

# UTILITY COMMITTEE MINUTES

May 11, 2001

The Utility Committee of the City of Mesa met in the lower level meeting room of the Council Chambers, 57 East 1st Street, on May 11, 2001 at 8:15 a.m.

**COMMITTEE PRESENT**

Mike Whalen, Chairman  
Bill Jaffa  
Claudia Walters

**COUNCIL PRESENT**

Mayor Keno Hawker

**OFFICERS PRESENT**

Mike Hutchinson

1. Discuss and consider issues associated with electric power supplies.

City Manager Mike Hutchinson advised the Committee that in an effort to ensure that Mesa has sufficient quantities of low-cost electric power for the upcoming summer months, the Utilities Department has considered several options. Mr. Hutchinson reported that staff has taken into account the anticipated power supply needs of the community as well as the City's financial stability.

Utilities Manager Dave Plumb provided a brief history, explaining that as a result of the termination of two power supply contracts in November 2000 and April 2001, the Utilities Department issued a Request for Proposals (RFP) for 40 megawatts (MW) of power for five- and ten-year periods commencing in May 2001. Mr. Plumb stated that all but two of the proposals received were not responsive to providing power for this summer, and the remaining two proposals offered only 24/7 power (available 24 hours a day, 7 days a week, with payment required whether power is taken or not) at prices ranging from \$440 to \$510 per megawatt hour (MWh). Mr. Plumb noted that due to the financial risk involved if unable to resell the excessive power, staff rejected all proposals and began researching alternative power supply sources.

Mr. Plumb stated that in conjunction with staff's research, an aggressive campaign was initiated to educate commercial and residential customers regarding energy conservation. Mr. Plumb added that the City Manager's Office also created an employee-based task force to address similar issues within City facilities.

Discussion ensued relative to the expectation that the City will receive power through the Salt River Project (SRP) Arizona Public Power Pool when it becomes available September 1; staff's current negotiations with SRP to potentially accelerate the date for receipt of such power; and the ten 750 kilowatt (kW) diesel generators available on loan from the Arizona Army National Guard (at no capital cost to the City) which could provide 7-7.5 MW of peaking energy at \$254/MWh. Mr. Plumb informed the Committee that an alternative power supply option evaluated and recommended by staff is the lease/purchase of sixteen 800 kW natural gas-fired generators at an

estimated cost of \$4,960,000. Mr. Plumb explained that the reciprocating engine units have the combined capability of generating 12.8 MW and are a relatively quiet, non-polluting resource that can be distributed in the City's electrical substations to provide peaking power for the summer, emergency generation for the long term, and potential additional power sales. Mr. Plumb stated that the owner of the generators has shipped two of the units to Mesa for staff's inspection, but commented that before the units can be fully operational, staff must resolve air quality permit and zoning issues.

Mr. Plumb noted that the operation of the natural gas-fired units would cost only a few cents more per kWh than the diesel-fired units and that the units as they currently exist could run for a period of 90 days upon receipt by the City of the appropriate permits. Mr. Plumb reported that the addition of catalytic converters to the generators, at a cost of approximately \$1.3 million, would allow the units to operate 365 days a year, 24 hours a day, with the potential to save the Electric Utility an estimated \$12 million in power costs for the months of June through August. Mr. Plumb added that if the southwestern United States is faced with rolling blackouts, the additional 12 MW within the City's power system would provide emergency generation.

In response to a question from Committeemember Jaffa, Mr. Plumb clarified that if the City opts not to purchase the natural gas-fired units and is required to buy power on the open market, the City would be required to pay a range from \$385/MWh for June to \$600/MWh for August based on the forward prices on the Palo Verde index as of May 1. Mr. Plumb stressed that the generators would provide energy at \$110/MWh, considering a five-year capital lease arrangement, which would result in substantial savings to the City, with the units virtually paying for themselves over the summer.

Mr. Plumb spoke regarding a negotiated agreement with the Arizona Electric Power Cooperative (AEPSCO) to supply energy in blocks requested by Mesa at 20% below market price.

Mr. Hutchinson noted that due to the noise and air quality issues related to the diesel generators, staff recommends approval by the Utility Committee of the sixteen natural gas-fired generators on a contingency basis with the matter presented to Council once the zoning and permit issues are resolved.

In response to a question from Committeemember Jaffa, Finance Director Larry Woolf advised that due to the City's current budgetary constraints, as well as the competitive interest rates offered by financial institutions, it is the recommendation of staff to lease/purchase the sixteen 800 kW natural gas-fired generators.

