Decision No. 11256

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Petition of THE CITY OF STOCKTON, a municipal corporation, to ascertain the value and to fix and determine just compensation to be paid to PACIFIC GAS AND ELECTRIC COMPANY, a corporation, for the acquisition by said City of Stockton of the system of distribution of water belonging to said Pacific Gas and Electric Company and all the appurtenances and appliances used in connection with or part of said distributing system within the said City of Stockton and adjoining territory used in the distribution of water to the inhabitants and consumers thereof.

Application No. 7231.

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M. P. Shaughnessy, for City of Stockton.

George S. McNoble and Stanley M. Arndt, for Stockton Water Consumers League.

C. P. Cutten and R. W. Duval, for Pacific Gas and Electric Company.

BENEDICT, Commissioner:

OPINION

The City of Stockton (hereinafter referred to as the City), on October 6, 1921, filed a petition asking that the Commission, under the provisions of the Public Utilities Act, fix the just compensation to be paid by the City of Stockton to Pacific Gas and Electric Company (hereinafter referred to as the company), for the property owned and used by the company in the City of Stockton for the purpose of production

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and distribution of water for domestic, industrial and municipal purposes in the city. A preliminary hearing was held in Stockton on December 20, 1921, at which time the company made objection to the form of the petition and the description of the property desired by the city, and it was stipulated that an amended petition would be filed by the city which would overcome the objections to the original petition, and which should be deemed to have been filed as of the date of the filing of the original petition.

In accordance with this stipulation the city, on April 6, 1922, filed an amended petition of the second class under section 47(b) of the Public Utilities Act, declaring that on March 24, 1922, the Council of the City of Stockton adopted Resolution No. 5219, which set forth that it was the intention of the city to initiate and to continue such proceedings as have already been initiated and may be required under the law for the purpose of submitting to the voters of the city a proposition to acquire, under eminent domain proceedings or otherwise, all the property of the company used for the production, distribution and sale of water in and in the vicinity of the city.

A description of the property involved, marked Exhibit "A", is attached hereto and made a part hereof.

Hearings in this proceeding were subsequently held in Stockton and San Francisco, the matter has been submitted, and all of the exhibits, reports and briefs filed, and is now ready for decision.

There are at issue in this proceeding the following main elements entering into the question of just compensation:

1. Valuation of physical properties plus overheads.
2. Going concern value.
3. Water rights.
4. Severance damages.

This Commission has heretofore in its decisions outlined certain general principles governing the determination of just compensation to be paid for public utility property, which principles it will be unnecessary to reiterate in this proceeding.

It may be briefly stated, however, that the Public Utilities Act provides for a finding of just compensation in a single sum for the utility's lands, property and rights sought to be acquired. Paragraph 4, (b), Section 47, provides:

> "When the proceeding has been submitted, the Commission shall make and file its written finding fixing, in a single sum, the just compensation to be paid by the political subdivision for said lands, property and rights, or said part or portion thereof; provided, that if the Commission finds that severance damages should be paid, the just compensation for such damages shall be found and stated separately. Said just compensation shall be fixed by the Commission as of the day on which the petition was filed with the Commission."

The value of the plant will, therefore, be considered as an indivisible gross amount. All of the elements of property, tangible and intangible, will be considered as parts of a single entity, and individual findings of value, as to each element, will not be made.

Appraisals were filed by engineers representing the city, the company, and the Railroad Commission. A summary of the various appraisals is set forth in the following tabulation:

FOR PACIFIC GAS AND ELECTRIC COMPANY

Appraisals by J. T. Ryan, E. B. Henley and F. C. Herrmann

Items	Reproduction Cost	Reproduction Cost less Depreciation
Lands	$ 71,700	$ 71,700
Physical property including overheads, based upon inventory as of October 6, 1921, and upon unit prices of labor and materials averaged over a two-year construction period ending on October 6, 1921, the date of filing of the petition with the Commission	2,257,458	1,848,485
Going Concern Value	250,000	250,000
Water Rights	385,000	385,000
Totals - - - -	$2,964,158	$2,555,185

FOR CITY OF STOCKTON

Appraisal by Fred. H. Tibbetts

Items	Reproduction Cost	Reproduction Cost Less Depreciation
Lands	$ 45,997	$ 45,997
Physical property including overheads, based upon inventory and unit prices of labor and materials as of July 15, 1920	2,114,827	1,286,739
Going Concern Value	0	0
Water Rights	0	0
Totals - - -	$2,160,824	$1,332,736

FOR CITY OF STOCKTON

Appraisal by W. G. Hunter

Items	Reproduction Cost	Reproduction Cost less Depreciation
Lands	$ 64,530	$ 64,530
Physical property including overheads, based upon inventory as of April, 1921, and upon unit prices of labor and materials averaged over a three-year period ending November 1, 1921	1,843,342	817,153
Going Concern Value	63,115	0
Water Rights	0	*40,000
Totals - - -	$1,971,077	$841,683

*Deduction for claimed short life of water supply.

FOR CITY OF STOCKTON

Appraisal of Lands by The Appraisal Committee of Stockton Realty Board

Value of property included in the inventory as of October 6, 1921 - - - - - - - - - - - - - - - - - $52,000

FOR RAILROAD COMMISSION

Appraisal by William Stava

Items	Reproduction Cost	Reproduction Cost less Depreciation
Lands	$ 52,000	$ 52,000
Physical property including overheads, based upon inventory as of October 6, 1921, and upon unit prices of labor and materials averaged over a construction period of two years ending October 6, 1921, the date of the filing of the petition with the Commission	1,937,478	1,395,517
Going Concern Value	0	0
Water Rights	0	0
Totals - - - - - -	$1,989,478	$1,447,517

The appraisals presented by the engineers for the company and for the Commission are as of the date of the filing of the application, and the prices of labor and materials are those prevailing over a reasonable construction period prior to the date of the ap praisal.

The inventories used by the engineers in this proceeding are unusually complete and comprehensive, and, apparently an earnest effort has been made to list every item of property.

