Proposal for Shared Governance Team to Review and Make Recommendations on WDEP on an As Needed Basis

The University of Colorado subscribes to a model of shared governance. The guiding principle of shared governance is that "the faculty and administration shall collaborate in major decisions affecting the academic welfare of the university."[1] The nature of that collaboration "shared as appropriate with students and staff, varies according to the nature of the decisions in question."[2] Ordinarily, tenure and tenure-track faculty have the principal responsibility for decisions concerning pedagogy, curriculum, research, scholarly, or creative work, academic ethics, and recommendations on the selection and evaluation of faculty."[3] The administration "has the principal responsibility for the internal operations and external relations of the university."[4] Within these general allocations of responsibilities, "the faculty shall collaborate with the campus and system administration in making recommendations or decisions on faculty personnel policies, administrative leadership, and resource allocation."[5]

In late-2023, the Board of Regents, upon the recommendation of the campus administration, approved a project to replace heat and power generating equipment in the West District Energy Plant (WDEP), located on the main campus.[6] The WDEP is a combined heat and power plant that serves the main campus, the east campus, and north of Boulder Creek. The CU Boulder campus receives its heating, cooling, and power through a combination of power provided by Xcel Energy and three campus energy plants. The campus administration proposed the upgrades to the WDEP after the State of Colorado enacted Colorado Air Pollution Control Regulation 7. The proposed project to replace combustion turbines CTG-1 and 2, install emission reduction equipment for Boiler 4, and retire Boiler 3. The campus administration proposed the upgrades to comply with new air permit requirements, preserve steam production capacity to heat the campus, and maintain the capacity to generate power on campus. The total cost of the project is $43,135,342, with the project cost being offset in the range of $6 to $9 million in new federal tax credits made available as cash repayments to public entities through the Inflation Reduction Act.[7]

---

1 Laws of the Regents, Article 5.A.1(A). https://www.cu.edu/regents/law/5

2 Laws of the Regents, Article 5.A.1(A). https://www.cu.edu/regents/law/5

3 Laws of the Regents, Article 5.A.1(B). https://www.cu.edu/regents/law/5

4 Laws of the Regents, Article 5.A.1(C). https://www.cu.edu/regents/law/5

5 Regent Policy 5.A.1(c). https://www.cu.edu/regents/policy/5

6 November 7, 2023 Board of Regents' Consent Agenda. https://go.boarddocs.com/co/cu/Board.nsf/Public

7 CC-C2: CASH FUNDED CAPITAL CONSTRUCTION REQUEST FY 2023-24 https://go.boarddocs.com/co/cu/Board.nsf/files/CWBLQT57467A/$file/UCB-WDEP%20EMISSIONS%20COMPLIANCE-FY23-24%20CC-C2_NARRATIVE.pdf

Concerned faculty, students, and staff have questioned whether the proposed upgrades to the WDEP are consistent with the best interests of the campus, particularly whether campus investments in infrastructure that is reliant upon fossil fuel sources is consistent with the campus's climate commitments and constitutes an investment aligned with institutional priorities. In late 2023, a group of concerned faculty met the Chief Operating Officer, the Vice Chancellor for Infrastructure & Sustainability, and other administration staff who have participated in the planning for the WDEP project. At that meeting, the participants agreed to explore several topics related to the WDEP, including:

1. Has the university performed an analysis of greenhouse gas (GHG) reductions from the WDEP upgrade relative to the business-as-usual (BAU) scenario, or any other comparator? If so, please provide.

2. According to the 2021 Energy Master Plan (here, p. 52): "The emissions factor of the utility grid is currently projected to be lower than optimal cogen operation by 2027." Has any analysis been done to revise that forecast? If so, please provide. Please also provide the analysis supporting the original statement in the EMP.

3. WDEP power generation has dropped from about 42% of campus electric consumption in 2005, to only 0%-5% (2009-2020). What led to that decline? (Technical conditions? financial considerations? Air permit compliance? Other?).

4. What is the technical condition of the existing CHP turbines? Has any non-routine work been performed on the turbines since 2005? If so, please provide documentation (date, cost, nature of work

5. Peer universities (including CSU) are electrifying their heating over a 7–10-year timeline with major works already under way. In distinction, the CU Boulder CAP anticipates 25-30 years before electrification is completed. Why is CU Boulder not pursuing electrification on a similar timeline to CSU and other peer universities?

