

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION)
68486 FILED TO CHANGE THE POINT)
OF DIVERSION OF A PORTION OF THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE PREVIOUSLY APPROPRIATED)
UNDER PERMIT 22891, CERTIFICATE)
8056, WITHIN THE CLOVERS AREA)
HYDROGRAPHIC BASIN (64), LANDER)
COUNTY, NEVADA.)

RULING

#5270

GENERAL

I.

Application 68486 was filed on February 11, 2002, by Russell Lane Parker and Tammy Lavon Parker to change the point of diversion of a portion of Permit 22891, Certificate 8056, being 1.34 cubic feet per second of water from an underground source within the Clovers Area Hydrographic Basin, Lander County, Nevada. The proposed point of diversion is described as being located within the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 24, T.34N., R.44E., M.D.B.&M., and the manner of use is for irrigation. The proposed place of use is described as being located within the S $\frac{1}{2}$ of Section 24, T.34N., R.44E., M.D.B.&M.¹

II.

Application 68486 was protested in a timely manner by Sierra Pacific Power Company on the following grounds:¹

The Valmy Power Station, owned by Sierra Pacific Power Company, pumps groundwater from wells located in Section 24, T34N, R44E (Permits 22892 and 27126) for irrigation. This protest seek [sic] to protect these Sierra Pacific Power Company wells.

Therefore the protestant requests that the application be issued subject to the following condition:

¹ File No. 68486, official records in the Office of the State Engineer.

The applicant shall measure, record and report static groundwater levels to the State Engineer.

The applicant shall discontinue use of, or reduce the rate or volume of withdrawal from the well if annual water level measurements reveal any of the following events:

- A. An average water level decline of 3 feet or more feet per year for five consecutive years; or
- B. A water level decline of 10 feet or more in fewer than five consecutive years; or
- C. A water level decline of 20 feet or more feet; or
- D. Hydraulic interference leading to a decline of 20 feet or more feet in wells pumping groundwater under Permits 22892 and 27126.

Therefore the protestant requests that the application be issued subject to the above conditions.

FINDINGS OF FACTS

I.

Pursuant to Nevada Revised Statutes § 533.365, it is within the State Engineer's discretion to determine whether an administrative hearing is necessary on a protested water right application. The State Engineer finds that a hearing is not necessary for a full understanding of the issues presented by the protest.

II.

A review of the records in the Office of the State Engineer indicates that Certificate 8056 was issued under Permit 22891 in the names of Russell Lane Parker and Tammy Lavon Parker. The duty of Certificate 8056 is limited to 1,250.88 acre-feet annually (afa) for the irrigation of 312.72 acres. The point of diversion is described as being located within the NW¼ SW¼ of Section 24, T.34N., R.44E., M.D.B.&M. The certificated place of use is the S½ of Section 24, T.34N., R.44E., M.D.B.&M.²

² File No. 22891, official records in the Office of the State Engineer.

Certificate 8057 was issued under Permit 22892 and Certificate 8163 was issued under Permit 27126. Certificates 8057 and 8163 are in the names of Idaho Power Company and Sierra Pacific Power Company. The total combined duty of the two certificates is limited to 1,250.88 afa, for the irrigation of 312.72 acres. The point of diversion under Certificate 8057 is described as being located within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, T.34N., R.44E., M.D.B.&M. The point of diversion under Certificate 8163, is described as being located within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 24, T.34N., R.44E., M.D.B.&M. The place of use for both certificates is the N $\frac{1}{2}$ of Section 24, T.34N., R.44E., M.D.B.&M. ³

The State Engineer finds that the distance between the Idaho Power Company/Sierra Pacific Power Company wells under Certificate 8057, and Certificate 8163, and the existing point of diversion under Certificate 8056 is approximately 1,450 feet and 4,195 feet, respectively. Similarly, the distance to the wells under Certificate 8057 and Certificate 8163, from the proposed point of diversion under Application 68486 is approximately 5,170 feet and 2,205 feet respectively.

III.

The State Engineer has estimated an average transmissivity of 1,738 square feet per day and an estimated storage coefficient of 0.01 for the aquifer.⁴ These values were used to estimate water level drops that could be expected from pumping 625.44 afa from the proposed point of diversion under Application 68486 and 625.44 afa from the existing point of diversion under Certificate 8056, simultaneously. The projected water level drops were generated using the standard Cooper-Jacob straight-line approximation of the Theis non-equilibrium equation for water level draw downs when a

³ File Nos. 22892 and 27126, official records in the Office of the State Engineer.

⁴ Well Driller Reports, official records in the Office of the State Engineer.

well is pumped or flowed. The quantity of water used in the equation to project the water level drops was 625.44 afa (74,641 cubic feet per day) per well. The method assumes a homogeneous and isotropic aquifer, infinite extent, with no recharge. These conditions would represent a worst-case scenario. The well test assumed continuous pumping from 1 day to 30 years. The results from the theoretical pump test indicated that after 30 years of continuous pumping from each well, the cumulative draw down in the wells under Certificate 8057 and Certificate 8163 would be 43.38 feet and 41.94 feet, respectively. The projected water level drops were also generated for the current situation, i.e., where all the water appropriated under Certificate 8056, was pumped from its current point of diversion. The transmissivity and storage coefficient remained the same while the quantity of water used in the equation was 1,250.88 afa (149,282 cubic feet per day). The results from the theoretical pump test indicated that after 30 years of continuous pumping, the draw down in the wells under Certificate 8057 and Certificate 8163 would be 52.06 feet and 37.54 feet, respectively. The net impact on the water level in Sierra Pacific Power Company's well under Certificate 8057 would be less than if Application 68486 were approved. The State Engineer finds that Application 68486, if approved, would not cause an unreasonable lowering of the water level in the well under Certificate 8163. Therefore, the pumping of the applicant's wells would not have a negative impact on the protestant's water rights; and thus, may be considered for approval.

IV.

Personnel from the State Engineer's office have conducted yearly water level measurements in the wells represented by Permit 22891, Certificate 8056; Permit 22892, Certificate 8057 and Permit 27126, Certificate 8163 since 1991 and plan to continue the yearly measurements.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁵

II.

The State Engineer is prohibited by law from granting a permit under an application to change the public waters where:⁶

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes the results of the flow test were analyzed using industry standard techniques and provide sufficient information on the aquifer characteristics to make a reasonable determination of potential impacts on existing rights.

IV.

The State Engineer concludes that the net projected draw down impacts at the protestant's wells are less as a result of changing half the duty under Certificate 8056 to a new point of diversion under Application 68486 and will not cause an adverse effect on the protestants wells.

VI.

Based on the record of evidence available, the State Engineer concludes that approval of Application 68486 to change the point of diversion of 625.44 afa of the water appropriated under Certificate 8056 will not conflict with existing water rights nor threaten to prove detrimental to the public interest.

⁵ NRS chapters 533 and 534.

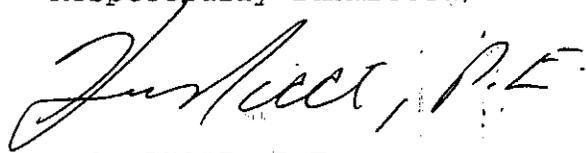
⁶ NRS § 533.370(3).

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RULING

The protest to Application 68486 is hereby overruled and Application 68486 is hereby approved subject to existing rights and the payment of the statutory permit fees.

Respectfully submitted,



HUGH RICCI, P.E.
State Engineer

HR/KEE/jm

Dated this 27th day of
August, 2003.