOR BUSINESSES AND RESIDENTS AS WELL AS PROVIDE COMMUNITY EDUCATION. [OPTION 5, REPORT PP. 67]

A. Rationale

- Making information on the power crisis readily available and supporting energy conservation or other energy management efforts may be a critical factor in convincing businesses where energy costs are a large component of an operating budget to remain located in Chula Vista. It will also help businesses remain competitive over the short run. High energy consumption businesses include high-tech and bio-tech manufacturers, refrigerated food wholesale and retailers, precision machine shops and aerospace parts manufacturers.
- Increased state funding for promotion of conservation options is likely to become available. The City is in a good position to assist residents in availing themselves of these funds.
- Conservation represents the lowest risk to the investor, and the highest benefit to the region and the environment. Every kilowatt saved or produced by an alternative source is a reduction on demand pressures that should result in lower costs for others. Conservation and alternative energy are also most productive during peak hours when they are needed most.
- Conservation and alternative energy have the added benefit of being good for the environment and complement the City's commitment to climate protection.
- An array of proactive energy programs could be critical in assisting business attraction and retention activities.

Note: The benefits of such programs may be difficult to measure in strict cost-benefit terms.

Note: Special Operations is in the process of distributing up to $100.00 of Compact Flourescent Lights (CFL) to 300 homes in the City (a total of 500+ homes have signed up leaving a waiting list of about 200 residents). The CFLs are being distributed and installed by two trained Energy Administrative Interns who will also conduct energy and solid waste audits to identify additional conservation opportunities and to additional resource information.

B. Next Steps:

- Distribute free energy saving retrofits for existing residences.
- Develop matching fund programs to assist local businesses with energy retrofits.

Note: Special Operations is in the process of soliciting small businesses with 10 employees or less to participate in a matching fund program that will provide up to $1,000 for energy efficient lighting retrofit. The retrofit will be conducted by a licensed contractor who will conduct an energy audit and provide a proposal to the City and business for prior approval.

- Analyze available options to provide incentives to businesses that utilize renewable sources of energy (i.e. solar panels, wind power, distributive, etc.)
  - City matching funds
  - Grants or low interest loans (Sec. 108, CDBG, CEC Solar Energy Grant Program)
  - Rebates (in partnership with SDG&E)
  - Free publicity
- Identify and support state and federal grant opportunities that encourage businesses to further develop or bring-to-market new energy-related technologies (i.e. wave technology, fuel cell, etc.)
- Work with local retailers to market and distribute energy saving options.
- Provide public education, information and assistance to residents and businesses so they may take advantage of rebate, loan and grant programs that assist energy conservation. This could include developing an Energy Conservation and Resource Guide.
- Include energy resource information on the City's website with links to relevant energy assistance websites (i.e. U.S. Dept. of Energy, SDG&E Small Business Services, San Diego Regional Energy Office, etc.)
- Conduct business outreach workshops inviting guest speakers from various consulting groups and service organizations/agencies to provide information on energy conservation, renewable/sustainable sources of energy, and government programs that provide funding/rebates to support these efforts.
- Partner with other service/community organizations to broadcast energy saving resources and tips to businesses via newsletters, information pamphlets and websites and coordinate efforts with the Planning Department.
- Continue to utilize MRW to assist companies with contract negotiations as well as with general energy-related inquiries.

C. Fiscal Impact

Fiscal impact is primarily from substantial staff time from Special Operations, Community Development and Public Information. The first phase of retrofits for 300 homes and ten businesses have already been approved by Council. Additional costs could include the Energy Conservation and Resource Guide as well as consultant services from MRW to assist companies with individual contract negotiations (ranged from $500 to $1,000 per company). Existing funds are available for MRW services. The resource guide is estimated to cost about $1.00 per printed copy.

3. MONITOR THE MARKET AND LEGAL RESTRICTIONS AND BE PREPARED TO ENTER INTO AN ELECTRICAL SERVICES CONTRACT WITH AN ENERGY SERVICES PROVIDER (AS PERMITTED BY LAW). [OPTION 6, REPORT PP. 71]

A. Rationale:

- About 55% of the City government's power purchases are bought at market rates. As a result, the March 2001 bill for electric/gas service was $303,688.40 (includes $106,004.50 electricity balancing account and $197,684.00 for electricity/gas. A contract with an ESP might provide electricity more cheaply than taking service from SDG&E.

B. Risks to Consider:

- AB1X currently prohibits direct energy purchases for as long as the state has outstanding long-term contracts. This law needs clarification, and may be overturned, but for now, has squelched this market opportunity.
- There is some risk that if market conditions improve in the next 1-3 years, a long-term commitment to an ESP will burden the City with higher cost electricity.

C. Next Steps:

Seek Council authorization to execute contracts within the following parameters:

- Pledge up to City's entire load (14MW).
- The contract term should be for the shortest time possible, but not to exceed three years.
- Establish a per kilowatt ceiling price under which staff has the authority to negotiate..

Note: Direct energy purchases may be subject to legal restrictions under AB1X; any contract will require legal validation or escape clauses.

D. Fiscal Impact

Staff time, primarily from City Manager's office, Community Development and City Attorney.