At the hearing and in its briefs the company contended that some of the unit costs and overhead percentages used in the appraisal presented by the Commission's engineer were too low and also made the claim that a few structures had been entirely omitted. Very careful consideration has been given to these matters and to all factors involved therein, and it would appear that as to some items the estimate of reproduction cost of physical property presented by the Commission's engineer should be increased.

The matter of accrued depreciation of the property was also the subject of long and exhaustive consideration at the hearings and in the briefs filed. It appears that all of the engineers who testified in the proceeding made careful inspection of all portions of the plant which were capable of inspection, but that in some other respects the methods of determining the condition per cent of the various structures varied. This matter is one largely of individual estimate or judgment; as was stated in the following language of the Supreme Court of this State in Pacific Gas and Electric Co. v. Devlin, et al., 63 Cal. Decs. 132:

> "It is obvious that this matter of depreciation particularly in a property which is mostly underground and not open to careful inspection, must be largely a matter of estimate and speculation based upon common observation and experience under similar conditions. It is a matter of approximation at best * * *."

The condition per cent of the physical property as set out in the various appraisals submitted is approximately as follows:

Ryan, for Company	82
Stava, for Commission	72
Tibbetts, for City	61
Hunter, for City	44

While both the Tibbetts and Hunter valuations do not include all items of property contained in the appraisals presented by Messrs. Ryan and Stava, and are, for that reason, not strictly comparable as to the condition of the property, a study of the items in the inventories used indicates that many of the items listed by all of these engineers are identical, and that such differences as exist are so slight as not to exclude the Hunter and Tibbetts valuations from consideration in determining the condition of the property.

A study of the estimates as to condition of the physical property, submitted by the various engineers, shows a wide variation and makes the determination of that question

extremely difficult. The estimates of Messrs. Tibbetts and Hunter are in some respects too drastic, and, on the other hand, Messrs. Ryan and Stava have been unduly optimistic in their calculations. Careful consideration has been given to all the evidence presented concerning depreciation, and the final finding of just compensation will be such as to reflect fairly and adequately the condition of the property.

It is well settled that in valuing a public utility for the purpose of eminent domain, consideration must be given to the element of going concern value, and if such value is shown to exist, allowance for it must be made. Going concern value is generally considered to be the difference in value between the dead physical structure and the business financially in successful operation.

In the case of Galveston Electric Co. v. City of Galveston (U.S. Sup. Ct. Adv. Ops. May 15, 1922, p. 382), appears a discussion of going concern, which we think is of material assistance in placing a value upon this very intangible element of property. The Court in that case said:

> "The most important of these items is $520,000 for 'development cost.' The item is called by the master also 'going concern value, or values of plant in successful operation.' He could not have meant by this to cover the cost of establishing the system as a physicallygoing concern, for the cost of converting the inert railway plant into an operating system is covered in the agreed historical value by items aggregating $202,000. These included, besides engineering, supervision, interest, taxes, law expenses, injuries, and damages during construction, the sum of $73,281 for the expenses of organization and business management."

It will be seen that the items referred to in the above quotation are the same which the engineers for the company and the Commission included under the head of "overhead expenses," with the exception of the one item of "organization," which was allowed as a separate item by both engineers. The Court then goes on to show that going concern value is something different from and in addition to these items:

"The going concern value for which the master makes allowance is the cost of developing the operating railway system into a financially successful concern."

We think this statement implies that to have any going concern value, a company must at least be operating successfully, or, in other words, must be on a paying basis. A statement of similar import appears in Des Moines Gas Co. v. Des Moines, 238 U.S. 153; 59 L.ed. 1245. In that case the Court said:

"That there is an element of value in an assembled and established plant doing business and earning money over one not thus advanced, is self evident."

To the same effect see,

Kennibec Water Dist. v. City of Waterville, 97 Me. 185; 54 Atl. 6.

Turner v. Cataract Power Co., 3 P.S.C.R. 656 (N.Y. 1913).

Monongahela Navigation Co. v. United States, 148 U.S. 312.

Montgomery Co. v. Schuylkill Bridge Co., 100 Pa. 54, 58.

San Joaquin L.& P. Corp. v. Railroad Commission, 175 Cal. 80.

Pacific Gas & Electric Co. v. Devlin, 65 Cal. Decs. 140.

From these decisions we think it is settled that the earning power and financial condition of the company are important factors to be considered in arriving at going concern value.

The Galveston case also holds in effect that the method, frequently employed, of capitalizing past deficits to ascertain or measure going concern value, is unsound. It is said by the Court: "Past losses do not tend to prove present values." The Court does not indicate, however, that

actual expenditures at the start in overcoming initial difficulties incident to operation and in securing patronage might be considered if there is evidence of such expenditures.

In the present case the Commission has carefully examined the evidence relative to the present and past financial condition of the company. The company claims that since 1901 the income derived from the sales of water has been sufficient to yield a fair return on the investment, except in the years 1919, 1920 and 1921, and that the failure to do so during the past few years has been due to the fact that the rate schedules have not yet been adjusted to meet the higher costs of labor and materials used in the operation of the property. The further claim is made that the community served is prosperous and has shown a continuous and healthy growth for more than thirty years; that there is no antiquated or obsolete equipment, no idle or useless property, no unnecessary buildings or structures, no unprofitable extensions into undeveloped territory, and that the business is a going concern, providing a prosperous community with a necessary service.

The results of operation of the Stockton water system from 1917 to 1921, inclusive, are as follows:

	1917	1918	1919	1920	1921
Cost of system as shown by company's books	$1040571	$1053772	$1102452	$1141616	$1167385
Consumers	7791	8481	8678	9098	9900*
Per cent of increase over 1917	0.0	8.9	11.4	16.8	27.1*
Total Revenue	$ 184477	$ 196088	$ 202159	$ 217791	$ 221547
Per cent of increase over 1917	0.0	6.3	9.6	18.1	20.1
Operating expenses	$ 99585	$ 101932	$ 113123	$ 132290	$ 146328
Depreciation	29445	29802	31170	32174	32869
Total Charges	$ 129030	$ 131734	$ 144293	$ 164464	$ 179197
Net Revenues	55447	64354	57866	53327	42350
Per cent of return upon book cost	5.33	6.11	5.25	4.68	3.64

* Approximate.

