



Agenda Item:

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## COUNCIL COMMUNICATION City Manager's Office

### GENERAL INFORMATION

Agenda Date: 05/09/05  
238

Communication No.: 05-

Agenda Item Type: Resolution  
No.:

Roll Call

Submitted by: Jeb E. Brewer, P.E., City Engineer

### SUBJECT—

Approving request from MidAmerican Energy Company for permission to construct and operate a temporary overhead electrical transmission line in the Downtown Underground District.

### SYNOPSIS—

If construction activities should result in failure of the second 69KV direct bury transmission line, MidAmerican Energy Company has requested permission to construct a temporary aerial 69KV transmission line in the Underground District on the west side of the Des Moines River from the confluence of the Des Moines and Raccoon Rivers to the River Hills Substation north of Grand Avenue only until the damaged direct buried transmission line can be replaced.

### FISCAL IMPACT—

None.

### RECOMMENDATION—

Approval

### BACKGROUND—

MidAmerican's Riverside Substation on the west side of the Des Moines River north of Grand Avenue supplies the electrical power to much of the downtown area and receives high voltage electricity from four sources; an aerial 69KV line from the north, two 69KV direct bury lines from the south, and by operating gas fired turbines inside the substation. The two direct bury lines are at the end of their useful life and MidAmerican has scheduled to replace them in a duct

bank that will be constructed in conjunction with Stage Two of the City's Des Moines River Outfall and Overflow sewer project that is scheduled to be completed in late 2006. During the construction in the area, one of the 69KV lines to the south has failed three times and is currently out of service. The other 69KV line to the south is near construction in the area and MidAmerican is fearful that it may not survive the construction activities.

If the second 69KV line to the south were to fail, MidAmerican will have to continuously operate the turbines at the substation at a cost of approximately \$2.5 million per month. In addition, if the second line is lost even with the turbines, there may not be enough capacity to provide electricity to the substation during peak demand times resulting in rationing of electricity or possible brown outs in portions of the downtown area including two hospitals.

MidAmerican is seeking permission to construct a temporary aerial transmission line in the Underground District on the west side of the Des Moines River from the confluence of the Des Moines and Raccoon Rivers to the River Hills Substation only if the second line is taken out of service. This temporary aerial line would be in place while the underground line is rebuilt.