# NATURAL ENERGY RESOURCES COMPANY

January 14, 1987

#### SPECIAL WATER REPORT

To: The People of Colorado

Subject: Union Park Water Supply Project vs. Two Forks

Purpose: The purpose of this report is to provide the people of Colorado a clear understanding of Union Park Water Supply Project as compared to the proposed Two Forks Reservoir alternative.

Problem: Although the Union Park Water Supply. Project is substantially superior to the Two Forks alternative, certain elements in the Colorado water community and media are trying to ignore and/or suppress the Union Park story until it is too late to stop Two Forks. The ultimate decision between the two concepts will have major economic and environmental impact, because the choice will set the "blueprint" for Colorado water development for the next 50 years. Hence the need and importance of this report.

there is a better alternative. environmental impact of Two Forks is worth the limited benefit -- especially if In short, it is highly questionable whether the high cost and make marina and other recreation support activities very difficult and Denver, but the steep canyon walls and extreme fluctuation in water levels will Two Forks would provide more flat water recreation near growing by the day. damage to endangered species and some of the nation's best river fishing is Environmental Impact Study (EIS), and the cost to mitigate the environmental economic and supply concerns, Two Forks would have serious environmental impacts. A national record \$36 million has already been spent on the severely hit by population demands of the metro area. In addition to these water supplies from both sides of the divide west of Denver have already been increase in yield from Two Forks is also limited and very expensive, because and environmental costs are very high for the expected benefit. Any tuture This is significant, but the economic reservoir system by about 32 percent. estimated Two Forks will increase the "safe annual yield" of Denver's existing additional water is required for the projected growth. Hydrologists have later municipal use throughout the Denver metro area. There is no doubt The primary purpose of Two Forks is to catch the unpredictable flood waters for dam is excellent, and the 1.1 million acre feet capacity is indeed impressive. recognized the Two Forks site as a good reservoir location. The geology for a For decades the Denver Water Department has Background for Two Forks:

Background for Union Park: The water conservation and power potential of Union Park was first envisioned when the Natural Energy Resources Company (NECO) was formed in 1982 by several retired Bureau of Reclamation engineers and some water attorneys. Union Park is a very large, high altitude, natural reservoir site located in a remote area just west of the Continental Divide south of the site located in a remote area just west of the Continental Divide south of the

existing Taylor Park Reservoir in the Upper Gunnison area. Union Park has an excellent dam site, and the dam cost for a 900,000 acre foot reservoir is relatively low compared to Two Forks. NECO is a private development company with the objective of providing large scale water and power systems that will benefit all of Colorado. We have a contract with three very large to insure the eventual construction of the projects. Since 1982, NECO has been to insure the eventual construction of the projects. Since 1982, NECO has been evaluating its water and power potential with initial emphasis in the more profitable hydroelectric area. We are now well along with the 1,000 megawatt, profitable hydroelectric area. We are now well along with the 1,000 megawatt, in 1990. This highly efficient underground power operation will provide low cost peaking power for Colorado and other western states when it is completed in 1994. Rocky Point, with its future expansion, will also help Colorado's often air policy by deferring construction of more coal fired plants in the clean air policy by deferring construction of more coal fired plants in the later.

In late 1985, NECO initiated public deliberations with the Colorado Water Resources and Power Development Authority (CWRPDA) to jointly develop NECO's water and power potential. Although CWRPDA was specifically chartered by the state in 1981 to develop major water and power projects for Colorado, their Board decided in an April 17, 1986 meeting to fund a two year Upper Gunnison Basin Study in lieu of active participation in the Union Park and Rocky Point projects. Since then NECO and its three major engineering firms have continued their detailed studies. With the publication of Ebasco Services' October 1986 Union Park Water Supply Study, we are now in a position to offer our water and Union Park Diects to the people of Colorado.

Two Forks is a good example of this inefficient brocess. the critical water industry. economic progress is being burdened by fragmentation, confusion, and chaos, in more water attorneys and engineers per capita than any other state, and our direction, even when better systems become obvious. As a result, Colorado has It is even harder for organizations to change .terall public interest. made public, it is very difficult to objectively evaluate how they impact the the overall economic and environmental impact. When the resulting systems are claimed or purchased in secret without much initial thought to alternatives or Water rights are usually that dictates the systems that are ultimately built. systems, the ownership of water rights is usually the primary driving force are handled by many separate organizations. With regard to the various water city and utility does its own planning, and water and power needs in the state direction, or coordination among the major providers of water and power. Each Unfortunately, in Colorado there has been little central planning, western states have done a reasonable job of accepting the broad planning Some of the major is now on the individual states, cities, and utilities. years federal participation has been very limited, and the development burden power needs and capabilities of a large geographic area. However, in recent The Bureau's approach was to consider the water and projects in the country. funded, and constructed most of the major water conservation and hydroelectric ✓ Bureau of Reclamation: The Bureau of Reclamation has historically planned,

NECO's Approach: In contrast to the Two Forks example, NECO has taken a state vide view of power and water needs, coupled with the natural assets of our area engineers knew from previous Bureau experience the Upper Gunnison was one of engineers knew from previous Bureau experience the Upper Gunnison was one of the wettest areas of the state, with considerable surplus water in wet years

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# **WINNTES** POWER DEVELOPMENT AUTHORITY COLORADO WATER RESOURCES

February 6 & 7, 1986

Denver, Colorado by Chairman Anthony W. Williams. the Queen City South Room at the Clarion Hotel. The meeting was called to order at 1:30 p.m. in

The following members were present:

W. D. Farr Thomas R. Sharp L. Richard Bratton John Porter

James D. Phillips Anthony W. Williams Charlie Jordan Carl Trick

Absent: Bill V. Kopfman

AUTHORITY MEETING BE APPROVED AS PRESENTED. THAT THE MINUTES OF THE DECEMBER 6, 1985

2ecouq: L. Richard Bratton James D. Phillips :nofJoM

MOTION CARRIED

WATER CONSERVATION following items: REPORT OF COLORADO J. William McDonald, Director, reported on the

Colorado River Floodway Protection Act

Small Reclamation Projects Act

3. Federal Budget Bill

•5 Sierra Club vs Block Changes in the Tax Law

٠, Colorado River Review Arkansas River Litigation

CWCB Board Activities •6 Animas La Plata Project .8 Endangered Fish Species

Board. November 30, 1985 and December 31, 1985 to the financial statements as of October 31, 1985, L. Richard Bratton, Treasurer, presented the:

PRESENTED. NOVEMBER 30 AND DECEMBER 31, 1985 BE APPROVED AS THAT THE FINANCIAL STATEMENTS AS OF OCTOBER 31

CALL TO ORDER

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APPROVAL OF MINUTES

NOITOM

BOARD

TREASURER'S REPORT

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Minutes - February 6 & 7, 1986 COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY

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James D. Phillips 2ecouq: Motion: L. Richard Bratton

able. It is hoped that the issue will be resolved paragraph that our Legal Counsel deems unacceptwas received on February 5 but it contained a have been received by the Authority. That letter MOTION CARRIED

Tyler Martineau, Project Manager, reported that all of the letters of agreement except for one have been received by the Authority.

Uli Kappus, Executive Director, reported on the status of the Union Park Project, He stated in mumber of meeting

**UNION PARK PROJECT** 

briefly discussed the following points: number of meetings with NECO and their engineers to discuss the relative merits of the Union Park water and power project. Mr. Kappus referred to his memo to the Board of January 16. He then

The opportunity exists for the Authority to the licensing step of the project. NECO needs additional capital to develop

.oberolod to thering water developmental work in the State support the Authority's activities in furas well as a stream of revenues that could develop an equity position in a major project. The project could potentially develop water

may be coming up in the mid 1990's. NECO needs about \$3 million from the Authority •9 project and it appears that a market niche NECO has looked at the marketability of the ٠ς of funds in order to maintain their schedule. drilling program and they need a commitment get into the field this spring to start their NECO has a preliminary permit but needs to

in the licensing phase over the next five of a total \$7.1 million estimated investment

the staff is looking for authorization from the Mr. Kappus concluded his comments by saying that

CLEAR CREEK PROJECT

naatiit agaq Minutes - February 6 & 7, 1986 COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY

to the CWCB and the Authority. is no distinction between Durango West applying There should be some middle ground because there standing by to provide some subsidy for studies. should be some arrangement that we would be should be redirected to the CWCB and maybe there with the CWCB and perhaps these applications Maybe this should be reexamined in conjunction is because the Authority offers 100% financing. these applications are coming to the Authority lication with the CWCB and perhaps the reason application if perhaps there isn't some dup-Mr. Sharp stated that on small site specific

OTHER BUSINESS

the Board. great length and then answered questions from Mr. Ziglar discussed the two types of bonds at bonds, airports, water, hydro-electric, etc. 2. Non-essential bonds - industrial development for schools, roads, courthouses, etc. and types: 1. Essential functional bonds - financing It has categorized bonds into two different has redefined the entire tax exempt market. December and was sent to the Senate. The bill that the tax bill passed out of the House in exempt financing stands in Congress. He reported INVESTMENT BANKER REPORT Jim Ziglar, Paine Webber, spoke to where tax

will have on the Authority. direct adverse effect the change in legislation Congressional delegation informing them of the that letters would be sent to the members of the At the conclusion of discussion it was determined

.1986. 7, 1986. The next meeting of the Authority will be on

The meeting was adjourned at 12:00.

**ТИЗМИЯИОСОА** 

**FUTURE MEETINGS** 

Respectfully submitted,

Porter, Secretary

# MINUTES POWER DEVELOPMENT AUTHORITY COLORADO WATER RESOURCES

February 6 & 7, 1986

the Queen City South Room at the Clarion Hotel. The meeting was called to order at 1:30 p.m. in

Denyer, Colorado by Chairman Anthony W. Williams.

CALL TO ORDER

BOLL CALL

The following members were present:

sqilling . U səmbb Anthony W. Williams Charlie Jordan Carl Trick Thomas R. Sharp L. Richard Bratton John Porter

APPROVAL OF MINUTES

NOITOM

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Absent: Bill V. Kopfman

WOLION CARRIED

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BOARD WATER CONSERVATION REPORT OF COLORADO

TREASURER'S REPORT

Small Reclamation Projects Act Colorado River Floodway Protection Act

Changes in the Tax Law Federal Budget Bill 3°

Colorado River Review Arkansas River Litigation •9 ٠Ğ Sierra Club vs Block

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CWCB Board Activities \*0L

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COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986

TO MODIFY THE PRIOR ACTION BY THE PUTHORITY IN RESOLUTION NO. 85-20 SO THAT THE PURCHASE OF THE A VENDOR OTHER THAN SUTRON AT AN AMOUNT NOT TO EXCEED \$4800.00.

NOITOM

Motion: L. Richard Bratton Second: James D. Phillips

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MOTION CARRIED

Tyler Martineau, Project Manager, reported that all of the letters of agreement except for one have been received by the Authority. That letter was received on February 5 but it contained a paragraph that our Legal Counsel deems unacceptable. It is hoped that the issue will be resolved able. It is hoped that the issue will be resolved by the March meeting.

UNION PARK PROJECT

CLEAR CREEK PROJECT

Uli Kappus, Executive Director, reported on the status of the Union Park Project. He stated that over the last month there have been a number of meetings with NECO and their engineers to discuss the relative merits of the Union Park water and power project. Mr. Kappus referred to his memo to the Board of January 16. He then to his memo to the Board of January 16. He then briefly discussed the following points:

NECO needs additional capital to develop
the licensing step of the project.
 The opportunity exists for the Authority to develop an equity position in a major proje

develop an equity position in a major project.

3. The project could potentially develop water as well as a stream of revenues that could support the Authority's activities in furthermal and the following support the fol

Support the State the State of Colorado.

NECO has a preliminary permit but needs to

get into the field this spring to start their drilling program and they need a commitment of funds in order to maintain their schedule.

NECO has looked at the marketability of the project and it appears that a market niche

may be coming up in the mid 1990's.

NECO needs about \$3 million from the Authority of a total \$7.1 million estimated investment in the licensing phase over the next five

%egrs.

Mr. Kappus concluded his comments by saying that the staff is looking for authorization from the

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986

Board to initiate negotiations and also to address several key issues relative to what form of contract can be executed with NECO and how that might be structured.

Mr. Kappus then introduced Mr. Dave Miller. President of NECO. Mr. Miller addressed the Board on the merits of the project and the funding needs.

The floor was then opened for discussion on the project and the legal aspects concerning a joint

THAT THE BOARD INSTRUCTS THE STAFF TO COMMENCE NEGOTIATIONS THAT WOULD CONSIDER THE LEGAL, BUSINESS, AND ANY OTHER ASPECTS THAT ARE APPROPRIATE IN PURSUING THIS PROJECT AND THAT WOULD BE IN THE BEST INTEREST OF THE AUTHORITY.

Motion: L. Richard Bratton Second: Carl Trick

".on stov of enrog ms  $I^{\prime\prime}$ \*palels which hydro-power will aid in the financiability of a project. For those reasons," Mr. Sharp purpose is to look for combined projects in St. Vrain and the Cache la Poudre where the promotes studies on the drainages such as the Authority may be competing with itself as it He concluded by saying that the of this power. elsewhere get underway and preempt the salability mid 1990's does not pan out or if other projects commitment is not there and the scenario for the stream of revenue and some downside in that the tive venture with good upside for a potential further stated that he views this as a speculacommitment that the Authority is pursuing. motion because he is troubled by the level of Mr. Sharp stated that he would vote against the

During the additional discussion that followed Chairman Williams stated that he would like to know where the revenue stream is going to come from and how much it might be. He asked the staff if they had studied the Black and Veatch point that the staff is willing to endorse it or does the staff have any reservations? Mr. Kappus replied that when you go ten years on a projection given all the economic uncertainty that we ion given all the economic uncertainty that we are facing then what was done is reasonably good.

