

New York (State)

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**DEPARTMENT REPORTS**

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OF THE

**STATE OF NEW YORK**

CONTAINING THE

**Decisions, Opinions and Rulings**

OF THE

**State Departments, Officers, Boards  
and Commissions**

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*Secretary of State*

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must have caused a satisfactory filtration plant to have been constructed and thereafter the provisions of Condition "A" must be complied with. No final approval of these works will be given by the commission until the conditions of this decision have been complied with.

In all other respects the said decision shall remain as originally written.

#### Modifying Decision

*Wherefore*, the Water Power and Control Commission does hereby modify the said application, maps and plans of Louis J. Casagrande and Maria Casagrande as requested.

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In the Matter of the Application of NEW YORK WATER SERVICE CORPORATION for Approval of Use of Intake into Lake Ontario of the ROCHESTER GAS AND ELECTRIC COMPANY as Auxiliary Source of Supply, and Pipe Line to Connect to Same. ROCHESTER PLANT. FIFTH APPLICATION

Water Supply Application No. 2315  
(November 9, 1954)

**Application, maps and plans approved as modified.**

#### Proceedings

By THE COMMISSION.—Arthur T. Luce, vice president of New York Water Service Corporation, acting in the name and on behalf of said corporation, on January 16, 1953 made application to the Water Power and Control Commission for approval of the plans of the corporation for the acquisition or taking of what it terms an auxiliary source of water supply for its Rochester plant and of the construction proposed in connection therewith. This application was filed in the office of the commission on January 19, 1953.

After due notice published in the *Rochester Times-Union*, the hearing on this matter was held before George J. Natt, senior engineer of the commission, in the Monroe County Court House in Rochester at 10 o'clock in the forenoon on February 20, 1953 and was continued thereafter, after adjournments duly taken, before John C. Thompson, executive engineer of the commission, at the same place on April 15, at the office of the commission in Albany on May 18 and 19, in the council chambers in the City Hall in Rochester on June 11, 1953 and in the commission's office on September 17, 1954 and October 1, 1954. The applicant was represented by Costello, Couney and Fearon, its attorneys (Hon. George R. Fearon, of counsel). At the close of the hearing on June 11, 1953 counsel for the applicant requested time for the filing of a brief and this date was fixed as not later than July 10, 1953. Thereafter, at the request of applicant's counsel the filing date for the brief was successively extended to July 28, September 15 and October 1, 1953. Following the

filing of briefs in the matter, the water company, by letters dated October 13, 1953, January 4, 1954 and March 1, 1954, requested that the commission delay consideration of the application pending discussions being held by the company with officials of the city of Rochester concerning the matter of the interchange of water at various taking points. On May 19, 1954 the commission received for the record the applicant's statement concerning such discussions and thereafter proceeded to study this matter. On August 24, 1954 the commission received from Bernard D. Fischman, secretary of the company, a request that the hearing be reopened and in accord therewith it was continued on the last mentioned hearing dates when it was finally closed.

The state Department of Health appeared at the hearing on this application by Charles R. Cox and George W. Moore, chief and acting chief, respectively, of its water supply section, Frank W. Gilcreas, assistant director in charge of laboratories and John C. Haberer, Rochester district sanitary engineer.

On February 20, 1953, the commission caused an engineering inspection to be made of the site of the proposed work and of the company's existing water supply facilities.

#### **Project**

The New York Water Service Corporation now asks the commission to approve and authorize the construction of an inter-connection with the intake of the Rochester Gas and Electric Company and the use of "such inter-connection as a means of an auxiliary source of water supply from Lake Ontario in order to maintain its allowed withdrawal of a total of 18,000,000 gallons per day". The intake of the electric company is eight feet in diameter and is constructed of reinforced concrete pipe extending into the lake a distance of 3,675 feet where it terminates in a crib the top of which lies at an elevation about 22.5 feet below normal lake level. The electric company's intake crib is approximately 1,500 feet west of the existing westerly crib of the water company but the two intake lines are only about 840 feet apart at the shore. The Rochester Gas and Electric intake was designed for an ultimate requirement of 130,000,000 gallons daily and its present use is about three-quarters of that figure. To make use of this adjacent intake the water company proposes to install some 800 feet of 20-inch pipe westerly from its existing intake well at its pumping station to the boundary line separating its property from that of the electric company. When the power company installed its intake in 1947 it agreed to provide a 20-inch connection thereto and to permit the water company to use the intake for emergency supply. The 20-inch connection pipe was later extended to the east boundary of the power company property and the new line of the water company is to connect to this line. To assure a continued flow of raw water into applicant's intake well from this intake it will be necessary for the flow to be by syphonic operation because of the difficulty in constructing the connecting main above certain culverts in Beach avenue.