4. DEVELOP AND IMPLEMENT A LEGISLATIVE STRATEGY THAT FACILITATES THE CITY'S OVERALL ENERGY PLAN. (STAFF GENERATED; NOT SPECIFICALLY REFERRED TO IN MRW REPORT)

A. Rationale:

Energy supply and cost issues will be dramatically affected by federal and state actions. Issues such as electricity supply costs, transmission reliability, natural gas supply/reliability, municipal utility operations, distributed energy, aggregation, environmental protection, power plant siting, direct energy procurement, and aggregation are all subjects of current Legislation. Favorable state laws could enhance and facilitate numerous City Energy Plan Options.

B. Next Steps:

Add a new category to the City's existing Legislative Program that embodies the City's goals in such key areas as environmental protection, electrical supply costs, transmissin reliability, natural gas supply and availability and power plant siting. This category would include the following:

Support measures that:

16-35

1. Assist the City and its energy consumers improve supply/demand conditions and enhance conservation measures.
2. Preserve local options to control and fund the supply and distribution of energy (including the formation of a municipal utility district) or that fund conservation programs.
3. Enhance the City's ability to enter into distributed generation agreements without having to pay stranded transmission or distribution charges.
4. Impose "fair and reasonable" wholesale price caps.
5. Repeal the provision in AB1X that suspends customer choice, and pass a favorable bill for customer choice (SB 27X or a similar one).
6. Make municipal aggregation programs available on an "opt-out" basis.
7. Allow public agencies (not just municipal utilities) such as the City to participate in state power supply programs.
8. Encourage use of real time metering.

Oppose measures that:

1. Impinge on or restrict the City's ability to exercise land use review/control with respect to the generation or transmission of power.
2. Erode the City's ability to acquire/generate power from alternative sources, operate as a municipal utility, or enter into aggregation and/or distributed generation arrangements.

C. Fiscal Impact

Staff time, primarily from City Manager's office and Community Development.

5. CONTINUE/EXPAND EFFORTS TO IMPLEMENT THE CARBON DIOXIDE (CO2) REDUCTION PLAN AND GREENSTAR BUILDING INCENTIVE PROGRAM. (STAFF GENERATED; NOT INCLUDED IN MRW REPORT).

A. Rationale:

The City recently adopted the Carbon Dioxide (CO2) Reduction Plan establishing 20 Action Measures to promote energy savings and emissions reduction. Implementation of the CO2 Plan allows the City to move forward with energy efficient land use and construction level programs.

B. Next Steps:

1. Implement applicable measures in CO2 Plan under three tiers; Citywide General Plan Level, Site Planning (Sectional Planning Area) Plan Level and Individual Project (Building Permit) Level.
   - Study the feasibility of citywide land use measures as part of the General Plan Update. Evaluate possible locations for mixed use and higher density development near transit and major activity centers
   - Develop and implement "Sustainable Development" concepts in new SPA Plans through updating guidelines for preparation of Air Quality Improvement Plans (AQIP's) as a part of SPA Plan review
   - Develop and implement construction-level conservation measures in conjunction with energy efficient building programs that are at least 20% more energy efficient than current Title 24 Energy Code requirements.

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2. Implement the GreenStar Building Incentive Program and promote energy efficient building practices. Identify air quality/energy conservation measures for implementation in new developments.
3. Conduct a "pilot study" through use of a consultant to establish a set of site planning and construction indicators (energy features and calculating methods), and to develop a customized computer model for use in analyzing development projects relative to air quality improvement and energy conservation.
4. Develop formal guidelines for the preparation of AQIP's based on the "pilot study" results and determine any necessary amendments to the Growth Management Ordinance.
5. Coordinate with the local development community and actively promote participation in available energy efficient building programs such as ComfortWise and Home Energy Partnership (HEP), and develop incentives to encourage this participation.
6. Remain actively involved with the statewide Community Energy Efficiency Program (CEEP) to provide oversight for the development and implementation of energy efficient building programs and related incentives.

C. Fiscal Impact

Staff time primarily from the Planning and Building Department. The "Pilot Study" ($58,000) will be funded from an existing EPA grant.

Promising Options

[Options that offer significant benefits but with increased risk and/or medium term payoff]

1. **PURSUE DISTRIBUTED GENERATION OPPORTUNITIES FOR BOTH CITY FACILITIES AND PRIVATE ECONOMIC DEVELOPMENT OPPORTUNITIES. [OPTION 3, REPORT PP. 56]** "Distributed generation" refers to small power generation units (generally up to 30 megawatts) that are located near consumer or targeted load centers. Technologies include simple cycle gas turbines, microturbines, fuel cells and photovoltaics.

A. Rationale:

- Distributed generation can be used as a source of energy at peak periods when power is most expensive.
- Some types of distributed generation offer significant environmental benefits to the local area.
- Because distributed generation can be accomplished with a low capital investment (relative to large-scale power plants), the financial risk to the City of this option is more manageable than pursuing the development of a City-financed power plant.
- Current and proposed funding and incentive programs that are available for distributed generation projects enhance the attractiveness of this option vis-à-vis other options. In particular, the Legislature's Special Session could lead to new funding for distributed generation and potentially an easing of regulatory and market barriers to distributed generation.
- Distributed generation can power just City facilities, or, depending upon capacity and location, could be utilized with adjacent industrial sites in an "over-the-fence" transaction. The City also should identify potential landfill gas resources and explore development of those resources, as has been done in the County at the Miramar, Sycamore and Otay landfills that use landfill methane gas to manufacture energy. In a hypothetical application of distributed generation at the Chula Vista Police Department, a best-case scenario for distributed generation provides power to the Police Department at about 7-8 cents per kWh at historical natural gas prices and 11-13 cents per kWh at current elevated prices.