NOITOM

DISCOSSION

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986

Page eight MOTION RESTATED

SOUTH PLATTE STUDY

TO ASK THE STAFF TO PROCEED DILIGENTLY TO FORMULATE A METHOD BY WHICH THE AUTHORITY COULD WORK WITH NECO IN MOVING THE PROJECT FORWARD. TO NEGOTIATE WITH NECO AS TO WHAT THE AUTHORITY'S POSITION WOULD BE FROM THE OUTSET UNTIL THE POTHORITY WAS FINISHED WITH THE PROJECT AND TO DEVELOP A REPORT ON THE BUSINESS OPPORTUNITY OR THE RETURN THE AUTHORITY MIGHT BE ABLE TO OR THE RETURN THE AUTHORITY MIGHT A METHOD OR THE RETURN THE AUTHORITY MIGHT BE ABLE TO THE RETURN THE AUTHORITY MIGHT BE ABLE TO OR THE RETURN THE AUTHORITY STATUS.

WOLION CARRIED

Yes - seven No - one (Thomas R. Sharp)

Chairman Williams announced that he would appoint a committee to work with the staff on Union Park.
Project,

Mr. Kappus reported that a number of meetings have taken place with the project sponsors in order to comply with the next step in the application evaluation in terms of the identification of bondable structural measures and what financing relationships might be there. A number of concepts were discussed and the project sponsors are currently studying them and it is anticipated that a report will be made at the March meeting.

Mr. Kappus continued by stating that time had been spent on responding to Mr. Sharp's suggestion concerning the initiation of an analysis of the South Platte Basin water demands as a separate module on the front end of the South Platte Study. It is a good idea to get a handle, right up front, in terms of what in fact is the future water demand and also some indication of what is water demand and also some indication of what is his memo of January 28.

TO AUTHORIZE THE EXECUTIVE DIRECTOR TO PROCEED TO NEGOTIATE SUCH A STUDY CONTRACT FOR THE PURPOSES OUTLINED IN THE JANUARY 28, 1986 LETTER, (COPY OF LETTER ATTACHED TO AND THERE-FORE BECOMES A PART OF THE ORIGINAL MINUTES.)

Motion: Thomas R. Sharp Second: W.D. Farr

NOITOM

MOTION CARRIED

Page fifteen Minutes - February 6 & 7, 1986 COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY

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Respectfully submitted,

**ENTURE MEETINGS** 

OTHER BUSINESS

**ТИЗМИЯПОСОТ** 

#### **AGREEMENT**

This Agreement, entered into this Agreement, entered into this Agreement, entered into this Agreement, a Colorado corporation, with place of business at 3855 Highway 105 West, palmer Lake, Colorado 80133 (hereinafter referred to as "NECO" or as "Seller"), and parker Water and Sanitation District, a Colorado quasi-municipal corporation, 11722 N. Dransfeldt, p. O. Urawer 700, Parker, Colorado 80134, (referred to hereinafter p. O. Urawer 700, Parker, Colorado 80134, (referred to hereinafter as "Parker" or as "Purchaser"), WITNESSETH THAT:

A. Whereas, NECO represents that it has full, merchantable and unencumbered title to a conditional decree for water rights issued June 14, 1984, by the District Court for Water Division No. 4, State of Colorado, in Case 82CW340, to store water from the Taylor River, Lottis Creek and Willow Creek for hydroelectric purposes in a reservoir, the south abutment of which is located at a point which bears South 150 20' 19" West 22,332.95 feet from the NW Corner of Section 21, Township 14 South, Range 82 West of the NW Corner of Section 21, Township 14 South, Range 82 West of

B. Whereas, NECO intends to file during calendar year 1986 in the office of the Clerk of the said District Court for Water Division No. 4, an application for water storage rights for municipal and transmountain purposes at substantially the same location, in the form attached hereto as Exhibit A (hereinafter referred to as "the Application" or "the Project"); and

the 6th P.M. in Gunnison County, Colorado; and

- C. Whereas, NECO represents that its agents or employees have engaged in open and notorious activities in support of the project referred to in the foregoing paragraph B, sufficient to project referred to in the foregoing paragraph B, sufficient to setablish an appropriation date earlier than and a priority senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior to the application filed by the City of Aurora in Case senior filed by the Case senior
- D. Whereas, Parker requires a supply of water available in the South Platte River to supplement its present water supply and augment some of its present water rights; and

Whereas, NECO has tendered to Purchaser a certain

- report by Ebasco Services, incorporated, entitled "Union Park Water Supply Project Reconnaissance Evaluation Study" dated October, 1986, which predicts a safe yield (safe yield means the average amount of consumptive use water which the project would yield over an extended period of time from the water rights referred to at paragraph B) for NECO's water rights referred to in foregoing paragraph B of about 60,000 acre feet per year, and contemplates a reservoir with capacity of at least 600,000 acre feet, together with a pipeline or conduit to Antero Reservoir on feet, together with a pipeline or conduit to Antero Reservoir on all described in said report, upon the correctness and accuracy all described in said report, upon the correctness and accuracy
- of which Purchaser is relying; and F. Whereas, NECO has at present no other contracts with municipal or quasi-municipal end users of its water, and such

contracts committing such purchasers to purchase some Project

water are essential to avoid possible dismissal of the Application

under Colorado case law;

NOW, THEREFORE, Seller and Purchaser, in consideration of ONE THOUSAND DOLLARS (\$1,000.00) in hand paid by Purchaser to Seller, and the additional consideration and the mutual

obligations recited herein, AGREE AS FOLLOWS:

i. Purchaser agrees to buy from Seller, and Seller agrees to sell to Purchaser, the right to receive, in perpetuity, 1,000 acre feet of water per year of the safe yield of the Project, for a total one time purchase price to Parker of FOUR HUNDRED THOUSAND DOLLARS (\$400,000), payable as follows: \$1,000 hereby receipted for, and the balance due in cash or certified funds upon completion of the Project to such a state of construction that it has the legal and physical capability to actually deliver such amount of water to said purchaser. This commitment to purchase shall expire 21 years from date hereof if not previously purchase shall expire 21 years from date hereof if not previously

2. Seller grants to Purchaser the option to purchase the right to receive in perpetuity up to an additional 2,000 acre feet per year of the safe yield of the Project for a total one time purchase price of SIX HUNDRED DOLLARS (\$600) per acre foot. Such option shall be exercised by written notice delivered to Seller no later than twenty-one (21) years from the date hereof or within six months after completion of the Project to such a state of construction that it has the legal and physical capability state of construction that it has the legal and physical capability

closed pursuant to paragraph 9.

to actually deliver such amount of water to Purchaser, whichever

occurs sooner.

years from the date hereof.

3. Seller grants to Purchaser the option to purchase up to 12,000 acre feet of reservoir storage space in the Project, beyond the space to which it is entitled by virtue of purchases of water under Paragraphs I and 2, at a one time purchase price of FIFTY DOLLARS (\$50.00) per acre foot of space, for storage of such water as Purchaser may wish to store therein, including by way of example and not by way of limitation carryover of safe yield water. Such option shall be exercised by written notice delivered to Seller no later than twenty-one (21)

4. Seller grants to Purchaser the right to expeditiously participate in any expansions of the Project beyond the water rights applied for in the Application attached hereto, on an equal basis with the most favored other participants, for up to five per cent (5%) of the additional water rights, storage space and other facilities of such expansions. These rights of

participation are agreed to be effective and to vest immediately

upon execution hereof; they are not options.

5. Any water purchased hereunder by Parker, or water owned by Parker which is stored in the project reservoir, shall be delivered upon request to Antero Reservoir through Project Facilities.

6. Parker shall have the right to receive from any hydroelectric facilities installed in the water conveyance system

revenues therefrom in proportion to the relative amount of water

All obligations of Purchaser except the earnest money

payment hereunder are contingent upon the entry of a final decree pursuant to the Application, after conclusion of appeals in that or related litigation, establishing that the water rights of the Project are senior to those sought by the City of Aurora in said Case 86CW37 in the District Court for Water Division No. 4, and are also senior to any other water storage right of over 200 acre feet for which application was filed in said Court in calendar year loads. Or which relates back to calendar year

6. All obligations of Purchaser hereunder are also contingent upon defeat or subordination by NECO of a sufficient quantity of conditional water rights to establish that the rights to to water of Purchaser under paragraphs I and 2 hereof are within the safe yield of the Project. However, NECO shall not attempt to defeat or subordinate 17,000 AF of the water storage rights to defeat to the City of Gunnison in Case BICW307 at such reservoir sites decreed in that case which Gunnison shall select.

1986 under C.R.S. 37-92-306.1 or otherwise.

it conveys through the said facilities.

9. Closing of purchases hereunder shall occur at the municipal offices of the Purchaser within a year after the occurrence of the condition described in paragraph 1, or within a year after the exercise of options described in other paragraphs, year after the exercise of options described in other paragraphs, as the case may be, or at such earlier date as purchaser may request. At closing, upon payment or tender as above provided

and compliance with the other terms and provisions hereof, Seller shall execute a good and sufficient warranty deed or other and equivalent evidence of ownership to purchaser, conveying the perpetual right to receive water, or the water storage space, as the case may be, free and clear of all liens, encumbrances, or obligations other than regular payments of Purchaser's share of

operating and maintenance charges.

The purchase prices do not include regular operation

and maintenance expenses. Any operation and maintenance expenses must be reasonably related to project facilities necessary to deliver water to Purchaser, and shall be allocated among the users of such facilities according to their use. Such expenses may include replacement costs of limited life-time items which are associated with the operation of the project facilities used by Purchaser, such as moving parts and bearings of pumps, generators, by Purchaser, such as moving parts and bearings of pumps, generators, valves and the like, but not to include reconstruction of the dam or the conveyance facilities, and not to include duplication of costs which have been charged under other accounts, nor to costs which have been charged under other accounts, nor to include retirement of debt.

ii. Title shall be merchantable in Seller as of closing.

If title to any water, water right or storage space is not merchantable, then at the option of the Purchaser this contract shall be considered void and of no effect, or Purchaser may proceed under paragraph 17.

12. This contract shall be filed with the Water court as an appendix or exhibit to the Application, and the contractual

rights of Purchaser hereunder are agreed to be a vested interest in all of the benefits of the Application and the Application and the Application and the Purchaser harmless from all costs, liabilities and burdens of pursuing the Application and related litigation to completion, completing the project and meeting MECO's other obligations hereunder, which project and meeting decreased in the project and meeting and carry out promptly, diligently and prospect to undertake and carry out promptly, diligently and

13. This Agreement imposes on Purchaser no obligation to assist NECO in litigation, administrative proceedings, project financing, or otherwise than as specifically provided herein.

14. A counterpart of this Agreement may be recorded by any party hereto. This Agreement may be executed with one or more

counterpart signature pages.

in good faith.

15. Seller shall not encumber or suffer a lien to remain recorded upon any of the rights to receive water, water, or water storage space as to which Purchaser has any interest hereunder or which Purchaser has the right to acquire by exercise of an option hereunder. Any security interest given by Seller to finance the project, or otherwise, shall be subordinate and finance the project, or otherwise, shall be subordinate and junior to the rights of Purchaser under this contract.

16. Seller shall regularly keep Purchaser informed of its corporate status, encumbrances upon the Project, other parties to whom water or storage space is sold, contracted or optioned, and progress and status of construction of the project.

hereunder is not paid, honored or tendered when due, or if any payment due hereunder is not paid, honored or tendered when due, or if any other obligation hereunder is not performed as herein provided, then the non-defaulting party may (1) elect to treat this agreement as terminated, in which case all payments and things of value received hereunder shall be returned to the non-defaulting party and it may recover such damages as may be proper, or (2) elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to treat this Agreement as being in full force and effect elect to the non-defaulting party shall have the agreement as a set ion

18. Each party represents that the persons executing this Agreement on its behalf have been regularly authorized to do so by that entity's governing Board or Council, as the case may be.

19. NECO holds harmless and shall indemnify Purchaser from

for specific performance or damages, or both.

any liability, attorney fees, cost or expense arising from injury to persons or property in the construction or operation of the project. NECO shall conform to all applicable construction and safety regulations, and shall maintain in force liability insurance or bonding suitable, appropriate and customary for the size, scope and status of the Project, including sufficient insurance to obtain the maximum benefit from CRS 37-87-104 or successor statutes. None of the deeds, instruments or documents contemplated or provided herein are intended to transfer to the Purchaser such a degree of control over the physical structures or project facilities as to make Purchaser or its agents "owners" or project facilities as to make Purchaser or its agents "owners"

in the sense of CRS 37-87-104.5 and successor or similar statutes

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to this Agreement shall be provided in writing to the parties at the addresses recited above, or at such changed addresses as to which the parties may notify each other from time to time. Notice to NECO may also be provided in writing to its registered agent. Any notice given by first class mail shall be deemed effective three days after mailing; notices by methods which provide written evidence of delivery such as certified mail with return receipt or personal service shall be deemed return receipt or personal service shall be deemed of the content of th

21. NECO agrees that any arrangements involving transfer to another entity of any of NECO's rights, title or interest in or needed to carry through the Application or Project will be subject to this Agreement and that NECO will obtain a binding agreement from the transferees under which the transferees will be legally bound by the undertakings and agreements of NECO hereunder.