At this high point in the line provision is to be made for the exhaustion of air by a vacuum pump.

After due study of the petition and its exhibits, and the evidence and arguments given at the hearing, the commission finds as follows:

#### Findings of Fact

1. New York Water Service Corporation, through its Rochester plant, supplies water for domestic, industrial and fire protection purposes to a portion of the city of Rochester (being portions of the 10th, 18th, 21st, 22nd, 23rd wards and all of the 24th ward) and to parts of the towns of Brighton, Gates, Greece, Irondequoit, Penfield, Perinton and Pittsford, all in Monroe county. In the latter areas, suburban to the city, the company supplies water directly to consumers in many sections, while in other sections, consisting of villages and water districts, the company sells water wholesale to the municipal corporations for resale by them through publicly owned distribution systems. In all, approximately 137,000 people are served by the facilities of the water company.

2. This company is the successor to the Rochester and Lake Ontario Water Service Corporation which had its organization in 1902 but which was merged with the New York Water Service Corporation on April 12, 1950. The area now served by this water company was described by this commission on October 28, 1931 in its decision on *Water Supply Application No. 649* (41 State Dept. Rep. 263; completed works approved October 28, 1931).

3. The company secures its supply by pumping from Lake Ontario at a point about one mile west of the mouth of the Genesee river. Some 3,850 feet off shore at this location two intake structures are situated about 30 feet below normal lake water level. These intakes are about 100 feet apart and water from them flows to a suction well at the pumping station on the lake shore through 24-inch and 36-inch pipes for a distance of 2,500 feet at which point the lines merge into a single 24-inch pipe line for the remaining distance to the suction well.

4. The company's treatment plant consists of 22 pressure filter units having a total capacity of 12,000,000 gallons per day, preceded by coagulation and sedimentation facilities.

5. As the water from the lake enters the plant it is disinfected with chlorine in the intake well and at this same point a coagulant also is added. Low-lift pumps then elevate the water to the mixing chambers, of which there are two in number, whence it flows by gravity into two settling basins arranged in series. The time of mixing in the mixing chambers under normal conditions of operation (that is at a pumping rate not in excess of 12,000,000 gallons daily) is approximately 20 minutes but as the rate of pumpage increases, obviously the time of mixing decreases.

6. The settling basins have a capacity of 1,000,000 gallons each and under normal plant operation the water is retained in these basins for a period of about four hours to permit the coagulated material

to settle out. Thereafter the settled water flows into two suction wells from which high-lift pumps discharge the water through the filters and into the distribution system. At the plant frequent periodic analyses of the filtered water are made each day and in addition daily analyses are made of the raw and settled water.

7. Water requirements on this company's system have steadily been increasing and in 1953 averaged 14,600,000 gallons daily compared with 13,450,000 gallons per day in 1952, 10,340,000 gallons daily in 1942 and 7,350,000 gallons per day in 1935. Maximum daily requirements in each of the foregoing years were, respectively, 19,200,000, 17,900,000, 13,280,000, and 10,090,000 gallons and these peak requirements have persisted for as long as four consecutive weeks during the summer season.

8. During this summer just past, requirements for water on the company's filter plant exceeded 18,000,000 gallons per day for periods as long as 14 consecutive days and on these occasions the maximum rate of operation of the filter plant was 19,500,000 gallons daily.