The company claims that the cost of the system as shown in the foregoing tabulation is incomplete and does not include all items of cost. If this contention is correct, the rates of return will be correspondingly reduced.

In order to secure a return of eight per cent upon the cost of the system as shown above, the net revenues for 1921 must be increased approximately 120 per cent, and to achieve this result the present rates should theoretically be increased 25 per cent.

The company claims a total of $2,555,185 as just compensation for this water system, and upon this amount the net revenues for 1921 would yield a return of 1.65 per cent. A return of eight per cent upon this amount would require a theoretical increase in the present rates of approximately 75 per cent. The actual rate of increase would probably exceed this amount.

From the foregoing it appears that the Stockton system is not now in an especially prosperous condition. In fact, its prosperity depends upon future rate increases, and hence, is, to some extent, a matter of speculation. Nevertheless, the system has, for many years, paid operating expenses, and there has been, for many years, some return in addition. We are satisfied, therefore, that it has some going concern value.

The company claims that the plant has a going concern value of $250,000. This sum is the average of the amounts obtained by the use of six different theoretical methods of figuring going concern value. None of these methods proceed upon a basis of the actual cost of developing the Stockton system into a going and successful concern. In fact, there was no evidence to show that any money had been exepnded "in overcoming the initial difficulties incident to

operation and in securing patronage." In the absence of such evidence, estimates of what it might cost to develop other businesses of similar character, or of what has been allowed by courts or commissions for going concern value in other cases, are not decisive of the value in the present case. (Galveston Electric Co. v. City of Galveston, supra.) In our opinion, the method used leads to a figure which is clearly in excess of the true going concern value when considered in relation to the financial condition of the company.

Engineers Stava, Hunter and Tibbetts made no definite allowance in their valuations for going concern, but, as above pointed out, this system has an actual and more than nominal going concern value. Considering the past and present financial condition of the company and the other evidence submitted on this question, a substantial allowance will be made in the final valuation for going concern.

The company, through Mr. F. C. Herrmann, presented evidence purporting to show a value of the so-called water rights of the company used in connection with the supply of water in Stockton. This evidence sets forth the following data in regard to the use of water:

Average daily draft for the past five years, in million gallons	5.15
Maximum daily draft sustained for one month during the past five years, in million gallons	7.53
Maximum draft for one day, in million gallons	12.00

Maximum draft during short periods of peak load, was at the rate of 19 million gallons per day.

It is claimed that the company has established a right to draw 5.15 million gallons of water per day, and that this right should be given a value of from $310,000 to $385,000 for the purpose of sale of the system to the City of Stockton.

The values of these so-called water rights claimed by the company, amounting to from $60,000 to $75,000 per million gallons of daily draft, are based upon reported sales of water rights in various parts of California. Some of the examples shown are for pumped water, some for gravity supplies and some for a combination of pumped and gravity water. None of the sales mentioned occurred in the vicinity of Stockton, and Mr. Herrmann did not know that any sales of water rights had ever been effected in this immediate locality.

Mr. Herrman claims that it is by no means certain that the City of Stockton or others could obtain an adequate, reliable and satisfactory supply of water for domestic purposes by sinking wells in Stockton or in the immediate vicinity, and that other sources of supply are somewhat remote. He admitted that, in small quantities, water can be secured in the neighborhood of the city, but Mr. Herrmann regarded it as improbable that a supply of potable water could be secured from wells in sufficient quantities to furnish all inhabitants of the city with water.

The Stockton water supply is derived entirely from wells which have been drilled at three pumping plants located at widely separated points. It appears that many wells other than those of Pacific Gas and Electric Company have been installed in the City of Stockton for the purpose of securing a water supply for industrial and domestic uses. Mr. Herrmann claims that the supply obtained from some of these wells is unfit for domestic use, and states that this is the case with respect to the well supply developed by National Paper Products Company and Western States Gas and Electric Company. We are satisfied from the evidence, however, that water occurs in large quantities beneath the surface throughout this territory. (In some localities near sloughs, the quality of the water

may be such that its potability is questionable.) It is also clear that industrial plants can, and do, develop their own supplies, and do not patronize the plant of the Pacific Gas and Electric Company, and that many domestic supplies have been developed.

Testimony shows that Pacific Gas and Electric Company has never considered it worth while to protest the development of any of these private supplies in order to protect its own so-called water right, and it is reasonable to conclude that these so-called rights were not formerly regarded as being of especial value.

It is undoubtedly true that the value of water rights, in so far as it is shown that they have value, must be allowed in eminent domain proceedings. (San Joaquin Light & Power Corp. v. Railroad Commission, 175 Cal. 78.) Most of the cases cited by the company relative to the value of the private or prescriptive rights to water have to do with streams or surface water, and are cases where the supply of water was limited, or the right to take it was in dispute. In the present case, the alleged water rights pertain to underground water. The rule as to underground water is enunciated in Hudson v. Dailey, 156 Cal. 617, 629. It was there held that no prescriptive right to percolating water accrues to an owner of land overlying water-bearing strata unless it be shown that the party claiming this right has used or diverted this water in such manner as to interfere in some way with the use of water from the same strata by others, or in such manner as to make the use adverse to such others. It was not shown in the present case that the company has ever used or diverted the water in such manner as to interfere with the use from the same source by others. On the contrary, there is evidence to show that the company's supply of water has never been affected by any

of the many wells, large and small, that have been put down in the vicinity. If the water supply were limited to the amount used by the company, then, under the facts shown, it might be held that the company's right was adverse to all other owners in the vicinity and, hence, was a prescriptive right, having a special value apart from the land. We do not mean to imply that the company does not possess a valid right to take the amount of water claimed by it from the underground strata, but we think this right is not one which, under the evidence above referred to, must be given a separate value in addition to the land value. Such value as it possesses will, therefore, be included in the amount fixed as the value of the land.

This conforms to the decision of the Federal Court in Water Company of Tonopah v. Public Service Commission of Nevada, 250 Fed. 204, where it was said:

> "I do not understand that percolating water passing under or through the soil is anywhere recognized as a water right, having a valuation separate and distinct from the land."

