SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

State of Utah
DEPARTMENT OF COMMERCE
Office of Consumer Services

MICHELE BECK
Director

To: The Public Service Commission of Utah

From: The Office of Consumer Services

Michele Beck, Director
Béla Vastag, Utility Analyst

Date: April 16, 2021

Subject: Docket 16-035-36

In the Matter of: Rocky Mountain Power's Application to Implement Programs Authorized by the Sustainable Transportation and Energy Plan (STEP) Act

INTRODUCTION

On March 3, 2021, Rocky Mountain Power (RMP) filed a request with the Utah Public Service Commission (PSC) for approval to use $200,715 of STEP funds to sponsor a proposed Utah State University (USU) study entitled "Projecting the Impact of the Electrification of the Uinta Basin Oil and Gas Fields on Air Quality" (Uinta Basin Study). On March 16, 2021, the PSC issued a Scheduling Order that set a deadline of April 16, 2021 for parties to file initial comments and April 23, 2021 for reply comments on RMP's request to fund the Uinta Basin Study. Accordingly, the Utah Office of Consumer Services (OCS) submits these initial comments on RMP's request.

STANDARD OF REVIEW FOR RMP STEP PROJECTS

In its application, RMP is requesting authorization to pursue the Uinta Basin Study as an innovative utility program under two sections of the STEP Act - § 54-20-105(1)(h) and § 54-20-107.[1] Section 105 requires the PSC to determine that a program is "in the interest of large-scale electric customers". The OCS notes that this study is not claiming that it will provide benefits that accrue to ratepayers, just the public interest benefits associated with Uinta Basin air quality. However, the STEP programs authorized under Section 105 have not been required to show ratepayer benefits. Section 107 requires the PSC to determine that a proposed program is "cost-effective and in the public interest". It appears to the OCS that RMP has not provided sufficient information in its application showing that the Uinta Basin Study is cost-effective. For this reason, OCS

[1] RMP's March 3, 2021 Application, page 1, first paragraph.

suggests that the PSC cannot approve the petition under Section 107 and must review the petition under Section 105 only.

BACKGROUND ON THE PROPOSED UINTA BASIN STUDY

The Uinta Basin in northeastern Utah often experiences poor air quality during the winter. In some years, levels of ozone during wintertime have exceeded maximum levels set by federal National Ambient Air Quality Standards (NAAQS). Due to these intermittent excessive levels, the US Environmental Protection Agency (EPA) may designate the Uinta Basin in the near future as a nonattainment area for ozone and require the state of Utah to submit a formal plan to reduce ozone causing emissions in the basin to ensure that the area remains in compliance with the NAAQS.

The Utah Division of Air Quality (UDAQ) has already funded several studies to investigate the basin air quality problem, including conducting inventories of emissions sources, and has determined that the primary source of ozone-causing emissions in the Uinta Basin is the oil and gas industry.[2] The two major emissions of concern are nitrogen oxides (NO_x) and volatile organic compounds (VOC). Both of these emissions react with sunlight to produce ozone. Reflective snow cover in the wintertime increases ozone production while also promoting pollution-trapping temperature inversion events. A source of NO_x from the oil and gas industry is production equipment (specifically oil well pumps) that burn fossil fuels such as natural gas, gasoline or diesel. VOCs are produced due to vapor leakage from oil and gas wells or from oil and gas storage/transportation facilities.

According to the proposed Uinta Basin Study in this docket, it is currently unknown which is the primary cause of ozone pollution in the Uinta Basin – NO_x or VOCs. Utah Department of Environmental Quality (DEQ) reporting for the year 2017 shows that the oil and gas industry in the Uinta Basin produces about 12,000 tons of NO_x each year in Duchesne and Uintah counties and about 104,000 tons of VOCs per year.[3] Though more VOCs are produced, the proposed study states that "Preliminary evidence suggests that the ozone system of the Basin is under NOx control." Therefore, if it is true that NO_x is primarily responsible for the ozone problem, the assumption is that electrifying the oil and gas equipment that currently produce most of the basin's NO_x could solve the ozone problem.

Based on this assumption, the proposed study has two primary goals:

1. Determine if NO_x is the source of most of the Uinta Basin ozone.
2. Study if electrification of the basin's oil well pumps will eliminate sufficient NO_x to solve the air quality problem and if electrification is technically and economically feasible.

[2] See: https://deq.utah.gov/air-quality/ozone-in-the-uinta-basin

[3] See: https://documents.deq.utah.gov/air-quality/planning/inventory/DAQ-2020-011090.pdf

OFFICE OF CONSUMER SERVICES COMMENTS

The OCS has reviewed the DEQ's 2017 Statewide Emissions Inventory[4] and indeed, for Uintah and Duchesne counties, the oil and gas industry account for 70 – 80% of these counties' annual NO_x emissions. Electrifying oil and gas facilities in the Uinta Basin, if economically feasible[5], could solve or at least significantly improve the basin's compliance with the EPA's NAAQS. It is vitally important that we improve air quality for Utahns living in the Uinta Basin. Therefore, the OCS finds RMP's and USU's proposed Uinta Basin Study to be very promising and supports providing STEP funding to move forward with it on the condition that the PSC orders two changes be incorporated in the final approved study plan.

