

ORIGINAL



0000060562

KENNETH D. SCHMIDT AND ASSOC
GROUNDWATER QUALITY CONSULTANTS
7227 NORTH 16TH STREET, SUITE 105
PHOENIX, ARIZONA 85020
602-997-7074

RECEIVED

2001 DEC 12 A 8:39

AZ CORP COMMISSION
DOCUMENT CONTROL

47
December 10, 2001

Ms. Laurie Anne Woodall
Chair, Arizona Power Plant and
Transmission Line Siting Committee
Office of the Attorney General
1275 West Washington
Phoenix, AZ 85007-2997

Arizona Corporation Commission

DOCKETED

DEC 12 2001

Re: La Paz Generating Station L-00000AA-01-0116

DOCKETED BY

mc

Dear Ms. Woodall:

I have reviewed the correspondence of November 21, 2001 to you from Joseph C. Smith, Director of ADWR. Following are my comments on this letter.

Issue No. 1

My testimony did not question the utility of the Harquahala Valley Numerical Ground Water Model for simulating regional groundwater conditions. Rather, the main question that I raised was the accuracy of this model in predicting the drawdown due to pumping from the La Paz G. S. well field. I testified that aquifer testing at the site would provide a much more accurate estimate of aquifer characteristics (and thus the drawdown) than the model. Only one aquifer test in the entire Harquahala Valley was referenced in the Harquahala Valley Numerical Ground Water Flow Model report (HydroSystems, Inc., 1999, page 3-12). This test was for Well (B-4-12) 9acc, located in the northwest part of the Valley, far from the project site. Experience in other central Arizona alluvial basins indicates that in some cases model-derived values for aquifer transmissivity can differ by more than 50 percent from the actual values determined from aquifer tests.

On Page 4-12 of the Harquahala Valley Numerical Ground Water Flow Model report, it was stated that "The Harquahala Valley model is a regional model that is intended to represent hydrologic conditions on a basin-wide scale, not on a small scale" (i.e. such as at and near the well field).

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

2

On Page 4-15 of the same report, it was stated: "The numerical model solution is a non-unique solution... This problem is particularly prevalent in areas of little aquifer data." A non-unique solution means that the calibrated values of some parameters could be wrong.

On Page 4-27 of the Harquahala Valley Numerical Ground Water Flow Model report, it was stated: "One localized area that the model did not represent well is the area of the MBT Ranch properties in T3N, R11W (at and near the project site).

Field Data

An aquifer test would provide the field data necessary to estimate the aquifer parameters as recommended in the Harquahala Valley Numerical Ground Water Flow Model report.

On Page 4-32 of the Harquahala Valley Numerical Ground Water Flow Model report, it was stated: "Because the model is moderately sensitive to hydraulic conductivity, it would be beneficial to have a better distribution of actual field data to estimate hydraulic conductivity..."

On Page 4-35 of that report it was stated: "Pumping tests can be conducted throughout the basin to collect additional data in order to refine the specific storage and specific yield values used in the calibrated model".

My opinion is that an aquifer test or tests at the project site would provide much better estimates of drawdown from pumping at the La Paz G. S. well field than does the Harquahala Valley Numerical Ground Water Flow Model.

Please call me if you have any questions.

Sincerely yours,



Kenneth D. Schmidt

KDS/jw