PROPOSED DECISION SUMMIT HYDROPOWER. CARGILL FALLS HYDROELECTRIC PROJECT FERC PROJECT NUMBER 10038-001

After a thorough and comprehensive review of the entire record of a public hearing held in the evening of December 11, 1989 in Putnam and January 26, 1990 in Hartford and in consideration of all relevant laws and regulations, including §§22a-426 and 4-166 et seq. of the Connecticut General Statutes (CGS) and pertinent sections of the Federal Water Pollution Control Act (FWPCA), the following facts have been established:

FINDINGS OF FACT

1. Summit Hydropower ("applicant") has applied to Commissioner of the Department of Environmental Protection for a water quality certification (WQC) pursuant to §401 οf the Clean Water Act (CWA) for a proposed hydroelectric project located on the Quinebaug River Cargill Falls in the Town of Putnam, Connecticut. applicant seeks from the DEP a certification stating that the operation of the project will not violate Connecticut's water quality standards (WQS) (DEP Exs. 2, 4, 6 and 8).

The proposed hydroelectric project would utilize an existing dam owned by the Town¹ but would necessitate the construction of a new powerhouse that could require blasting to remove rocks, if no less intrusive method is feasible, and would include a tailrace 2 resulting in a bypass reach of some one hundred feet in length below Cargill Falls. The applicant proposes to install a 1.2 megawatt (MW) turbine generator in the powerhouse in order to divert the water. The applicant indicated at the hearing that it may also be seeking a diversion permit from the DEP (DEP Ex. 8; Tapes 7 and 13).

¹Mr. Robert Miller, a local historian and President of the Aspinock Historical Society (who neither supported nor opposed the project), testified that the site has been used for the production of hydropower since 1730 (Tapes 3, 5; see also DEP Ex. 8 at 17, 18).

²Tailrace is defined as "the part of a millrace, flume, or channel below the water wheel; any channel that takes water away from a water wheel."

The proposed project would be operated in a run-of-the-river mode. Run-of-the-river means that neither the impoundment level nor the river flow rate downstream of the project would be affected by the proposed project because the water used in the turbine would be released back into the water. In other words, the rate of water entering the project would equal the rate of water leaving on an instantaneous basis (APP. Ex. 8; Tapes 3 and 6).

2. Section 401(a)(1) of the CWA, an amendment to the FWCPA, Public Law (P.L) 92-500, provides in pertinent part:

Any applicant for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the state in which the discharge originates that any such discharge will comply with the applicable provisions of §§1311, 1312, 1313, 1316 and 1317 of this title . . . (33 U.S.C. §1341(a)(1).

Section 401(d) allows states to condition certifications:

to assure that any applicant for a federal license or permit will comply with any applicable effluent limitations and other limitations under §1311 [301] or §1312 [302] of this title . . . and with any other appropriate requirement of state law set forth in such certification, and shall be a condition on any Federal license or permit . . . (33 U.S.C. §1341(d)).

The legislative history of the CWA (P.L. 92-500) states:

water quality requirements established under State law, more stringent than those requirements established under this Act, also shall through certification become conditions on any Federal license or permit. The purpose of the certification mechanism provided in this law is to assure that Federal licensing or permitting agencies cannot override State water quality requirements. S. Rep. No. 414, 92d Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Ad. News 3735.

³Discharge is defined in the FWPCA as "... the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution;"

For this reason, the Federal Energy Regulatory Commission (FERC) will not grant a license or permit until the applicant obtains such state certification and no license or permit will be granted if the state denies certification or unless such certification has been waived (33 U.S.C. §1341(1)). In other words, unless the state certification requirements are waived, a state's certification is a condition precedent to the issuance of a license by FERC to construct and operate a hydroelectric facility.

3. The U.S. Environmental Protection Agency (EPA) has promulgated regulations establishing minimum requirements that must be satisfied by the states in adopting their water quality standards (see 40 C.F.R. §§1316, 131.10-131.13). The standards must specify appropriate uses to be achieved and protected, must include water quality criteria sufficient to protect the designated uses, and must maintain and protect existing uses.

Specifically, Section 303 of the CWA mandates that the states adopt WQS which "shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." The standards shall enhance the quality of water and take into consideration the "use and value for public water supplies, propagation of fish and wildlife, recreational purposes . . . industrial, and other purposes . . ." (U.S.C. §1313(c)(2)(A)).

- 4. Pursuant to the mandate of the above and to CGS §22a-426, Connecticut's revised WQS were adopted in February of 1987. The water quality standards are consistent with the FWPCA and:
 - 1. Apply to interstate waters or portions thereof within the state.
 - 2. Apply to such other waters within the state as the Commissioner may determine is necessary.
 - 3. Protect the public health and welfare and promote the economic development of the state.
 - 4. Preserve and enhance the quality of state waters for present and prospective future use for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes and agricultural, industrial, and other legitimate uses (DEP Ex. 13).
 - 5. On April 8, July 1, August 10, and September 7, 1988, the applicant submitted draft FERC license applications to the DEP (DEP Exs. 2, 4, 6 and 8). In response to DEP staff comments (DEP Exs. 1, 3 and 5), the applicant submitted the above-cited additional draft applications. Both the applicant and DEP agree that the last application submitted to DEP and the first one submitted to FERC, dated September 7, 1988, is not materially different from the August 10, 1988