22. NECO agrees that any sale, assignment or transfer in Project shall be subject to prior written approval by Purchaser, which shall not be unreasonably withheld provided the transfere in Project shall not be unreasonably withheld provided the transfere which shall not be unreasonably withheld provided the transfere in part of the authorian or which spill not be unreasonably withheld provided the transfere which shall not be unreasonably withheld provided the transfere that the technical and financial capability to pursue the Project.

23. All of the benefits and obligations of this agreement shall accrue to and be binding upon the assigns or successors in a shall accrue to and be binding upon the assigns or successors in a shall accrue to and be binding upon the assigns or successors in a shall accrue to and be binding upon the assigns or successors in

interest of each of the parties hereto, whether by merger, reorganization, sale, assignment or otherwise.

similar Agreement with the City of Gunnison ("Gunnison"). The higher cost of water to Parker in this agreement reflects and includes the capital cost of delivering Parker's water to Antero Reservoir. However, in times of shortage Parker and Gunnison shall have equal priorities for the available water in each category up to the amount to which each is entitled.

25. This Agreement constitutes the entire agreement between the Seller and the Purchaser, and upon execution hereof, any provisions of any agreement which have not been expressly incorporated herein shall be deemed null and void and of no effect. No oral agreement may modify this Agreement. All modifications or amendments shall be in writing signed by both

Signed and executed the day and year first above written.

PARKER WATER AND SAULTATION

DISTRICT

Ted Deetz, President of the Board

NATURAL ENERGY RESOURCES COMPANY

Allen D. Miller, President

:TS3TT)

the Seller and the Purchaser.

Motery Public	
82-08-8	My commission expires:
ent was acknowledged before me this, by Allen D. Miller as President of openy, a Colorado Corporation.	9861 Jadmagad to veb 95
	COUNTY OF DOUGLAS
*SS	STATE OF COLORADO )
Hotary Public	
3-3-08-8	My commission expires:
	corporation.
ent was acknowledged before me this by Ted Deetz, President of the Board sation District, a quasi-municipal	AX day of December, 1986, of Parker Water and Sanit
	COUNTY OF DOUGLAS
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COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - December 6, 1985 ✔ Page ten

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THAT STAFF GATHER THE ADDITIONAL INFORMATION AS NEEDED BUT TO STAY WITHIN THE BUDGET AND TO REMEMBER THAT STAFF TIME ALSO COSTS MONEY. THE INFORMATION WILL BE PRESENTED TO THE BOARD AT THE NEXT MEETING OF THE AUTHORITY.

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Mr. Kappus provided an update to the Board on the proposed legislation for 1986.

UNION PARK PROJECT

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DIRECTIVE

ERDA, INC.

PROPOSED LEGISLATION

November 4, 1985

BEV FILE 15.0800

BEV Project 11263

KUCHARIOKEK

Arrending:

Natural Energy Resources Company

Union Park Hydroelectric Project Rocky Point Pumped Storage Project

P. J. Adam

1. R. Seack (15)

Auchortey (CWRPDA). Board Member of the Colorado Water Resources and Power Development A meeting was held in Denver on Occober 31, 1985 with Dick Bratton,

John Stack (B&V) Dave Miller (Major NECO acockholder) Dale Raite (NECO) Ab Watta (NECO) Alvin Steinmark (NECO) Dick Bratton (CWRPDA)

Bill Thompson (B&V)

his primary loyalties are in the Upper Cunnison region. He is also a board Mr. Bratton is a Cunnison attorney specializing in water law. He advised

Cunnison Region. He sees this project as a way to spur limited development in the Upper Project" for years. Politics make development in the near future remote. He explained that the Bureau had been working on an "Upper Gunnison

member on the Upper Colorado River Water Conservancy District (?). Cathanny

is remote. Mr. Bratton is an environmentalist that will listen to resson. through economic logic. Project development without local control of politica vocal to the no growth idea. He believes that he can control this element Mr. Statton is not an advocate of no growth; however, there is a small group

chinks diversion of 50,000 AF our of a 250,000 AF to be reasonable. verstal. My understanding of trans-divide water would be McI. He personally Colorado Alliance and even though trans-divide transfer of water is controindustrial (Mil). Having said this, he stated he is not opposed to the considers a low likelyhood of classifying Union Park water as municipal and We believes that Union Park would be primarily agricultural reservoir. He

Mr. Kappus' views than Mr. Phillips'. This translates to a larger equity source of money to promote water projects. This theory coincides more with He favors CWRPDA participation in a power project to develop a continuing

share of any power project.

Natural Energy Resources Company Rocky Point Pumped Storage Project Union Park Hydroelectric Project B&V Project 11263 B&V File 15.0800 November 4, 1985

It was agreed that a "brainstorming" session would be in order to refine any NECO proposals prior to the December 6 board meeting. It was established that NECO would try to have three proposals out for review no later than November 14. November 20 is the target data for the brainstorming session. Drafts will be sent to NECO board. CWRPDA board and B&V (PJA). Mr. Bratton will promote this concept with Mr. Kappus. Dale Raitt will handle logistics. He will obtain a schedule suitable to Mr. Phillips and Mr. Bratton since they are key to this effort. It was agreed that John Carlson, CWRPDA attorney, should attend this meeting.

The potential of trans-mountain diversion of Union Park water was discussed with Mr. Miller. He asked if the abandoned Alpine tunnel had any potential in this regard. The following data was given him.

#### Elevations:

West Portal 11,605
East Portal 11,600
Union Park 9,880
Taylor Park 9,330
Rocky Point 11,300-

The tunnel is about 1,900 feet long and is about 16 miles from Taylor Park "as the crow flies." Bill Thompson suggested a surface siphon from "Round Top" (el. 11,3001) through the tunnel may have possibilities.

ta

cc: W. E. Thompson

D. F. Guyoc

T. W. Haag

p. R. Froehlich

Z0-90

Natural Energy Resources Company Rocky Point Pumped Storage Project Union Park Hydroelectric Project B&V Project 11263 B&V File 15.0800 November 1, 1985

To: P. J. Adam

From: J. R. Stack :)

A meeting was held on October 30, 1985 with Jim Phillips in reference to participation in the Union Park Project by Colorado Water Resource and Power Development Authority (CWRPDA).

Attending: Jim Phillips - CWRPDA
Ab Watts - NECO

Ron Thomas - NECO

Dave Miller - Major NECO stockholder

John Stack - Black & Veatch Bill Thompson - Black & Veatch

Mr. Phillips showed familiarity with the project and expressed his general approval of the conceptual plan. He stated this project has reached a stage of development beyond what CWRPDA is accustomed to. He stated that Colorado Springs is interested in the project but cannot participate at this time. As a board member of CWRPDA he favors their involvement and will support the project.

Significant information obtained at this meeting:

- c CWRPDA was originally funded with 30 million dollars principal. Through investments this figure grew to 42 million at one time. Various projects have been funded and he was not sure of the balance. The original 30 million dollars is not available for funding projects, only its interest. However, he did not indicate that up to five million dollars funding would be a problem.
- o There is pending legislation in Colorado that would establish three or more water storage projects in Colorado. Specifically this legislation would aim at capturing water that would otherwise be lost to the state ("New Water"). There is an organization of 40 or so of the most prominent Colorado citizens that are involved in sponsoring this effort. This organization is know as the "Colorado Alliance." Specifically they plan on developing 250,000 AF storage on the west slope with 50,000 AF to be diverted to the east slope. These legislative efforts will be financed through a sales (?) tax. Union Park seems to fit perfectly.

Natural Energy Resources Company 2 Rocky Point Pumped Storage Project Union Park Hydroelectric Project

B&V Project 11263 B&V File 15.0800 November 1. 1985

- o Mr. Phillips stated:
  - Importance of an environmentally acceptable transmission plan. (A copy of the WAPA Study was handed to him by NECO.)
  - Power purchase agreements are important. Probably cannot be negotiated now, but, the License Approval (3 years) would probably fit about right. (He seemed to believe that state support of the project at this time is probably required.)
  - There will probably be one major power project and several water projects sponsored by CWRPDA.
- o The predominant question at this time is how NECO and CWRPDA can combine efforts to further the development of Union Park.
- o To this end, it was agreed that NECO should present two or more proposals of how this could be accomplished. Various scenarios of how this could be accomplished is included at the end of this memorandum.
- o There is a Board meeting on December 6, 1985 and NECO is going to try for at least 30 minutes on the agenda. (CUMPDA)
- o Mr. Phillips questioned the staying power (permanence) of the CWRPDA.
- o Mr. Phillips also questions the ability of CWRPDA to assume major equity position in the project. This seemed to conflict with a previous statement by Mr. Uli Kappus to Bill Thompson. The ability of the CWRPDA to bond projects is not clear, however, the program outlined previously as the "Colorado Alliance" will unquestionably have tax free bonding capability due to the underwriting by tax.

The following comments are my own thoughts. Since the feasibility of Union Park was difficult to ascertain due to the question on price of water, it seems to me that the "Colorado Alliance" could be a big factor in Union Park feasibility. Since NECO has only a "Water Right" for storage and the Colorado Alliance will have a consumptive water right for the "New Water," a price for municipal and industrial water will be established rather than the rather low agricultural water value we were trying to deal with. This seems to lead to a project structure that could be financed with the power phase (Rocky Point) underwritten by the power sales agreements and the water phase (Union Park) underwritten by the Colorado Alliance. This of course is speculation on my part, however, if CWRPDA has tax free bonding capability it could be a structure the project could be based on.

Lastly, the board presentation must be done in a professional manner. It was agreed that quality writing and editing will be required for the submittal of the proposals. I volunteered to assist in slides, etc. I suggested this strategy be reviewed with you. .

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Natural Energy Resources Company Rocky Point Pumped Storage Project Union Park Hydroelectric Project B&V Project 11263 B&V File 15.0800 November 1, 1985

## Proposal #3

The premise of this proposal would be that Project Development and Control would be assumed by CWRPDA. This would require a total or partial "buyout" of NECO. This negotiation would have many possibilities, the most obvious being:

- 1. Establishing a value of NECO's equity plus a reasonable return on investment. Encumbrances, such as the B&V deferred fees, would be calculated in. Under this plan NECO would no longer be involved in the project.
- 2. Negotiate a value of NECO's equity that would retain some residual profit incentives to the stockholders. Under this plan NECO would relinquish control of the project but would receive some future potential profits in return for a reduced equity.

In either scenario, B&V's position would have to be clearly defined.

If CWRPDA has bonding capability they could essentially own the project and subcontract the operations to a utility.

In my opinion this option could have legal entanglements since some "designated" money from CWRPDA would go to investors profit.

NECO is going to assume the responsibility to prepare the proposals. I agreed to assist them in any way they may choose.

ta

cc: W. E. Thompson

- D. F. Guyot
- T. W. Haag
- D. R. Froehlich

Natural Energy Resources Company Rocky Point Pumped Storage Project Union Park Hydroelectric Project

B&V Project 11263 B&V File 15.0800 November 1. 1985

# Proposal #1

The premise of this proposal would be for the CWRPDA to use the Union Park project as an investment. This would allow a portion of the principal amount of 30 million to be used. The terms of the investment (15% interest was mentioned) would be extremely favorable to CWRPDA. This investment would be repaid (principal and interest) at the time permanent construction financing was obtained.

The collateral for this investment would be the Water Rights and the license itself. The licensing effort would have to be expanded to include Union Park. Thereby, effecting the costs currently projected by NECO.

To further the acceptance of this option, limited approval of project development could be given to CWRPDA to insure development in public interest.

Under this scenario NECO would retain all equity in the project and all accrued potential profit.

# Proposal #2

The premise of the second proposal would be a joint venture between NECO and CWRPDA. Funding for the studies and investigations necessary for licensing would be by CWRPDA. Funding for the NECO operation would be by others. (Presumably Swiss Banks.) The ownership (equity) of the project would then be negotiated to some percentage presumably on the order of

60% NECO 40% CWRPDA

The terms of the agreement with the Swiss Bank would have to be accepted by CWRPDA.

Upon receipt of the License, Power Purchase Agreements would be completed and the plan for permanent construction financing could be implemented. This could be bonding, as previously discussed, or presumably the project equity could be defined to a point that permanent investors would be available.

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - December 6, 1985
Page two

REPORT OF CHAIRMAN

Chairman Williams reported that he was appointting a Legislative Committee which would be available for telephone consultations, etc., during the legislative session. The members of the committee are:

Anthony W. Williams L. R. Bratton

W. D. Farr Thomas R. Sharp

REPORT OF COLORADO WATER CONSERVATION BOARD

- J. William McDonald, Director, reported on the following items:
- 1. Colorado River Floodway Protection Act

2. USBR Small Projects Act

3. 1986 Appropriation Bill for Water & Energy

4. Arkansas River Litigation

5. Colorado River Basin Operating Criteria

CWCB Board Actions.

Mr. McDonald then answered questions from the Board concerning Judge Kane's Decision on Federal reserved water rights and the USBR Small Projects Act.

