



City of Columbia, Missouri

Meeting Minutes

City Council

Monday, May 4, 2026
4:30 PM

Pre-Council

City Hall
Conference Room
1A/1B
701 E. Broadway
Columbia, MO

I. CALL TO ORDER

Mayor Buffaloe called the meeting to order at approximately 4:33 p.m.

Present: 7 - Buffaloe, Foster, Peters, Carroll, Sample, Elwood, and Hartman

Electric Integrated Resource Planning

Attachments: [Electric Resource Plan 2026](#)

Erin Keys introduced herself as well as the staff and contractors that will be discussing generation and capacity needs for the next twenty years.

What drives an Integrated Resource Plan (IRP) is what the future load looks like, which helped them identify what was needed in the long term. The contractors conducted a quick overview on some of the key terms that would be discussed in this presentation and what it means. Greg Labbe, consultant, mentioned that they ran an additional 6 seniors on what the future could look like.

Council Member Betsy Peters arrived at approximately 4:36pm.

Labbe described the Project Teams and the city staff that assisted with the project. Labbe described the Integrated Resource Plan Development. TEA suggested that these projects be conducted every three years. IRP's in the past had been done every 5-10 years.

Labbe explained capacity, which is how much energy the market needs to support a peak event. That one time in the day where the energy is screaming. Examples that were given were 5 o'clock, 6 o'clock. It is the one time at one hour to ensure that the lights never go off.

Labbe discussed the Planning Reserve Margins and how much energy needs to be produced to be able to handle all peak hours. This is standard for all energy markets and producers. He discussed the various accreditations for the different types of electric generation (e.g. Thermal, Renewable, Gas, Nuclear, etc).

Labbe gave a few examples that explain how the peaks and maintaining the current level of service during peak hours during the winter and summer accreditation. The idea of a resource plan is to analyze the less cost options. Labbe factored in the different types of energies, and explained that some energies are more effective than others. Labbe explained that Solar and Wind are not as predictable, but that they still get some accreditation.

Labbe explained that the IRP model includes load forecasts, existing resources data, new resource cost, fuel price projections, environmental regulation and reliability standards.

Labbe explained the load forecast, noting that the load has increased over time. He identified where COVID occurred in the graphs.

Labbe stated that we sell and buy energy through the MISO market. He mentioned that energy revenues play into this as well. Labbe then turned it over to Marquees Kimmey, portfolio manager.

Kimmey discussed the resource options as well as the modeling of the various energy sources. He walked the council through the modeling in Columbia's portfolio. Kimmey showed the summer load balance and where Columbia's customers get those various energy solar. Columbia is currently below the Summer Load Capacity and is expecting to have a serious drop in the year 2040. Columbia is expecting some retirement for the energy producers that support Columbia. Gwen Corches, Assistant Utilities Director, emphasized that this is an assumption and not guaranteed to happen.

Kimmey displayed the winter load balance. Mostly these assumptions are to fix the summer load because it has a considerably higher peak compared to winter.

Kimmey moved on to the Base Case and what the model is planning for the upcoming resource balance. Kimmey said the constraints are resources and time to get contracts and those plants built or producers built.

Kimmey mentioned that 120 MegaWatts wind and 30 MegaWatts solar will achieve 40% carbon-free energy by 2040. Kimmey mentioned the biggest challenge will be the lead-time needed for energy to come online. Labbe explained that it takes more time for energy to come online because of the constraints from COVID and tariffs. Batteries used to be made in less than a year, and now it is taking 2 to 3 years to get them built.

Council member Nick Foster asked if new tech is included in these forecasts and Labbe mentioned that the LSMR are the ones included, for example 4-hour batteries, flexible natural gas, and renewables. Foster also asked about the coal retirements that they are anticipating. Kimmey mentioned that Siksten's retirement is in 2028. Crum mentioned that they were conservative by using the timeline on what the earliest date these coal plants could retire.

Council member Valerie Carroll asked what kind of conditions they are taking into account, weather, energy users, etc. Labbe mentioned that both of them are included in these projections. They are not assuming any large loads in the base case. Labbe mentioned direct loss of load studies, which are where these margins are set. They do include weather events, but not a significant load increase (large user), such as a data center. Labbe mentioned that a lot of places are requiring large load users (e.g. data centers) to bring their own capacity. Labbe mentioned that large technology companies are investing heavily into SMRs. Municipalities and other energy companies are not able to afford to build SMRs at an affordable price.

Council member Christina Hartman asked if accreditation changes based on what ISO is regulating it. TEA said that it does change going by ISO, but they currently use MISO standards.

