This webinar will report on a recently completed multi-organization project to quantify benefits of increasing transmission capacity between the US Eastern and Western Interconnections under a high-renewables future. Given the existing “seam” between the two interconnections, a co-optimized infrastructure planning model was developed to assess tradeoffs between investments in cross-seam HVDC transmission, AC & DC transmission needs within each interconnection, generation investment costs, and operational costs, while satisfying different policy compliance constraints. This work was performed using industry-vetted expansion planning and production cost models of the North American power grid. Results from the analysis indicate that, under high wind/solar growth scenarios, the cost of cross-seam transmission is outweighed by the generation-related savings it produces. The presence of other benefits related to grid reliability, resilience, and adaptability, suggest that cross-seam transmission would be a highly attractive infrastructure development. We conclude this talk identifying ways to move forward on developing high capacity cross-seam HVDC transmission.