Note: In terms of downside risk, there is some risk the CPUC will rule in favor of the utilities' position on distribution stranded costs or other issues that could limit the financial attractiveness of distributed generation.

B. Next Steps:

1. Solicit proposals for distributed generation projects at selected City facilities as well as for potential private economic development opportunities. Staff will solicit development proposals for specific generation facilities/technologies on City-owned facilities that produce peak or full load generation at or below current market rates.

   City Facilities

   - Respondents are to identify favorable sites and preferred technologies as well as cost estimates. Potential City sites identified by staff include (a) the new Corporation Yard on Maxwell Road; (b) the Civic Center Expansion/Police Facility; and (c) various library and recreation centers.

Economic Development Opportunities

- Staff will evaluate potential business development and retention opportunities and solicit development proposals for Distributed Generation and/or other developer/economic development "over the fence" transactions.
- Potential Economic Development Opportunities include (a) Maxwell Road site (northern portion) (synergy with the landfill, Corporation Yard, Energy Way redevelopment potential); (b) LandBank site (northwest corner – synergy with Corporation Yard, landfill, LandBank and Auto Park redevelopment); and (c) BFGoodrich site (new BFG campus development/Co-Generation opportunity).

2. Pursue the Solar Energy and Distributed Generation Grant Program offered through the CEC. Program offers rebates and/or other financial incentives for residential, business, and government users who purchase and install solar energy and distributed generation facilities.
3. Monitor CPUC proceedings and encourage decisions that facilitate the program.

C. Fiscal Impact

Staff time primarily from City Manager's office, Community Development and City Attorney's office. Depending on the outcome of some preliminary investigations by staff, there may be the need to secure the services of specialized legal, financial and/or energy consultants as various economic development proposals emerge.

2. MONITOR THE MARKET AND LEGAL RESTRICTIONS AND BE PREPARED TO ENTER INTO A BILATERAL AGREEMENT WITH A POWER GENERATOR. [OPTION 7, REPORT PP. 74]

A. Rationale:

- In effect, acting as its own ESP, the City could choose to purchase power directly from a power supplier and obtain a longer-term access to electricity at a fixed or hedged price.

Note: As with the ESP contract, described above, pursuing this option at this time could lead to the City locking itself into a power supply contract at a price that will be above market prices in a more stable electricity market.

B. Next Steps:

Seek Council authorization to execute contracts within the following parameters:

1. Pledge up to City's entire load (14 MW).
2. The contract term should be for the shortest time possible, but not to exceed three years.
3. Authorize staff to negotiate an agreement up to but not to exceed a specified ceiling price.

Note: Direct energy purchases may be subject to legal restrictions under AB1X; any contract will require legal validation or escape clauses.

C. Fiscal Impact

Staff time primarily from City Manager's office, City Attorney and Community Development.

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3. PARTNER WITH A THIRD PARTY TO BUILD AND OPERATE POWER GENERATION FACILITIES. [OPTION 2, REPORT PP. 53]

A. Rationale:

- The City has an excellent opportunity to pursue this option with Duke Energy as part of the modernization of the South Bay plant.
- A partnership can be structured in numerous ways to share the risks and benefits of development and operation, and to leverage what each party brings to the table. For example, in consideration for facilitating the redevelopment of the South Bay plant, the City could obtain rights to receive a dedicated share of the plant's capacity, a share of plant revenues, and/or other public benefits such as Bayfront infrastructure, City facility energy projects, etc.
- Proposed legislation may expedite the licensing and permitting process for new power plants (primarily peaking plants) and for the repowering of existing power plants. Because this legislation will likely have sunset provisions (i.e., dates upon which they expire), the next one to three years may provide an ideal window to push through the development and siting of a power plant.

B. Risks to Consider:

- Competing legislation may reduce the attractiveness of owning or sharing in the development of a power plant. For example, legislation, if passed, may require the owner of a power plant to sell its electricity only to in-state customers, limiting the potential market for the plant's output (legislation pushing for this "California First" policy has been softened in latest versions and now is framed in terms of price parity for California vis-à-vis out of state customers). A more draconian measure proposed in new legislation would make any owner of a power generation facility a public utility subject to the jurisdiction of the CPUC (although the legal validity of such legislation is uncertain).
- California's electricity market structure is still in a state of flux and there is considerable uncertainty as to how the market will operate in the future. This regulatory uncertainty is significant.

C. Next Steps:

- Continue negotiations with Duke Energy and the Port District regarding the terms for redevelopment of the South Bay Plant. Basic premise is to derive public benefit in consideration of City facilitation of plant development.

D. Fiscal Impact

Staff time from City Manager's office, City Attorney's office and Community Development. As discussions advance, there may be the need to secure additional outside legal, financial and/or energy consultant services.