Kimmy introduced the winter load base case, mentioning it meets and is slightly over in some of the years. He mentioned that there is no change in the build out compared to the base case for summer. Kimmy showed the annual costs incorporated into the base case. They will be using these base cost numbers compared to the other scenarios.

Hartman asked about including the cost of destruction of resources. Labbe said that would have included destruction costs but that would be dependent on the city's plans, however, it is not included unless the model suggests that they close a resource early. Labbe said that decommissioning cost would not be included if it was not Columbia's asset. Kimmy added that those additional costs would not affect the overall action plan that they are proposing.

Kimmy showed the table for the resource balance chart from where all the storage. He mentioned that the model was solved to meet Planning Reserve Margin for capacity at a 20 year cost of \$1436M in 2026 dollars.

Kimmy mentioned that the portfolio will become short energy after Sikeston retirement in 2028, a market assumed to serve the unmet load. Corches emphasized that they are focusing on capacity in these slides. Labbe pointed out some increased energy production in later years in their model.

Kimmy reviewed some scenarios to the base case and how that will affect Columbia.

Kimmy started off with Scenario 1a- removal of bilateral capacity after 2029. This would add more batteries and flexible natural gas compared to the base case. There is a mix of batteries, flexible natural gas and wind. He then went to explain the built out, comparing the costs to the base case. Comparatively this would increase costs by \$19M compared to the base case.

Moving onto Scenario 1b- this is similar to 1a but adds 10 percent higher Planning Reserve Margin. Kimmy mentioned that it would have larger margins but the resources would stay about the same. This would be a much greater increase compared to 1a at about \$71M increase.

For Scenario 2, they limited the battery tolling, renewable purchase power agreements and bilateral capacity. No flexible natural gas or self-build resources were used in these scenarios. Winter battery capacity value drops from 80 percent to about 30 percent by 2040. Hartman asked if there is desegregation of the battery in the winter or is it about capacity. Labbe mentioned that value goes down over time. He explained that batteries do not operate as well in the winter. He explained that as more and more batteries come on the system, you won't be using them all at once.

Council member Vera Elwood asked about renewables and purchasing capacity. Labbe said that the scenarios used renewable energy but for the PPA then they could still purchase coal and natural gas.

TEA Energy reviewed a few more scenarios for renewable energy and the last scenarios. Scenario 3 went off the Small Modular Reactors and how it could provide a capacity of 30%. They explained the connotations for the present value. Scenario 4 planned a high gas and power prices. This scenario would benefit solar and wind due to the cost. However, it is deeply infeasible and a decent amount of risk. It would be unlikely to build this much solar and wind to make this scenario possible. Although the prices decrease in the long term by (\$63M) 4%, the initial cost increases by (\$115M) 18%. Kimmy explained that this is a completely different scenario that they are planning for and has a

significant amount of risk attached to it, even though there is a decrease in price, this is something that needs to be considered.

The fifth scenario is the so-called Do Nothing Scenario. This would be if the city does not find replacements for power generation. It would not be good. This would increase costs by (\$199M) 14%. Hartman asked if this is the current plan we were on and Kimmey confirmed. This demonstrates great risk longer term.

For the final scenario, Kimmey mentioned that this is the most realistic scenario. Kimmey also displayed a graphic that compared all the build outs and costs.

Kimmy emphasized batteries being built in the short-term and additional production in the near future. Carroll asked about the 2035 goal for 40% in the appendix. TEA Energy said that is something they are able to do.

Kimmey stated overall that capacity is short through 2045, bilateral capacity may serve as bridge capacity. Natural gas is a potential option and a diverse portfolio helps meet capacity needs and emissions targets. By diversifying it helps reduce risk.

Kimmey gave a brief overview of the action plan, planning for late 2020s and early 2030 capacity needs. Mentioning that once a near-term plan is in place to look at the long term, considering a diverse portfolio, refreshing the IRP regularly and monitoring regulatory and market developments.

Mayor Buffaloe mentioned that there will be a renewable energy work session in the future to explore this more. Corches mentioned that there is more to come and this is just an overview of some scenarios.

Planning & Zoning Commission Interviews

For each applicant, Mayor Buffaloe provided a brief overview of the commission before conducting the interviews. Each applicant had the opportunity to ask questions. The Mayor noted that decisions would be made at the May 18 City Council meeting.

II. ANY OTHER ITEMS COUNCIL MAY WISH TO DISCUSS

Council members discussed some of the items that would be removed from consent.

III. ADJOURNMENT

The meeting adjourned at approximately 6:49 p.m.