To the same effect, see the discussion of the Commission in the following cases:

City of Coalinga vs Pleasant Valley Water Co. and Coalinga Cons. W. Co., 6 C.R.C. 33,36.

In the Matter of the Application of the City of Santa Monica, 7 C.R.C. 444, 450.

In the Matter of the Rates, etc. of Belvedere W.Co., 10 C.R.C. 705, 710.

In the Matter of the Application of Marysville W. Co., 19 C.R.C. 452, 454.

Many other matters were submitted for the Commission's consideration as affecting the value of the plant and as having bearing upon the final finding and just compensation. Elaborate and detailed discussion of these factors will not be attempted, but full consideration will be given them in the final order.

It was stipulated at the hearing by counsel for the Company and the City that the sum of $20,000 should be included by the Commission in the final award as the value of the material and supplies, and that this amount might be adjusted at the time the property is actually transferred to the City, to provide compensation for such items as may be shown to be on hand by exact inventory. Engineer Stava for the Commission, and Ryan for the Company also gave a value of $20,000 for these items in their engineering reports (Com. Ex. 1, p. 18; Co. Ex. 1, p. 2). Based upon this evidence and stipulation, an allowance for materials and supplies of $20,000 will be made and included in the final award of just compensation.

Engineers Ryan, Stava and Hunter estimated the severance damage to be the sum of $1,250. In the Company's brief it is stated that this sum is also subject to adjustment, depending on the actual cost of moving certain poles and switch structures. Based upon the above estimates, an allowance of $1,250 will be made for severance damage. As section 47 (b) requires that such damages shall be found and stated separately, this amount will not be included in the final award of just compensation for the land, property and rights to be taken, but will be awarded in addition thereto.

After a careful consideration of all of the elements pertinent to a final conclusion herein, and of all the items going to make up the value of the properties sought to be acquired by the City of Stockton in this proceeding, it appears that the just compensation to be paid by the City of Stockton to Pacific Gas and Electric Company for the lands, physical properties and rights, including all intangible values, is the sum of $1,400,000, and that the damage resulting from the severance of the properties will consist of the reasonable actual cost of rearrangement of Pacific Gas and Electric Company's electric transmission line, together with the cost of moving to a new location the switch structure and electric-

al stock on hand, all of which arelocated on the property occupied by Pumping Plant No. 1.

F I N D I N G S

THE CITY OF STOCKTON, a municipal corporation, having filed with the Railroad Commission a petition entitled as above, and the Railroad Commission having proceeded, under the provisions of section 47 of the Public Utilities Act to fix and determine the just compensation to be paid by the City of Stockton to Pacific Gas and Electric Company for the public utility water system supplying water to consumers in the City of Stockton, public hearings having been held thereon, briefs having been filed, and the Commission having been fully advised in the matter:

It is hereby found as a fact that the just compensation to be paid by the City of Stockton to Pacific Gas and Electric Company for that company's public utility water system supplying water to consumers in and in the vicinity of the City of Stockton, and more particularly described in Exhibit "A" attached hereto and made a part of these findings, but not including severance damages, is the sum of one million four hundred thousand dollars ($1,400,000.00).

It is hereby further found as a fact that the just compensation to be paid by the City of Stockton to Pacific Gas and Electric Company, as severance damages to the property and rights of Pacific Gas and Electric Company not to be taken by the City of Stockton, and resulting from the acquisition by said city of the property and rights described in Exhibit "A" attached hereto and

made a part of these findings, is the sum of Twelve hundred and fifty dollars ($1,250.00).

The foregoing opinion and findings are hereby approved and ordered filed as the opinion and findings of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 21st day of November, 1922.

Commissioners.

EXHIBIT "A"

DESCRIPTION OF PROPERTY TO BE ACQUIRED BY THE CITY OF STOCKTON FROM PACIFIC GAS AND ELECTRIC COMPANY, AS COVERED IN APPLICATION NO. 7231.

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REAL ESTATE

All of Block 99 South of Mormon Channel, as said block is shown upon the official Map of the City of Stockton, approved and adopted by the City Council on July 23, 1894.

Lots 9, 11 and 15, Block 52 West of Center Street, as said lots and block are shown upon the official Map of the City of Stockton, approved and adopted by the City Council on July 23, 1894.

Lots 1 to 12, inclusive, Block 1, and Lots 1 and 2, Block 5½, all in Jensen's Addition, as said lots and blocks are shown upon a map entitled: "Map of H. P. Jensen's Addition to Stockton," filed in the office of the County Recorder of San Joaquin County, State of California, on April 14, 1890.

Also a tract of land in the City of Stockton described as follows:

Beginning at a point on the east line of East Street, which point is the intersection of the east line of East Street with the south line of Jensen's Addition as shown upon a map entitled: "Map of H. P. Jensen's Addition to Stockton," filed in the office of the Recorder of San Joaquin County, State of California, on April 14, 1890; thence north 71°35' east, along the south line of Jensen's Addition, a distance of 973.5 feet to the southeast corner of County Survey Numbered 615; thence south 16°55' east, a distance of 264 feet; thence south 71°35' west, a distance of 885.76 feet; thence north 11°54' west, a distance of 189.55 feet; thence south 78°10' west, a distance of 120 feet, to a point on the east line of East Street; thence north 11°54' west, along the east line of East Street, a distance of 64.4 feet, to the point of beginning.

Also a tract of land in the City of Stockton described as follows:

Beginning at a point on the east line of East Street, which point is the intersection of the east line of East Street with the south line of Lafayette Street; thence easterly, along the south line of Lafayette Street, a distance of 514.55 feet; thence southerly, parallel to the west line of Della Street and distant 171.71 feet when measured at right angles therefrom, a distance of 264.13 feet to the northeast corner of Lot 2, Block 5½ of Jensen's Addition, as the same is shown upon a map entitled: "Map of H. P. Jensen's Addition to Stockton," filed in the office of the Recorder of San Joaquin County, State of California, on April 14,1890; thence westerly in a direct line 290.6 feet to the northwest corner of Lot 1, Block 5½, Jensen's Addition; thence southerly, a distance of 37.7 feet to the southwest corner of Lot 1, Block 5½, Jensen's Addition, which corner is on the north line

of Sonora Street; thence westerly, along the north line of Sonora Street, a distance of 225 feet, to the intersection of the north line of Sonora Street with the east line of East Street; thence northerly, along the east line of East Street, a distance of 303 feet to the point of beginning.