- application and that the September 7, 1988 application is the subject of this proceeding (DEP Ex. 8). On November 8, 1988, FERC issued a public notice of the application.
- 6. By letter dated August 10, 1989, Leslie Carothers, the Commissioner of DEP, denied the applicant's request for a §401 WQC (DEP Ex. 11). Her denial states, inter alia, that the proposed project is inconsistent with the antidegradation provisions of the state WQS because it can reasonably be expected to adversely affect the quality of the Quinebaug River, including:
 - a. the physical, chemical and biological integrity and uninterrupted instantaneous flow of the river;
 - b. the designated uses for the river, including recreational use and enjoyment, fish, other aquatic life and wildlife and their habitat, and other legitimate uses of the river; and
 - c. the aesthetic quality of the river.
- 7. On August 28, 1989, the applicant appealed the Commissioner's denial and requested a hearing (APP. Ex. 1). The DEP issued a public notice of the hearing on September 28, 1989 (DEP Ex. 12). In lieu of a prehearing conference, documents were prefiled with the Office of Adjudications and exchanged among the parties.
- 8. The applicant argues that the DEP has waived its right to deny a §401 WQC for the proposed project because the DEP did not act on Summit's request within one year of its July 1, 1988, application (Tape 3; DEP Ex. 4). The applicant further argues that FERC is the agency that determines whether a §401 waiver has occurred and not the state certifying agency. By letter dated March 20, 1990, I indicated to all parties that, as a threshold and jurisdictional matter, I needed to resolve this question (see Correspondence, herinafter "COR" Ex. 8). As discussed in Conclusion A below, I resolved this issue and found that the Commissioner's denial on August 10, 1989 was timely.
- 9. In earlier draft applications (DEP Exs. 2 and 4), the applicant proposed minimum stream flow (msf) releases of 15 cubic feet per second (cfs) over the spillway. But after concerns were raised by the DEP staff that flows that low may not protect aquatic life, the applicant proposed in later draft applications (DEP Exs. 6 and 8) a constant msf of 58 cfs to be released over the spillway of the dam when the turbine is in operation. Currently, the average annual flow at the site is approximately 447 cfs and flows exceed 58 cfs

approximately 95% of the time (<u>see</u> DEP Ex. 8 at 8 and APP. Ex. 7 at 3). Flows also vary considerably from day to day. For example, flows were observed at 2,827 cfs on August 17, 1989 and at 815 cfs on August 21, 1989 (<u>see</u> INT. Exs. 7 and 8; APP. Ex. 12; Tape 7).

- 10. Based upon the August 10, 1988 application (DEP Ex. 6), the staff believed that the reduction in the flow of the water over the spillway to a steady or "flat" release of 58 cfs would "significantly" decrease the flow presently observed at the site and violate the WQS because it would have an unacceptable impact on the recreational use and aesthetic quality of the river. Accordingly, the staff recommended denial of the certification (Tapes 9 and 10).
- 11. However, at the reconvened hearing in Hartford on January 26, 1990, the applicant and the DEP submitted for my consideration and recommendation to the Commissioner a stipulated agreement that had been reached between the two parties with a variable minimum flow requirement (APP. Ex. 13).

Under the proffered agreement, flows would range from 80 cfs to 145 cfs, in accordance with the following formula, during the hours from 8:00 a.m. to one-half hour after sunset between May 1 through October 31:

$$M = (T-A) \times \frac{65}{B-A} + 80$$

Where T = flow through the turbine

M = minimum flow release

A = minimum turbine flow

B = maximum turbine flow

The applicant projects the value of B as 670 cfs and the value of A as 67 cfs.

Also, according to the agreement,

Whenever the flow in the river above the dam is less than the respective minimum flow release plus A, all the flow in the river will be released over the dam, and whenever the flow in the river is greater than B plus 145 cfs, all of the excess flow will be released over the dam.

⁴At the initial hearing session, the applicant was not represented by counsel.

Under the stipulation, from November 1 through April 30 and in the evening from May 1 to October 31, the flow will remain at 58 cfs or run of the river, whichever is lower. When natural water conditions in the river are between 0 and 125 cfs, the river flow would be the same, with or without the proposed project, because the turbine would not begin to operate until the river flow reached 125 cfs (minimum turbine flow of 67 cfs plus minimum flow release of 58 cfs). The flow would then drop to 58 cfs and the 58 cfs would remain until the river flow reached 728 cfs (which is the 58 cfs minimum requirement plus the 670 cfs turbine maximum operating capacity), any increase in run of the river from that point on would flow over the falls.

From May 1 through October 31, daylight hours, the flows would be allowed to increase from 0 to 147 (80 cfs lower mimimum flow release plus 67 cfs turbine minimum operating capacity); thus, flows would be the same with or without the project. From that point on, the turbine would begin operation and the flow over the Falls would drop to 80 cfs.

There is also a provision in the agreement whereby the DEP may require a flow monitoring plan, as a condition of the §401 certification, to assure the passage of flows as described herein.

The applicant contends that "increases in river flows during times of the year when the public is most likely to be observing the falls will be matched by increases in the water released over the dam." (APP. Ex. 15).

- 12. On April 18, 1990 (COR. Ex. 10), I asked the parties to submit numerical values for the variables in the above formula so that I could more accurately compare the flows presently observed at the site with those proposed under the stipulation (see APP. Ex. 18 attachment entitled "Cargill Falls Flow Requirements" and INT. Ex. 7).
- 13. The applicant requests that, if the aforementioned stipulation is not adopted, I recommend to the Commissioner that the earlier proposal be approved at a flow release of 58 cfs. The DEP requests, on the other hand, if I fail to recommend adoption of the stipulation, that I should uphold the Commissioner's earlier denial.
- 14. The applicant submitted an "Aesthetic Impact Study" (APP. Ex. 7) that was prepared by the applicant and purported to show, through photographs of the cascades and their accompanying flow rates, that the proposed project will not have an adverse impact on the aesthetic quality of the river. The applicant submitted another 26 photographs (APP. Ex. 12) it had taken of the Falls, with different flow regimes displayed in order to substantiate its claim that Cargill Falls will still maintain its present aesthetic quality. If the

proposed project is adopted, the following represents the reduction in flows that would be observed:

| PRESENT FLOWS AND PERCENTAGE OF TIME EXCEEDED | "STIPULATED" FLOWS AND PERCENTAGE OF TIME EXCEEDED |
|---|---|
| 58 cfs - 94% 145 cfs - 75% 332 cfs - 50% 532 cfs - 30% 815 cfs - 17% 1,000 cfs - 10% | 58 cfs - 37% 145 cfs - 17% 332 cfs - 12% 532 cfs - <10% 815 cfs - 5% 1,000 cfs - < 3% |
| NATURAL RIVER FLOW (run-of-the-river) | TURBINE IN OPERATION (May 1 through October 31, daylight hours) |
| 2,052 cfs 1,186 cfs 1,036 cfs 983 cfs 815*cfs 332 cfs | 1,382 cfs 516 cfs 360 cfs 313 cfs 145 cfs 100 cfs |

*815 cfs represents the 145 cfs upper minimum flow requirement plus the 670 cfs turbine operating capacity. After 815 cfs is reached any additional river flow would flow over the Falls, but would always be reduced by 670 cfs; similarly, the river flow of 58 cfs would remain until the river flows reaches 728 cfs (670 cfs plus 58 cfs msf release).