4. DEVELOP AN EMISSIONS OFFSETS PROGRAM BASED ON MOBILE SOURCES (AS PERMITTED BY LAW). [OPTION 10, REPORT PP. 83]

New power generators must obtain emissions offset credits (CNG vehicles) or other conservation projects from the APCD to mitigate increased NOX pollutants.

A. Rationale:

- Some City conservation programs could be utilized to obtain emission offset credits from conversion of diesel/gasoline-powered vehicles to Natural Gas power. These

could be sold or utilized to facilitate local alternative sources of power generation or fund the conversion of City fleet vehicles to cleaner air vehicles.

B. Next Steps:

- City staff should work with air quality officials to realize benefits of any City investment in alternative fuel vehicles (e.g. CNG buses) to allow the City to provide the value of those reductions to potential partners.
- City staff can also work with future generators and the APCD to ensure that any mitigation funds generated are invested locally.
- Develop portfolio of potential offset projects to make available to new generation sources requiring offsets.

C. Fiscal Impact

Staff time from Special Operations.

Higher Risk Options

[Options that require large capital outlays and/ or carry significant business risks and have a longer term payoff horizons]

1. FINANCE, OWN, AND OPERATE A LARGE-SCALE POWER PLANT TO MEET A PORTION OF THE CITY'S DEMAND FOR ELECTRICITY. [OPTION 1, REPORT PP. 49]

A. Rationale:

- Plant ownership and efficient operation could provide protection from high and/or volatile wholesale electricity prices, a potential source of revenue if excess power is sold into the open market, and improved local electric reliability.

B. Risks to Consider:

- The initial capital investment is estimated to range from $50 to $90 million and the plant could generate electricity for 10 to 12 cents per kWh at current natural gas prices (not including local distribution or transmission costs).
- There are almost no examples of a municipally owned large-scale power plant except as part of a municipal utility.
- Siting, building, and operating a large-scale power plant require specialized expertise and the negotiation of numerous regulatory hurdles.
- A long-term market outlook suggests wholesale power prices will decline; this would put at risk the plant's financial viability.

C. Next Steps:

- In light of these risks, this option is not recommended at this time. This option may be revisited in the future if other options fail to achieve desired results.

2. FORM A MUNICIPAL DISTRIBUTION UTILITY TO OWN AND OPERATE ALL OR PORTIONS OF THE LOCAL DISTRIBUTION SYSTEM. [OPTION 9, REPORT PP. 77]

The formation of a municipal utility could entail anything from the mere declaration of municipal utility status (akin to what San Marcos did recently), all the way up to ownership and operation of some portion of, or all of, a power generation and distribution system to serve some or all of the City's actual gas and electricity needs. To be able to control the delivery of power to any substantial segment of the population, the City would need to control or own some substantial portion of the distribution system.

A. Rationale:

- A municipal utility has preferential access to cheap federal hydropower (but there is a "waiting list" for access to this power) and potentially other alternative power supply sources. It does not pay federal income taxes, and it has access to tax-exempt debt to finance capital projects.
- A municipal utility may be able to provide distribution services at a lower cost than the incumbent utility. Note, however, distribution costs are not the primary driver of current high power costs.
- By operating the distribution system the City would have the ability to structure rates in a manner that rewards conservation, encourages the use of off-peak power, and provides the City with control over how and where "public benefit," conservation funds are invested.

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B. Risks to Consider:

- With the structure of California's electricity market in flux, the outlook for a municipal utility is uncertain. It is unclear at this stage whether municipal utilities, particularly ones yet to be established, will be able to buy power from DWR. If they cannot, a City utility would have to procure power on the open market.
- Lassen Municipal Utilities District is the most recent example in California of a formation of a new municipal utility. LMUD now faces significant rate increases due to power procurement decisions that, with hindsight, were ill advised. SMUD also is planning to raise its electricity rates; however, this will be the first rate increase in ten years and rates will still be lower than PG&E's electricity rates before this recent round of PUC approved rate increases.

C. Next Steps:

- Commence negotiations with SDG&E for mutual beneficial partnerships.
- Conduct preliminary appraisal and pre-feasibility consultant services necessary to evaluate rough costs to acquire existing SDG&E facilities (or build new facilities) and evaluate legal/regulatory issues/obstacles. If approved by Council, issue an RFP for services to valuate SDG&E facilities.
- Consider resolution to declare City a Municipal Utility (effective immediately with no real tangible benefits).
- Coordinate any effort on this strategy with the efforts of other local jurisdictions.

D. Fiscal Impact

Staff time primarily from City Attorney, City Manager, and Community Development. Additionally, it is currently anticipated that the preliminary appraisal and feasibility consultant services would cost approximately $40,000 to $50,000. If after the pre-feasibility phase is completed, and the City elects to proceed, it is anticipated that the final phase would cost up to $250,000 that would produce a condemnation quality appraisal including severance issues analyzed and valuated.