PUMPING STATION NO. 1

PUMP HOUSE

One story building, steel frame, brick walls, plastered both sides, concrete foundations and floors. Pump pit lined with glazed tile. Tar and gravel roof on concrete slab. Size of building: 64 x 113½ feet, 26½ feet from floor to top of walls. Size of pit: 41 x 57 feet by 23 feet deep.

PUMP HOUSES

Nine galvanized iron pump houses, each 4' 8" x 4' 8" x 10' 5".
Two one-story buildings, wood frames, board and batten sides, shingle roofs, dirt floors, each 8 x 8 feet. 7 feet to eaves.

PROPERTY IMPROVEMENTS

Consisting of ornamental iron fence, wood fence, concrete fountain, concrete electroliers, concrete curbs, macadam driveways, flag pole, lawns, trees, shrubs, etc.

WAREHOUSE

One story building, wood frame, corrugated iron sides, tar and gravel roof, concrete foundations and floor. Size of building: 38' 8" x 77' 10" by 21' 6" high.

GARAGE

One story building, wood frame, corrugated iron sides and roof, concrete floor. Size of building: 50' 4" x 98' 0" by 9' 4" to eaves.

BLACKSMITH SHOP

One-story building, wood frame, corrugated iron sides and roof, concrete floor. Size of building: 22' 8" x 25' 0" by 9' 6" high to eaves.

STORE SHED

One-story building, wood frame, board and batten sides, shingle roof. Size of building: 5' 0" x 5' 0" x 7' 0" high to eaves.

PAINT SHED

One-story building, wood frame, corrugated iron sides and roof. Size of building: 8' x 10' by an average of 7 feet high.

TOOL HOUSE

One-story building, wood frame, corrugated iron sides and roof. Size of building: 18' x 35' by 7 feet to eaves.

STORE HOUSE

One-story building, wood frame, board and batten sides, shingle roof, wood floor. Size of building: 16' x 40' by 10 feet to eaves.

WAGON SHED

One-story building, "lean-to" type, wood frame, wood sides, shake roof, dirt floor. Size of building: 14' x 24' by an average of 9' 9" high.

BARN

One-story building, "lean-to" type, wood frame, board sides, shake roof. Size of building: 16' x 31' by an average of 10' high.

RESERVOIR

Circular concrete structure, wood frame roof covered with felt, tar and gravel. Size: 125 feet diameter by 20½ feet deep.

TANK

Steel tank and tower. Capacity 200,000 gallons. Total height 110 feet.

TUNNELS

1133½ linear feet of tunnels, lined with brick, brick and timber, and with timber, including manholes and valve chambers.

WELLS

WELL No.1. 800 feet of 8 inch diameter and 300 feet of 7 inch diameter. No. 16 gauge well casing. Total depth 1100 feet. Brick well pit.

WELL No.2. 600 feet of 6 inch diameter and 310 feet of 5 inch diameter. No.16 gauge well casing. Total depth 960 feet. Brick well pit.

WELL No.4. 560 feet deep. 10 inch diameter. No.14 gauge casing.

WELL No.5. 218 feet deep. 8 inch diameter. No.16 gauge casing.

WELL No.7. 300 feet deep. 8 inch diameter. No.16 gauge casing.

WELL No.8. 577 feet deep. 8 inch diameter. No.16 gauge casing.

WELL No.9. 150 feet of 16 inch diameter and 628 feet of 12 inch diameter. No.14 gauge casing. Total depth 778 feet. Brick and reinforced concrete well pit.

WELL No.10. 230 feet deep. 20 inch diameter. No.14 gauge casing.

WELL No.11. 150 feet of 16 inch diameter and 800 feet of 12 inch diameter. No.14 gauge casing. Total depth 950 feet. Brick and reinforced concrete well pit.

WELL No.12. 150 feet of 16 inch diameter, 118 feet of 14 inch diameter, and 734 feet of 12 inch diameter. No. 14 gauge casing. Total depth 1002 feet. Brick and reinforced concrete well pit.

WELL No.13. 150 feet of 16 inch diameter, 100 feet of 14 inch diameter, and 800 feet of 12 inch diameter. No. 14 gauge casing. Total depth 1050 feet. Brick and reinforced concrete well pit.

WELL No.14. 223 feet deep. 20 inch diameter. No.14 gauge casing. Brick well pit.

WELL No.15. 150 feet of 16 inch diameter, 93 feet of 14 inch diameter, 610 feet of 12 inch diameter, and 200 feet of 10 inch diameter. Total depth 1053 feet. Brick and reinforced concrete well pit.

WELL No.16. 257 feet of 16 inch diameter, 589½ feet of 14 inch diameter, and 205½ feet of 12 inch diameter. No. 14 gauge casing. Total depth 1052 feet. Brick and reinforced concrete well pit.

WELL No.17. 201 feet deep. 20 inch diameter. No.14 gauge casing.

WELL No.18. 861 feet of 14 inch diameter, and 91 feet of 12 inch diameter. No.14 gauge casing. Total depth 952 feet. Brick and reinforced concrete well pit.

WELL No.19. 280 feet of 16 inch diameter, 238 feet of 14 inch diameter, and 156 feet of 12 inch diameter. No. 14 gauge casing. Total depth 674 feet. Brick and reinforced concrete well pit.

WELL No.20. 279 feet of 20 inch diameter, 754 feet of 14 inch diameter, and 151 feet of 12 inch diameter. No. 14 gauge casing. Total depth 484 feet. Brick and reinforced concrete well pit.

WELL No.22. 368 feet deep. 16 inch diameter. No.14 gauge casing.

WELL No.23. 230 feet deep. 8 inch diameter. No.14 gauge casing.

PUMPING EQUIPMENT

BOILERS

Two 80 H.P. horizontal, tubular boilers, with foundations and setting.
Four 80 H.P. horizontal, tubular boilers, dry steam drums, with foundations and setting.
Steel stack and breeching, stack 5 feet diameter by 70 feet high, with steel support and concrete foundation.