(see DEP Ex. 8/Attachment 1 and DEP Ex. 14; INT. Ex. 7 and 8; APP. Exs. 7, 12 and 13; Tapes 5 and 11).

- 15. Pursuant to CGS §22a-19, the Town of Putnam (represented by Attorney Gregory Sharp) intervened in these proceedings on October 30, 1989 (INT. Exs. 1 and 3). The Town argues that the proposed project would violate the public trust and would destroy the aesthetic beauty of Cargill Falls. The Town alleges that the proposed project "would dramatically reduce the water flow over the Falls and destroy this important aesthetic and historic landmark that provides enjoyment to residents and visitors alike." (INT. Exs. 3 and 9)
- 16. By letter dated November 21, 1990, pursuant to CGS §22a-19 and RCSA §22a-3a-1, Polymer Corporations (represented by Attorney James M. Connor) intervened in these proceedings (COR Exs. 13 and 14). Polymer's request for party status states:

Polymer owns one half (1/2) of the water power rights at the Cargill Falls Dam. The proposed

project will involve a taking of those rights. In addition, the proposal will require an alteration of the existing installation owned by Polymer since existing process water intakes at the plant will be cut off.

17. The Town points to the depiction of Cargill Falls on the cover of Southern New England Telephone Company's telephone directory (for Putnam and other neighboring towns) and the Town's own logo to show that Cargill Falls is considered a central aesthetic landmark of Northeastern Connecticut and an important natural resource to the Town. Five historic photos and copies of Aspinock Historical Society Records were also submitted as evidence of the same (INT. Exs. 4, 5 and 6; testimony of Mr. William Simmons; Tape 4).

The Town was not a signatory to the stipulation and does not endorse the proffered stipulation because in its opinion the variable minimum flow would still have the net effect of "significantly reducing" the amount of water flowing over the dam and thus "result in the sacrifice of a vigorous and beautiful waterfall that provides recreational use and enjoyment to large numbers of residents and visitors and substantially contributes to the aesthetic quality of the Quinebaug River." (INT. Exs. 3 and 9)

The Town believes that the proposed project, notwithstanding the variable flows proposed in the stipulated agreement, "would dramatically reduce both the flow over Cargill Falls and the seasonal and weather related fluctuations in that flow." Accordingly, the intervenor requests that I reject the stipulation and uphold the Commissioner's denial of the applicant's request for a 401 WQC (INT. Ex. 9).

18. The Town maintains that the proposed project will provide neither significant employment opportunities nor revenue for the Town because only a "miniscule" amount of energy will be produced. The Town believes that the need for hydropower in this instance does not outweigh the Town's interest in the aesthetic quality of Cargill Falls (Tape 4).

The applicant rebuts this argument by stating the chief "economic and environmental" benefit of the project is in its "contribution to the state's energy independence by

⁵The applicant's proposal includes the hiring of one full-time operator at a salary of \$15,000 and lists \$11,000 it expects to pay in property taxes in 1991 (DEP Ex. 8).

displacing oil which would otherwise be burned to produce electricity." The applicant also argues that the proposed project will enhance the recreational value in the area by providing enhanced opportunity for water-based recreation and increased public access to the site (APP. Ex. 16; Tape 10).

The applicant proposes to install a stairwell which will provide access to a fish platform and thus increase the public's ability to fish and accessibility to the water. The DEP is also requesting, and the applicant has agreed to provide, a fish restoration plan which includes a fish passage facility to insure that the fish will be able to safely traverse the watercourse (DEP Ex. 8; Tape 10).

In addition to the foregoing, the applicant's proposal includes adding "aesthically pleasing" cascading water near the gatehouse which is presently dry; improving the floodlights in order to better illuminate the cascades at night; enhancing the Town's industrial heritage by describing its hydropower history on a publicly displayed plaque; providing public access to areas presently inaccessible by installing a handrail; and removing litter and debris from the river (DEP Ex. 8; Tape 3).

- 19. Pursuant to Connecticut's WQS, the Quinebaug River at the site of the proposed project is classified as a Class C surface water body with a goal of Class B. The Class B water quality criteria were used to evaluate this project. The designated uses for Class B waters are: recreational use, fish and wildlife habitat, agricultural and industrial supply and other legitimate uses including navigation. Under the heading "criteria" the first enumerated parameter is aesthetics. The standard for aesthetics for a Class B surface water body is "good to excellent." (DEP Ex. 13 at 12)
- 20. Mr. Thomas Morrissey, Director of the Inland Water Resource Management Division of the Bureau of Water Management, testified on January 26, 1990 that the water quality parameters and their accompanying standards enumerated in

⁶The Mayor testified that the falls are already illuminated with floodlights and he questioned the need for additional lights (Tape 5).

⁷It is undisputed that hydropower plants in general, and the proposed project in particular, are legitimate uses contemplated within the purview of the WQS. Indeed, Mr. Morrissey presented uncontroverted testimony that hydroelectric power is considered a legitimate use of the river (Tapes 8 and 13).

numbers 4-11 would not be adversely impacted by the proposed project. These parameters include: silt or sand deposits (provided BMP or all reasonable controls are used), turbidity, coliform bacteria, dissolved oxygen, pH, taste, and odor (Tapes 7, 9 and 12).

21. Mr. Morrissey further testified that the stipulation was consistent with DEP's WQS for Class B waters and that it did not "materially depart" from, nor violate, the state's antidegradation policy (Tapes 7 and 9).

Antidegradation is defined in the WQS as:

a statement of practice required by federal law which prohibits a state from lowering surface water quality classifications or standards in order to accommodate new or increased wastewater discharges or land use practices which impact a particular water course. The state must attain, and maintain the most sensitive existing and potential use for a respective waterbody.

- 22. Mr. Morrissey also testified that the DEP's msf requirements will be met by an msf release of 58 cfs. Fisheries regulations, promulgated pursuant to CGS §26-141a, generically define msf requirements as .2 cfs per square mile of watershed. However, that formula is primarily used for water-supply reservoirs. Mr. Morrissey testified that the analysis of msf with respect to hydroelectric projects is unique and very complicated and determined on a case-by-case basis and that the DEP does not particularly endorse the above-referenced generic formula for hydroprojects. He stated that some hydropower plants do have higher msf requirements than the generic formula might appear to dictate. He also stated that msf is not designed nor intended to protect the scenic and aesthetic qualities of a river (Tapes 7, 10 and 13).
- 23. The DEP staff, according to the testimony of Mr. Morrissey, interprets the WQS to require preservation and enhancement of the aesthetics of the state waters which includes "in large part the [physical] appearance of the water" but also includes an analysis of the natural beauty of the site. Neither Mr. Morrissey nor Mr. Arthur Mauger amplified further or more specifically on how the DEP staff defines or interprets natural beauty (Tape 10).

