



## United States Department of the Interior



BUREAU OF RECLAMATION  
Boulder Canyon Operations Office  
P.O. Box 61470  
Boulder City, NV 89006-1470

IN REPLY REFER TO:

BCOO-1000  
IRM-1.10

NOV 10 2004

Mr. Raul S. McQuivey, Ph.D., P.E.  
President  
Sutron Corporation  
21300 Ridgetop Circle  
Sterling, VA 20166

Subject: Installation of XConnect Software

Dear Mr. McQuivey:

The Boulder Canyon Operations Office has successfully installed and is operating Sutron's PC-based XConnect software. XConnect retrieves river and reservoir data from sites in the lower Colorado River Basin and writes the data directly to the Hydrologic Database (HDB) an Oracle-based schema designed specifically for hydrologic data. In addition, the field repeater sites are now upgraded with Sutron's XPert RTU's.

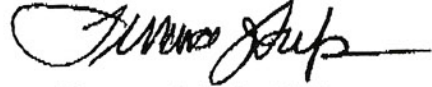
Since 1987 Sutron's DEC-based Data Management System (DMS) software had been used to collect data over a microwave backbone from Sutron's 9000 RTU's at repeater sites. Each 9000 RTU collected data via radio communications from Sutron 8200 RTU's located at several field sites in the lower Colorado River Basin. The data was then stored in Sutron's DMS database on DEC computers.

The upgrade was necessary because the hardware both in the field and at the master site had become obsolete and the software was no longer supported by the vendor. In addition, use of an industry standard relational database for storage of hydrologic data was necessary as efficient access to this information became more critical for the river operation and modeling analyses. As a result, HDB was created and has been in use for the past ten years.

This installation eliminates duplicate data storage in the DMS database. It also moves the telemetry processes off the failing DEC hardware platforms onto a Windows computing environment. This allowed for the removal of the obsolete 9000 RTU's at the repeater sites, since the DMS software was not compatible with the new XPert RTU's.

We appreciate the hard work of Mr. Ashish Raval, Ms. Clara Patch and Mr. Stanley Ye, of Sutron Corporation. Their highly responsive efforts were instrumental in providing us with a telemetry system necessary to effectively manage the river. We look forward to continuing our relationship with you in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Terrance J. Fulp", with a long horizontal flourish extending to the right.

Terrance J. Fulp, Ph.D.  
Area Manager