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NORMAN H. BANGERTER
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114
November 27, 1985

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OFFICE OF

EXECUTIVE DIRECTOR

UTAH DEPT. OF HEALTH

PHOTOED

Suzanne Dandoy, M.D., M.P.H. Executive Director Utah State Department of Health P.O. Box 45500 Salt Lake City, Utah 84145-0500

DEC 0 3 1985

RE: Establishment of a Task Force to Address Acid Deposition in Utah

Dear Dr. Dandoy:

Because of the potential policy implications and impacts of the acid deposition legislation currently proposed for consideration by Congress, the State of Utah should investigate the issue of acid deposition. Facts concerning the potential impacts of acid deposition in Utah are needed so we can provide information on impacts from acid rain within Utah to the Congress and the Legislature, and so we can evaluate the effects of national legislation related to acid deposition. Therefore, Utah experts should assess these issues and provide recommendations on acid rain policy at both the State and National level.

It is requested that the Utah Air Conservation Committee, in cooperation with the Utah Water Pollution Control Committee, review the acid deposition problem in Utah and prepare policy recommendations to address this issue. To assist the Committees in this effort, I am directing the Department of Health to form a technical advisory task force to assist the Committees in compiling the scientific and technical data which may be available and/or needed to develop policy recommendations. I believe that the issue is sufficiently significant so that all State and Federal agencies within the State which have interest or expertise in this area as well as the academic community should be encouraged to contribute to this effort.

Suzanne Dandoy, M.D., M.P.H. Page 2 November 27, 1985

Policy formulation with respect to the air pollution aspect of acid deposition rests squarely upon the shoulders of the Utah Air Conservation Committee and upon the Water Pollution Control Committee for the water pollution aspects. These two committees will review the technical information developed by the technical task force and formulate policy recommendations for the State. Your assistance in this important venture will be greatly appreciated.

Sincerely,

Norman H. Bangerter

Governor

NHB:bcb

UNIVERSITY OF UTAH RESEARCH INSTITUTE



13 October 1986

Mr. Mark T. Ellis Bureau of Air Quality Department of Health 288 N. 1460 W., P.O. Box 16690 Salt Lake City, UT 84116-0690 AIR QUALITY OCT 16 1986

Dear Mr. Ellis:

Due to the preliminary nature of our data, the values that we previously provided for alkalinity in the soil solution in the Mirror lake watershed are too high. The lysimeters have now been in the ground for about a year and are providing more reliable data. We have also altered our placement technology and appear to be getting more realistic numbers from placements that have not equilibrated for a year. Nevertheless, all of these data are to be considered preliminary until we have accumulated enough data to examine temporal trends.

With these caveats in mind, the alkalinities that we see in the soil solution range from approximately 100 microequivalents per liter to approximately 500 microequivalents per liter. These values are about 1/4 that of the previous values. Since the lake averages about 110 microequivalents per liter in alkalinity, these are still significantly high. In fact, these values should allow a much easier calibration of the ILWAS model.

Since you attended our small acid rain conference in Park City, then you know that our values for soil Base saturation are also subject to doubt. This is a result of standard agricultural analyses for base saturation. The standard method is accomplished at a buffered soil pH of approximately 8.2. Virtually all of the central Rocky Mountain soil analyses (from different investigators) have been done with the standard method and are likely in error. The true Base saturation may be two or more times greater than the 25% that we observe and that others also observe. Thus, the lowered soil alkalinities combined with the likely higher Base saturation, still provides quite a bit of buffering capacity in the soils. The Base saturations are currently being recalculated under a new method. My apologies if our preliminary data produced any misconceptions. Reliable field data simply require several years to obtain.

Sincerely,

Ronald P. Neilson, Ph.D.

Roused P. M. San

IPP

INTERMOUNTAIN POWER PROJECT

August 5, 1986

Mr. Mark T. Ellis State of Utah Department of Health Bureau of Air Quality 288 North 1460 West Salt Lake City, Utah 84116

Dear Mr. Ellis:

Acid Deposition Technical Advisory Committee (ADTAC)

Thank you for inviting our Mr. Naim Syed to make a presentation before the ADTAC regarding Intermountain Power Project's (IPP) acid deposition position and to provide related technical information. Unfortunately, we are unable to make such a presentation at this time; however, we would like to take this opportunity to share with your ADTAC the following information.

IPP is an environmentally responsible Project whose commitment to maintain good air quality is reflected by its investment in air pollution control equipment which accounts for about 25 percent of the power plant's cost. This air pollution control equipment will remove 98 percent and 90 percent of the particulate and sulfur dioxide emissions, respectively. Based on the results of modeling analysis conducted to issue the IPP Air Quality Approval Orders, IPP is confident of meeting prevention of significant deterioration increments.

In addition, upon commercial operation of Unit II, IPP will provide post-construction ambient air quality monitoring data to the Utah Bureau of Air Quality (BAQ). This monitoring data will be collected at three monitoring stations, one of which is located in the U.S. Fish Lake National Forest. Voluntarily, IPP has agreed to provide the BAQ with one year of fine particulate (PM_{10}) and upper-level atmospheric data.

 $\ensuremath{\mathsf{IPP}}$ suggests to the ADTAC to consider costs and benefits in its technical recommendation to the Statutory Committees.