REPORT OF EXECUTIVE DIRECTOR

Mr. Uli Kappus, Executive Director, reported on the following items:

Skip Kerr has joined the Authority as Project
 Manager and will be working on the San Luis
 Project.

- 2. Elizabeth Azuero is the new Receptionist.
- 3. Publication of the Revised Statutes which include HB 1088
- 4. Summary report from Thomas R. Sharp on the NWRA Meeting.
- 5. Meetings and speaking engagements which included the Interim Committee on Water and Land Resources. CWC and the Closed Basin Dedication in the San Luis Valley.

REPORT OF INVESTMENT COMMITTEE

L. Richard Bratton reported that the Investment Committee had completed making the investments in the Treasury Bills and referred the Board to the October 30, 1985 Memo from the Executive Director concerning the investment strategy. Mr. Bratton stated that the goal was to maximize yield in safe investments so that they are sufficiently liquid to provide cash as needed, not only for the Operating Fund but the Project Fund as well, since it is not known what the outcome of the Animas LaPlata negotiations will be.

# COLORADO WATER RESOURCES and POWER DEVELOPMENT AUTHORITY MINUTES December 6, 1985

CALL TO ORDER

The meeting was called to order at 8:30 a.m. in the Queen City South Room at the Clarion Hotel, Denver, Colorado by Chairman Anthony W. Williams.

ROLL CALL

The following members were present:

L. Richard Bratton W. D. Farr Charlie Jordan Bill V. Kopfman

James D. Phillips John Porter Thomas R. Sharp Carl Trick

Anthony W. Williams

APPROVAL OF MINUTES MOTION

THAT THE MINUTES OF THE OCTOBER 4, 1985 AUTHORITY MEETING BE APPROVED AS PRESENTED.

Motion: Tom Sharp

Second: Bill V. Kopfman

MOTION CARRIED

TREASURER'S REPORT

L. Richard Bratton, Treasurer, presented the financial statements and the budget reconciliation statement as of September 30, 1984 to the Board.

Mr. Bratton also presented Resolution No. 85-25 to the Board for adoption. He explained that due to unforeseen additional expenses related to maintaining sufficient Personal Property Liability Insurance it is necessary to make a line item transfer of \$500.00 from line item Office Machines to line item Insurance - Office Machines and Furniture.

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THAT RESOLUTION NO. 85-25 "A RESOLUTION TRANS-FERRING MONEYS AMONG LINE ITEMS IN A SINGLE SPENDING AGENCY WITHIN A SINGLE BUDGET FUND" BE ADOPTED.

Motion: L. Richard Bratton

Second: John Porter

MOTION CARRIED

MOTION

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - December 6, 1985 
Page ten

Study area during the last six weeks expressing opposition to the Snowball Creek Site and a request that the Echo Canyon Site be reconsidered. Mr. Law then presented a brief history of the project to date and the reasons for the choice of the Snowball Creek Site.

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PROPOSED LEGISLATION

Mr. Kappus provided an update to the Board on the proposed legislation for 1986.

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - December 6, 1985
Page nine

MOTION

THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO PREPARE A REPORT ON THE SOUTH PLATTE BASIN STUDY AS REFERRED TO UNDER ITEM SIX OF THE APPLICATION PROCESSING SCHEDULE.

Motion: Charlie Jordan Second: Carl Trick

DISCUSSION

Mr. Sharp expressed some concerns about the study, particularly the high expense. He also stated that he was concerned about it being premature without an analysis of the Cache La Poudre Study, the St. Vrain Study and the results of the Systemwide EIS. Mr. Bratton stated that this involved the whole issue of whether or not the Authority should be involved in these types of studies. It was suggested that when the South Platte report is discussed at the next meeting other interested parties, such as the CWCB should be involved in the discussion.

#### MOTION CARRIED

DISCUSSION

In the additional discussion that followed the above motion, Mr. Sharp stated that he would like to pursue the possibility of expanding the scope of the Cache La Poudre Project in the areas of quantification of future water demands, water supplies and potential water shortages. This expansion would be from the present basin limits to the Nebraska state line. Mr. Sharp further stated that he thought it would have some validity and would be somewhat cost effective to to consider this approach at the present rather proceed separately down the road with the South Platte Study. Mr. Williams suggested that in planning the POS for the South Platte Study perhaps consideration could be given to folding the South Platte Study into the Cache La Poudre Study and then present those projected costs to the Board along with the costs for the South Platte Study.

TURKEY CREEK PROJECT

Dan Law, Associate Director, reported on the status of the Turkey Creek Project. Mr. Law stated that he had received a copy of the Geotechnical Report and that a copy of the Final Report Draft is expected in mid-January. Mr. Law reported that a great deal of correspondence has been received from people in the

Union Park Pumped Storage Project Analyses January 16, 1986 Page two

293,000 af of water storage capacity with a firm yield somewhere in the neighborhood of 50,000 af/yr for beneficial consumptive use. A 50 MW pump/turbine unit would be used to fill Union Park Reservoir by pumping 1000 to 1200 cfs 550 feet up from Taylor Reservoir. The facility would recover much of the pumping cost when flows are released from Union Park Reservoir. A plan of the Union Park Reservoir is shown in Figure 3.

The key issue for the Authority is one of water development associated with hydroelectric power production. The Project as currently formulated could include major upgrading of the Taylor Reservoir spillway to meet the Federal Dam Safety Act. The possibility of constructing Union Park Reservoir as a second phase after the pumped storage/Taylor Reservoir improvements are completed should also be evaluated.

In order to complete the FERC licensing requirements for the Rocky Point component of the Project NECO estimates that it will need approximately \$5 million which will be spent over the next three years. Included in the above estimate is \$2 million in engineering and consulting fees, \$1 million in technical services and fees to support water rights, permitting, and contractual activities, and \$2 million for NECO administration. Environmental field studies and geotechnical investigations of the proposed project site should be funded and underway this summer if the Project is to proceed according to schedule. NECO does not have any funds available at this time to continue the development of the Project and is looking for financial support of the Project from others. Approximately \$2 million has been spent to date by NECO for engineering and administration.

A number of entities have indicated a willingness to participate financially in the Union Park Project for licensing activities if project sponsorship can be obtained from an organization like the Authority. Ebasco Services, Inc. a consulting firm, and Harrison-Western (HW), a heavy construction firm, have each tentatively offered \$1 million in services-in-kind. The Swiss Handelsbank (mechanical/electrical equipment export) has offered \$1.5 million subject to certain restrictions. There are some risks associated with a consultant, construction company, mechanical, or electrical supplier "buying" into a project such as this. It is possible that the net result could be an increased cost over a straight competitive bidding situation. It will be necessary to carefully structure the the contracts with the other participating entities to limit the potential increase in cost over that which would be competitively bid. This is normally done by the owner (Authority) retaining a third party to develop an independent cost estimate for all services, equipment and construction costs. Differences in the estimates developed by the project participants and the third party are then negotiated.

Based on preliminary discussions, the key for the entities listed above to participate financially is for an organization with the stature of the Authority to manage the Project. Ebasco and HW correctly believe that our name associated with the Project will render a great deal of

# COLORADO WATER RESOURCES & POWER DEVELOPMENT AUTHORITY

Logan Tower Bldg. - Suite 620, 1580 Logan Street. Denver. Colorado 80203 303/830-1550

# **MEMORANDUM**

January 16, 1986

TO: Board of Directors, Colorado WR & PD Authority.

J. Ziglar, D. Krahl, J. Carlson

FROM: U. Kappus, Executive Director

RE: Union Park Water Supply and Pumped Storage Project

## Introduction

The purpose of this memo is to provide a status report on the staff's ongoing analysis of the Union Park Water Supply and Pumped Storage Project (Project) application. A preliminary recommendation as to possible Authority participation in the Project is included. A meeting was held with the Natural Energy Resources Company (NECO), the project sponsor, on January 13, to review the concepts discussed herein. We will review this memorandum with you on February 6, 1986.

# <u>Analysis</u>

The Project has two independent components: a large pumped storage facility to be located at the Rocky Point site north of Taylor Reservoir and a large water storage feature at Union Park south of Taylor Reservoir.

The Rocky Point Reservoir would have an active storage of 3900 af and would be located approximately 2350 feet above Taylor Reservoir. A pumped storage hydroelectric plant at Rocky Point is presently conceptualized to generate power at a rate of 1000 MW for an eight-hour period before pumping would be required to refill the upper reservoir. A plan and profile of the Rocky Point pumped storage features is shown in Figures 1 and 2.

The Union Park Reservoir would be created by constructing a 1000-. foot long, 320-foot high, rock filled dam on Lottis Creek in the southwest corner of Union Park. The reservoir would provide approximately

TABLE 1
PUMPED STORAGE COST COMPARISONS

Projects	Union Park (Rocky Point+Union Park Res.)	Azure	Dolores
Status	Pre-feasibility completed	FERC License Application filed, Project deferred	Pre-feasibility completed, Project deferred
Location	Gunnison, CO Taylor River	Kremmling, CO Colorado River	Dove Creek, CO Dolores River
Plant Capacity (MW)	1,000 and 50	800	500
Head (ft.)	2,350 and 550	1,300	870
Est. construction cost including engineering & contingencies (Jan. 1985 \$)	695,600,000(1)	616,000,000	377,700,000
Est. construction cost per installed kW incl. eng. and contingencies (\$/kW)	663 <sup>(1)</sup> 548 <sup>(2)</sup>	770	755
Transmission costs included (Yes/No)	Yes	Yes	Yes
Firm water yield (af/yr) included in costs shown above	( Approx. 50,000 <sup>(1)</sup>	15,000	None

<sup>(1)</sup> With Union Park Reservoir (2) Without Union Park Reservoir

Union Park Pumped Storage Project Analyses January 16, 1986 Page three

credibility and marketability. Ebasco and HW have done considerable work in screening other pumped storage projects and discussing peaking power needs with utilities in the entire western market area. Their conclusion is that the Project has considerable potential.

The analysis of the Project performed by Black & Veatch concludes that the Project is technically feasible. However, until exploratory drilling is performed at the proposed site it will not be possible to say with confidence that geological conditions are adequate for construction of the Project.

The economic and financial feasibility of the Project was studied by Black & Veatch through the use of a computerized economic model and was found to have a favorable benefit-cost ratio. The Project was found to be competitive with conventional methods of meeting peaking power requirements such as gas turbines. The Project has not been analyzed for its feasibility under the tax and financing conditions available to a public entity such as the Authority. A comprehensive financing plan for the Project from licensing and permitting through construction is needed. With major overhaul of the entire tax structure likely, such an analysis is important.

In order for the Project to be successful a market for the water and power developed must exist. At this point it is unknown whether a future viable market for peaking power will exist in 1989 or 1990 when the power purchase contracts must be finalized according to the present schedule. Utility industry projections are that no new commitments for generation will be made until 1992-1994. Utility and PUC forecasts indicate that neither a local nor a western market will exist to utilize the full output of a 1000 MW peaking plant at the time the project comes on-line in 1995. Private forecasters on the other hand predict that future demand is being understated by the utilities and regulatory agencies, and that a significant shortage in supply will develop by the 1990's creating a considerable opportunity for investors in power development. The Project could be staged at 250 MW increments in order to better match future load growth.

In order to be successful the Project will have to compete with other planned pumped storage projects for the available market. It appears that there are less costly pumped storage alternatives available for serving New Mexico, Arizona and west coast, however, costs for Rocky Point compare quite favorably with projected costs for other projects competing to serve the Colorado market. The Project is compared with other pumped storage projects in Table 1. Some of these other projects however, could be subject to environmental constraints which would not be present at Rocky Point or Union Park.

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Union Park Pumped Storage Project Analyses January 16, 1986 Page four

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No fatal environmental constraints to the Project were identified during Black & Veatch's study. The Colorado Division of Wildlife has expressed concern about the effect of Rocky Point Reservoir on Bighorn Sheep in the area. A major new transmission corridor would be developed to link the project site with existing transmission lines in the upper Arkansas Valley. This does not appear to present major environmental problems.

The project schedule for the Project is attached as Figures 4 and 5. Figure 4 portrays the interim financing period which includes FERC licensing and preliminary design. This is the period of time for which NECO is currently seeking funds. Figure 5 includes the design and construction phase which will be implemented when permanent financing is obtained for the project. This schedule is based upon the schedule originally developed by Black & Veatch for the Project Feasibility Study, but with the dates extended one year to allow for delays which occurred in 1985.

The staff's analyses indicates that the project is probably a viable long-term investment. By long-term it appears that utility interest in the Project is about five years away. With this lag in the utilities willingness to put money into the Project development and with the participants inability to raise the required capital to keep the Project moving ahead, the present economic value of the Project is small. However, given the interest several entities have expressed in providing funding if the Authority agrees to participate as the lead, it provides an opportunity to the Authority to obtain a potentially controlling interest in the Project with a nominal investment.

It appears prudent for the Authority to spread its interest into those projects that have a reasonable chance of being developed. Based on the data in-hand, the Project is one of these candidates.

The present investors in the Project may be able to recoup their investment in the future, once we have a license in hand. This assumes that the Project or its output can be sold to utilities. Also, the Authority could sell all or part of its interest in the Project at that time. The sale of water developed by the project would require a separate negotiation.

The Authority would face a number of downside risks in pursuing the Rocky Point component of the Project. The project faces many risks which could affect the technical or financial feasibility at any stage during the project development:

- A market for the power may not exist at the time when commitments for the purchase of the power output must be finalized.
- The utilities may be unwilling to cooperate with the project sponsors.