Mr. Plumb provided a brief synopsis relative to the acquisition of the natural gas-fired generators.

Discussion ensued regarding the purchase price of the natural gas-fired generators, which includes the immediate overhaul of four units, with the remaining twelve units to be overhauled in the fall; the cost to overhaul each unit of approximately \$50,000; and the City's intent to withhold payment of the total purchase price until such time as the twelve units have been completely overhauled.

In response to a question from Committeemember Jaffa, Mr. Plumb stressed that it is imperative that the Committee and the Council reach a prompt decision regarding the purchase of the natural gas-fired generators to ensure that the City's energy needs are met for this summer and into the future.

Committeemember Jaffa requested that staff provide additional input concerning the manner in which surrounding communities are pursuing alternative power sources.

In response to a question from Committeemember Jaffa, Mr. Plumb stated that the likelihood of rolling blackouts in Arizona this summer is relatively small, but added that the additional 12 MW within the City's power system would provide emergency backup.

Committeemember Jaffa spoke in appreciation of the City's energy conservation efforts and staff's ongoing negotiations with SRP. Committeemember Jaffa questioned whether it is appropriate to continue electric utility operation and voiced the opinion that the City has an obligation to its citizens to evaluate the operation on a periodic basis.

In response to a question from Chairman Whalen, Mr. Plumb clarified that electric utility rates may be adjusted for the cost of fuel or purchase power.

In response to a question from Chairman Whalen, Environmental Programs Director Christine Zielonka commented that pending final approval of this matter, staff will endeavor to obtain an expedited permit review through Maricopa County, and advised that the City has the option to request approval to run the generators within 30 days from the submission of the permit application. Ms. Zielonka informed the Committee that Maricopa County officials have voiced concerns regarding localized pollutants discharged by diesel generators but noted that the operation of natural gas-fired generators is cleaner and quieter.

Chairman Whalen questioned the appropriate zoning designation for the proposed units. City Attorney Neal Beets clarified that when the PF (Public Facilities) zoning category was initially adopted, the City did not anticipate the usage of natural gas-fired generators in such locations. Mr. Beets explained that in an effort to resolve this matter, staff will confer with Zoning Administrator John Gendron to discuss the purpose and intention of the PF zone.

In response to a question from Chairman Whalen, Mr. Plumb advised that the Rosa Rita substation could accommodate the installation of eight natural gas-fired units. Mr. Plumb stressed, however, that placement of all sixteen generators in one location would cause a reduction in the hours of operation.

Further discussion ensued relative to the minimal cost of routine maintenance for the natural gas-fired generators; the availability of a qualified mechanic who is familiar with such units to perform the major overhauls; and the fact that no additional staffing costs will be incurred as a result of such maintenance.

Chairman Whalen stated the opinion that staff should abandon its pursuit of the diesel generators as a source of electric power due to the associated noise and pollution issues.

Committeemember Jaffa noted the complexity of this issue and encouraged staff to continue pursuit of expertise and technical support from SRP and other agencies.

It was moved by Committeemember Walters, seconded by Committeemember Jaffa, to recommend to Council approval of staff's recommendation for the lease/purchase of sixteen 800 kW natural gas-fired generators at a cost of \$4,960,000, pending approval of permit and zoning matters.

In response to a question from Mayor Hawker, Mr. Plumb advised that the electrical substations which would house the natural gas-fired generators have been tested by staff, and a determination has been made that sufficient gas line capacity exists to accommodate the increased power supply.

Mayor Hawker questioned whether the permit process for the natural gas-fired generators could be accelerated if the City purchased the catalytic converters in conjunction with the units. Mr. Plumb said that the immediate purchase of the catalytic converters would accelerate the process and permit the units to operate for a greater length of time and provide additional power sales.

Committeemember Walters noted that in view of Mayor Hawker's suggestion, she would amend her previous motion.

It was moved by Committeemember Walters, seconded by Committeemember Jaffa, to recommend to Council approval of staff's recommendation for the lease/purchase of sixteen 800 kW natural gas-fired generators and associated catalytic converters, pending approval of permit and zoning matters.

Carried unanimously.

2. Adjournment.

Without objection, the Utility Committee Meeting adjourned at 9:27 a.m.

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Utility Committee Meeting of the City of Mesa, Arizona, held on the 11th day of May, 2001. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this \_\_\_\_ day of \_\_\_\_\_ 2001

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BARBARA JONES, CITY CLERK