3. BECOME A MUNICIPAL "AGGREGATOR" AND ACQUIRE ELECTRICITY AT NEGOTIATED RATES FOR THE CITY, AND INCLUDE RESIDENTS AND BUSINESSES (AS PERMITTED BY LAW). [OPTION 8, REPORT PP. 74]

A. Rationale:

- Municipal aggregation offers the potential for lower electricity costs and certain non-price benefits at minimal initial capital investment.
- The City of Palm Springs saved customers in its aggregation program $88,000 in only two years. (The program has since been suspended.)

B. Risks to Consider:

- Current law requires procedures whereby local residents and businesses must affirmatively "opt in" to an aggregation plan. This dramatically reduces participation, and therefore the benefits of aggregation. However, there is legislation currently under discussion to change this provision and allow municipal aggregation programs to be done on an "opt-out" basis. If there is a change in the law, this option is more promising in terms of the potential benefits such a program could provide to Chula Vista's residents and businesses.

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- Although the risk to the City under this option is less than the above two options, municipal aggregation is likely to yield very minimal benefits while burdening the City with administrative and contractual responsibilities.

C. Next Steps:

- Support legislation that preserves consumer choices and authorizes "opt out" municipal aggregation programs.

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Summary of Major Action Items

1. Retrofit new and existing City facilities while also distributing retrofits to residents.
2. Pursue modified work schedule for City employees.
3. Continue/expand energy conservation projects for City facilities and promote energy efficient and renewable energy programs for businesses and residents.
4. Continue to monitor the market and negotiate with ESP's and Duke as the law allows – execute deal within specified parameters if obtainable.
5. Continue to monitor the legislative process and implement the Legislative Strategy.
6. Implement the CO_2 Reduction Plan through efforts on three tiers: the Citywide General Plan Update, Sectional Planning Area (SPA) Plans/Site Planning, and Building Construction (GreenStar Program).
7. Implement the GreenStar Building Incentive Program.
8. Conduct a "pilot study" through use of a consultant to establish a set of site planning and construction indicators, and to develop a computer model for use in analyzing development projects relative to air quality improvement and energy conservation.
9. Solicit proposals for Distributed Generation projects at selected City facilities and evaluate potential economic development "over the fence" transaction opportunities.
10. Pursue the CEC Solar Energy and Distributed Generation Grant Program for both City facilities and other economic development opportunities.
11. Negotiate (in cooperation with the Port District) public benefits with Duke Energy as new plant is entitled.
12. Develop an Emissions Offsets Program based on mobile sources (as permitted by law).
13. Negotiate with SDG&E for mutually beneficial opportunities.
14. Prepare Request for Proposals for consultant services to perform preliminary appraisal and pre-feasibility studies to valuate SOG&E facilities and analyze legal/ regulatory environment for municipalization. Estimated cost to $50,000.
15. Present resolution for declaring the City a Municipal Utility.

Next Steps

1. Based on Council direction at workshop, proceed with Major Action Items.
2. Determine overall Energy Strategy, staffing and management plan and more refined general implementation costs.
3. Present Energy Strategy and Action Plan to Council for formal adoption in June 2001, and report on progress made on the Major Action Items.

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CITY OF CHULA VISTA

May 24, 2001

TO: The Honorable Mayor and City Council

FROM: Michael Meacham, Special Operations Manager

VIA: David D. Rowlands, Jr.

SUBJECT: Update Regarding the Implementation of Energy Conservation Measures for City Facilities, Residences and Businesses as Contemplated in the Energy Strategy and Action Plan

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The Governor has asked all electricity consumers in the state to reduce their energy consumption by another 10% this summer and has offered San Diego consumers a 20% rebate incentive payable in October if they reduce consumption by 15% throughout the summer. Without these reductions in energy use, the state is projected to experience an estimated 35 to 50 days of rolling black outs. With or without these reductions, Chula Vista businesses and residents are faced with the threat of significant increases in energy costs. The following programs are designed primarily to assist the City in doing its part at City facilities to reduce its energy consumption while continuing public services. Secondarily, the report outlines the City's efforts to educate residents and businesses about the need for energy conservation and assist them with their efforts.

Staff is not requesting that Council take action at this time to implement a 9/80 work schedule as part of the effort to reduce energy consumption during peak summer demand. Staff has concluded that the schedule required to generate the energy benefits needed to meet the (10%) ten percent conservation goal would be too disruptive to public services. Additionally, there is not enough notice to allow families sufficient time to adjust to the changes that would need to occur to the planning and promotion that has gone into summer programs for seniors, children and other potentially dependent members of the community that rely on those public services. Staff believes strongly that there is merit in the 9/80 plan from conservation and other important perspectives, however more planning is needed to fully take advantage of those benefits and minimize the potential impacts to service. Staff will continue to work with all City Departments and Council to identify conservation measures that could produce the significant reductions in energy use that could have accrued through the 9/80 plan.

Staff will implement a number of measures that have the potential to reduce energy consumption during the state's greatest annual energy use period; June 1, 2001 to

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September 30, 2001. The following further describes those items, which Council has seen in draft form in the Energy Report and an Information Memorandum of April 24, 2001.

