INTRODUCING

RAILROAD & ELECTRIC GRID COLLABORATION

May 2025

THE RAIL-GRID COLLABORATIVE ("RGC" or "the Collaborative") is a non-profit founded to promote and enable technical collaboration, joint action, research, and mutual goal-setting in pursuit of investment in (1) efficient, safe, and high-performing North America freight and passenger rail operations and related supply chains; and (2) an integrated, resilient, secure, and economical electric transmission grid.

RGC TARGETS the respective and shared need for GROWTH AND SUSTAINABILITY of North America's two most critical infrastructure networks. RGC BELIEVES that industrial policy, technology change, and greater operational flexibility and even profitability will be driven by enhanced COLLABORATION, JOINT ACTION, and PARTNERSHIPS between and within these industry networks and with policy makers at all levels of government, including bi-national interactions. ONLY RGC is dedicated to helping railroads and electric power mutually develop knowledge and strategies that produce real results. While electric system owners, operators, investors, and planners are readying the system for a monumental surge in energy demand and deployment of new or updated infrastructure, freight and passenger transport operators and stakeholders are exploring expansion and upgrade of systems, fleets, fuels, including sustained market share, commercial advantage, and opportunities for growth and improved asset utilization.

HERE'S WHAT NEEDS TO HAPPEN --

- ❖ WHERE COMMERCIAL OPPORTUNITIES EXIST, let's pursue direct (and private, where necessary) negotiations about individual, limited-term commercial arrangements or specific transactions, projects, or outcomes the parties can achieve. RGC accounts for investor and market demands, operational concerns, structural barriers and information deficits, resource and technology needs, and the opportunities and the historical position that rail holds in the marketplace.
- ❖ WHERE PUBLIC POLICY OPPORTUNTIES OR PROBLEMS EXIST, the electric and railroad industries can utilize RGC to pursue project or policy objectives, meet the demands of public policy and employ an understanding of FEDERAL, STATE, and LOCAL laws and processes as a tool of public advocacy. RGC is reaching out to energy regulators and planners, state rail planners, and funding programs, to identify and seize benefits for all classes of rail and grid participants.
- ❖ A classic example of JOINT PROBLEM-SOLVING involves co-location of electric transmission lines and cables within railroad and other transportation rights-of-way as a contribution to both strengthening the national electrical grid, decarbonizing railroad system components, and accelerating operational innovation through catenary, energy storage, and other applications.

- ❖ BEST INDUSTRY INTELLIGENCE serves policy makers, and RGC participants and stakeholders require TIMELY POLICY IMPUT. Because the services and benefits of electric grid and rail transport operations are economy-wide and impact states, markets, small communities in diverse regions of the country, RGC will develop capabilities to identify trends and developments among industrial strategies, regional transmission plans, state and national rail plans, and state integrated resource plans, where future projects are planned for funding and development.
- ❖ A CCESS TO DATA. Where a paucity of commercial, industrial, or technological data or significant barriers to economic development exists, new research and data collection will assist decision making by industry and public interests. Grid and rail expansion require better information on railroad rights-of-way, system requirements, energy demand, system interconnection, and more coordinated state siting requirements, that can address the drag on new projects, such as the co-location of charging facilities, electric generation and transmission facilities, or data centers within transportation geospatial assets.
- ❖ FRESH START. Major research projects, long absent from rail infrastructure planning, can stimulate new economic activity. The Federal Railroad Administration's recent study "Cost and Benefit Framework for Modern Railway Electrification Options," together with new industry experience co-locating rail and electric facilities, demonstrate the feasibility of deploying more efficient electric generation and transmission resources for locomotive power, ways to identify the cost and benefits of overcoming uneconomic barriers, methods of reducing costs, development timelines, and the operational risks of transmission co-location. Rail system electrification, starting with components (e.g., switchyards, substations, branch lines) is necessarily 'incremental.'

HERE'S HOW WE MAKE IT HAPPEN --

EDUCATION/ADVOCACY

- Workshops, webinars
- Legal/regulatory analysis
- Intervention/comments in energy cases, rail plan proceedings, legislation
- Studies/papers
- Articles/newsletters/op-eds
- Outreach to public and private parties/interest groups
- Contacts, referrals, introductions

TRANSACTIONS

- Closed door siting negotiations
- Route/ROW mapping studies
- Model contracts
- Engineering/technology evaluations
- Markets/supply chain analysis
- State law/policy research
- Workforce transition studies
- Industrial/technology standards

HERE'S WHO SHOULD HELP MAKE IT HAPPEN –

RAILROADS/STAKEHOLDERS

- Class 1 railroads
- Class II and III railroads
- Passenger railroads
- Economic Dev. Authorities
- Rail Unions/workforce
- Rail Investors
- Rail Manufacturers/suppliers
- Shippers
- Port authorities
- Contractors

ELECTRIC POWER/STAKEHOLDERS

- System operators/planners
- Power suppliers/integrated utilities
- Transmission developers
- Generators/diverse resources
- Electric Manufacturers
- AI firms and data centers
- Regulators/advocates
- Industrial/other Consumers
- Investors
- Technology Firms

OUR MESSAGE TO YOU

JOIN US. Rail operators and stakeholders and electric investors and transmission developers should commit, even if tentatively at first, to support RGC's collaborative objectives and contribute to its operations and discussions about a pathway to the future(s) of North American infrastructure.

GETTING TO 'YES'. Whether through innovative commercial transactions, collaboration with the energy industry, new technologies, taxpayer-funded support and incentives, or with evolving public policy, railroads (like other transport modes) can enter a period of growth and expansion, by developing the capability to move toward more reliable, lower-carbon motive power resources, and helping promote electric grid development, and by seizing opportunities to compete with other transport modes and electricity suppliers in the North American market. Tell RGC how you would move the process! There's not a minute to lose.

PUBLICATIONS NOTE

Federal Railroad Administration (USDOT) Cost and Benefit Risk Framework for Modern Railway Electrification Options | FRA (1/15/25);

POWER Magazine on US Railroading, https://www.powermag.com/railroading-what-sectors-future-power-suppliers-will-need-to-know/ (1/9/25);

Rail Age, The Electric System Today: Basics for Railroaders - Railway Age (7/2023)

PERSONNEL AND CONTACT INFORMATION

This Collaborative is currently administered and advised by a former Chairman of the Federal Energy Regulatory Commission, a season railroad expert and union representative, a veteran professor of railroad engineering in the US and Europe, a corporate officer of a US short line railroad, an industry leader of a national association of electrical manufacturers, a national expert in electric utility operations, an specialist in electric grid planning and operations, and a veteran in energy communications. RGC is supported by former REC members as well. For more information, contact James Hoecker at Jim@HoeckerEnergy.com or James.Hoecker@Huschblackwell.com, 540-549-0584