Competitive Transmission – Pros and Cons

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Introduction to GridLiance

- Incorporated in 2014, GridLiance is the first independent transmission company **focused on partnering with electric cooperatives, municipal utilities, joint action agencies, and irrigation districts**
  - **We are problem solvers** – we help our partners invest in transmission projects they could not pursue alone
  - We currently **own and operate nearly 600 miles of transmission** assets and related equipment in **MO, NV,** and **OK,** representing over **$140MM** in **current rate base,** with nearly **$50MM** of **planned rate base additions in development**
  - We have **long-term relationships** with partners in Kansas, Missouri, Nevada, and Oklahoma
  - Our **leadership team is experienced** and has the strategic and financial **support of Blackstone Energy Partners, L.P.**—a leading energy infrastructure investor
  - We have **highly-capable independent board members,** including Terry Boston (former CEO, PJM Interconnection) and Mike Morris (former CEO, American Electric Power)

Current Partners

Valley Electric Association, Inc.
A Touchstone Energy Cooperative

MJMEUC
Missouri Joint Municipal Electric Utility Commission

OMPA Oklahoma Municipal Power Authority

TCEC

KANSAS POWER POOL
Smart Municipal Energy

NIXA UTILITIES
WATER | SEWER | ELECTRIC
Count on us.

Wholesale Competition – a Federal Initiative

- **Wholesale Power Competition –** in 1990's the Federal Energy Regulatory Commission (FERC) opened the door to competition in wholesale generation and ordered grid owners to provide open access transmission (Order No. 888)[1]
- **Competitive Pressure Then Turned to the Grid** – Policymakers and stakeholders asked whether competitive pressures that brought down the cost of new generation could do the same for large regionally-planned transmission projects.
- **FERC Order 1000 – July 2011**
  - Requires every transmission owner join a **regional planning** group; each region create a regional transmission plan; and competition for regionally planned projects.
  - Prohibits Commission-approved tariffs and agreements to contain a **federal right of first refusal**
  - Each regional planning organization filed implementation rules – "Solution" per PJM Interconnection or "sponsor" for all others
    - **"Sponsor" best in class** – California Independent System Operator Corp. (**CAISO**) – a process undertaken in advance of Order 1000 mandate by entity that is committed to competition (Revised Transmission Planning Process, May 2010)

[1]*See Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 at 2, 25-31 (2011), *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No 100-A on Rehearing and Clarification, 39 FERC ¶ 61,132 (2012 *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No 100-B on Rehearing and Clarification141 FERC ¶ 61,044 (2012) (collectively referred to throughout as Order No. 1000)

Expansion of Competition to the Grid

- Most States Supported FERC's Order Encouraging New Entrants for Transmission
  - Illinois Commerce Commission
  - Pennsylvania Public Utilities Commission
  - Ohio Public Utilities Commission
  - California Public Utilities Commission
  - All Northeast USA States
  - Most PJM States and Organization of MISO States

- Some State Restrictions Remain
  - CPCN – In 2015, Maryland passed legislation unanimously allowing new entrants to obtain permits to construct transmission. The vast majority of states nationally do not restrict a qualified new entrant from obtaining a CPCN. **Michigan and Nebraska are 2 of 5 outlier states on this issue.**
  - Eminent Domain – In the vast majority of states, eminent domain authority for transmission/ public utility companies is able to be used once a CPCN is approved by the utility commission. **Michigan is an outlier whose laws need to be updated.**

- **Expansion of State ROFRs** since Order 1000
  - 6 states have enacted new state laws giving ROFR to incumbents. FERC Chairman Bay has publicly noted state ROFRs raise constitutional issues by discriminating against interstate commerce.

Benefits of Competitive Transmission

- Results have shown that competitive transmission can lead to:

Lower Rates
- Reward efficiency
- Transfer risk of cost overruns to developer

Greater Reliability
- Incentivize new entrants

- **Established Model** – Demonstrated by successful projects in Cal-ISO, PJM, MISO, and ERCOT's CREZ process, opening projects to new entrants

Where Transmission is Competitive, Consumers Win

- **Demonstrable savings from lower capital costs**
  - Successful proposals have been up to 25 - 50% below planning level cost estimates
  - Absent competition, final costs can overrun planning level estimates by up to 25 - 50%
- **Concrete risk reduction**
  - In nearly every case, successful proposals include binding cost containment commitments
  - Cost caps shift risk to developers from utility customers
- **Commercial creativity**
  - Developers have offered to cap other inputs to revenue requirement, including forgoing ROE incentives, capping base ROE, capping O&M expenses and others
- **Demonstrable reliability** and **construction quality** comparable to incumbents