### TABLE 1 (Cont'd) PUMPED STORAGE COST COMPARISONS

Project	Helms (PG&E)	Spring Canyon	Spring Canyon	St. Vrain Project N. Sheep Mtn. To Buttonrock	
Status	On-line April 1985	Feasibility being conducted	Feasibility being conducted	Pre-Feasibility completed	
Location	70 miles East of Fresno, CA	Lake Mead, AZ Colorado River	Lake Mead, AZ Colorado River	North St. Vrain Creek, CO	(
Plant Capacity (MW)	1,200	1,000	2,000	350	•
Head (ft.)	1,740	750	750	1,000	
Est. construction cost including engineering & contingencies (Jan.1985 \$)	715,000,000 (Restated)	790,000,000	994,000,000	230,000,000 (Pumped storage features only)	
Est. construction cost per installed kW incl. eng. and contingencies (\$/kW)	596	790	497	657	
Transmission costs included (Yes/No)	Yes	Yes	Yes	No	
Firm water yield (af/yr) included in costs shown above	None	None	None	None	

Union Park Pumped Storage Project Analyses January 16, 1986 Page six

- The Authority acquires a majority interest in the project, the FERC license, and the needed water rights and other assets. We provide our expertise to keep the project viable. However, our present thinking is that management services will constitute the majority of the Authority's investment.
  - We initiate discussions with other equipment suppliers to see what type of resources they might be willing to commit up front to the project.
  - We initiate discussions with key utilities to see if they would be willing to participate in the project.
  - An acceptable agreement can be structured with Ebasco to provide services and cash to the licensing and subsequent efforts. Preliminary discussions indicate a \$1.0 million investment. Also Ebasco will resolve the outstanding issues with Black & Veatch.
  - An agreement can be structured with Harrison-Western to provide services and cash to the licensing and subsequent efforts. Preliminary discussions indicate that a \$1.0 million investment is possible.
  - An acceptable agreement can be structured with the Swiss Handels-bank to provide \$1.5 million.
  - A transfer of the FERC preliminary permit to the Authority and an extension in the term of the permit which is required due to time delays in completing the financing package.
  - The bottom line is that the project will become dormant if the Authority does not become involved.

The advantages to the Authority of such an agreement will be the opportunity to manage a controlling interest in a possibly viable large scale water and hydropower development project. In return for contributing its name and a limited investment to the project the Authority will obtain access to a good pumped storage site with a modest investment.

UK/m

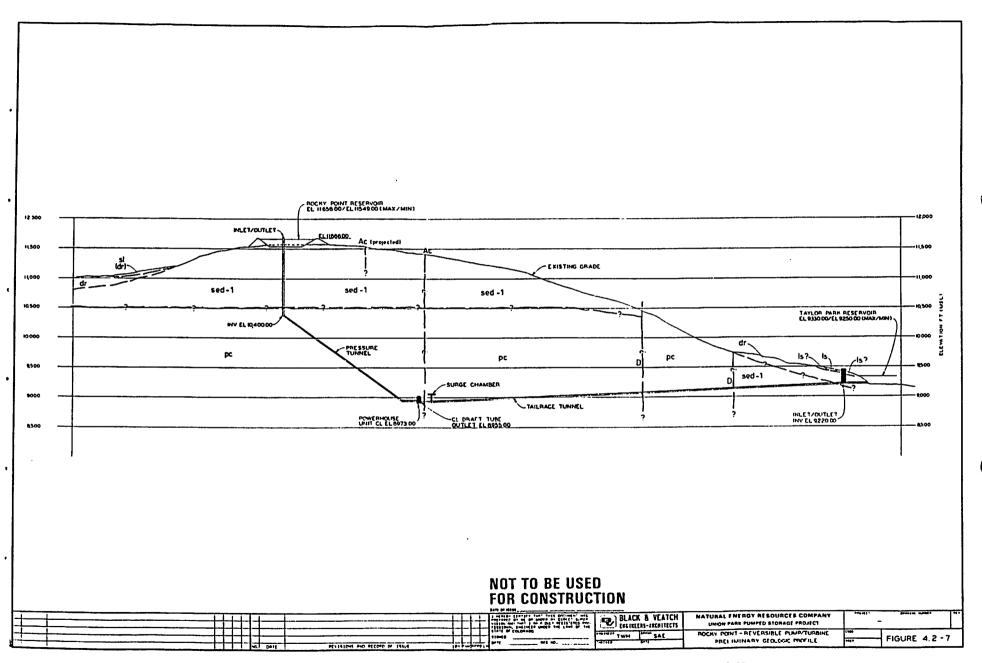
Encl.:

Union Park Pumped Storage Project Analyses January 16, 1986 Page five

- 3. Another project may be conceived which is less costly or whose sponsors are more successful in contracting for the sale of their power. This would greatly reduce the attractiveness of Rocky Point.
- 4. Any association with NECO has risk associated with it given NECO's present financial status, lack of reputation, and limited experience. The Authority could face difficulties by entering in an agreement with a private entity. Such an agreement could raise serious liability questions that would have to be addressed.
- 5. The contractual relationship between the Swiss, Harrison-Western, Ebasco, NECO, and the Authority will be very complex. The effort required to pursue and maintain these agreements will be considerable.
- 6. Although the Project appears financially feasible at this time it is possible that the sale of water and electrical capacity while breaking even would not produce significant surplus revenues to yield a large return to the investor. In this case the Project would be able to pay off the cost of construction but would contribute nothing to furthering the Authority's primary mission of water development. In a worst case scenario the Project might not generate enough revenue to pay off its own costs. This could occur if large cost overruns are encountered during construction and initial operation, as occurred recently with the 1200-MW Helms Project in California.
- 7. At present there are a number of public and private entities planning and evaluating pumped storage facilities in Colorado. Included among others are the Authority projects: Dolores, St. Vrain, and Cache la Poudre projects. If all the proposed projects were built the capacity would far exceed any foreseeable demand, unless a system for transferring large amounts of power in and out of the region was developed. Therefore, if the Authority enters into an agreement with a private company in the development of the Project it will necessarily join in a competitive race with others to obtain commitments for the sale of its peaking power. This activity of the Authority may be viewed with alarm by other public entities who wish to develop pumped storage projects.

#### Recommendations

Based on our analysis of the available data the staff recommends that the Authority initiate preliminary negotiations with the project owners to manage the licensing and subsequent activities. These negotiations will be predicated on the following:



4-32

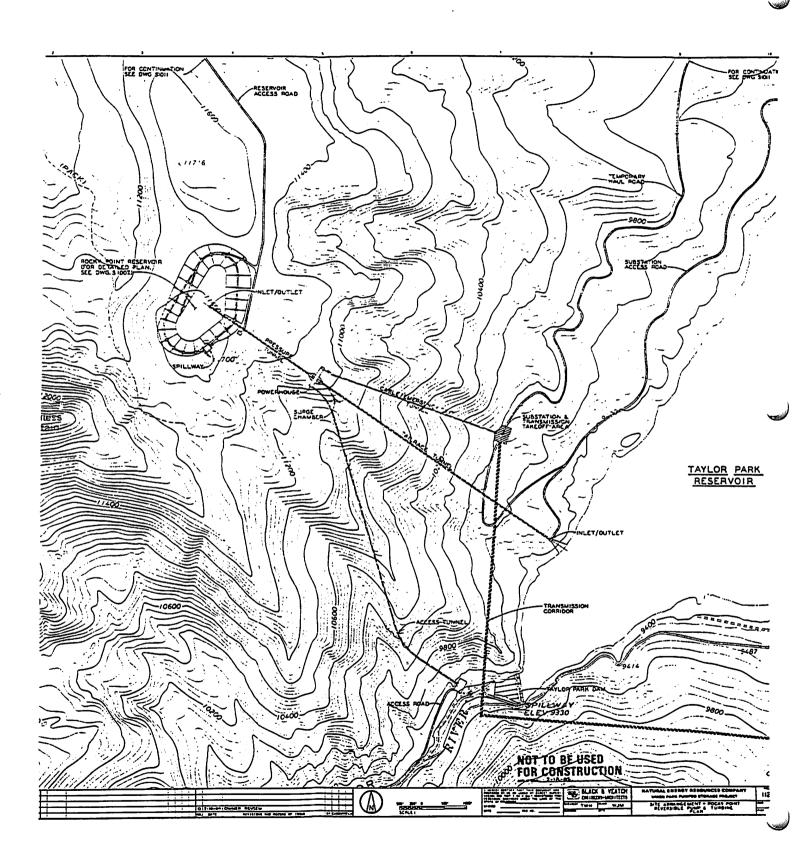
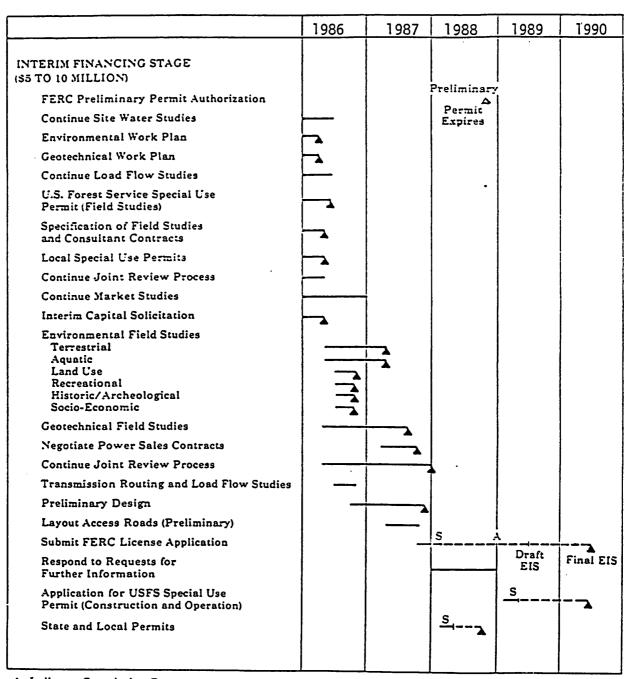


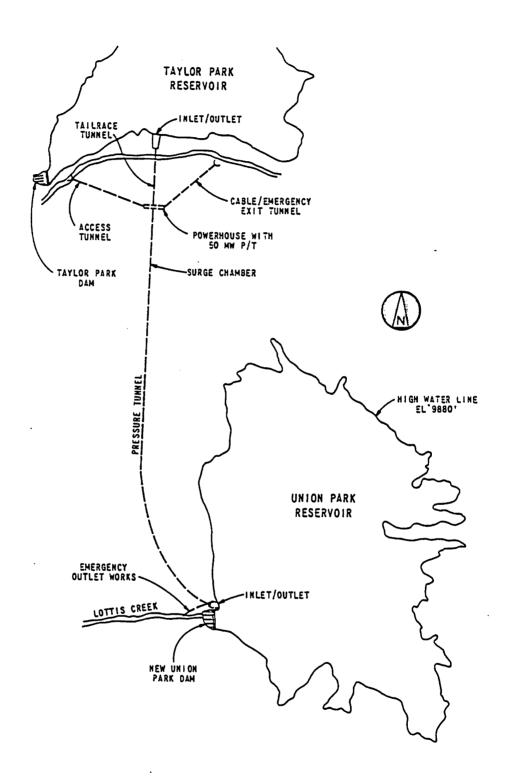
Figure 1



- ▲ Indicates Completion Date
- S Indicates Submittal Date

**Dotted Lines Indicate Agency Processing** 

PROJECT IMPLEMENTATION PLAN INTERIM FINANCING STAGE



SITE ARRANGEMENT

	1990	1991	1992	1993	1994	1995	1996
DESIGN AND CONSTRUCTION STAGE (Conventional Utility Financing)							
FERC License Issued							
Negotiate Construction Financing .							
Complete Access Rond Luyout							
Complete Final Design Equipment Specifications Construction Drawing and Specifications Arrangement Drawings Construction Schedules Recreational Facilities Transmission Routing							
Construction Activities Access Roads Access Tunnel to Powerhouse Dams, Reservoir, Spillway Powerhouse Tunnels Inlet/Outlet Structures Elect/Mech Switchyard Recreational Facilities							•
Equipment Installation						<del></del>	<u> </u>
Prepare and Issue Pump/Turbine Specification						 2	ļ
Pump/Turbine Manufacture and Delivery					<u> </u>	<del></del>	` <b>.</b>
PSC Transmission Line Upgrade							
Union Park Transmission Line							] .
Unit On-Line Dutes		1				<b>.</b>	2 3 ·

- ▲ Indicates Completion Date
- S Indicates Submittal Date

Dotted Lines Indicate Agency Processing

PROJECT IMPLEMENTATION PLAN DESIGN AND CONSTRUCTION STAGE

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986 Page six

MOTION

TO MODIFY THE PRIOR ACTION BY THE AUTHORITY IN RESOLUTION NO. 85-20 SO THAT THE PURCHASE OF THE GRAPHICS EMULATION SOFTWARE CAN BE COMPLETED FROM A VENDOR OTHER THAN SUTRON AT AN AMOUNT NOT TO EXCEED \$4800.00.

·Motion: L. Richard Bratton Second: James D. Phillips

MOTION CARRIED

CLEAR CREEK PROJECT

cwapon (stryl) Tyler Martineau, Project Manager, reported that all of the letters of agreement except for one have been received by the Authority. That letter was received on February 5 but it contained a paragraph that our Legal Counsel deems unacceptable. It is hoped that the issue will be resolved ciur poa) by the March meeting.