Mr. Mark T. Ellis August 5, 1986

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For additional information, please contact Mr. Syed at (213) 481-5699.

Sincerely,

JAMES H. ANTHONY Project Director

Intermountain Power Plant

James H. Anthonyw

cc: Mr. Brent Bradford

State of Utah
Department of Health

Bureau of Air Quality

Mr. Naim Syed



Colorado River Wildlife Council

RESOLUTION, 86-1

RESOLUTION OF THE
COLORADO RIVER WILDLIFE COUNCIL
RELATIVE TO THE MONITORING OF
ACID RAIN IN THE WESTERN
UNITED STATES

WHEREAS, the destructive effects of acid rain are well known, and the occurrence of acid rain is widespread, and has been well documented in the northeastern United States and southern Canada; and

WHEREAS, there have been areas identified in the western United States—most notably the Sierra Nevada and Rocky Mountain ranges—of high susceptibility and sensitivity to acid precipitation; and the U.S. Forest Service has recently documented acid precipitation on national forest lands in the Colorado River Basin; and

WHEREAS, eventual natural resource damage resulting from acid precipitation includes, but is not limited to acute and chronic acidification of lakes with subsequent and profound losses of sport and nongame fishery values; and

WHEREAS, the basis for decision making and action plans to combat the occurrence of acid rain and its resulting environmental damage is the analysis of sound scientific data collected in areas of known susceptibility and sensitivity throughout the potential range of acid rain occurrence in the United States;

BE IT THEREFORE RESOLVED, that the Colorado River Wildlife Council at its April 7-8, 1986 meeting in Las Vegas, Nevada, does urge and request the U.S. Environmental Protection Agency to include representative waters in the western United States having existing sport and endemic fisheries in the Phase II and III monitoring programs of the National Watershed Survey; and

BE IT FURTHER RESOLVED, that the Colorado River Wildlife Council does also request the inclusion in the Phase III monitoring program of at least four high mountain lakes with sport and endemic fisheries, one lake each from the Sierra Nevada Mountain Range in California and Nevada and the Rocky Mountain Range within the Colorado River Basin.

STATE MEMBERSHIP: Arcona Game and Fish Department Cautomia Department of Fish and Game: Colorado Division of Wildlife. Nevada Department of Wildlife New Mexico Department of Game and Fish. Utah Division of Wildlife Resources. Wyoming Game and Fish. Department | COOPERATING FEDERAL AGENCIES: Bureau of Indian Affairs, Bureau of Land Management, Bureau of Deciamation | Corps of Engineers Environmental Protection Agency Fish and Wildlife Service Forest Service: National Park Service.



The League of Women Volers of Ulah
3804 Dighland Drive Sule 9
Salt Lake Gily, Weak &4106
801.272.189 TE

August 6, 1986

I am Joan Auger, Natural Resources Chairman of the League of Women Voters of Utah. We appreciate the opportunity to address this committee and to present the League's position on the problem of acid deposition. We commend the governor and the Department of Health for organizing this task force to examine acid deposition in Utah and we appreciate the committee's review of acientific and technical data from various areas of research.

The League in Utah has been concerned about air pollution for many years. The Salt Lake League was one of the first leagues in the country to study air pollution in 1965. The Utah League worked for the passage of the Air Conservation Act in 1967, and the first chairman of the Utah Air Conservation Committee was a League member. Local leagues have considered updated reports on air quality several times through the years, and acid deposition is a topic of concern for League members today.

In the area of natural resources the goal of the League of Women Voters is to promote an environment beneficial to life by preserving the physical, chemical, and biological integrity of the ecosystem. Acid rain, unlike some other forms of air and water pollution, is not easily visible. Because it is not obvious, it can cause damage in insidious ways. As this committee knows, the damage is not limited to lakes devoid of fish and aquatic life, but it includes deteriorating and dying forests, changes in the soil, and the mobilisation of toxic metals into the water. These changes may take a long time to occur, but they are serious and may be permanent.

Acid rain has been considered in the past to be a regional problem, affecting primarily the Northeast and Canada. The League is concerned, as are many others, that the West is also vulnerable to the effects of acid deposition. Hany high altitude lakes in the Bocky Mountains, the Cascades, and the Sierra Nevada were identified by EPA as sensitive to acidification. The League supports additional study to clarify the problem of acid deposition in the West. We need long-term, fundamental, well-organised research and a continuation of the cooperation among the western states. The research, however, is technically difficult, expensive, and can take years to complete. Here in the West we have the opportunity to avoid the effects occurring in the East by taking action now.

The League's environmental protection and antipollution goals aim to prevent ecological degradation and to reduce and control pollutants at their sources, both stationary and mobile. The League wants to see current legislation enforced and strengthened and opposes extensions of deadlines to comply with the Clean Air Act. Hationally the League supports the legislation being considered in Washington, H.R. 4567 the Acid Deposition Control Act of 1986 and Senate Bill 2203, which call for reductions in sulfur dioxide and nitrogen oxides emissions.

Environmental protection and pollution control should be considered a cost of providing a product or service. The League believes that in general the polluter should pay for the costs of clean up. Consumers, taxpayers, and ratepayers must expect to pay some of these costs.

The league believes that action to reduce sulfur dioxide and nitrogen exides emissions is the most prudent course to follow to prevent acid rain damage and to improve air quality.