Emergency Summer Energy Policy - City Facilities

- The programs will be effective from June 1 through September 30, 2001
- All employees are authorized and encouraged to dress in a professionally casual manner and asked to bring sweaters for early morning or colder days
- Air conditioners will be set at 74 degrees and heating will be turned off to "pre-cool," for the warmer times of day? Thermostats may not be adjusted.
- All staff will be reminded that they are to eliminate any personal energy devices connected to City service in their workspace such as refrigerators, fountains, television sets, microwave ovens, clock radios, fans and other devices unless the devices are battery operated or authorized by a physician.
- Staff will be expected to turn off electronic items such as monitors, printers and calculators when not in use and when leaving their workstation for more than (10) minutes.
- Staff will be asked to work under natural light whenever possible without health or safety risk and to turn off task or office lights whenever leaving their work area for more than 10 minutes.
- All computers, copy machines, printers and non-essential faxes shall be turned off at the end of each workday. Staff will be asked to pay particular attention to the last day before the weekend.
- Each division will be asked to assign one person to check all workstations to verify that all electronic equipment is turned off at the end of each day.
- The City will replace any refrigerators in City facilities that are six or more years of age or have broken door seals with new energy star certified models.
- Staff has cleaned the coils of all other refrigerators to assure they are operating as efficiently as possible and energy planner devices will be added to those models.
- Conservation Staff will conduct a preliminary audit of any outdoor building lighting and interior lighting that has not been retrofit. Whenever possible, simple day/night sensors and compact fluorescents will be installed.
- The City is applying for a grant to conduct a comprehensive energy audit of all City facilities. If awarded, the audit will be conducted as soon as possible and in

conjunction with the San Diego Energy Office Rebuild America Program. Staff will then return to Council with an analysis of the payback periods for each project, recommendations and a request for authorization to implement the program.

- Recreation will be authorized to increase rates assessed adult leagues and activities to recover the full cost of lights used for those activities. Lights will not go on until after 6 p.m., the "peak" period.

Emergency Summer Energy Assistance - Residences and Small Businesses

Staff's efforts are designed to assist residents and small businesses reduce their electricity costs and usage which further helps to prevent rolling blackouts. Staff will implement the following conservation measures between June 1 and September 30, 2001.

Direct Conservation Measures
A separate item on this evening's agenda request authorization to use additional unanticipated revenues from the sale of recyclables from calendar year 2000 to expand conservation programs. The funds will allow Staff to expand the program from 300 households and 10 businesses to serve up to 1,500 additional households and 25 additional businesses with further program modifications to increase recycling participation and energy conservation.

- Residents
    - At the time this report was circulated, Staff had installed free compact fluorescents and provided energy rebate assistance to approximately 200 homes through the door-to-door program and expects to meet the 300 home goal by June 1, 2001.
    - With City Council approval, staff will serve up to an additional 1,500 residences by the end of the summer.
    - The funds will also allow staff to continue to assist those residents with their participation in local and state energy efficient rebate programs.
    - Staff is working with SDG&E to assist low-income residents with their participation in the SDG&E's Direct Assistance Program that will fund full cost of window, lighting, insulation and appliance upgrades.
    - The SDG&E's Light Bulb Exchange Program for senior citizens and low-income residents has exhausted current funding. SDG&E has performed three events in Chula Vista and is working with staff to complete at least one final event for Congregational Towers. Staff will pursue additional events for Chula Vista agencies as future funds become available.
- Small Businesses
    - Staff has completed proposals for six Chula Vista businesses and expects to complete ten businesses by June 1, 2001.

With Council approval of the increased budget request staff will increase the match per business from $1,000 to $2,500 per business and reach an additional 25 businesses by the end of summer. City and business funds could then be matched by SDG&E for a potential value of up to $10,000 in energy saving equipment per business.

- Business and Residential Steps
  - Staff will continue to assist residents and small businesses interested in installing alternative energy sources.
  - Staff will continue to work with the Planning & Building Department, as well as, regional and State agencies to facilitate the identification of sound alternative energy equipment and installation practices.

Additional Conservation Actions

Printed Information

Staff has developed and distributed an informational brochure to all businesses outlining the Governor's executive order regarding after hours lighting through the May commercial refuse bill mailing. The attached brochure was developed with the support of the Police Department, Public Information, Code Enforcement, Community Development Department, and Special Operations Programs (see attached).

Staff has also distributed energy conservation information to residents through flyers inserted in previous refuse billing insert and to businesses through direct contact and service club meetings.

Staff is developing an "Energy Resource Conservation Guide" to enable residents and small businesses to implement electricity conservation measures by providing: conservation tips, information on local retailer of energy efficient products and appliances, qualified energy efficiency contractors, and to provide assistance and information on installing alternative energy sources such as solar photovoltaic systems and provide bill assistance information. Staff plans to have the guide completed and ready to be mailed with the June 2001 residential and small businesses refuse bills that will reach residents by June 30, 2001.

Staff will work with the San Diego Regional Energy Office, San Diego Gas & Electric, the California Conservation Corps and other agencies and jurisdictions in developing the guide and other service materials and programs.

Long Term Actions to Address Energy Efficiency at City Facilities

- Staff intends to pursue grants and non-general fund sources to provide additional energy design, management and funding support to the City Facilities Project Team.
- Staff will incoporate options for energy savings measures that exceed Title XXIV and alternative energy generation in future buildings and design for Council review. Staff will also devleop recommendations to install, where appropriate, comparable retrofits in existing City facilities.