1. Funding should be released by RMP to USU in two phases. As discussed above, the study will address two questions – 1) is NO_x the cause of the basin's ozone problem and 2) will electrification reduce NO_x sufficiently to alleviate the ozone problem. Essentially, this means that there are two phases to this study. If the answer to the first question is "no", then there would be no need to proceed to phase two to study whether oil and gas equipment should and can be electrified. Therefore, the OCS recommends that only half of the approved funding for this study be released initially with the remaining funds only being released when USU reports back to RMP that the basin's ozone problem is indeed under NO_x control. RMP should make a brief filing with the PSC at that time notifying parties of the results of phase one and whether USU will proceed on to phase two.

2. The indirect costs included in the proposed study's budget should be significantly reduced. Of the proposed $200,715 total budget, $63,239 or 31.5% is for indirect costs. USU explains that a 46% adder is applied to the base budget to add indirect costs which are for "facilities and administration". The OCS believes that this 46% adder for indirect costs is excessive for two reasons. First, $100,264 of the base budget is for consultant fees, fees for the firm SLR International Corporation. The OCS's experience with hiring expert consultants is that their facilities and administration costs are included in the high hourly rates that they charge. Therefore, $46,121 should be removed from the budget.[6]

   Second, the USU's Bingham Research Center, who is the lead on this study, conducts research for UDAQ on a regular basis and currently has several ongoing studies related to Uinta Basin air quality.[7] When hiring universities to do studies,

[4] Go to https://deq.utah.gov/air-quality/2017-statewide-emissions-inventories, then click on "2017 Emissions data provided in tons/year (3 MB)"

[5] Page 3 of the proposed study states "Uinta Basin crude oil is only marginally profitable, and there is concern that these regulations could significantly stifle the industry."

[6] 46% x $100,264.

[7] See: https://deq.utah.gov/category/air-quality/uinta-basin-oil-gas-current-studies

UDAQ limits the amount of indirect costs that can be charged.[8] An excerpt from UDAQ's RFP submission instructions is shown below.

> **Note:** As it relates to universities, UDAQ prefers that no overhead (indirect costs) are included in the project. However, if overhead costs are necessary, UDAQ requires that overhead costs not exceed 10% of the total cost of the project.
>
> It is important to note that UDAQ will evaluate proposal budgets for the following:
>
> 1. The budget's appropriateness, including the amount allocated to each goal or task, and its adequacy to support and complete the proposed work.
> 2. Whether the budget includes specific amounts for each proposed task (as outlined in the "Technical Approach" section of the SOW).
> 3. The completeness and detail of the budget.

The OCS notes that UDAQ prefers universities charge no indirect costs and if indirect costs are still requested, UDAQ limits them to no more than 10% of the total cost of the project. Since USU already has considerable experience working on Uinta Basin air quality projects (facilities and administration are already in place), the requirements of another Utah state agency, DEQ, for indirect costs on projects should provide reasonable guidance for those costs on the proposed Uinta Basin Study project in this docket. Therefore, the OCS believes that UDAQ's 10% limit for indirect costs should be used for the USU portion of the budget and an additional $13,396 should be removed from the budget.[9]

With the OCS's above recommendations for reduced indirect costs, the proposed total budget for the Uinta Basin Study project should be reduced from $200,715 to $141,197.

SUMMARY

The OCS appreciates the significance of the proposed Uinta Basin Study in this docket and how it might help to improve air quality for Utahns living in the basin. Though the proposed budget of $200,715 is small compared to RMP's overall budget of $50 million for all of its STEP projects, the OCS believes that the PSC should still ensure that ratepayer funds are spent wisely and imposing similar requirements to other state agencies is a reasonable metric. Unlike the UDAQ funded Uinta Basin air quality projects that are chosen through a competitive RFP process,[10] this project is brought before the PSC with little budget detail and with no comparison to show that the costs are reasonable. Furthermore, as discussed above, Uinta Basin oil production is marginally profitable; and therefore, this study may just sit on a shelf and never be implemented. In other words, even if this study was to show that NO_x reduction through electrification was effective and feasible, the economics of oil production combined with the cost of electrification could prevent a majority of the basin's oil and gas facilities

[8] See: https://deq.utah.gov/air-quality/request-for-proposals-rfp-science-for-solutions-research-grant and https://documents.deq.utah.gov/air-quality/planning/technical-analysis/DAQ-2020-013946.pdf.
[9] 36% x ($25,401 + $11,811)
[10] See footnote 8 above with links to UDAQ documents and according to RMP response to DPU 16.12.

from ever being electrified. With these issues in mind, the OCS asserts that the PSC should only allow this project to proceed with a reduced budget and a phased approach, as described above. This would ensure that ratepayer funds are prudently spent.

RECOMMENDATION

The OCS recommends that the PSC approve the proposed Uinta Basin Study with the following two conditions:

1. Reduce the approved budget to $141,197 to eliminate excessive indirect costs, consistent with requirements imposed by other state agencies in granting public funding.

2. Require funding be allocated in two phases – one half at the start of the project and the remaining one half only after USU has demonstrated that Uinta Basin ozone pollution can be significantly reduced by controlling NO_x emissions.

cc:

Jana Saba & Marie Bradshaw Durrant, Rocky Mountain Power
Chris Parker, Division of Public Utilities
Email Service List