FEED WATER PUMPS

Worthington duplex pump, 5½" x 3½" x 5", concrete foundation.
Snow duplex pump, 4½" x 3½" x 4", concrete foundation.

FEED WATER HEATER

National, Type A, 24" x 50".

HOTWELL TANK

Tank 4' 0" x 6' 0" x 5' 0", Steel plate.

CONDENSER

United Iron Works, 5' 4½" diameter by 9' 10".

FUEL OIL PUMPING SYSTEM

Two Fairbanks-Morse pumps, 3" x 2" x 4".
Cast iron oil heater, 10" diameter by 3' 0".
Two Dow pumps, 4½" x 2½" x 4".
Oil heater, wrought iron plate, 12" diameter by 3' 0".
2 sets of drip pans, regulators, air chambers and pressure gauges.

STEAM PIPING

Consisting of various lines of pipe ranging in size from ½ inch to 24 inches diameter, with valves, fittings, steam traps, separators, etc.

OIL TANKS

Two steel shell oil tanks, 8 feet diameter by 18 feet long.

OIL PIPING

Consisting of various lines of pipe ranging in size from 3/8 inch to 3 inches diameter, with valves, fittings, etc.

PUMPS

Snow cross-compound, duplex, double action steam pump, 18" x 36", 51 R.P.M., capacity 6 million gallons per day, on concrete foundation.
Two pumping units each consisting of Allis-Chalmers, 10 inch, double suction, single stage centrifugal pump, 6 million gallons daily capacity, direct connected to Kerr steam turbine of 250 H.P., 1760 R.P.M., Form 247M, also Allis-Chalmers induction motor, 250 H.P., 1750 R.P.M., 440 V., all on cast iron base and concrete foundation.
Byron-Jackson, 8 inch, two stage, centrifugal pump direct connected to Stanley induction motor, 75 H.P., 440 V., 720 R.P.M., on concrete foundation.
Byron-Jackson, single stage, centrifugal pump with 12 inch double suction and 10 inch discharge, direct connected to General Electric induction motor, 150 H.P., 440 V., 1200 R.P.M., Type IQ, on concrete foundation.

SUCTION MANIFOLD

Steel and cast iron manifold, 36½ inches diameter by 19½ feet long.

AIR PUMPING EQUIPMENT

Edwards air pump, 10" x 10" x 18", two cylinder steam drive, on cast iron base and concrete foundation.
Blake triplex air pump, 11" x 12", single acting, 100 R.P.M., gear driven by Ohmen vertical steam engine, 6" x 10", 400 R.P.M., on cast iron base and concrete foundation.
Air piping consisting of various lines of pipe ranging from 2 inch to 6 inch diameter, with valves, fittings, etc.

DEEP WELL PUMPS AND MOTORS

Nine pumping units each consisting of Layne-Bowler, medium lift, 8 stage, turbine pump with surface and underground discharge, direct connected to Westinghouse vertical induction motor, 50 H.P., 1160 R.P.M., 440 V., with Trumball externally operated switch at pump house.
United Iron Works medium lift, two stage, 5 inch deep well turbine, surface discharge, direct connected to Westinghouse vertical induction motor, 15 H.P., 1160 R.P.M., 440 V.
Electric induction motor, 10 H.P., 1160 R.P.M., 440 V.

WATER PIPING

Various lines of standard screw pipe, casing pipe, cast iron bell and spigot pipe and cast iron flanged pipe, ranging in size from 1 inch to 24 inch diameter, with valves, fittings, etc., located in pump house and between pump house and wells, distribution mains, tank and reservoir.

METERS

Three General Electric flow meters, Type FW-4, including nozzles.

MISCELLANEOUS STATION EQUIPMENT

Steam regulator, G.E.Witt, ½ inch.
Steam gauge, G.E.Witt, 160 lbs.
Steam gauge, Ashcroft, 300 lbs.
Empire oil meter, 1".
Two oil screens.

ELECTRICAL EQUIPMENT

Consisting of 5 transformers, switchboards, cell structure and equipment, power wiring, ducts, outside switching equipment, etc.

TOOLS AND APPLIANCES

Tools and equipment at pumping station, blacksmith shop, machine shop, stable and garage, as per inventories.

FURNITURE AND FIXTURES

Office equipment at pumping station, fire apparatus, etc., as per inventory.

PUMPING STATION NO. 2

PUMP HOUSE

One story concrete building, 23' 8" x 28' 8" x 11' 0" to eaves, hip roof, plastered walls, steel roof trusses, tile roof, concrete foundations and floor. Pump pit 16' 6" x 21' 4" x 10' 6" deep.

PUMP HOUSES

Two galvanized iron pump houses, 4' 8" x 4' 8" x 10' 5".

PROPERTY IMPROVEMENTS

Concrete walks, lawn, trees, shrubs, vines, etc.

WELLS

WELL No.1. 632 feet of 12 inch diameter, and 35 feet of 10 inch diameter. No.14 gauge casing. Total depth 667 feet. Brick and concrete well pit.

WELL No.2. 594 feet of 12 inch diameter, 208 feet of 10 inch diameter. No.14 gauge casing. Total depth 802 feet. Brick and concrete well pit.

WELL No.3. 150 feet of 16 inch diameter, 110 feet of 14 inch diameter, 715 feet of 12 inch diameter. No.14 gauge casing. Total depth 975 feet. Brick and concrete well pit.

WELL No.4. 250 feet of 14 inch diameter, 550 feet of 12 inch diameter, and 75 feet of 10 inch diameter. No. 14 gauge casing. Total depth 875 feet. Brick and concrete well pit.

WELL No.6. 650 feet of 16 inch diameter and 262 feet of 14 inch diameter. No.14 gauge casing. Total depth 912 feet.

PUMPING EQUIPMENT

PUMPS

Two pumping units each consisting of Byron-Jackson No. 5, six stage, deep well turbine pump, with underground discharge, direct connected to 75 H.P. vertical induction motor, 440 V., 1200 R.P.M., Type K.T.

SAND TRAP

Two sand traps each consisting of riveted steel cylinder, 3 feet by 36 feet with brass wire cloth screens.