⁸RCSA §26-141a-1 through §26-141a-6.

- 24. The DEP's earlier fish and wildlife concerns had been satisfactorily addressed during the comment period and the staff now believes the natural resources of the state will be protected and the aesthetic quality and recreational use of Cargill Falls will be maintained as a result of the proposed project (DEP Ex. 17 at 10-12; Tape 7).
- 25. The DEP staff have attempted to balance the contribution of the project to the economic development of the state versus any adverse impact the proposed project may have on the aesthetics of Cargill Falls. However, Mr. Morrissey testified that the staff does not believe adoption of the stipulation will alter the essential character of the falls. (DEP Ex. 13 at 2; Tape 13)
- 26. The term "aesthetics" is not defined in the WQS, but the applicant asserts that the only aesthetics criteria I may legitimately consider are those discussed in the federal regulations which, it opines, are limited to the physical appearance or character of the water and do not include an analysis of the natural beauty of the site (Tape 4).
- 27. The applicant further contends that passive viewing is not a "recreational use" within the meaning of the WQS. The applicant references the CWA and the regulations promulgated thereunder which refer to recreation "in and on the water" (see 40 C.F.R. §131.10(a)) to support its contention that I am limited to considering recreational uses such as boating, swimming, and canoeing that are by definition in-stream uses. Mr. Duncan Broatch, one of two partners in Summit Hydropower, testified that in his opinion passive viewing of the falls from a distance was not a recreational use envisioned by the WQS and thus not within my purview to consider when determining a §401 WQC (Tape 4).
 - Mr. Arthur Mauger, Senior Environmental Analyst with the DEP, testified that the DEP's interpretation of the WQS is that passive viewing of the cascades at Cargill Falls is within the scope of the WQS as a recreational use of the site (Tape 7).
- 28. The proposed project will require the condemnation of the water rights to the Falls and of the Cargill Falls dam structures which the Town currently owns and would like to continue to preserve for the public's use and enjoyment (APP. Ex. 5). Mayor Donald St. Onge of Putnam testified that the Town was not interested in selling or leasing its interest in the property to the applicant (Tape 6).

Title 16 of the U.S.C.A. §814 provides that:

When any licensee cannot acquire by contract or pledges an unimproved dam site or the right to

use or damage the lands or property of others necessary to the construction, maintenance, or operation of any dam, reservoir, diversion structure. works appurtenant or the thereto, in conjunction with accessory in the judgment of the improvement which commission is desirable and justified in the public interest for the purpose of improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce it may acquire the same by the exercise of the right of eminent domain . . .

29. The applicant attempted to introduce as a full exhibit a letter which indicated that the DEP had granted a §401 WQC to another hydroelectric facility, named Hale Manufacturing, located in the vicinity of the proposed project. The WQC was approved by the DEP at some unspecified time in the past (APP. Ex. 2; Tapes 10 and 11).

The document that the applicant sought to have admitted was not dated and the "received" date stamp year was unclear, but it was signed by former Commissioner Stanley Pac. Although applicant's counsel argued there was an "incredible amount of similarity" between the two projects, he brought forth no credible witness to attest to the same.

In fact, the DEP witness being questioned on this issue, Mr. Morrissey, testified that no two projects were alike and that the Hale project "was cloudy in his mind." He stated he had insufficient recollection of the project to testify regarding the specifics of the project. The basis of my ruling disallowing the document as a full exhibit was that since the witness being questioned had an insufficient recollection, the document had no probative value and was immaterial.

The applicant argues that any WQC that the DEP has issued in the past is relevant to this proceeding and cites in its post-hearing brief the case of <u>Doubleday Broadcasting Company</u> Inc. v. F.C.C, 655 F.2d 417, (D.C. Cir., 1981) for the proposition that DEP must act consistently and not arbitrarily and capriciously. The purpose of the offer was to show DEP's "possible inconsistent treatment." (Tape 10) The <u>Doubleday</u> case, however, involved the issuance of conforming call signs to radio stations and the court found that the two cases at issue were "almost identical"; no such showing was made in the case at hand.

Assuming arguendo, there had been an adequate showing that the two projects were substantially similar, Mr. Morrissey testified that msf is determined on a case-by-case basis. So the fact that the DEP may have approved a project

several years ago with a msf release of 58 cfs does not serve as legally binding precedent for the DEP to approve another project in 1990 with the same msf release.

- 30. The applicant also submitted, at my request, Vermont's Water Quality Standards because at the initial hearing session the applicant mentioned an administrative decision by the Vermont Water Resources Board concerning a hydroelectric project entitled the Great Falls Hydroelectric Project (Tape 14). However, during the second hearing session, no credible showing was made that Vermont's WQS are substantially similar or equivalent to Connecticut's WQS; thus, I was unable to make a comparison between the two states' WQS. In any event, as the applicant is well aware, I would not be bound by the decisions of another jurisdiction.
- 31. The Town attached to its post-hearing brief (INT. Ex. 9) a Department of Public Utility Control (DPUC) decision, Docket No. 88-03-37 (August 10, 1988), regarding the applicant's hydroelectric project and its sale of electricity to the Connecticut Light and Power Company. Although I did take administrative notice of the document, the DPUC's decision regarding this matter had no bearing on my determination. Furthermore, the decision was not submitted at the hearing and thus was not subject to cross-examination; for that reason alone, I would not consider it when rendering my decision.
- 32. Parties filed post-hearing briefs and reply briefs on or about February 26 and March 5, respectively, but the record did not close until July 9, 1990, because four times during the proceeding I requested that the parties submit additional information or supplemental argument to me (see COR Exs. 1, 8, 10 and 11). First, after the initial hearing session in Putnam when the applicant (not yet represented by counsel) raised several legal issues that warranted additional analysis; second, the post-hearing briefs raised additional questions; third, after reviewing the stipulation, I had questions regarding the formula. Lastly, after reading excerpts from a U.S. Supreme Court decision, California v. FERC, 110 S. Ct. 2024, 109 L. Ed. 2d 474 (May 21, 1990), I

⁹Administrative notice was also taken of RCSA §26-14a-8, <u>Statement of Purpose</u>, and CGS §16a-35k, <u>Legislative findings and policy</u>.