UNION PARK PROJECT

Uli Kappus, Executive Director, reported on the status of the Union Park Project. He stated that over the last month there have been a number of meetings with NECO and their engineers to discuss the relative merits of the Union Park water and power project. Mr. Kappus referred to his memo to the Board of January 16. He then briefly discussed the following points:

- NECO needs additional capital to develop 1. the licensing step of the project.
- The opportunity exists for the Authority to develop an equity position in a major project.
- The project could potentially develop water as well as a stream of revenues that could support the Authority's activities in furthering water developmental work in the State of Colorado.
- NECO has a preliminary permit but needs to get into the field this spring to start their drilling program and they need a commitment of funds in order to maintain their schedule.
- NECO has looked at the marketability of the project and it appears that a market niche may be coming up in the mid 1990's.
- NECO needs about \$3 million from the Authority of a total \$7.1 million estimated investment in the licensing phase over the next five years.

Mr. Kappus concluded his comments by saying that the staff is looking for authorization from the

# COLORADO WATER RESOURCES and POWER DEVELOPMENT AUTHORITY MINUTES February 6 & 7, 1986

CALL TO ORDER

The meeting was called to order at 1:30 p.m. in the Queen City South Room at the Clarion Hotel, Denver, Colorado by Chairman Anthony W. Williams.

ROLL CALL

The following members were present:

L. Richard Bratton W. D. Farr Charlie Jordan

John Porter Thomas R. Sharp Carl Trick

James D. Phillips

Anthony W. Williams

Absent: Bill V. Kopfman

APPROVAL OF MINUTES MOTION

THAT THE MINUTES OF THE DECEMBER 6. 1985 AUTHORITY MEETING BE APPROVED AS PRESENTED.

Motion: James D. Phillips Second: L. Richard Bratton

MOTION CARRIED

REPORT OF COLORADO WATER CONSERVATION BOARD

- J. William McDonald, Director, reported on the following items:
- 1. Colorado River Floodway Protection Act
- 2. Small Reclamation Projects Act
- 3. Federal Budget Bill
- 4. Changes in the Tax Law
- 5. Sierra Club vs Block
- 6. Arkansas River Litigation
- 7. Colorado River Review
- 8. Endangered Fish Species
- 9. Animas La Plata Project
- 10. CWCB Board Activities

TREASURER'S REPORT

L. Richard Bratton, Treasurer, presented the financial statements as of October 31, 1985, November 30, 1985 and December 31, 1985 to the Board.

THAT THE FINANCIAL STATEMENTS AS OF OCTOBER 31, NOVEMBER 30 AND DECEMBER 31, 1985 BE APPROVED AS PRESENTED.

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986

Page eight MOTION RESTATED

TO ASK THE STAFF TO PROCEED DILIGENTLY TO FOR-MULATE A METHOD BY WHICH THE AUTHORITY COULD WORK WITH NECO IN MOVING THE PROJECT FORWARD. TO NEGOTIATE WITH NECO AS TO WHAT THE AUTHORITY'S POSITION WOULD BE FROM THE OUTSET UNTIL THE AUTHORITY WAS FINISHED WITH THE PROJECT AND TO DEVELOP A REPORT ON THE BUSINESS OPPORTUNITY OR THE RETURN THE AUTHORITY MIGHT BE ABLE TO EXPECT FROM PARTICIPATING AND THAT A METHOD BE FORMULATED MOVING INTO THIS PROJECT THAT COMPLIES WITH THE AUTHORITY'S STATUTE.

MOTION CARRIED

Yes - seven No - one (Thomas R. Sharp)

Chairman Williams announced that he would appoint a committee to work with the staff on Union Park Project.

SOUTH PLATTE STUDY

Mr. Kappus reported that a number of meetings have taken place with the project sponsors in order to comply with the next step in the application evaluation in terms of the identification of bondable structural measures and what financing relationships might be there. A number of concepts were discussed and the project sponsors are currently studying them and it is anticipated that a report will be made at the March meeting.

Mr. Kappus continued by stating that time had been spent on responding to Mr. Sharp's suggestion concerning the initiation of an analysis of the South Platte Basin water demands as a separate module on the front end of the South Platte Study. It is a good idea to get a handle, right up front, in terms of what in fact is the future water demand and also some indication of what is the ability to pay. Mr. Kappus then referred to his memo of January 28.

MOTION

TO AUTHORIZE THE EXECUTIVE DIRECTOR TO PROCEED TO NEGOTIATE SUCH A STUDY CONTRACT FOR THE PURPOSES OUTLINED IN THE JANUARY 28, 1986 LETTER. (COPY OF LETTER ATTACHED TO AND THEREFORE BECOMES A PART OF THE ORIGINAL MINUTES.)

Motion: Thomas R. Sharp

Second: W.D. Farr

MOTION CARRIED

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986

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Board to initiate negotiations and also to address several key issues relative to what form of contract can be executed with NECO and how that might be structured.

Mr. Kappus then introduced Mr. Dave Miller. President of NECO. Mr. Miller addressed the Board on the merits of the project and the funding needs.

The floor was then opened for discussion on the project and the legal aspects concerning a joint venture.

MOTION

THAT THE BOARD INSTRUCTS THE STAFF TO COMMENCE NEGOTIATIONS THAT WOULD CONSIDER THE LEGAL, BUSINESS, AND ANY OTHER ASPECTS THAT ARE APPROPRIATE IN PURSUING THIS PROJECT AND THAT WOULD BE IN THE BEST INTEREST OF THE AUTHORITY.

Motion: L. Richard Bratton

Second: Carl Trick

DISCUSSION

Mr. Sharp stated that he would vote against the motion because he is troubled by the level of commitment that the Authority is pursuing. He further stated that he views this as a speculative venture with good upside for a potential stream of revenue and some downside in that the commitment is not there and the scenario for the mid 1990's does not pan out or if other projects elsewhere get underway and preempt the salability of this power. He concluded by saying that the Authority may be competing with itself as it promotes studies on the drainages such as the St. Vrain and the Cache la Poudre where the purpose is to look for combined projects in which hydro-power will aid in the financiability of a project, "For those reasons," Mr. Sharp stated, "I am going to vote no."

During the additional discussion that followed Chairman Williams stated that he would like to know where the revenue stream is going to come from and how much it might be. He asked the staff if they had studied the Black and Veatch Study with respect to market prediction to the point that the staff is willing to endorse it or does the staff have any reservations? Mr. Kappus replied that when you go ten years on a projection given all the economic uncertainty that we are facing then what was done is reasonably good.

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - February 6 & 7, 1986 Page fifteen

OTHER BUSINESS

Mr. Sharp stated that on small site specific application if perhaps there isn't some duplication with the CWCB and perhaps the reason these applications are coming to the Authority is because the Authority offers 100% financing. Maybe this should be reexamined in conjunction with the CWCB and perhaps these applications should be redirected to the CWCB and maybe there should be some arrangement that we would be standing by to provide some subsidy for studies. There should be some middle ground because there is no distinction between Durango West applying to the CWCB and the Authority.

INVESTMENT BANKER REPORT Jim Ziglar, Paine Webber, spoke to where tax exempt financing stands in Congress. He reported that the tax bill passed out of the House in December and was sent to the Senate. The bill has redefined the entire tax exempt market. It has categorized bonds into two different types: 1. Essential functional bonds - financing for schools, roads, courthouses, etc. and 2. Non-essential bonds - industrial development bonds, airports, water, hydro-electric, etc. Mr. Ziglar discussed the two types of bonds at great length and then answered questions from the Board.

> At the conclusion of discussion it was determined that letters would be sent to the members of the Congressional delegation informing them of the direct adverse effect the change in legislation will have on the Authority.

FUTURE MEETINGS

The next meeting of the Authority will be on March 7, 1986.

ADJOURNMENT

The meeting was adjourned at 12:00.

Respectfully submitted,

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - March 7, 1986

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- 7. Meeting with Bechtel, Public Service of Colorado and other entities re: pumped storage.
- 8. Meeting with Governor Lamm

9. CWC Meeting

DISCUSSION OF INSURANCE ISSUES

Mary Hammond, Legal Counsel, introduced Stacey Beakes of Cravens Dargen who made a presentation to the Board on the insurance issues and the status of the insurance industry. At the conclusion of his presentation numerous questions were asked concerning liability insurance and claims made policies.

SAN LUIS CONSULTANT CONTRACT

Discussion then moved to the San Luis Contract and the status of the insurance issue. Mary Hammond made a presentation to the Board as to what the problems are and what is being done to resolve them.

Mr. Andy Andrews of WRC Engineering requested the opportunity to provide input from the consultant's point of view as part of the discussion of insurance issues.

MOTION

THAT A POLICY BE SET WITH RESPECT TO CONTRACTS FOR STUDIES THAT GENERAL LIABILITY COVERAGE BE NOT LESS THAN \$1 MILLION OWED FOR PERSONAL INJURY AND FOR PROPERTY DAMAGE AND BODILY INJURY COMBINED UNLESS FOR GOOD CAUSE SHOWN ON A SPECIFIC CONTRACT A DIFFERENT LIMIT IS PROVIDED FOR.

Motion: Thomas R. Sharp

MOTION DIED FOR LACK OF A SECOND

MOTION

REVIEW EACH CONTRACT AS TO THE ENGINEERING LIABIL-ITIES AND THEN SET PROPERTY DAMAGE AND BODILY INJURY AND THE PROFESSIONAL LIABILITY.

Motion: James D. Phillips Second: John Porter

After some discussion is was determined that the motion should be tabled at this time and considered under the Agenda Item "San Luis Basin Confined Aquifer Study".

#### COLORADO WATER RESOURCES and POWER DEVELOPMENT AUTHORITY MINUTES March 7, 1986

CALL TO ORDER

The meeting was called to order at 9:00 a.m. in the Mount Yale Room at the Stapleton Plaza Hotel, Denver, Colorado by Chairman Anthony W. Williams.

ROLL CALL

The following members were present:

L. Richard Bratton
W. D. Farr
Charlie Jordan
James D. Phillips

John Porter Thomas R. Sharp Carl Trick

Anthony W. Williams

Absent: Bill V. Kopfman

TREASURER'S REPORT

L. Richard Bratton, Treasurer, introduced Mark Iwan of Arthur Andersen & Company who presented the 1985 Audit to the Board for approval. He then reviewed the report for the Board and answered questions.

MOTION

THE BOARD ACCEPTS THE 1985 AUDIT OF THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY BY ARTHUR ANDERSEN AND COMPANY AS PRESENTED.

Motion: L. Richard Bratton Second: James D. Phillips

MOTION CARRIED

Mr. Bratton then presented the Budget Reconciliation as of December 31, 1985 to the Board for review. No action required.

EXECUTIVE DIRECTOR REPORT

Mr. Kappus, Executive Director, reported on the following items:

- 1. Correspondence received re: HB 1088
- 2. Transcript of Senate Confirmation Hearings
- 3. Discussions with Colorado River WCD concerning Authority participation in financing several water development projects.
- 4. Great Western Reservoir Expansion
- 5. Super Conductor/Super Collider Activity
- 6. Meeting with Bill Leonard, Parsons Engr.

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MOTION

ON THE BASIS OF THIS WORDING "STUDY FOR STEP 2 NOT TO EXCEED THE REMAINING BUDGET OF \$305,900 AND THE ACCUMULATED TOTAL COST OF THE STUDY NOT TO EXCEED THE CONTRACT AMOUNT OF \$785,900," THE AUTHORITY PAY NO ADDITIONAL COMPENSATION.

Motion: Carl Trick Second: Thomas R. Sharp

MOTION CARRIED

NEW BUSINESS ANNUAL REPORT

Chairman Williams stated that he had reviewed the Annual Report and had made some revisions.

MOTION

THAT THE AUTHORITY ADOPT RESOLUTION 86-3 "TO ADOPT AN ANNUAL REPORT FOR FISCAL YEAR 1985 AND AUTHORIZE ITS TRANSMITTAL TO APPROPRIATE ENTITIES" WITH THE UNDERSTANDING THAT NONSUB-STANTIVE CHANGES MAY BE MADE.

Motion: L. Richard Bratton Second: Thomas R. Sharp

#### MOTION CARRIED

GUNNISON BASIN APPLICATION

Mr. Dan Law, Associate Director, reported that an application has been received from the Upper Gunnison River WCD for a Water Resources Management and Development Investigation. He stated that after review of the application the staff requested additional information and when that is received the application and information will be transmitted to the Board. A presentation will be made by the sponsors at the April meeting.

TOWN OF PARKER APPLICATION

Mr. Dan Law. Associate Director, presented the application from the Town of Parker for an investigation of a new dam and reservoir on Cherry Creek above the Cherry Creek Dam which would serve the Parker Water and Sanitation District and perhaps adjacent areas. A presentation by the sponsor will be made at the April meeting.

TOWN OF PAGOSA SPRINGS APPLICATION

Mr. Dan Law. Associate Director, reported that he had received an application from the Town of Pagosa Springs and co-sponsors on March 6. Mr. Law stated that he has not had an opportunity to review the application to see if it is complete. He commented that he would be mailing the application and accompanying information to

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - March 7, 1986 Page three

STATE WATER RESOURCES PLANNING NEEDS

Mr. Kappus, Executive Director, presented the February 26 draft to the Board and requested approval for distribution to the CWCB. After some discussion the Board directed Mr. Kappus to distribute the memo with the changes as noted.