VENTURI METER

Meter tube No.1852, 14 inch diameter, 7 inch throat, with registering device.

PITS

One pit 24" x 24" x 40", brick lined.
One pit 26" x 26" x 48", brick lined.

WATER PIPING

Consisting of various lines of standard screw pipe and cast iron pipe, ranging in size from 1½ inch to 14 inch in diameter, with valves, fittings, etc.

ELECTRICAL EQUIPMENT

Consisting of transformers, switchboards, power wiring, ducts, etc.

TOOLS AND APPLIANCES

Tools and equipment at pumping station, as per inventory.

FURNITURE AND FIXTURES

Furniture, fire apparatus, etc., at pumping station as per inventory.

PUMPING STATION NO. 3

PUMP HOUSE No.1

One story frame shed, corrugaged iron roof and sides, 8' 0" x 28' 0" x 7' 9" average height.

PUMP HOUSE No.2

One story frame shed, 8' 3" x 34' 0" x 8' 0" average height.

PUMP HOUSE No.3

One story frame building, shingle roof, concrete floor, 7' 3" x 7' 9" x 7' 6" to eaves.

SWITCH HOUSE

One story frame building, shingle roof, 7' 3" x 7' 9" x 7' 6" to eaves.

METER HOUSE

One story frame shed, shingle roof, 4' 0" x 6' 0" x 5' 8" average height.

FENCE

Wood and barbed wire fence around property.

WELLS

WELL No.1. 260 feet of 14 inch diameter, and 714 feet of 12 inch diameter. No.12 and No.14 gauge casing. Total depth 974 feet.

WELL No.2. 209½ feet of 20 inch diameter, and 629½ feet of 16 inch diameter. No.14 gauge casing. Total depth 839 feet.

WELL No.3. 818 feet deep. 16 inch diameter. No.14 gauge casing.

PUMPING EQUIPMENT

PUMPS

Layne-Bowler medium lift, 5 stage, turbine deep well pump with surface discharge, direct connected to 30 H.P. Westinghouse vertical induction motor, 440 V., 1160 R.P.M., Type C.S.
Western deep well, 3 stage turbine pump, with surface discharge, direct connected to 75 H.P. General Electric vertical induction motor, 440 V., 1200 R.P.M., Type KT.
Byron-Jackson deep well, 8 stage, type DW, pump with surface discharge, direct connected to 50 H.P.Fairbanks-Morse, vertical, induction motor, 440 V., 1200 R.P.M., Type UN.

SAND TRAP

Consisting of riveted steel cylinder, 30 inch diameter by 23 feet long, with brass wire cloth screens.

METER

General Electric flow meter, type FW-4, with 12 inch nozzle.

MISCELLANEOUS PLANT EQUIPMENT

10 inch diameter pressure gauge.
8 inch diameter pressure gauge.

DRAIN SUMP

Wood lined sump, 8 x 8 x 10 feet.

ELECTRICAL EQUIPMENT

Consists of switchboards and miscellaneous wiring.

WATER PIPING

Consists of various lines of standard screw pipe and casing pipe, ranging in size from ¾ inch to 12 inch diameter, with valves, fittings, etc.

FURNITURE AND FIXTURES

Fire apparatus, etc., as per inventory.

DISTRIBUTION SYSTEM

DISTRIBUTION MAINS

Consisting of the following sizes, kinds, and lengths of distribution pipe laid in the streets and alleys of Stockton and vicinity.

Sizes	Lengths in Feet			
	Standard Screw Pipe		Cast Iron Pipe	
	Buried	Exposed	Buried	Exposed
¾ inch	530			
1 inch	1065			
1¼ inch	430			
1½ inch	1067			
2 inch	294206	150		
3 inch	1360		14839	
4 inch			102609	
6 inch			81130	169
8 inch			29889	
10 inch			8404	
12 inch			17767	
14 inch			7655	200
16 inch			35	
20 inch			120	
Also a one-half interest in the following pipes in the Moreing Tract:				
2 inch	2767			
4 inch			1725	

Of the foregoing pipe 82,860 linear feet of 2 inch and 920 linear feet of 3 inch screw pipe are protected with P. and B. covering.

The following lengths of standard screw pipe are dipped:

¾ inch. . .	530 feet
1 inch. . .	1065 feet
1¼ inch. . .	430 feet
1½ inch. . .	1067 feet
2 inch. . .	100000 feet

SPECIAL STRUCTURES, DISTRIBUTION MAINS

Concrete culvert, 2½ x 2½ x 200 feet, carrying pipes under tracks of Southern Pacific and Western Pacific Railroads.
Timber and steel straps carrying pipe on City bridge, Pilgrim Street.
Timber trestle carrying pipe on Sierra Nevada Street.
Steel casing 14 inch diameter, 40 feet long, carrying pipes under Western Pacific Railroad tracks.

GATE VALVES

The following number, size and kind of gate valves and cocks installed at various points on the distribution pipes:

	Number		
	Gate Valves		Brass
	Brass	Iron Body	Cocks
1 inch	-	-	1
1½ inch	-	-	10
2 inch	727	-	96
3 inch	-	21	-
4 inch	-	214	-
6 inch	-	150	-
8 inch	-	49	-
10 inch	-	11	-
12 inch	-	33	-
14 inch	-	13	-
20 inch	-	1	-

VALVE PITS

Seven brick valve pits, 4" walls, 30" x 30" x 36", with cast iron frame and double cover 24" x 24".
196 brick valve pits, 4" walls, 24" x 24" x 36", with extra heavy cast iron cover 18" x 18".
One brick valve pit, 8" walls, 42" x 72" x 42", with 28" cast iron frame and cover.

HAND HOLES

Consisting of short piece of pipe with cast iron cover, for operating valves.
4 inch pipe and cover, 3
6 inch pipe and cover, 910
8 inch pipe and cover, 206

FLUSH GATES

2 inch wrought iron . .	18
4 inch cast iron . . .	2
6 inch cast iron . . .	8
8 inch cast iron . . .	10
10 inch cast iron . . .	2
14 inch cast iron . . .	1

FLUSH PITS

Two brick flush pits, 8 inch walls, 3 feet diameter, 6 feet deep, with 28 inch cast iron frame and cover.