¹⁰Under the DEP's Rules of Practice (RCSA §22a-3a-1(a)(3)), this proceeding commenced on or about April 8, 1988 (the date of application), and under CGS §4-185, it is governed by the provisions of the Uniform Administrative Procedures Act in effect prior to July 1, 1989.

requested comments on its relevance to this case (COR. Ex. 11). After reading the entire case and reviewing the parties' briefs on this matter, I learned that the two cases were distinguishable on several grounds, and that the California case was not relevant to this proceeding. As a legal distinction, the California case was primarily a federal preemption matter. In that case, a state agency attempted to impose a separate permit with msf conditions that differed from FERC's earlier msf determinations. Unlike the present case, it presented a direct conflict between federal and state law.

DISCUSSION AND CONCLUSIONS OF LAW

Based on the foregoing findings, and after due consideration of the applicable statutes and regulations, the undersigned concludes as follows:

A. Section 401 of the CWA provides in pertinent part that:

if the state . . . fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed 1 year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application (see 33 U.S.C. §1341).

FERC has interpreted the phrase "fails or refuses to act" to mean that the state agency has one year in which to grant, deny or waive certification (see Michael Russo, Project No. 6119-001, 31 FERC ¶61,111 (May 3, 1985)). FERC has further interpreted that provision, in the case of Washington County Hydro Development Associates (Project No. 3688-000, 28 FERC ¶61,341 (September 18, 1984)), to mean "that the one year waiver period under §401 (a) should be considered as commencing on the date a state agency deems an application acceptable for processing." FERC's reasoning was that:

if applicants for certification were able to trigger the running of the one year waiver period by filing applications devoid of appropriate information, the states would have a difficult time acquiring the information necessary to make informed decisions on such requests. Such a result would undermine the state's right to evaluate the water quality impacts of an activity requiring a federal discharge permit and would undermine the fundamental purpose of §401 Id. at 61,624.

The applicant argues that the one year period commenced on July 1, 1988, the date of its second draft license application, because its subsequent applications were not materially different 1 from its earlier application (Tape 4).

¹¹ Material amendment to plans of development is defined as, inter alia, "any fundamental and significant change, including but not limited to: . . . a material change in the location, size, or composition of the dam, the location of the powerhouse . . Any material amendment . . . must be considered to require a new request for certification (18 C.F.R. §4.35(f), 18 C.F.R. §4.38(3)(e)(1)(3)).

Consistent with the rationale in the above-cited <u>Washington County</u> case, I find that the statute was not triggered until August 10, 1988, the date in which the applicant submitted its penultimate application to the DEP, the first with all of the earlier deficiences cured. As I indicated earlier (<u>see Finding 5</u>), the applicant submitted four applications, but the August application was the first one that contained all the requisite information and was deemed ready for processing by the DEP staff. Thus, the Commissioner's denial of August 10, 1989 was timely.

B. The proffered agreement reached between the DEP and the applicant admittedly results in higher flows than the earlier proposal of a steady release of 58 cfs. The unrebutted testimony of the DEP witnesses demonstrates that the proposed project will meet the fisheries regulations msf requirements, primarily designed to protect fish and other aquatic life. However, as Mr. Morrissey testified, msf releases are not intended to protect the aesthetic quality of a river. Indeed, the central issue in this case, as framed by the applicant, is whether the proposed flow rates are deemed aesthetically desirable (APP. Ex. 21). In other words, whether the proposed minimum flow rates can reasonably be expected to diminish the aesthetic quality of Cargill Falls, and whether the proposed project will adversely impact the existing uses of the river, namely recreational uses.

However, before reaching that dispositive question, which essentially turns on an interpretation of the WQS, two other preliminary questions must be decided: first, whether passive viewing of the scenic vistas of Cargill Falls is a recreational use envisioned by the WQS; second, whether the term aesthetics, as used in the WQS, warrants an analysis of the natural beauty of the site.

C. As stated in Finding 27, the applicant asserts that I cannot consider passive viewing of the falls as a recreational use of the river because federal regulations restrict me to consideration of recreational activities that are conducted "in and on the water" (40 C.F.R. §131.10(a)). However, CGS §22a-426 and the WQS list recreational use as a designated use without any such qualification. A reasonable interpretation of the statute and the WQS is that the state certifying agency, when defining recreational purposes and uses, is not limited to those activities that are by definition in-stream uses.

Furthermore, federal regulations and CGS §22a-426 require, at a minimum, that the state's WQS protect and maintain designated and existing uses of the water and preserve and enhance the quality of the state's waters for present and future use (see Findings 3 and 4). It is undisputed that residents of Putnam and other members of the public currently enjoy Cargill Falls by passively observing its cascading waterfalls.

Additionally, Mr. Mauger testified that the DEP staff, when reviewing a hydroelectric project, interprets the WQS to include passive viewing as a recreational use of the river (Tape 7).

Recreational use is not defined in the WQS, but it is commonly defined in the World Book Dictionary (1972 Edition), as: "n. play; amusement: [e.g.] Walking, gardening, and reading are quiet forms of recreation. --Syn. diversion, relaxation."

I conclude that passive viewing of the falls is within the scope of the WQS because it is a quiet form of recreation. Accordingly, it is within my purview to consider when determining a WQC. The applicant failed to meet its burden of proof, by a preponderance of the evidence, on this issue. I find its testimony on this issue unpersuasive and the DEP's testimony more credible. I also accord more deference to the staff's testimony insofar as they represent the entity that has been charged with the administration of the WQS.

D. The second question is whether aesthetics, as an enumerated parameter in the WQS, should include an analysis of the concept of the natural beauty of the site. Similar to recreational use, aesthetics is undefined in the WQS, but in American aesthetic jurisprudence 'aesthetics' and 'visual beauty' are essentially synonymous. Aesthetic[s] is more commonly defined in Black's Law Dictionary (4th ed. rev. 1977) as: "relating to that which is beautiful or in good taste"; "pertaining to the beautiful." 13

¹² See Costonis, Law and Aesthetics, 80 Michigan Law Review 355, 375-376 (1982).