#### UNION PARK PROJECT

Mr. Kappus, Executive Director, reported that he has had a series of meetings with the sponsors as well as the engineers and Mr. Marlin of Mudge Rose during the last month. Mr. Kappus stated that Mr. Marlin is preparing draft of a potential arrangement that might work for the Authority as well as Union Park and it should be delivered in the next week. Other meetings have been held with various entities that might have an interest in the project and this includes Public Service of Colorado, Bechtel, Parsons, and Western Area Power Administration. Mr. Kappus reported that there would be a definitive memo available for discussion at the April Board meeting.

Chairman Williams appointed the following Board members to serve on the Union Park Committee for the purpose of reviewing the Union Park Report prior to the April meeting

L. Richard Bratton Thomas R. Sharp Carl Trick
James D. Phillips

The Committee will meet on March 20 at 1:30 p.m. in the Authority office.

Mr. Dave Miller, NECO, presented some comments to the Board on the Union Park Project.

#### CACHE LA POUDRE PROJECT

Mr. Tyler Martineau, Project Manager, presented a report to the Board on the Cache la Poudre (Copy of report on file in Authority Project. office.) Mr. Martineau reported that the majority of the effort has been expended on the analysis of regional water supply and water demand. He stated that one of the results that has emerged is that the overall utilization of water in the basin is high in that there is not a lot of water leaving the basin that is unused. Of the 550,000 af flowing out of the basin approximately 400,000 af is being consumed for municipal industrial and agricultural purposes. There is about 40,000 af originating high in the basin that could be stored high in the basin and then distributed for agricultural purposes. Mr.

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - March 7, 1986 Page ten

the Board within the next 7 to 10 days. A presentation by the sponsor will be made at the April meeting.

FUTURE MEETINGS

The next meeting of the Authority will be on April 4, 1986. Chairman Williams stated that he wished to discuss the matter of the Authority's activity vs the CWCB's activity. He will send a summary of what he wishes to discuss prior to the next meeting. At the suggestion of Mr. Sharp and after some discussion it was determined that the Board would meet on April 5 for a work session.

**ADJOURNMENT** 

The meeting was adjourned at 5:00 p.m.

Respectfully submitted,

John Porter, Secretary

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - April 17 & 18, 1986
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official's liability insurance coverage for 1986/87. Only one company responded to the request for coverage. Mr. Law reported that the Authority can purchase \$1 million of coverage for one year with a premium of \$14,566.20 or \$500,000 with a premium of \$10,803.00. Tail coverage can also be purchased at a cost of \$1,500 for a one year extension, \$2,500 for a two year, and \$3,000 for a three year extension. John Carlson, Legal Counsel, recommended that the Authority purchase the three year tail coverage at a cost of \$3,000. After discussion the following motion was presented for adoption.

MOTION

THAT THE AUTHORITY PURCHASE PUBLIC OFFICIAL'S LIABILITY INSURANCE COVERAGE FOR \$500,000 WITH A PREMIUM OF \$10,803 AND THAT A THREE YEAR TAIL COVERAGE BE PURCHASED WITH A PREMIUM OF \$3,000.

Motion: W.D. Farr Second: Carl Trick

#### MOTION CARRIED

UNION PARK PROJECT

Uli Kappus, Executive Director, reported that a meeting was held on March 21, 1986 at the Authority office with the Union Park Committee and representatives of the Union Park Project. He then expressed his appreciation to those involved in the Union Park Project for their presentation and interest.

RECOMMENDATION

Mr. Kappus then reported that it was the Committee's recommendation that the Authority decline to participate in the Union Park Project at this point.

MOTION

THAT THE AUTHORITY ADVISE NECO OF THE COMMITTEE'S DECISION TO DEFER THE AUTHORITY'S PARTICIPATION OR COMMITMENT TO THE UNION PARK PROJECT AT THIS TIME AND THAT A LETTER BE SENT TO NECO ADVISING THEM OF THE AUTHORITY'S DECISION AND THANKING NECO FOR THEIR PARTICIPATION.

Motion: Thomas R. Sharp Second: Carl Trick

Prior to the vote on the motion Mr. Dave Miller of NECO commented on the proposed motion and the status of the project.

#### COLORADO WATER RESOURCES and POWER DEVELOPMENT AUTHORITY MINUTES April 17 & 18, 1986

CALL TO ORDER

The meeting was called to order at 1:30 p.m. in the Mt. Lincoln Room at the Stapleton Plaza Hotel, Denver, Colorado by Chairman Anthony W. Williams.

ROLL CALL

The following members were present:

L. Richard Bratton W. D. Farr Charlie Jordan Bill V. Kopfman

John Porter Thomas R. Sharp Carl Trick

Anthony W. Williams

Absent: James D. Phillips

APPROVAL OF MINUTES MOTION

THAT THE MINUTES OF THE FEBRUARY 6 & 7, 1986 AND THE MARCH 7, 1986 MEETINGS BE APPROVED AS PRE-SENTED.

Motion: Charlie Jordan Second: John Porter

MOTION CARRIED

EXECUTIVE DIRECTOR'S REPORT

Uli Kappus, Executive Director, reported on the following items:

- Western Area Power Administration
- 2. Federal Tax Law Revisions
- Deficit Management Memo 3.
- 4. CWCB Meeting
- 5. Platte River Water User's Meeting
- Meeting with Governor Lamm
- 7. Metropolitan Water Provider's Meeting
- SSC Project 8.
- ERDA Meeting 9.
- Cache La Poudre Wild and Scenic Bill 10.
- Snow Monitoring Stations (Some additional printed information was distributed to the Board members on this item.)

**ISSUES** 

DISCUSSION OF INSURANCE Dan Law, Associate Director, presented a letter from Frank Cotten of Cotten Jones Watson which gave additional information on the public

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - April 17 & 18, 1986 Meeting Page eight

After the discussion, Mr. Law stated that the the Staff recommends that the Board proceed with the study, waive the public hearing and authorize the staff to proceed with contract negotiations with the co-applicants as well as the engineer for a study of the two stated sites at a cost of up to \$30,000 with two Phases; Phase I would be a preliminary analysis of both sites with a decision to proceed with Phase II on a specific site.

MOTION

THAT BOARD HEREBY AUTHORIZES THE STAFF TO PROCEED WITH THE PAGOSA SPRINGS STUDY BY WAIVING THE PUBLIC HEARING AND PROCEEDING DIRECTLY TO CONTRACT NEGOTIATIONS WITH THE CO-APPLICANTS AND THE ENGINEER FOR A STUDY OF THE TWO PROPOSED SITES TO BE ACCOMPLISHED IN PHASE I WITH A DECISION TO PROCEED WITH A SPECIFIC SITE IN PHASE II AT A COST NOT TO EXCEED \$30,000 WITH THE CO-APPLICANTS PAYING \$15,000 AND REPAYMENT WILL ALSO BE MADE FOR THE TURKEY CREEK STUDY.

Motion: Thomas R. Sharp Second: L. Richard Bratton

#### MOTION CARRIED

#### **GUNNISON BASIN STUDY**

Chairman Williams introduced Eric Kuhn of the Colorado River Conservation District who made the presentation to the Board. Mr. Don Clay, Bureau of Reclamation and Mr. Jim Hokit, Uncompangre Valley Water Users also assisted in the presentation. (Printed material used in presentation on file in the Authority Office.) The estimated cost of the study is \$400,000 to \$500,000. The three objectives of the study are:

- Examine potential water resource development projects in the Gunnison and Uncompandere River basins with particular attention to identifying present and future demands including out of basin diversions.
- 2. Determine cost, yield, and technical feasibility of both structural and non-structural alternatives available for development.
- 3. Develop a plan to finance water development alternatives.

The Bureau of Reclamation can financially participate in the study through the state assistance program which does not involve going through the federal budgeting process. COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - April 17 & 18, 1986
Page three

Mr. Bratton requested that the Board defer voting on the motion until after the Gunnison presentation on April 18.

MOTION

THAT THE UNION PARK PROJECT MOTION BE TABLED UNTIL AFTER THE GUNNISON PROJECT PRESENTATION ON FRIDAY. APRIL 18.

Motion: L. Richard Bratton Second: Bill Kopfman

MOTION CARRIED

Yes 5 No 2 (Trick & Sharp)

TREASURER'S REPORT

L. Richard Bratton, Treasurer, presented the financial statements for January, February and March, 1986. He also presented the Budget Reconciliation for the Operating Fund as of March 31, 1986.

MOTION

THAT THE FINANCIAL STATEMENTS FOR JANUARY, FEBRUARY AND MARCH. 1986 BE APPROVED AS PRESENTED.

Motion: John Porter Second: Carl Trick

MOTION CARRIED

CACHE LA POUDRE PROJECT

Tyler Martineau, Project Manager, reported that the study to date has been reasonably well accepted by all participants. The study is 65% complete and 65% of the funds have been expended to date. (Copy of Status Report on file in Authority office.)

Considerable discussion was held concerning inclusion of the South Platte Study into the Cache La Poudre Study. No action was taken.

CLEAR CREEK STUDY

Tyler Martineau, Project Manager, stated that all the letters of agreement have been received and accepted. The contract has been executed and the staff is currently proceeding with selection of a consultant for Phase I of the Project. A letter requesting Statements of Qualifications will be sent out next week to consulting firms.

DURANGO WEST PROJECT

Dan Law, Associate Director, introduced Sam Coxson who presented the Durango West Project COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - April 17 & 18, 1986
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MOTION CARRIED

Mr. Sharp requested that the wording of the letter be done by motion.

MOTION

THAT THE BOARD APPROVE THE LETTER AS CIRCULATED WITH THE DELETION OF THE FIRST SENTENCE OF THE THIRD PARAGRAPH.

Motion: L. Richard Bratton

Second: John Porter

DISCUSSION

After considerable discussion the motion was withdrawn by Mr. Bratton with approval by Mr. Porter.

The letter will be sent to NECO with the changes as agreed to by the Board.

PARKER PROJECT

Mr. Skip Kerr, Project Manager, introduced Mr. Frank Jaeger and Dr. John Halepaska who made the presentation to the Board on the Parker Project. (Printed material on the Parker Project on file in the Authority office.) Numerous questions were asked by the Board following the presentation.

Mr. Sharp expressed concerns that a policy should be developed with regard to the financial commitment on a study of this size. Mr. Kappus responded that the staff will develop some policy criteria. He further stated that it has been the Board's position to ask a prospective sponsor what moneys they are willing to put up for the study. Parker has indicated they would be willing to put up \$10,000. Mr. Kappus concluded by saying that as far as asking for specific numbers from a policy perspective, that has not been Mr. Sharp suggested that the Board defer acting on the application until the Board decides if they want to proceed on a negotiated basis per project or set other policy guidelines at this level.

After additional discussion concerning cash flow and future projects the following motion was presented to the board for approval

MOTION

THAT THE BOARD APPROVE THE PARKER PROPOSAL ACCORD—ING TO THE SCHEDULE AS PRESENTED IMPLIED WITHIN THAT SOME PARTICIPATION BY THE SPONSOR BE NEGO—TIATED AS A PART OF THE CONTRACT.

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During the discussion period that followed Chairman Williams asked Mr. Kuhn if the District would be willing to help fund the study. Mr. Kuhn responded that the District has already put money into the proposed study and has budgeted additional funds. Financial participation by the other applicants has not been clearly defined at this point.

**CONSENSUS** 

STAFF WILL TENTATIVELY PLAN A VIDEO PRESENTATION AND A PUBLIC HEARING FOR THE AFTERNOON OF THE LAST DAY OF THE WESTERN STATE COLLEGE WATER SYMPOSIUM. A TOUR TO THE HEADWATERS BY BUS WILL BE SCHEDULED DURING THE RECREATIONAL ACTIVITIES OF THE SYMPOSIUM.

CASH FLOW MEMO

Chairman Williams requested that the staff prepare additional information on cash flow projections taking into consideration the commitment of the \$30 million and the proposed studies. Mr. Kappus reported that a cash flow report will be prepared on a monthly basis for the Board's review.

GUNNISON BASIN STUDY

Mr. Dave Miller of NECO stated that his organization would be willing to assist on the Gunnison Study where needed and that he supports the study.

UNION PARK PROJECT

Chairman Williams reopened the discussion on the Union Park Project by asking the Staff if Bond Counsel had endorsed the project. The answer was no in that the Bond Counsel stated that the first charge of the Authority is to develop water; the second is hydropower.

During the discussion that followed Mr. Bratton presented a motion to the Board. Chairman Williams declared the motion out of order because a motion was already on the table from the previous day.

The motion from the previous day was brought to the table for consideration.

MOTION RESTATED

THAT THE AUTHORITY ADVISE NECO OF THE COM-MITTEE'S DECISION TO DEFER THE AUTHORITY'S PARTICIPATION OR COMMITMENT TO THE UNION PARK PROJECT AT THIS TIME AND THAT A LETTER BE SENT TO NECO ADVISING NECO OF THE AUTHORITY'S DECISION AND THANKING THEM FOR THEIR PARTICI-PATION. COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY Minutes - April 17 & 18, 1986 Page eleven

Motion: W. D. Farr

Second: L. Richard Bratton

MOTION

THAT THE PRECEDING MOTION BE TABLED UNTIL THE BOARD ADOPTS A WRITTEN POLICY REGARDING FINAN-CIAL PARTICIPATION IN FEASIBILITY STUDIES THAT ARE AT THE PARKER PROJECT LEVEL.

