Vistra Corp. Response to RA Study October Stakeholder Questions

Vistra Corp. (Vistra) is submitting the response below to the RA Study October Stakeholder Questions issued on October 16, 2025, by the Illinois Power Agency (IPA), Illinois Commerce Commission (ICC), and Illinois Environmental Protection Agency (IEPA) (collectively, the Agencies). Specifically, Vistra is responding to Question 3, which is as follows:

3. Referencing the Workshop #2 presentation topics, what key issues or challenges do stakeholders believe are the most important to consider in the analysis of future resource adequacy needs within the next five years (to 2030)? Do the identified issues or challenges change for a 2030-2035 study period? If yes, how? Please describe.

Vistra Response to Question 3

First, regarding Energy + Environmental Economics' (E3) projections of future load, E3 indicated during Workshop #2 and expressed on Slide 36 (second bullet point) that new data center loads will "largely consist of flat, inflexible/non-interruptible loads, based on existing data center load profiles." Additionally, E3 notes in the presentation that they took a "conservative view that data center load is not flexible" but then goes on to identify factors that could result in data center loads being more flexible including advances in chip efficiency, overall data center design and power usage changes, and/or ability to utilize on-site or adjacent generation resources. Vistra submits that there should be at least one scenario developed and modeled that includes more flexible operations by large data center loads and how these alternative assumptions impact the overall load forecasts. The Agencies should also analyze how much data center load flexibility would be necessary and in which hours to avoid a resource adequacy deficiency. Further analysis of the potential impacts of more variable loads of large data centers is warranted, given that Slide 36 identifies the magnitude of data center load growth and data center load flexibility as two of the four "Key Sources of Uncertainty."

<u>Second</u>, on the resource side of the analysis, Vistra submits that prior to finalization and publication of the final report, the Agencies should allow stakeholders to review/have access to the assumptions being used to support the analysis of projected generating capacity, which should include data on:

- Which generating units are assumed to continue operating throughout the study period;
- Which units have restricted operations due to the Climate and Equitable Jobs Act (CEJA) requirements;
- Which units are assumed to retire, in what years, including which units are assumed to retire due to CEJA requirements;
- Which new units are assumed to come into service during the study period and in what years; and
- Which existing units could achieve uprates or downrates in capacity or could reduce emissions and continue operations though fuel switching.

The presentation slides depict, using bar charts, projections of aggregate changes in capacity in the various types of generating units and amounts of capacity projected for each type, but do not

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provide the ability to evaluate the underlying assumptions and projections as to specific units' retirement, in-service dates, or other changes in capacity.

As an example, Slides 21 through 25 show essentially no growth in nuclear capacity from 2026 to 2030 is assumed in the analysis. However, Constellation, owner of the nuclear plants in Illinois, has publicly discussed increasing the capacity of one or more of these plants through uprates, including at the Clinton plant in MISO as part of Constellation's agreement with Meta. It cannot be determined from the slides whether announcements like this are included in the assessment of available generating capacity.

Third, and related to Vistra's second comment, whether PJM and MISO have a resource adequacy shortfall and by how much in the 2026-2030 and 2030-2035 time frames will be influenced by the load-resource balance projections. On the resource side, there is uncertainty around how IEPA and the PLEXOS model are projecting the generating capacity from Illinois fossil-fueled units that are either required to reduce emissions or retire because of CEJA Section 9.15 requirements. In particular, there is a lack of clarity as to what criteria and assumptions are being used to determine resource availability under CEJA's emission and retirement provisions, and specifically how both IEPA and PLEXOS are forecasting generating capacity from fossil-fueled units given availability of differing data sets on unit emissions, announced or changed retirement decisions, potential fuel switching by existing units, and other considerations impacting retirement decisions.

The Workshop slides acknowledge "CEJA retirements" but do not explain how these requirements are being analyzed for RA study purposes. There is reference in the slides to a list maintained by IEPA but no information has been provided on which units are on the list, how they are characterized or grouped, which units are assumed to be retired, or required to reduce CO2e emissions by 50%, by 2030 or 2035, and which plants can continue operations beyond 2030, including through possible fuel switching. Additionally, there is no information on how the Agencies are measuring or forecasting heat rate performance by the subject plants. Using heat rate as an example, CEJA requires certain gas-fueled Electric Generating Units to reduce emissions and retire based on heat rate, yet the statute does not identify whether "heat rate" is referring to "gross" or "net", when heat rate must be determined to avoid the CEJA triggers, or the method for determining the heat rate. Use of differing values for these variables leads to different outcomes.

Providing the list of units assumed to be retiring in the study period, and a description of how the information is being used, to workshop participants or even to the unit owners, could allow stakeholders to provide corrections, new information, or identify areas in need of resolution. Vistra submits that Illinois stakeholders are well-positioned to identify any potential errors in the capacity assumptions/projections. Accuracy in the capacity projections is important because, similar to Vistra's first comment above, the E3 presentation identifies thermal resource retirements as a "Key Source of Uncertainty" (Slide 36).

by January 1, 2040 by "all EGUs and large greenhouse gas-emitting units" that "have a heat rate greater than or equal to 7000 BTU/kWh," with each such unit also required to reduce its CO₂e

¹ Specifically, CEJA requires retirement or 100% reduction in all CO₂e and copollutant emissions

The Agencies should run multiple scenarios of differing "CEJA retirements" to test sensitivity of the load-resource balance to these measures. The Agencies should also analyze the impact on available resources of changes to CEJA based on changes in plant retirement dates such as by extending the deadlines by 5 years, increasing the heat rate used for gas-fueled units, and modifying the baseline used to set Section 9.15 (k-5) emission requirements. These changes would not significantly impact unit level emissions, but would significantly impact the amount of dispatchable capacity to remain in operation.

Finally, given that there are likely multiple potential paths to compliance with the 2030 and post-2030 emissions requirements, the Agencies should consider running analyses to determine the least-cost option paths for Illinois electricity consumers.

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