¹³ See People v. Wolf, 216 N.Y.S. 741, 744, 127 Misc. 382; Hav-A Tampa Cigar Co. v. Johnson, 149 Fla. 148, 5 So. 2d 433, 440.

As the first listed parameter, aesthetics is clearly a legitimate factor that a state certifying agency must consider when deciding a §401 WQC. The question that the applicant has raised is a question of its scope with respect to a §401 WQC. As stated earlier, the applicant contends that any aesthetic criterion that I consider must be limited to the physical appearance or characteristics of the water.

That argument is belied, however, by the fact that if aesthetics, as used in the WQS, were limited to the physical appearance or characteristics of the water, there would be no need to distinguish it from other conventional parameters covering the physical characteristics of the water such as turbidity, taste and odor.

In fact, Mr. Morrissey distinguished between the two when he testified that the DEP staff considers both the physical appearance and the natural beauty of a site in its review of a §401 WQC (see Finding 23). Once again, I give more credence to the staff's testimony and interpretation of the WQS and conclude that the term aesthetics, as used and envisioned by the WQS, includes an assessment of the natural beauty of a site.

While I realize there exists no objective or recognized standard for natural beauty, the applicant's entering into a stipulated agreement with the department for a higher msf release (when the DEP's earlier denial was primarily based on the applicant's lower msf release and its concomitant loss of aesthetics quality) constitutes the applicant's tacit acknowledgment that msf releases contribute to the aesthetic quality and natural beauty of Cargill Falls.

The applicant further argues that the overall environmental impact of a hydroelectric project, including any aesthetics consideration, is an appropriate factor which FERC is required to consider in evaluating a hydro-electric license application, and not the state agency. The applicant cites Scenic Hudson Preservation Conference v. Federal Power Commission, 354 F.2d 608 (2nd Cir., 1965) in its post-hearing brief in support of its proposition.

The applicant also cites <u>First Iowa Hydro-Electric Cooperative v. FPC</u>, 328 U.S. 152 (1946) in support of its argument that FERC has exclusive jurisdiction to approve hydroelectric projects and that the states cannot interfere with that activity unless specifically authorized. While the applicant concedes in its post-hearing brief that the states are specifically, albeit narrowly, authorized in this instance and may impose more stringent restrictions than are mandated under federal law, it continues to argue there exists no authority for extending the scope of the regulatory scheme to encompass the natural beauty of the site.

33 U.S.C.A. §1251 (g) states: "It is the policy of Congress that the authority of each State to allocate quantities of within its jurisdiction shall not be superseded, abrogated or otherwise impaired..." Moreover, congressional statement accompanying the CWA expressly recognizes congressional policy that the states retain the right and primary responsibility to preserve and enhance land and water resources within their boundaries. Additionally, the CWA, its legislative history and well-established case law all provide ample authority for a state certifying in the area of WQC, to impose more stringent than are mandated under federal restrictions law. Although the WQS must be consistent with the FWPCA, the state's WQS may go beyond what is federally mandated.

E. CGS §22a-426 requires that the WQS "protect the public health and welfare and promote the economic development of the state." The DEP staff has apparently interpreted that provision to require a balancing of any adverse environmental impact caused by the proposed project and the economic development that it would provide to the state. Indeed, Mr. Morrissey testified that the staff, when reviewing the present project, attempted to balance these two factors (see Finding 25).

The applicant also requests that I consider that the proposed project will displace the state's dependence on foreign oil and the burning of fossil fuels (see Finding 18). Implicit in that request is the supposition that I should engage in a balancing of the state's need for alternative energy sources versus the environmental impacts of the proposed project.

However, in <u>Power Authority v. Williams</u>, 60 NY 2d 315 (1983), the court held that a state regulatory agency

is not empowered to base its decision on a balancing of need for the project against adverse environmental impact. The section 401 certification process is accomplished by a determination that a proposed project will meet

¹⁴In <u>Power Authority of State of N.Y. v. Dept. of Environmental Conservation</u>, 379 F.Supp. 243 (D.C.N.Y., 1974), the court upheld the state's right to impose more restrictive standards regarding discharges from hydroelectric power plants than those imposed by the CWA.

the particular water quality standards for the applicable classification. To extend that process, . . . to consideration of countervailing energy environmental and interests with the possibility of issuance of section 401 certification despite noncompliance with water quality standards on the basis of overriding energy needs would be . . . a failure by the commissioner to perform the function reserved to him under FWPCA . . . [The] commissioner ha[s] neither authority nor responsibility to engage in balancing economic. energy, environmental or other factors. . . (Id at 326, 327).

Notwithstanding the above, and assuming arguendo that a state certifying agency has the authority to engage in such a balancing analysis, I find the Town's argument more compelling than the applicant's: given the relatively small amount of energy to be produced by the project, and the accordingly small amount of fossil fuel it will displace, coupled with the fact that the project will not provide significant employment opportunities or revenues, the need for hydropower in this instance simply does not outweigh the Town's loss of the aesthetic value of Cargill Falls.

While the production of hydropower and other alternative energy sources is unquestionably a laudable goal, in this case the scales of justice weigh more heavily in favor of the public's right to continue to recreationally use and enjoy the scenic vistas of Cargill Falls and not with the state's de minimis economic gain.

F. Having concluded that passive viewing of Cargill Falls is a recreational use and that the term "aesthetics" includes the notion of the natural beauty of the site, the remaining issue is whether the proposed project and its variable minimum flow release will have an unacceptable adverse impact on the aesthetic quality and recreational use of Cargill Falls.

Despite the proffered agreement reached between the DEP and the applicant, I conclude that no reasonable assurance can be given to FERC that the proposed project will not violate the WQS. The proposed project will diminish the flows presently observed at the site to an aesthetically undesirable level.

Although there was testimony that presently the Falls can be observed and enjoyed from several vantage points, apparently for the sake of easy comparison, the applicant chose to photograph only one vantage point (the eastern end of the Route 44 bridge) in its

Aesthetic Impact Study¹⁵. However, these and other photographs vividly portray many of the various flows presently observed at the site. Comparing these flows with the projected "stipulated" flows (see page 7), the dramatic and devasting effect that the proposed project would have on Cargill Falls is convincingly demonstrated.