9. In 1942 the increase in requirements for water necessitated an increase in the capacity of the company's intake. Accordingly on May 1, 1942 the Rochester and Lake Ontario Water Service Corporation, a predecessor of the present company, filed with this commission an application for approval of the construction of additional intake capacity in Lake Ontario to make possible the taking of additional water up to approximately 18,000,000 gallons per day through the existing and additional intake pipes. (*Water Supply Application No. 1544*; approved May 26, 1942; 64 State Dept. Rep. 997; completed works approved February 1, 1944.) Accomplished under that approval was the construction of the existing easterly intake crib and the laying of 2,500 feet of 36-inch pipe.

10. At the time that application was filed with the commission the capacity of the then existing intake was limited to a figure, depending on lake levels, of about 12,600,000 gallons per day but during abnormally low lake levels the capacity was lowered even below that figure. At the time that application was made in 1942 testimony indicated that average demands for water on the company's system approximated 8,800,000 gallons daily but peak demands, for periods as long as six days, ran as high as 13,200,000 gallons daily with single day maxima as high as 14,500,000 gallons. The company at that time envisioned that maximum daily requirements would soon rise to 15,650,000 gallons.

11. The company's consulting engineer in that proceeding, Thomas H. Wiggin, also testified for the applicant in this proceeding. On page 7 of his report under *Application No. 1544*, Mr. Wiggin stated as follows:

"Since a great part of the cost of an additional intake is in providing the plant for submarine construction work, it is thought uneconomical to provide merely for the 15,650,000 gallons daily capacity listed above. The plans will provide approximately 18,000,000 gallons daily capacity".

12. The 1942 application of the company (*Application No. 1544*) made no provision for enlargement of the treatment plant. In that proceeding the commission found that the average demand on the company's system was 8,800,000 gallons per day, which figure was well within the designed capacity of the filter plant namely 11,000,000 gallons daily. The commission, in its decision on that application found that:

"The question of the quality of the water which will be distributed by the company upon completion of this project, is of some concern, particularly as this project will make available a quantity of water considerably in excess of the present rated capacity of the company's filter plant. The company now has installed some 22 filter beds with a rated capacity of 500,000 gallons per day each, or a total maximum plant capacity of 11,000,000 gallons per day with all beds in operation. Such rated capacity is based on an assumption that the quality of the raw water will be poor, but during the majority of the year such an hypothesis can hardly be justified, as under most conditions, the quality of the raw lake water at this plant is excellent and this water is reasonably easy to treat. Even with present facilities, the capacity of the filter plant is somewhat below the intake capacity, but the quality of the effluent of the plant, at least from a sanitary point of view, has always been satisfactory. Nevertheless, even with normal allowable overloading of the filter plant and on the assumption that the raw water is of good quality, the company is dangerously near the possible maximum capacity in this plant and it should seriously consider the necessity and desirability of installing greater filter capacity. The commission, in approving this application, must reserve the right to require the installation of such additional filters, the taking of further sanitary precautions or the further treatment of the water from this plant, if in the future, analyses or inspections shall show a need for such action."

The commission finds that it has jurisdiction on this present application to consider the question of requiring the installation of additional filters, the taking of further sanitary precautions or the further treatment of the water from this source of supply, under the reservation of the right to do so in the decision on *Application No. 1544*.

13. During 1952 the water company found that even with an unusually high lake level the flow of raw water through the intake was restricted. Tests were conducted from which it was determined that under low lake levels and even under normal lake levels the amount of water obtainable through the existing intakes was not sufficient to meet the company's needs during peak demands.

14. The first of the water company's existing filter units was installed in 1904 at which time eight of the tanks were erected. Thereafter two more units were installed in 1917, four in 1925, six in 1930 and two in 1932.

15. The normal daily capacity of these pressure filters, as acknowl-

edged by the company in prior proceedings before this commission and in records filed with the New York State Public Service Commission, is 500,000 gallons each or 11,000,000-gallons-daily total. This capacity is at the filtering rate of two gallons per minute per square foot of filter surface area, a design rate generally accepted by water supply engineers, state and local health officials and many others.

16. It was acknowledged in previous years that there has been a definite need for additional filter units to meet increases in the demands for water that were placed upon the company's facilities.