- Staff will pursue additional grants and non-general fund revenue sources to enhance the cost-effectiveness of conservation measures and reduce "payback," periods.
- Staff will coordinate the alternative energy and conservation design efforts with energy service providers, the San Diego Regional Energy Office, the California Energy Commission and other agencies to take advantage of public facility programs and obtain energy conservation certifications for new and remodeled facilities.

The implementation of this program has not resulted in an impact to the general fund except that certain conservation measures may produce savings in the City's monthly energy costs. The action items completed in this report were funded by Special Operations Program Conservation funds, grants and other non-general fund sources approved by Council. Future energy conservation projects will be brought to Council with funding recommendations for their review and approval prior to their implementation.

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COUNCIL RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ADOPTING THE CITY OF CHULA VISTA ENERGY STRATEGY AND ACTION PLAN

WHEREAS, in light of the State's energy crisis, the City of Chula Vista hired MRW & Associates to assess energy management options which may allow the City to gain a measure of control over the City's demand and supply of energy as well as the financial costs of the City's energy use over time; and

WHEREAS, MRW, in its final report dated February 23, 2001, provided an overview of the energy crisis and broad-based recommendations the City could pursue; and

WHEREAS, staff then recommended an Energy Strategy and Action Plan which is comprised of eight (8) specific components that collectively seek to advance the interests of the City of Chula Vista and its residents and businesses in the areas of energy conservation, supply and procurement for the City of Chula Vista; and

WHEREAS, City Council held a workshop on April 17 to consider the draft recommendations and provided input to staff; and

WHEREAS, City Council at their April 24 meeting accepted the report and directed staff to return with an implementing resolution to formally adopt the Energy Strategy.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chula Vista, that it hereby approve the City of Chula Vista Energy Strategy and Action Plan.

Presented by

Chris Salomone
Director of Community Development

Approved as to form by

John M. Kaheny
City Attorney

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ORDINANCE NO._____

AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ESTABLISHING THE CITY OF CHULA VISTA AS A MUNICIPAL UTILITY

WHEREAS, the City of Chula Vista (the "City"), a municipal corporation and charter city, is authorized pursuant to Article XI, Section 9(a) of the California Constitution and Section 200 of the City Charter to establish, purchase and operate public works to furnish its inhabitants with utility services including light, power, heat, transportation, or means of communications; and

WHEREAS, the deregulation of the electricity market, increased demand for energy, inadequate supply of natural gas and other fuel sources, a deteriorating transmission and distribution system, inadequate or poorly implemented federal and state energy regulations, and a volatile energy commodities market has led to a state-wide energy crisis characterized by soaring energy costs and unreliable energy supplies; and

WHEREAS, this euergy crisis threatens the public health, safety and general welfare of businesses and residents throughout the state, including businesses and residents in and around the City of Chula Vista; and

WHEREAS, the City has studied, reviewed and analyzed the current status of the energy crisis and has consulted with various experts to identify the prospective benefits of establishiug a municipally owned utility; and

WHEREAS, as a result of deregulation of the electric utility industry in California, the City has identified numerous potential benefits that would derive from providing a municipally owned utility, included but not limited to (a) a municipal utility has preferential access to low-priced federal power and potentially other alternative power supply sources; (b) a municipal utility does not pay federal income taxes, and it has access to tax-exempt debt to finance capital projects; (c) a municipal utility may be able to provide distribution and other energy related services to City facilities, businesses and/or residents more reliably and at a lower

cost than the incumbent utilities under the existing energy delivery system; (d) by operating the distribution system itself the City would have the ability to structure fair and reasonable utility rates in a manner that rewards conservation, provides for the use of alternative/renewable power sources, encourages the use of off-peak power, and provides the City with control over how and where "public benefit" conservation funds are invested; and

WHEREAS, the City is also concerned with the rising costs, threats to reliability, and potential environmental impacts related to the various other utility services necessary to the City, its bnsinesses and residents; and

WHEREAS, City Council has found and determined that the creation of a municipal utility could enhance utility system reliability, lower utility rates and otherwise provide utility services that significantly enhance the quality of life and provide significant benefits to the citizens, businesses and environment of the City; and

WHEREAS, the City's establishment of itself as a municipal utility is categorically exempt from CEQA pursuant to CEQA Gnidelines Section 15320.

NOW, THEREFORE, the City Council of the City of Chula Vista does hereby ordain as follows:

SECTION I: The above findings and determinations are hereby adopted as true and correct.

SECTION II: The City of Chula Vista hereby establishes itself as a municipal utility ("Municipal Utility"). The Municipal Utility is authorized to provide electricity, natural gas, alternative forms of energy, water, telecommunications, transportation and related utility services ("Utility Services") to governmental facilities, businesses, organizations, and residents located within and around the City of Chula Vista. Additional City Council approval shall be required before the Municipal Utility actually provides one or more utility services.

SECTION III: The City Council shall be the governing board for the Municipal Utility acting in accordance with its existing rules and procedures. The City Manager or his designee is hereby authorized to take all necessary steps

to implement the authority of the Municipal Authority as directed and approved from time to time by the City Council. The City Manager or his designee is further authorized and directed to take all necessary actions to provide for the implementation, operation and maintenance of City Council approved Municipal Utility activities including, but not limited to, determining the level of additional staffing required, if any, identifying outsourcing needs, negotiating agreements with consultants, special counsel, underwriter(s) and/or financial advisors in connection with regulatory, legal or financial matters.

