

UTILITY COMMITTEE MINUTES

April 22, 2004

The Utility Committee of the City of Mesa met in the lower level meeting room of the Council Chambers, 57 East 1st Street, on April 22, 2004 at 10:12 a.m.

COMMITTEE PRESENT

Janie Thom, Chairman
Kyle Jones
Mike Whalen

COUNCIL PRESENT

None

OFFICERS PRESENT

Debra Dollar
Paul Wenbert

1. Discuss and consider conducting a wiring downtown study.

Utilities Manager Dave Plumb reported that at the May 1, 2003 Study Session, former E-Streets and Licensing Director Dan Brewer provided an update to the Council on the City's ongoing efforts to create a more technologically connected community through a variety of "e-Mesa" initiatives (e-infrastructure, e-government and e-partnerships). He explained that since Mr. Brewer's retirement, Electric Division Director Jeff Gould has continued on in the process and that a review team comprised of City staff from various departments was assembled to solicit input and identify the primary objectives of a telecommunications feasibility study to deploy fiber optics in downtown Mesa for broadband services.

Mr. Gould displayed graphics in the Council Chambers and provided a brief analysis of this agenda item. He stated, among other things, that there are many businesses in the downtown area that could benefit from telecommunications connections for various applications (high-speed Internet, high-speed data, voice services, video conferencing and distance learning) and that currently, such services are limited; that telecommunications companies generally deploy new infrastructure only where the business cost and benefit is most favorable; and that "broadband service," which constitutes anything 200 kilobytes per second or faster (generally four times faster than a typical dial-up modem in a home or business), is defined as a high capacity connection via fiber optic cable into a building where a single connection point provides multiple services and can be upgraded as needed.

Mr. Gould explained that one of the significant barriers regarding the implementation of advanced broadband telecommunications systems is the installation cost of the "last mile" infrastructure (from what is typically called the point of presence) whereby multiple service providers connect from a local central point to customers. He explained that countless miles of fiber optics extend throughout the country, and as the cable is brought closer into a community and multiple connections must be made in order to reach numerous facilities, the cost of the

excavation and installation of fiber duct banks remains a substantial portion of the overall fiber installation.

Discussion ensued relative to examples of broadband users such as banks and financial institutions, educational facilities, computer or web-based businesses, legal and medical offices, marketing firms, call and order centers, and corporate and governmental facilities; and the new roles for local distribution utilities and public power systems, which are municipally owned electric systems like the City of Mesa, including fiber leasing operations, municipal data networks, Internet service providers and cable TV operations.

Mr. Gould reported that many municipalities have entered the broadband business arena and that those communities that own and operate electric utilities have the opportunity to leverage the assets of the utility in providing these services. He noted that such services are viewed as a positive economic development tool, a new revenue source for the municipality and also attract prospective tenants to new commercial sites that could provide broadband communications infrastructure that would support their business needs.

Mr. Gould further stated that the City of Mesa's Electric Division serves 16,000 customers in the downtown area encompassing a service territory between Alma School Road and Stapley Drive and south of Brown Road to Southern Avenue. He advised that the Electric Division has installed extensive underground electric duct banks to serve the commercial buildings in the downtown area and that it also has spare conduits with sufficient capacity to provide fiber optic cables to reach most downtown businesses. Mr. Gould reiterated that the highest cost portion of providing any telecommunications service is the installation of conduits and added that because Mesa has already completed this task, the deployment, maintenance and operation of a fiber optics network in the downtown area could be accomplished economically as part of the Division's electric system.

Mr. Gould explained that because of Mesa's existing infrastructure, the City would be able to make the telecommunications connection between the service providers and customers at a very low incremental cost. He stated that it is staff's proposal that the connection become universal access, either from a point of presence whereby service providers would bring their own lines and make a connection or, alternatively, the providers would lease access to reach the point of presence and therefore be connected to the City's fiber optic distribution system to gain access to all of the businesses in which the City would install the cable. Mr. Gould also stated that in order to achieve universal access, staff anticipates that the City would wire every building in the downtown area as opposed to just selected large businesses.

Further discussion ensued relative to the fact that the proposed telecommunications feasibility study would identify, among other things, the points of presence, the backbone infrastructure, and the location of fiber optic systems already installed by corporations such as AT&T, Cox Communications and Qwest.

In response to a series of questions from the Committeemembers, Mr. Plumb stressed that the goal of the feasibility study is to identify sources of revenue, perform an infrastructure assessment and develop a financial and business structure analysis regarding the deployment of fiber optics in downtown Mesa for broadband services.

It was moved by Committeemember Jones, to recommend to the Council that staff be directed to enter into a contract with Uptown Services, LLC to perform a telecommunications feasibility study to deploy fiber optics in downtown Mesa for broadband services.

Additional discussion ensued relative to the differences between high speed cable and high speed broadband applications; the fact that fiber optic cable is an insulated medium, not susceptible to electrical interference and can be easily upgraded; that the proposed consultant, Uptown Services, LLC, has an extensive background in municipal deployment of telecommunications networks and has performed similar studies for over 25 municipal electric systems nationwide; and a comparison of wireless and fiber optic technologies.

Committeemember Whalen seconded Committeemember Jones' motion.

Carried unanimously.

Chairman Thom expressed appreciation to staff for the informative presentation.

2. Adjournment.

Without objection, the Utility Committee Meeting adjourned at 10:55 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 22nd day of April 2004. I further certify that the meeting was duly called and held and that a quorum was present.

BARBARA JONES, CITY CLERK