17. Notwithstanding the fact that such was the company's policy in previous years the record in this proceeding sets forth the fact that no additional filtration capacity has been installed since 1932, even though demands on the water plant have increased substantially since that time. The increase in these demands has averaged 400,000 gallons per day each year in the period between 1940 and 1950.

18. The company has met peak requirements on its system by operating the filter plant at rates increasingly in excess of its normal capacity.

19. Apparently in spite of the high rates at which this treatment plant has been required to operate in order to meet the demands made on the company's facilities, the quality of the water delivered to the consumers has been satisfactory from a bacteriological standpoint and has been within the requirements prescribed by the U. S. Public Health Service for drinking water.

20. The experts of the state Department of Health testified that the safe operating capacity of the filter plant is about 12,000,000 gallons daily based on the aforementioned rate of filtration and that overloads on it in excess of 25 percent, for periods longer than a few days, are not acceptable to that department. This determination recognizes the fact that the raw lake water is subject to wide and sudden variations in quality and is influenced by many factors, particularly by discharges from the Genesee river into the lake.

21. The Genesee river is considered by the health department to be a highly polluted stream. The effect of this river's influence on the quality of the water entering the company's intake is such that the amount of chlorine required for adequate disinfection of the supply varies as much as 100 percent during a single period when there is no change in the rate of pumping but when shifting winds and currents are such as to bring about substantial changes in the amount of flow emanating from the river and passing over or near the company's intake.

22. These experts of the health department have testified that the minimum treatment of the water supply of this company which should be afforded is effective coagulation and settling of the water, followed by gravity rapid-sand filtration with pre- and post-chlorination when necessary. In this operation the rate of filtration should not exceed two gallons per minute per square foot of filter surface area and the filters should be considered as an integral part of the purification process to eliminate at least 99 percent of the bacteria present.

23. The filtration plant of this company has pre-treatment facilities but these facilities were designed to operate with the present pressure filters and this type of filter is no longer generally acceptable for use in connection with public water supply systems. It is pointed out that the pressure filters were installed when water requirements on the system were not in excess of 10,000,000 gallons daily. The plant never was designed for high rates of filter operation.

24. The company points out that in operating its plant for weeks at a time at rates in excess of 15,000,000 gallons daily it depends greatly on clarification of the water in the coagulation and sedimentation basins, thus having the filters operate merely as strainers. In doing so major dependence for the production of a safe water is placed on the chlorination of the supply. If this disinfection should fail, the possibility of pathogenic bacteria reaching the distribution system is always present.

25. The function of a filter is to remove from the water the suspended solids and bacteria which have been coagulated and remain in the water following the sedimentation process.

26. Analyses of the effluent of this company's filter plant show that, at times, turbidity is present in the water following filtration. When this occurs it indicates that the filtration process is not being carried out at its maximum efficiency and since bacteria are much smaller than the particles of sand in the filter bed and also are smaller than the particles of turbidity, there is every possibility that bacteria might well pass through the filters.

27. Turbidity in the filter effluent is an indirect indicator of the bacterial efficiency of a filter in removing bacteria from the raw water.

28. Trained employees of the company made daily analyses of the water as it passes through the treatment plant. These analyses consist of one sampling of the water as it enters the intake well and again as it leaves the settling basin. These tests are for chemical and bacterial examination. In addition, five samples are taken daily for bacterial analyses from each of the two banks of pressure filters. Although on occasions presumptive tests of the finished water have indicated the presence of coliform organisms, tests to confirm the presence of *B. Coli* have thus far been negative.

29. The applicant presented testimony by experts on the operation of filter plants at rates in excess of two gallons per minute per square foot of filter area at various locations including such cities as Chicago, Illinois, Detroit, Michigan, and Elmira, Plattsburg, North Tonawanda, Newburgh and other cities in New York State.

30. The Detroit and Chicago filter plants are of comparatively recent construction. They are of the open gravity rapid-sand type and each actually was designed as a complete unit for high rates of operation. The two plants at Detroit and the Chicago plant were designed to operate respectively at two and one-half gallons and three gallons per minute per square foot of filter surface area but at times, these plants are required to filter water at rates in excess of their designed rate for short periods of time.

