



The American Council of Engineering Companies (ACEC) appreciates the opportunity to submit comments on the Department of Energy's draft National Transmission Needs Study (Study). ACEC is the business association of the engineering industry, representing more than 5,600 member firms across all 50 states that plan, design, and support the construction of the nation's infrastructure, including a substantial share of the transmission and distribution systems that will be called upon to meet the needs the Study identifies.

ACEC supports the findings of the draft Study and agrees that significant transmission investment will be required to meet future reliability and economic development needs. While the need for additional transmission infrastructure has been recognized by many stakeholders across the electric industry for some time, the Study effectively highlights how emerging load growth trends are increasing both the scale and urgency of the challenge. ACEC encourages the Department to complement its assessment of future needs with policies and practices that accelerate the planning, permitting, and construction of transmission facilities. The comments below identify six areas where ACEC believes the Department's ongoing work on the Needs Study, and its implementation, could be strengthened from an engineering and delivery perspective.

I. Support for the Study's Key Findings

ACEC agrees with the Study's core findings: that load growth from data centers, manufacturing, and electrification is driving a pressing need for additional transmission; that interregional transmission delivers meaningful reliability and cost benefits; and that regional planning entities are responding with some of the largest transmission portfolios in their history. These findings are consistent with what ACEC member firms are observing directly in their planning, design, and permitting work across the country.

ACEC recommends that the Department:

- Use the final Study to identify regions where technical assistance, federal coordination, or near-term planning support would have the greatest impact on project delivery.
- Convene a technical stakeholder roundtable with transmission planners, state siting authorities, engineering firms, environmental review professionals, utilities, and regional planning entities to discuss how the Study's findings can move from assessment to implementation.

II. Permitting and Siting Processes Should Be Addressed Alongside the Needs Assessment

The Study identifies where transmission is needed but does not address the permitting and siting processes that often turn multi-year needs into decade-long build timelines.

ACEC recommends that the Department:

- Support streamlined federal environmental review processes, including improved interagency coordination, clearer timelines, and a defined lead-agency model, particularly for interregional lines that cross multiple jurisdictions. Consider timeline requirements for review and comment periods.
- Work with the Federal Energy Regulatory Commission and state siting authorities to reduce duplicative review.

III. Interregional Planning Would Benefit from a Durable Cost-Allocation and Coordination Framework

The Study's finding that interregional links (West Connect to SPP, NorthernGrid to WestConnect, and ISO-NE to NYISO) offer high value is only actionable if regions have a workable framework for planning and paying for them jointly. Inconsistent cost-allocation rules across regional seams remain a leading cause of stalled interregional projects, independent of engineering feasibility.

ACEC recommends that the Department:

- Encourage regional transmission organizations, independent system operators, and non-RTO regions to adopt more consistent interregional planning processes, informed by the Study's congestion-value analysis, and that the Study's data be used to help identify a short list of high-value interregional projects for near-term coordination.
- Create a recurring interregional coordination forum focused on the specific high-value links identified in the Study, with public progress updates on planning status, barriers, and next steps to ensure paths forward.

IV. Engineering and Workforce Capacity is a Key Execution Constraint

The Study documents unprecedented load growth and record transmission portfolios, including the Midcontinent Independent System Operator's 2024 approval of its largest transmission portfolio to date, but says less about whether the engineering, design, and construction-management capacity exists to deliver these portfolios on schedule. A transmission need identified on paper is not the same as a project that can be staffed, designed, and delivered. ACEC member firms report multi-year backlogs for transmission design, siting, and environmental permitting work that illustrate this capacity constraint.

ACEC recommends that the Department:

- Ensure future iterations of the Needs Study include a workforce and firm-capacity dimension alongside its engineering-demand findings, and that the Department promote visible, forward-looking project pipelines and earlier engagement of engineering firms in the planning process so firms can align staffing and resources with anticipated need.
- Provide utilities, public power entities, state agencies, and regional planning entities with guidance on how federal funding can be used to build project-delivery capacity before final construction authorization.
- Encourage reasonable contracting practices and risk allocation that reflect the level of control engineering firms actually have over project outcomes, since projects will not move faster if firms

are asked to assume risks, such as third-party delay or unresolved permitting timelines that are outside their control.

V. Large-Load Growth Requires Faster Feedback into Planning Cycles

The Study cites hyperscale data center and manufacturing load growth as a primary driver of transmission need. ACEC members are seeing this play out region by region, often faster than traditional three-year planning cycles can absorb.

ACEC recommends that the Department:

- Examine mechanisms to update or supplement the triennial Needs Study cadence with more frequent load-growth data refreshes in regions experiencing rapid large-load interconnection requests, potentially through a shorter-cycle or rolling update mechanism for fast-growth regions rather than waiting a full three years to reflect material changes in load forecasts.
- Develop an annual or semiannual load-growth update for fast-growth regions where large-load interconnection requests materially change transmission need between triennial Study cycles.
- Create a consistent reporting template for large-load additions that distinguishes requested, contracted, and reasonably probable demand—along with timing, load flexibility, on-site generation assumptions, and transmission service requirements—so that speculative or duplicate data center requests do not overstate near-term need.

VI. Efficient Delivery Supports Affordability

ACEC members support cost-effective delivery of the transmission identified in the Study and recognize that affordability is a central consideration shaping the broader policy environment around large-scale grid investment. Accelerating planning and permitting is itself a cost-control measure, as delay compounds the congestion costs the Study documents in the New York Independent System Operator, NorthernGrid South, and the Midcontinent Independent System Operator footprints.

ACEC recommends that:

- The final Study explicitly frame permitting and planning efficiency as affordability measures, alongside its technical findings on need and congestion cost, and that the Department continue to support transparent, technical and experienced firms as a means of ensuring cost-effective delivery.
- Support the use of grid-enhancing technologies, reconductoring, uprating, and other near-term solutions where engineering analysis shows they can cost-effectively reduce congestion or improve reliability while larger transmission projects advance.

Conclusion

ACEC appreciates the Department's continued leadership on transmission planning and reaffirms its support for the Needs Study's core findings. We encourage the Department to pair its assessment of future transmission needs with a parallel focus on the permitting, workforce, and coordination conditions required to deliver on those needs. ACEC and its member firms stand ready to serve as a technical resource to the Department as it finalizes the Study and considers implementation.

Thank you for your attention and consideration. If you have questions or need additional information, please contact Nando Gomez, ACEC Sr. Vice President, Energy & External Affairs, at 202-682-4311 or at fgomez@acec.org.