Motion: Thomas R. Sharp

MOTION DIED FOR LACK OF A SECOND

CALL FOR THE QUESTION

MOTION CARRIED

PERSONNEL MATTERS

Chairman Williams presented Resolution No. 86-7 employing Uli Kappus as Executive Director of the Authority.

MOTION

THAT THE BOARD APPROVE THE ADOPTION OF RESOLUTION NO. 86-7 "TO AUTHORIZE THE EMPLOYMENT OF AN EXECUTIVE DIRECTOR".

Motion: L. Richard Bratton Second: Charlie Jordan

MOTION CARRIED

Chairman Williams then asked for a motion to cancel the previous contract with U. Kappus. Inc.

MOTION

TO AUTHORIZE THE ISSUANCE OF A MEMORANDUM LETTER CANCELLING THE PRIOR CONTRACT AND THAT THE CHAIRMAN BE AUTHORIZED TO SIGN THE LETTER ON BEHALF OF THE AUTHORITY.

Motion: Carl Trick Second: Charlie Jordan

MOTION CARRIED

FUTURE MEETINGS

The next meeting of the Authority will be on

June 5 & 6, 1986 in Denver.

**ADJOURNMENT** 

The meeting was adjourned at 11:30 a.m.

Respectfully submitted,

John Porter, Secretary

existing Taylor Park Reservoir in the Upper Gunnison area. Union Park has an excellent dam site, and the dam cost for a 900,000 acre foot reservoir is relatively low compared to Two Forks. NECO is a private development company with the objective of providing large scale water and power systems that will benefit all of Colorado. We have a contract with three very international engineering firms who are investing their own development funds to insure the eventual construction of the projects. Since 1982, NECO has been evaluating its water and power potential with initial emphasis in the more profitable hydroelectric area. We are now well along with the 1,000 megawatt, \$500 million Rocky Point Pumped Storage Project which will start construction This highly efficient underground power operation will provide low in 1990. cost peaking power for Colorado and other western states when it is completed Rocky Point, with its future expansion, will also help Colorado's clean air policy by deferring construction of more coal fired plants in the West.

•••

In <u>late 1985</u>, NECO initiated public deliberations with the Colorado Water Resources and Power Development Authority (CWRPDA) to jointly develop NECO's water and power potential. Although CWRPDA was specifically chartered by the state in 1981 to develop major water and power projects for Colorado, their Board decided in an April 17, 1986 meeting to fund a two year Upper Gunnison Basin Study in lieu of active participation in the Union Park and Rocky Point projects. Since then NECO and its three major engineering firms have continued their detailed studies. With the publication of Ebasco Services' October 1986 Union Park Water Supply Study, we are now in a position to offer our water and power projects to the people of Colorado.

Bureau of Reclamation: The Bureau of Reclamation has historically planned, funded, and constructed most of the major water conservation and hydroelectric projects in the country. The Bureau's approach was to consider the water and power needs and capabilities of a large geographic area. However, in recent years federal participation has been very limited, and the development burden is now on the individual states, cities, and utilities. Some of the major western states have done a reasonable job of accepting the broad planning Unfortunately, in Colorado there has been little central planning, direction, or coordination among the major providers of water and power. Each city and utility does its own planning, and water and power needs in the state are handled by many separate organizations. With regard to the various water systems, the ownership of water rights is usually the primary driving force that dictates the systems that are ultimately built. Water rights are usually claimed or purchased in secret without much initial thought to alternatives or the overall economic and environmental impact. When the resulting systems are made public, it is very difficult to objectively evaluate how they impact the overall public interest. It is even harder for organizations to change direction, even when better systems become obvious. As a result, Colorado has more water attorneys and engineers per capita than any other state, and our economic progress is being burdened by fragmentation, confusion, and chaos, in the critical water industry. Two Forks is a good example of this inefficient process.

<u>NECO's Approach</u>: In contrast to the Two Forks example, NECO has taken a state wide view of power and water needs, coupled with the natural assets of our area -- similar to the historical approach used by the Bureau of Reclamation. Our engineers knew from previous Bureau experience the Upper Gunnison was one of the wettest areas of the state, with considerable surplus water in wet years

### NATURAL ENERGY RESOURCES COMPANY

January 14, 1987

#### SPECIAL WATER REPORT

To: The People of Colorado

<u>Subject</u>: Union Park Water Supply Project vs. Two Forks

<u>Purpose</u>: The purpose of this report is to provide the people of Colorado a clear understanding of Union Park Water Supply Project as compared to the proposed Two Forks Reservoir alternative.

Problem: Although the Union Park Water Supply Project is substantially superior to the Two Forks alternative, certain elements in the Colorado water community and media are trying to ignore and/or suppress the Union Park story until it is too late to stop Two Forks. The ultimate decision between the two concepts will have major economic and environmental impact, because the choice will set the "blueprint" for Colorado water development for the next 50 years. Hence the need and importance of this report.

Background for Two Forks: For decades the Denver Water Department has recognized the Two Forks site as a good reservoir location. The geology for a dam is excellent, and the 1.1 million acre feet capacity is indeed impressive. The primary purpose of Two Forks is to catch the unpredictable flood waters for later municipal use throughout the Denver metro area. There is no doubt additional water is required for the projected growth. Hydrologists have estimated Two Forks will increase the "safe annual yield" of Denver's existing reservoir system by about 32 percent. This is significant, but the economic and environmental costs are very high for the expected benefit. Any future increase in yield from Two Forks is also limited and very expensive, because water supplies from both sides of the divide west of Denver have already been severely hit by population demands of the metro area. In addition to these economic and supply concerns, Two Forks would have serious environmental A national record \$36 million has already been spent on the impacts. Environmental Impact Study (EIS), and the cost to mitigate the environmental damage to endangered species and some of the nation's best river fishing is growing by the day. Two Forks would provide more flat water recreation near Denver, but the steep canyon walls and extreme fluctuation in water levels will make marina and other recreation support activities very difficult and In short, it is highly questionable whether the high cost and environmental impact of Two Forks is worth the limited benefit -- especially if there is a better alternative.

Background for Union Park: The water conservation and power potential of Union Park was first envisioned when the Natural Energy Resources Company (NECO) was formed in 1982 by several retired Bureau of Reclamation engineers and some water attorneys. Union Park is a very large, high altitude, natural reservoir site located in a remote area just west of the Continental Divide south of the

LETTER TO THE EDITOR Gunnison Country Times and other Colorado media

The Upper Gunnison River Water Conservancy District has not always "been against transmountain diversion", as reported in the Gunnison Times, March 28th issue.

In late 1985 and early 86, our company met several times with the River District's attorney to discuss the sale of Union Park's storage rights to either the District or the Colorado Water Resources and Power Development Authority. Both of these public agencies were represented by the same attorney, and both entities were considering the export of about 50,000 acre feet from Union Park to fund construction of West Slope recreation reservoirs.

Instead of acquiring Union Park, the River District and Authority decided to initiate an Upper Gunnison Water Study to primarily investigate diversion alternatives for revenue. The Uncompaghre Valley Water Users and the Colorado River Water Conservancy District joined as study co-sponsors with the Gunnison District. All of these sponsors were hoping the study would show that a diversion from Taylor Park Reservoir would be superior to Arapahoe County's Union Park Project and Aurora's Collegiate Range proposal.

After considerable delay, the Colorado Water Authority recently released its Final Study Report, in spite of numerous technical objections from outside contributing engineers. These engineers were aware that local and state funds were largely wasted, because the study was politically manipulated to be misleading, non-conclusive, and requiring further study. The protesting engineers also knew that Union Park would be the clear environmental and economic choice if the analysis were factual instead of political. It is unconscionable that the public's greater good is taking a back seat to a tainted power struggle over who controls the Gunnison's surplus waters. The pending federal/state Phase II Gunnison Water Study will soon correct the obvious bias of the Authority's first study.

The City of Gunnison's late 1986 decision to participate in Union Park was based on the studied advice of staff and counsel, who have served the city well for many years. It is a shame the city lost the services of principled experts because of recent unbridled political pressure from a few uninformed activists. It will be an even greater tragedy for Gunnison citizens if the city drops its Union Park option, worth at least \$50 million in future water, storage, and power values.

When Upper Gunnison citizens fully understand the facts, they will welcome Union Park as Colorado's first diversion project that has major environmental and economic benefits for the basin of origin.

# **Union Park** Water Project taking shape

A proposed major western Colorado hydroelectric project is now several steps closer to being a reality. Natural Energy Resources Company announced that its 900 megawatt Union Park pumped storage project has been granted the necessary water rights by the Montrose Water Court.

Union Park is approximately 40 miles northeast of the City of Gunnison in the Gunnison National Forest.

In addition, the Company's Preliminary Permit was issued by the Federal Energy Regulatory Commission August 15, 1984 for a 36 month period. The FERC application was made to secure a priority position for filing for a long-term federal license.

The Union Park project contemplates the construction of a 325,000 acre foot reservoir on Lottis Creek. Power will be generated by exchanging water with Taylor Park Reservoir, some 550 vertical feet

below Union Park.

The Water Court Decree recognized a conditional water right for the Union Park Reservoir. When the project is completed, the Company will be entitled to make the conditional right absolute. "The conditional water right gives us all the security we need to move forward," Company President Alvin Steinmark said.

The Uncomphagre Valley Water Users Association and the Bureau of Reclamation have interests in the facilities and water rights for Taylor Park Reservoir. Steinmark acknowledged that agreements with both groups would be necessary.

"We've been in contact with both the Bureau and Uncompangre almost from day one," he said. "We believe that

"Of course," Steinmark added, "we'll have the new 2,000 surface acre reservoir for additional recreational opportunities."

The Union Park project will pump water up from Taylor Park Reservoir during times of low demand on the power network. Typically this is nighttime and on weekends. Union Park Reservoir water would be released back down to Taylor Park Reservoir for power generation during peak demand periods.

"The project's capability for almost instantaneous power production also lends itself to assisting in emergency situations and as a reserve for unusually high

demand periods," Steinmark said.

The Company has scheduled the project to be on line by 1994. "Our research and projections show that there will be a very significant demand for increased power production capabilities by then," the president said.

"The Phoenix area alone had electrical hookup orders for about 15,000 new homes in the first two months of 1984," he said. "If that kind of demand growth continues, the West will be in real trouble by the mid-1990's unless new projects,

such as ours, are built."

Natural Energy Resources Company is a private Colorado corporation with offices in Greeley. It was organized primarily for developing hydroelectric power projects. The Union Park power will be sold to existing power utilities in the Rocky Mountain area.

A wide variety of governmental approvals will be needed before the project is completed. Steinmark indicated that the Company is gearing up for all the research and studies needed to complete

"We've been in contact with both the Bureau and Uncompander almost from day one," he said. "We believe that agreements can be achieved which will be beneficial to them in exchange for their letting us use Taylor Park Reservoir."

Steinmark noted that a work-study agreement with the Bureau of Reclamation and the water users had been fi-

nalized already.

The Union Park water case had opposition from area water users. However, an agreement was reached with the opponents which allowed the Court to issue the decree.

"In our stipulation with Perkins D. Sams and other area water users, we included numerous provisions relating to the stream fishery," Steinmark said. "If we get all the approvals and cooperation that we anticipate, Lottis Creek, the Taylor River and even the upper Gunnison should enjoy a vastly improved fishery."

The water case agreement called for flow stabilization, water temperature improvement, and water quality protec-

ion in the streams.

completed. Steinmark indicated that the Company is gearing up for all the research and studies needed to complete the permit processes.

"We are giving a high priority to studying and fairly dealing with the existing Forest Service uses in Union Park," he said. "We are very sensitive to the wildlife issues and the concerns of the

grazing permit holders."

Steinmark noted that the Company officials initially met with the Taylor Park Grazing Association in Gunnison last year. He anticipated having additional meetings with the group to attempt to

Preliminary projections indicate that as many as 1,500 jobs will be created during the study, design and construction phases. "We anticipate about three years of data gathering by engineers, scientists and other professionals before the FERC license is issued," Steinmark said. "The construction phase will take approximately four more years after that."

The total project costs will be about 600 million dollars estimated in 1984 values.

## Limited licenses available from DOW

There are still plenty of limited licenses available for antlerless deer in the Southwest Region. Following is a list of units with permits available as of August 20, on a first-come first-serve basis:

Unit 52: 387 antlerless deer permits; Unit 53: 683; Unit 61: 181; Unit 62: 841; Unit 63: 714; Unit 64: 160; Unit 66: 39; Unit 70: 126; Unit 71: 337; Unit 72: 45; Unit 73: 107; Unit 411: 89; Unit 521: 285.

There are also 47 archery either sex elk licenses still available in Unit 61 for the season running September 8 through September 30. And, for those interested in thing during the November 17-December 2 late season, there are 151 antierless

ginal hunt codes. The application must be accompanied by a self-addressed stamped envelope. Payment must be in the form of a personal check or money order or alternative license. Send all applications to: Colorado Division of Wildlife, P.O. Box 21000 (21 thousand), Denver, Colorado 80221.

A person may not be in possession of more than one elk license, but a person may hold two deer licenses, only one of which may be a buck license.