31. The testimony with respect to the various other filter plants in New York State indicate that none of these plants is of recent construction but that when called upon occasionally to operate at rates in excess of designed capacity, the effluent from the plants has been of a satisfactory sanitary quality. These plants, however, are operated at rates in excess of two gallons per minute per square foot of filter surface area for very short periods lasting not more than a few days at most. The designed rate of operation of these plants was the conventional two gallons per square foot of filter area per minute.

32. Certain of the applicant's witnesses testified that if, in the filtration process, coagulated material passes through the filters, the bacterial quality of the water would not necessarily be impaired but they conceded that turbidity in the finished water does indicate that the water probably was not properly conditioned prior to filtration. Analyses of the water that has passed through the filters of the New York Water Service Corporation plant at Rochester have, on occasion given this indication.

33. One of the applicant's witnesses, John R. Baylis, has stated in published articles on the subject, that no increase in the rate of filtration in a plant should be allowed if it lowers the bacteriological efficiency of the filters or allows coagulated material to pass through the filters in objectionable quantities. This witness advised that special coagulation methods must be followed in the pre-treatment of any waters when the rate of filtration exceeds two gallons per minute per square foot of filter surface area.

34. The filter plant of the applicant was first constructed in 1904 when only eight pressure-filter units were installed. Thereafter additional units were provided as needed and at such times were sufficient in number to provide treatment of the additional demands at a rate of two gallons per minute per square foot of filter surface area. The earliest of these filters were operated without any pre-treatment of the water until 1918 when the first of two existing settling basins was constructed. In 1935 the second settling basin was built. Thus the applicant's plant was expanded over the years up until 1935 as the need arose to meet increased demands on its facilities.

35. As late as 1950 the company stated in reports to the Public Service Commission that the maximum safe capacity of its plant was 16,000,000 gallons daily. Although the company now claims such safe capacity, the plant as a whole, never was designed for the high rates of filter operation necessary to produce such safe capacity and it should not be allowed to operate at such rates.

36. It is pointed out that although demands for water have increased since 1935 there has been no enlargement of the company's filtration or pre-treatment facilities since that time. Since 1950 demands on the system have been met by overpumping through the filter plant.

37. A reason advanced by a company official for the applicant's abandonment of any plans for modernization of the present plant was a decision of the city of Rochester to construct its own filter

plant to obtain water from Lake Ontario and the effect that such construction will have on the demands on the company's plant. This city plant is now nearing completion and when completed would enable the city to furnish water to those consumers of the company who reside within the city. The requirements of these customers constitute about 40 percent of the demand placed upon the facilities of the applicant. Although the company has abandoned its plan for modernization of its present plant it does not contemplate any cutback in the production of water by buying added quantities of filtered water from the city. The company plans to operate its filter plant at rates in excess of 18,000,000 gallons daily whenever the need arises.

38. The recent creation of the Monroe County Water Authority to operate in the water company's service area reputedly has also delayed the company from advancing any new plans for its plant. That authority, on September 7, 1954, filed an application with this commission for approval of its plan to acquire, by purchase of condemnation, the plant and property of the applicant herein.

39. When the present plant is operated at rates varying from 15,000,000 to 20,000,000 gallons or more daily that quantity of filtered water is actually needed to supply the demands, and consequently that rate of operation is essential regardless of the character of the raw water prevailing and entering the plant at the time. Thus, if the raw water happens to be of poor quality at the time of peak demands the added factor of safety of a lower filter rate and more effective treatment is lacking.

40. Under the statute this commission is vested with the responsibility of determining whether the plans submitted in connection with an application provide for the proper protection of the supply or for the proper filtration of the supply. The commission, therefore, in conjunction with the state Department of Health, must appraise the quality of the water delivered to the public in the light of many more factors than the quality of a sample collected under any one condition. Of importance are factors of safety to cope with sudden changes in the quality of the raw water which might require sudden or material changes in the type and degree of treatment. The fact that effective chlorination of the raw water in the past has been such that the filters have been called upon only to remove a very small concentration of bacteria does not mitigate against the possibility that chlorination might fail and permit bacteria to pass on to the filters at a time when, because of high turbidity in the raw water, the filters are not operating at full efficiency.