6. Has the university performed or commissioned an analysis of the energy resiliency needs of campus?

7. Have different options been compared for meeting campus resilience needs (CHP turbines, conventional turbines, batteries, other)?

8. Since 2020, on how many occasions was WDEP used for electric generation, and what were the dates and times of day? What were the considerations for generating at these times? (Supply shortage? Cost savings?).

9. How much power (kWh) per year, and how much usable heat (Btu), is the university planning to generate from the upgraded WDEP? (For usable heat, please only include heat that will he to meet actual university needs in distinction, e.g., from heat during summer generation).

10. What will be the overall efficiency of the WDEP following the upgrade? Please also provide gas boiler efficiency, and fractions of output for electricity and heat.

11. If campus heating could be electrified on a 7–10-year timeline, would the university still pursue the CHP turbines portion of the upgrade?

Rather than address these questions in an ad hoc manner, the Chief Operating Officer asked that the participants utilize the shared governance process, in recognition that existing shared governance structures serve as a means of ensuring that "the faculty and administration shall collaborate in major decisions affecting the academic welfare of the university."

Consequently, the Chief Operating Officer has asked the Chair of the Boulder Faculty Assembly empanel a team that includes both faculty and the administration with subject matter expertise to address these topics. Ultimately, the Chief Operating Officer has asked that the team submit a report and recommendations that addresses the WDEP project.

WDEP Shared Governance Team:

- The Boulder Faculty Assembly will have two seats on the Team. Emily Yeh, Geography Faculty, will be a member of the Team given her role as chair of the BFA's Budget Planning Committee, and the financial issue involved in WDEP. Dan Riffell will be on the Team as a BFA rep, Mechanical Engineering Department faculty, and member of the BFA's Climate Science and Education Committee.
- Nadav Orian Peer and Mark Squillace will serve on the team as representatives of the Getches-Wilkinson Center (GWC) for Natural Resources, Energy and the Environment and Law Faculty.
- Kyri Baker and Gregor Henze, Civil, Environmental and Architectural Engineering Faculty, will be invited to join the team as independent subject matter experts. Depending on their response, the Committee co-chairs will agree on additional nominations for engineers, if necessary.
- Student government may nominate a representative to the team who is studying issues relevant to the climate change issues raised by the WDEP Program Plan

- A member from Infrastructure and Sustainability such as the Vice Chancellor for Infrastructure and Sustainability, the Associate Vice Chancellor for Facilities Management, or the Director of Utility and Energy Services.
- Other persons may be invited to appear before the team to share expertise as needed, including faculty whose research interests intersect with WDEP and external consultants with experience in similar developments

Process and Workflow:

- The Team will be co-chaired by BFA/CSEC and GWC. The co-chairs will meet with the Vice Chancellor for Infrastructure & Sustainability to agree on an agenda for each meeting.
- A majority of Team members in attendance, either in person or remotely, will constitute a quorum. Once a quorum has been satisfied, the team may make decisions with a majority of members present.
- The Team will arrange for a website to disseminate information about the Team's work, such as the meeting agendas, meeting minutes, and decisions and recommendations of the team. In the interest of transparency, all information, except for any information that is confidential or proprietary, will be made available to the public and will be subject to CORA requests.
- On or before May 31, 2024, the team will release to the Chief Operating Officer and the public a formal report with recommendations as to whether to proceed with the WDEP Program Plan as currently conceived, to recommendation any modifications to the plan or whether to adopt one or more reasonable alternatives to the Plan.
- If the Chief Operating Officer chooses not to accept any or all the Team's recommendations, the University will provide a detailed explanation for rejecting any recommendation. If the team disagrees with the Chief Operating Officer's explanation, the team may address any disagreement to the chancellor.
- For the team to begin its work promptly, the University will make available to team existing documents and other information that is reasonably necessary for the team to perform its work. The chairs of the team shall work with the Vice Chancellor for Infrastructure & Sustainability to prioritize document requests and to minimize undue burden upon administrative staff.
- The campus will be proceeding with any unavoidable costs and implementation steps necessary for it to maintain a critical path that would allow it to realize the federal tax credits made available as cash repayments to public entities through the Inflation Reduction Act.

The proposal here relates to the WDEP project. If the work undertaken here result in beneficial actions and relationships between the participants, this proposal may serve has a framework for future shared governance collaborations.