Granting the applicant a §401 WQC for the proposed project would thwart the DEP's ability to fulfill its statutory mandate and thus frustrate the central thrust of the WQS, that is to "preserve and enhance the quality of state waters for present and prospective future use . . . ," which includes existing recreational uses and purposes.

The proposed project would have a detrimental effect on the public's recreational use and enjoyment of the falls. The flow of water would be diminished to an unacceptably low level and the natural river flow fluctuation, which contributes to the beauty and aesthetic quality of Cargill Falls, would essentially be eliminated. To conclude otherwise would be an abdication of the DEP's legislative mandate.

¹⁵I find nothing in the applicant's background that would render it qualified to prepare the Aesthetic Impact Study. The applicant lacks any background or expertise in fine arts, planning, architecture or another related discipline that would render it qualified to prepare such a document and thus cause me to lend any credence to its self-serving conclusions that the proposed project would maintain the present aesthetic value of Cargill Falls.

RECOMMENDATIONS

- 1. Based on the foregoing, the undersigned respectfully recommends:
 - (a) that the subject application dated September 7, 1988 (DEP Ex. 8) submitted by Summit Hydropower for a water quality certification pursuant to §401 of the CWA for a proposed hydroelectric project located on the Quinebaug River at Cargill Falls in Putnam, Connecticut be denied;
 - (b) that the stipulation embodied in a proffered agreement (APP. Ex. 13) reached between the applicant and the DEP with a variable minimum flow requirement be rejected; and
 - (c) that the Commissioner's denial of August 10, 1989 (DEP Ex. 11) regarding the aforementioned application be upheld.

Date December 24, 1990

Cynthia B. Watts

Adjudicator

Department of Environmental

Protection

CBW: mw

APPENDIX A

In Re: Proposed Decision in the Matter of Application for Water Quality Certificate by Summit Hydropower for Cargill Falls Hydroelectric Project

EXHIBIT LIST

APPLICANT'S EXHIBITS

- 1. 1-page letter dated August 28, 1989 from Duncan S. Broatch to Leslie Carothers requesting public hearing
- 2. For ID Only. 1-page letter to Attorney Robert Olsen signed by Stanley Pac, undated, but stamped received April 28, 198[], "Water Quality Certification"
- 3. For ID Only. 1-page letter to Mr. Raymond Rosenfield signed by S. Pac, dated February 6, 1984, "Water Quality Certification"
- 4. 20 agency letters to Summit
- 5. 2-page letter to FERC from U.S. Department of Interior, dated January 6, 1989
- 6. 1-page letter to FERC from U.S. Environmental Protection Agency, dated January 11, 1989
- 7. Aesthetic Impact Study [Docu. No. 8] prepared by Summit Hydropower
- 8. 5 letters from Summit Hydropower to Town Selectmen
- 9. Excerpts from Town Selectmen's meeting minutes (May 2, 1988, May 23, 1988, May 15, 1989)
- 10. Summit Hydropower's testimony, 25 pages, dated December 11, 1989; excerpts read into the record at the hearing
- 11. Appearance dated January 26, 1990 from Roger E. Koontz for Summit Hydropower
- 12. 26 photos of site at variable flows taken by both applicants (Duncan Broatch and Richard Mackowiak), dates photos taken noted within (App. Ex. 7) [Flow Calculations]
- 13. Stipulation reached between DEP and the applicant, 3-pages, dated January 26, 1990
- 14. EPA's Water Quality Standards Handbook

- 15. For ID Only. Cover letter and Brief dated February 23, 1990 from Roger E. Koontz on behalf of Summit Hydropower to Cynthia B. Watts
- 16. For ID Only. Cover letter and Reply Brief dated March 5, 1990 from Roger E. Koontz to Cynthia B. Watts
- 17. For ID Only. 4-page letter dated April 2, 1990 from Roger E. Koontz to Cynthia B. Watts
- 18. For ID Only. 2-page letter dated April 24, 1990 from Roger E. Koontz to Cynthia B. Watts, with 2-pages attached
- 19. For ID Only. 1-page letter dated April 27, 1990 from Roger E. Koontz to Cynthia B. Watts
- 20. For ID Only. 1-page letter dated June 15, 1990 from Roger E. Koontz to Cynthia B. Watts
- 21. For ID Only. 2-page letter dated July 9, 1990 from Roger E. Koontz to Cynthia B. Watts
- 22. For ID Only. 1-page letter dated November 15, 1990 from Roger E. Koontz to Cynthia B. Watts

DEP'S EXHIBITS

- 1. Letter dated March 6, 1987 from Mabel Chin to Richard G. Mackowiak
- 2. Draft License Application dated April 8, 1988 with cover letter dated April 8, 1988 from Duncan S. Broatch to Brian Emerick
- 3. 3-page letter dated May 9, 1988 from Mabel Chin to Duncan S. Broatch
- 4. Second Draft License Application dated July 1, 1988 with cover letter dated July 1, 1988 from Duncan S. Broatch to Brian Emerick
- 5. Letter dated July 27, 1988 from Mabel Chin to Duncan S. Broatch
- 6. Minor License Application for Cargill Falls dated August 10, 1988 with cover letter dated August 10, 1988 from Duncan Broatch to Mabel Chin
- 7. Letter dated August 29, 1988 from Mabel Chin to Duncan S. Broatch
- 8. FERC Minor License Application for Cargill Falls dated September 7, 1988
- 9. Comments to FERC dated January 11, 1989 from Leslie Carothers re: Cargill Falls, Summit Hydro Power
- 10. 2-page letter dated February 20, 1989 from Mabel Chin to Duncan R. Broatch and Richard G. Mackowiak
- 11. Letter dated August 10, 1989 from Leslie Carothers to Duncan Broatch, denying request for Water Quality Certification
- 12. Public Notice of "Denial of Water Quality Certification" dated September 29, 1989
- 13. Water Quality Standards of DEP Water Compliance Unit dated February 1987
- 14. a-f. Photos taken on December 6, 1989 by Art Mauger