41. To increase its filtration and treatment facilities immediately so as to provide the factor of safety above referred to, poses a problem with the water company, particularly considering the fact that the city of Rochester is actively engaged in completing its own 36,000,000-gallon-daily-capacity treatment plant. That plant now is temporarily being operated at only one-third capacity under emergency provisions of the state Sanitary Code. It could be that if a surplus of water is available at the city plant when it has received

final approval of this commission and is operated at full capacity, a diminution of the demand on the water company's facilities might result.

42. The applicant must be required to install sufficient additional filtration capacity at its plant so that demands can be met by normal operation at a rate of filtration not in excess of two gallons per minute per square foot of filter surface area although it may be permitted to operate in such a manner that daily peak requirements can be met by exceeding that rate by approximately 25 percent for continuous periods of not longer than two days.

43. The carrying-out of this project will have no adverse effect on the water supply interests of any other municipality or civil division of the state.

44. The legal damages which may be caused by the execution of the plans of the petitioner are not such as to require any special consideration or legislative enactment in order that they equitably may be determined and paid.

#### Conditions

The commission finds it necessary, in order to protect the water supply and the interests of the applicant and of the inhabitants of the territory supplied by it with water, to protect the water supply and interests of any other municipal corporation or other civil division of the state and the inhabitants thereof and to protect the water supply and interests of any other person or waterworks corporation engaged in supplying water to any other municipal corporation or other civil division of the state and the inhabitants thereof, that the application, maps and plans submitted should be modified to conform to the following:

A. Under this decision and approval applicant is authorized to divert from Lake Ontario, for public water supply purposes, a maximum of 18,000,000 gallons daily, either through its own intake facilities or those of the Rochester, Gas and Electric Company. Before distribution to the company's consumers this water must first have been treated by sterilization and by filtration at a normal rate not in excess of two gallons per minute per square foot of filter surface area, except that daily peak demands on the system can be met by exceeding that rate by not more than 25 percent for periods not longer than two days.

B. If this plant is operated at a rate in excess of 12,000,000 gallons daily, the present safe rate of operation of this plant, the additional filters required to be installed under "A" above to make such operation possible, must be of the open-gravity rapid-sand type. Pending completion of these units and for a period of not to exceed three years, the applicant is permitted to operate the existing filtration plant at a rate not in excess of three gallons per minute per square foot of filter surface area whenever demands on the system require such a rate of

operation. Provided, however, that whenever the plant is so operated at rates in excess of two gallons per minute per square foot of filter surface area such operation must have the further consent of and be under the supervision of the state Department of Health and must meet the following requirements:

(1) The output of the plant shall be limited at all times to a rate not greater than 18,000,000 gallons daily and to lower limits under the conditions outlined below.

(2) The rate of flow to the filters shall be metered and recorded.

(3) If one or more of the 22 filters are out of service for repairs or inspection, except for normal backwash, the allowable output of the plant shall be reduced during the period of outage so that the rate per filter in service shall not exceed 820,000 gallons per day.

(4) The turbidity of the filtered water shall be measured at least once per shift under normal operations and more frequently if the character of the raw water or operation of the treatment processes indicate unusual conditions. If the turbidity of the filtered water exceeds 2.0 parts per million for a period of six hours, the filter plant operating rate shall be reduced immediately to 15,000,000 gallons daily and to a lower rate if necessary to bring the turbidity within 2.0 parts per million.

(5) The turbidity of the effluent from each individual filter shall be determined at least once between filter washings. Any filter delivering water with a turbidity exceeding 2.0 parts per million shall be taken out of service and inspected at once for evidence of channeling or improper functioning. The filter shall not be returned to service until the difficulty has been eliminated.

(6) The output of the plant shall be reduced to a rate not to exceed 15,000,000 gallons daily whenever there is evidence of pollution from the Genesee river. Evidence of such pollution shall consist of:

(a) A daily chlorine requirement in excess of 23 pounds per million gallons in order to maintain a residual of one part per million at the outlet of the mixing basin.