PITOMETER PITS

Seven brick pitometer pits, 4 inch walls, 20" x 20" x 20", with 18" cast iron extra heavy cover.

SERVICES

The following tabulation indicates the number, size, and kind of services on the system.

Size	Number		
	Wrought Iron Extra Heavy	Wrought Iron Standard	Cast Iron
¾ inch	9391	-	-
1 inch	297	-	-
1¼ inch	20	-	-
1½ inch	79	-	-
2 inch	-	88	-
3 inch	-	7	-
4 inch	-	-	4
6 inch	-	-	4

SEWER FLUSHER - SERVICES

529 three-quarters inch, extra heavy, wrought iron sewer flusher services.

PIPE PROTECTION

Of the foregoing services and sewer flushes the following numbers are protected with P. and B. covering.

¾ inch services. . . .	1016
1 inch services. . . .	230
1¼ inch services. . . .	20
1½ inch services. . . .	79
2 inch services. . . .	88
3 inch services. . . .	7

SERVICE BOXES

7,862 service boxes, consisting of short pieces of

4 inch pipe with cast iron covers, for operating cocks on services, sewer flusher services, and services to fountains and troughs.

FIRE HYDRANT CONNECTIONS

Consisting of tees on distribution mains:

4 inch. . . .	173
6 inch. . . .	196
8 inch. . . .	94
10 inch. . . .	1

SERVICES TO FOUNTAINS AND TROUGHS

Seven ¾ inch extra heavy wrought iron services.

METERS

The following number, size and kind of meters are in place on services or in stock in the warehouse:

National Meter Company's Meters					
Size	Nash Meters		Empire	Empire Compound	Empire Hot Water
	Type 9	Type K			
5/8"	89	26	577	-	21
3/4"	-	-	150	-	10
1"	-	-	95	-	5
1½"	-	-	19	-	1
2"	-	-		3	-

Neptune Meter Company's Meters			
Size	Trident Meters		
	Disc	Compound	Protectus
5/8"	2971	-	-
3/4"	67	-	-
1"	78	-	-
1½"	1	-	-
1½"	3	10	-
2"	-	15	-
3"	-	-	2
6"	-	-	1

Worthington Meters

19 Worthington 5/8 inch meters.

King Meters

32 King 5/8 inch meters.
19 King 3/4 inch meters.

Watchdog Meters

14 Watchdog 5/8 inch meters.
6 Watchdog 3/4 inch meters.
2 Watchdog 1 inch meters.

Crown Meters

One 3/4 inch Crown meter.

Lambert Meters

One 2 inch Lambert Meter.

Hersey Meters

One 5/8 inch Hersey Meter.

METER BOXES

3063 concrete boxes, 12" x 18" x 12", set on 8 bricks, with 12" x 18" cast iron cover.
22 concrete boxes, 12" x 18" x 12", set on 8 bricks, with 12" x 18" extra heavy cast iron cover.
144 concrete boxes, 12" x 18" x 12", no covers.
242 concrete boxes, 14" x 22" x 12", set on 12 bricks, with 14" x 22" cast iron cover.
18 concrete boxes, 18" x 18" x 16", with 18" x 18" cast iron frame and cover.
5 concrete boxes, 18" x 18" x 16", no cover.
4 concrete boxes, 9" x 16" x 12", with 9" x 16" concrete cover.
7 concrete boxes, 24" x 24" x 18", with 18" x 18" extra heavy cast iron cover.
4 concrete boxes, 24" x 24" x 20", with 18" x 18" cast iron frame and cover.
55 concrete boxes, 24" x 24" x 24", with 18" x 18" cast iron frame and cover.
2 concrete boxes, 26" x 26" x 24", with 24" x 24" cast iron frame and cover.
50 brick boxes, top 24" x 24", bottom 36" x 36", 30" deep, with 24" x 24" cast iron frame and cover.
9 brick boxes, top 14" x 22", bottom 24" x 30", 24" deep, with 14" x 22" cast iron cover.
3 brick boxes, 24" x 24" x 30", no cover.
2 brick boxes, 14" x 22" x 24", no cover.
16 brick boxes, 24" x 24" x 24", with 18" x 18" cast iron frame and cover.
7 brick boxes, 32" x 30" x 30", with 24" x 24" cast iron cover.
26 brick boxes, 36" x 24" x 24", with 36" x 24" cast iron frame and cover.

10 brick boxes, 36" x 24" x 24", with 24" x 24" extra heavy cast iron cover.
1 brick box, 48" x 84" x 54", with 3" wood cover and 28" x 28" cast iron cover.
25 wood boxes, 14" x 22" x 18", wood cover.
6 wood boxes, 18" x 18" x 24", with 18" x 18" extra heavy cast iron cover.
77 wood boxes, 18" x 18" x 20", with 18" x 18" cast iron frame and cover.
10 wood boxes, 24" x 24" x 24", with 24" x 24" cast iron frame and cover.
19 wood boxes, 28" x 28" x 20", with 24" x 24" cast iron cover.
10 wood boxes, 24" x 24" x 20", with 18" x 18" extra heavy cast iron cover.

CAST IRON COVERS

12" x 18" Standard.	124
12" x 18" Extra Heavy . . .	2
14" x 22" Standard.	4

CAST IRON FRAMES AND COVERS

9" x 13".	11
24" x 24"	2
18" x 18"	11

SAND TRAPS

One 3/4 inch Mueller sand trap.

TOOLS, EQUIPMENT, ETC.

Tools, wagons, horses, automobiles, etc., as per inventory.

OFFICE FURNITURE, FIXTURES AND EQUIPMENT

Office furniture, fixtures, equipment, maps, plans, etc., at head office, No.130 Sutter Street in City of Stockton, as per inventory.

MATERIAL AND SUPPLIES

Pipe, fittings, water meters, valves, lumber, well casing, fuel oil, etc., as per inventory.

The intent of the foregoing inventory is to set forth a full and complete description of the property, lands, rights, etc., owned by Pacific Gas and Electric Company and used for the purpose of supplying water to consumers in the City of Stockton and vicinity.