- 15. Cover letter from Art Mauger to C. Watts with excerpts from Lee Dunbar's, a DEP report, "Statistical Analysis of Water Quality Data 1973-1982" attached, 13 pages
- 16. For ID Only. 1-page letter dated February 16, 1990 from David H. Wrinn to Cynthia B. Watts, with handwritten note dated February 16 attached
- 17. For ID Only. Cover letter and DEP Brief dated February 26, 1990 from David H. Wrinn to Cynthia B. Watts
- 18. For ID Only. Supplemental Response Brief of DEP Water Management Bureau dated April 9, 1990 by David H. Wrinn
- 19. For ID Only. Cover letter dated April 26, 1990 to Attorneys Koontz and Sharp from David H. Wrinn (response to Hearing Officer request), with 6-page attachment
- 20. For ID Only. Cover memo dated May 7, 1990 from Art Mauger (DEP) to Cynthia B. Watts, with 2-page flow duration curve attached
- 21. For ID Only. Supplemental Response of DEP Water Management Bureau dated July 5, 1990 by David H. Wrinn

INTERVENOR'S EXHIBITS

- 1. Appearance dated October 30, 1989 from Gregory A. Sharp for the Town of Putnam
- 2. Memo dated November 2, 1989 from Clyde O. Fisher, Jr. to All Parties re: change of schedule for proceeding
- 3. Notice of Intervention and Request for Notice of Meetings dated December 11, 1989 from Gregory A. Sharp for Town of Putnam
- 4. For ID Only. Town of Putnam's telephone book
- 5. a-e. 5 photos circa 1888, 1890, 1895, 1900, and 1910
- 6. Photocopies of glass plates (6 sheets), 11 photos
- 7. 1-page, Flow Duration Curve for Cargill Falls Hydroelectric Project
- 8. 1-page, graph of average monthly flow on Quinebaug River at Putnam
- 9. For ID Only. Brief of Town of Putnam, dated February 26, 1990
- 10. For ID Only. 1-page letter dated March 23, 1990 from Gregory A. Sharp to Cynthia B. Watts
- 11. For ID Only. Supplemental Brief of Town of Putnam dated April 9, 1990 by Gregory A. Sharp
- 12. For ID Only. 1-page letter dated April 11, 1990 from Gregory A. Sharp to Cynthia B. Watts
- 13. For ID Only. 2-page letter dated April 18, 1990 from Mayor Donald R. St. Onge (Putnam) to Cynthia B. Watts
- 14. For ID Only. Cover letter and Supplemental Brief dated April 23, 1990 from Marcus G. Organschi to Cynthia B. Watts
- 15. For ID Only. 3-page letter dated May 15, 1990 from Marcus G. Organschi to Cynthia B. Watts with flow duration curve attached
- 16. For ID Only. 4-page letter dated July 6, 1990 from Gregory A. Sharp to Cynthia B. Watts

CORRESPONDENCE

- 1. 3-page memo dated January 3, 1990, from C. Watts to "All Parties"
- 1-page letter from Richard G. Mackowiak to C. Watts, dated, January 3, 1990
- 1-page letter from R. Mackowiak to C. Watts dated, January 4, 1990
- 4. 1-page memo dated January 5, 1990 from C. Watts to "All Parties"
- 5. 22a-6 public notice sent to Mayor of Putnam, Samuel J. Roberts, with 3-page list of other municipal officials notice sent to
- 6. Cover letter with State of Vermont (7 pages) Water Quality Standards attached
- 7. 1-page memo dated February 20, 1990 from C. Watts to "All Parties"
- 8. 2-page memo dated March 20, 1990 from C. Watts to "All Parties"
- 9. 1-page memo dated March 28, 1990 from C. Watts to "All Parties"
- 10. 2-page memo dated April 18, 1990 from C. Watts to "All Parties"
- 11. 1-page memo dated June 26, 1990 from C. Watts to "All Parties"
- 12. 2-page memo dated November 20, 1990 from C. Watts to Roger Koontz
- 13. 1-page memo dated November 21, 1990 from James M. Connor to C. Watts with 1-page certification attached
- 14. 2-page memo dated November 30, 1990 with COR Ex. 12 attached, to James M. Connor from C. Watts

APPENDIX B

In Re: Proposed Decision in the Matter of Application for Water Quality Certificate by Summit Hydropower for Cargill Falls Hydroelectric Project

PARTY LIST

Party

Summit Hydropower Cargill Falls Hydroelectric Project 92 Rocky Hill Road Woodstock, Connecticut 06281

Represented by

Roger Koontz, Esq. Silverstone and Koontz 227 Lawrence Street Hartford, Connecticut 06106

Mr. Duncan Broatch Summit Hydropower

Mr. Richard Mackowiak Summit Hydropower

Town of Putnam
Town Hall
126 Church Street
Putnam, Connecticut 06260

Gregory A. Sharp, Esq.
Murtha, Cullina, Richter &
Pinney
Box 3197, (185 Asylum Street)
City Place
Hartford, Connecticut 06103

Polymer Corporation

James M. Connor, Esq.
Updike, Kelly & Spellacy, P.C.
One State Street
P. O. Box 31277
Hartford, Connecticut 06103

Water Compliance Unit Department of Environmental Protection 122 Washington Street Hartford, Connecticut 06106

David H. Wrinn, Esq. Assistant Attorney General P. O. Box 120 55 Elm Street Hartford, Connecticut 06106

APPENDIX C

In Re: Proposed Decision in the Matter of Application for Water Quality Certificate by Summit Hydropower for Cargill Falls Hydroelectric Project

WITNESS LIST

Party

Witness

Summit Hydropower Cargill Falls Hydroelectric Project

Mr. Duncan Broatch Summit Hydropower

Mr. Richard Mackowiak Summit Hydropower

Town of Putnam

The Honorable Donald St. Onge Mayor Town of Putnam Putnam, Connecticut 06260

Water Compliance Unit
Department of Environmental
Protection

Mr. Arthur Mauger Senior Environmental Analyst Water Compliance Unit

Mr. Thomas Morrisey
Director
Inland Wetland Water Resource
Division
Department of Environmental
Protection
Room 207
165 Capitol Avenue
Hartford, Connecticut 06106

APPENDIX D

In Re: Proposed Decision in the Matter of Application for Water Quality Certificate by Summit Hydropower for Cargill Falls Hydroelectric Project

SPEAKER LIST

Speaker

Representing

Mr. William Simmons

Town of Putnam

R. R. #1

Putnam, Connecticut 06260

Mr. Ernest Cotnoir

Self

65 Cleveland Street

Putnam, Connecticut 06260

Robert J. Miller, President

6 Park Road

Putnam, Connecticut 06260

Aspinock Historical Society

Mr. William Glizen

Self

R. D. 1 Box 254

Woodstock, Connecticut 06281