SECTION IV: This ordinance in no way precommits the City to providing one or more of the defined Utility Services or to acquiring, voluntarily or otherwise, some or all of the incumbent utility facilities. City staff is hereby authorized and directed to explore partnership opportunities with the incumbent utility providers and with other public agencies in the region which may themselves be pursuing public utility options.

SECTION V: This ordinance is necessary as an emergency measure for preserving the public peace, health, safety and general welfare in light of the gravity of the state's energy crisis and the need to take immediate action to respond to this crisis. The City Clerk shall certify to the adoption of this Ordinance, which shall be in full force and effect immediately upon its first reading and adoption if passed by a four-fifth's vote of the City Council.

Presented by

Chris Salomone
Director of Community Development

Approved as to form by

John M. Kaheny
City Attorney

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ORDINANCE NO._____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ESTABLISHING THE CITY OF CHULA VISTA AS A MUNICIPAL UTILITY

WHEREAS, the City of Chula Vista (the "City"), a municipal corporation and charter city, is authorized pursuant to Article XI, Section 9(a) of the California Constitution and Section 200 of the City Charter to establish, purchase and operate public works to furnish its inhabitants with utility services including light, power, heat, transportation, or means of communications; and

WHEREAS, the deregulation of the electricity market, increased demand for energy, inadequate supply of natural gas and other fuel sources, a deteriorating transmission and distribution system, inadequate or poorly implemented federal and state energy regulations, and a volatile energy commodities market has led to a state-wide energy crisis characterized by soaring energy costs and unreliable energy supplies; and

WHEREAS, this energy crisis threatens the public health, safety and general welfare of businesses and residents throughout the state, including businesses and residents in and around the City of Chula Vista; and

WHEREAS, the City has studied, reviewed and analyzed the current status of the energy crisis and has consulted with various experts to identify the prospective benefits of establishing a municipally owned utility; and

WHEREAS, as a result of deregulation of the electric utility industry in California, the City has identified numerous potential benefits that would derive from providing a municipally owned utility, included but not limited to (a) a municipal utility has preferential access to low-priced federal power and potentially other alternative power supply sources; (b) a municipal utility does not pay federal income taxes, and it has access to tax-exempt debt to finance capital projects; (c) a municipal utility may be able to provide distribution and other energy related services to City facilities, businesses and/or residents more reliably and at a lower

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cost than the incumbent utilities under the existing energy delivery system; (d) by operating the distribution system itself the City would have the ability to structure fair and reasonable utility rates in a manner that rewards conservation, provides for the use of alternative/renewable power sources, encourages the use of off-peak power, and provides the City with control over how and where "public benefit" conservation funds are invested; and

WHEREAS, the City is also concerned with the rising costs, threats to reliability, and potential environmental impacts related to the various other utility services necessary to the City, its businesses and residents; and

WHEREAS, City Council has found and determined that the creation of a municipal utility could enhance utility system reliability, lower utility rates and otherwise provide utility services that significantly enhance the quality of life and provide significant benefits to the citizens, businesses and environment of the City; and

WHEREAS, the City's establishment of itself as a municipal utility is categorically exempt from CEQA pnrsnant to CEQA Guidelines Section 15320.

NOW, THEREFORE, the City Council of the City of Chula Vista does hereby ordain as follows:

SECTION I: The above findings and determinations are hereby adopted as true and correct.

SECTION II: The City of Chula Vista hereby establishes itself as a municipal utility ("Municipal Utility"). The Municipal Utility is authorized to provide electricity, natural gas, alternative forms of energy, water, telecommunications, transportation and related utility services ("Utility Services") to governmental facilities, businesses, organizations, and residents located within and around the City of Chula Vista. Additional City Council approval shall be required before the Municipal Utility actually provides one or more utility services.

SECTION III: The City Council shall be the governing board for the Municipal Utility acting in accordance with its existing rules and procedures. The City Manager or his designee is hereby authorized to take all necessary steps

to implement the authority of the Municipal Authority as directed and approved from time to time by the City Council. The City Manager or his designee is further authorized and directed to take all necessary actions to provide for the implementation, operation and maintenance of City Council approved Municipal Utility activities including, but not limited to, determining the level of additional staffing required, if any, identifying outsourcing needs, negotiating agreements with consultants, special counsel, underwriter(s) and/or financial advisors in connection with regulatory, legal or financial matters.

SECTION IV: This ordinance in no way precommits the City to providing one or more of the defined Utility Services or to acquiring, voluntarily or otherwise, some or all of the incumbent utility facilities. City staff is hereby authorized and directed to explore partnership opportunities with the incumbent utility providers and with other public agencies in the region which may themselves be pursuing public utility options.

SECTION V: This ordinance shall take effect and be in full force on the thirtieth day from and after its second reading and adoption.

Presented by

Chris Salomone
Director of Community Development

Approved as to form by

John M. Kaheny
City Attorney

J.\attorney\municipality utility (regular)

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