(b) A sudden increase in chlorine demand as evidenced by the dose required to maintain a one part per million residual at the outlet of the mixing basin, accompanied by a persistent strong wind from the east and an increase in turbidity.

(7) The wind direction and the velocity of it shall be determined at the plant regularly and be recorded.

(8) When conditions require operation of the plant at reduced rates as outlined above, tests for the following shall be made at hourly intervals:

- (a) Turbidity of the raw water.
- (b) Chlorine residual in the water leaving the mixer (*orthotolidine*).
- (c) Turbidity of the filtered water.
- (d) Residual chlorine in the finished water delivered to the distribution system.

Operating rates in excess of 15,000,000 gallons daily shall not be resumed until these tests and other routine observations indicate definitely the return of normal raw water quality and satisfactory performance of the plant.

(9) Complete records of the water analyses and operations shall be maintained during periods of restricted output, and copies of these records shall be submitted promptly to the regional engineer of the New York State Department of Health.

(10) The filtered water shall be chlorinated continuously before it is pumped from the station, and a free chlorine residual shall be maintained in it at not less than 0.2 parts per million.

C. Prior to starting work on any construction required by this decision and approval, detailed plans of the structures proposed to be built and specifications for such work must have been submitted to and approved by this commission. Thereafter such construction work must be entirely completed in full accordance with the plans and specifications which have been so submitted and approved.

D. The commission reserves the right to require the taking of further sanitary precautions or the further treatment or purification of the water from this source should conditions in the future indicate a need for such action.

E. Unless the works authorized or required by this decision shall have been fully completed by December 1, 1957 or within such extended time as may have been applied for and granted by the commission, then and on that date this decision shall be deemed to have lapsed and to be of no further force and effect.

F. Nothing in this decision and approval contained shall be held to abrogate the provisions of section 524 of the Conservation Law, which forbid the operation of any of these works until as constructed they have been approved by the commission. Such final approval will be given only on due petition therefor. In general such approval will not be given except for a fully completed system, and it never will be given until all provisions affecting quality of the water and safety of the works fully have been complied with.

#### Statutory Determinations

The Water Power and Control Commission having given due consideration to the said petition and its exhibits and the proofs and

arguments submitted at the hearing, determines and decides as follows:

*First.* That the application, maps and plans submitted are modified as set forth above and, as so modified, are the plans hereinafter mentioned.

*Second.* That the plans proposed are justified by public necessity.

*Third.* That said plans provide for the proper and safe construction of all work connected therewith.

*Fourth.* That said plans provide for the proper protection of the supply and the watershed from contamination and for the proper filtration of such supply.

*Fifth.* That said plans are just and equitable to the other municipalities and civil divisions of the state affected thereby and to the inhabitants thereof, particular consideration being given to their present and future necessities for sources of water supply.

*Sixth.* That said plans make fair and equitable provisions for the determination and payment of any and all legal damages to persons and property, both direct and indirect, which will result from the execution of said plans or the acquiring of said lands.

#### Decision

*Wherefore,* the Water Power and Control Commission does hereby approve the said application, maps and plans of the New York Water Service Corporation as thus modified.

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In the Matter of the Application of the VILLAGE OF PRATTSBURG for Approval of Acquisition of Source of Water Supply and Financial and Engineering Plans for Construction of Additional Facilities. THIRD APPLICATION

Water Supply Application No. 2588  
(November 9, 1954)

**Application, maps and plans approved as modified, waterworks system approved as constructed, and operation thereof authorized.**

#### Proceedings

BY THE COMMISSION.—Stanley H. MacDougal, mayor of the incorporated village of Prattsburg, Steuben county, acting in the name and on behalf of that village on April 5, 1954 made application to the Water Power and Control Commission for approval of the plans of said village for the acquisition or taking of an additional water supply and of the construction proposed in connection therewith. This application was filed in the office of the commission on July 30, 1954.

After due notice published in *The Steuben Advocate* of Bath, the hearing on this application was held before Henry M. Schiller, associate engineer of the commission, in the village hall in Prattsburg on October 27, 1954 at 10 o'clock in the forenoon. At this hearing the commission considered the petition, maps and plans submitted, exam-