Project Award	Planning Estimate	Cost Cap	Est. Savings
Suncrest Reactive Power (CAISO)	$50-$75 M (2014)	$42 M[1] (2015)	16-44%
Estrella Substation (CAISO)	$35-$45 M (2014)	$25 M[1] (2015)	29-44%
Delaney-Colorado River (CAISO)	$300 M (2014)	$241 M[2] (2015)	~20%
Harry Allen-Eldorado (CAISO)	$144 M (2014)	$133 M[3] (2015)	~8%
Walkemeyer-North Liberal (SPP)	$17 M (2015)	$7 M[4] (2016)	~58%
Duff-Coleman (MISO)	$60 M (2015)	$47 M[5] (2016)	~22%
Empire State Line (NYISO)	N/A	N/A	~22%[6]

Source: RTO project sponsor selection reports and agreements.

1 Binding construction cost cap covering all costs associated with the construction period, subject to adjustment for directed changes in scope, and a 5-year cap on annual O&M and A&G costs.
2 Binding capital cost cap covering all costs associated with the project, including ROE, subject to adjustment for changes in law and route.
3 Binding capital cost cap covering all costs associated with the project, including ROE, subject to adjustments only for changes in CAISO's project requirements, law, or force majeure type events.
4 Lowest capital cost cap was not selected by SPP.
5 Binding "firm rate base cap". Lowest capital cost cap of $32 M was not selected by MISO.
6 The cost estimate of the selected project bid was $181 M vs. $232 M for the incumbent utility's bid, resulting in $51 M in estimated savings.

Without Competition Cost Overruns are Common

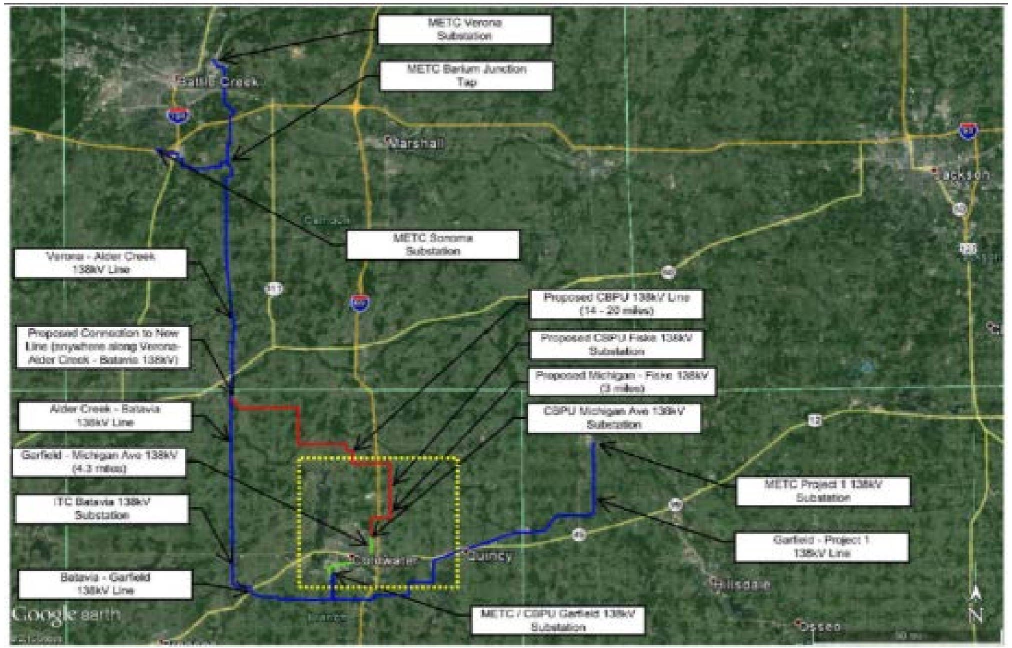
- **Utility customers bear the burden** of these cost overruns
- The table at right shows examples of cost estimates for RTO-approved projects developed outside of competitive processes
- Without consistent data from RTOs it is **hard to know the true cost overruns**

Projects	Planning Estimate[1]	Current Estimate[1]	% Overrun
CAISO Spring (non-comp. part)	$45 M	$192 M	326%
CAISO Midway-Andrew	$150 M	$414 M	176%
CAISO Estrella (non-comp. part)	$45 M	$112 M	150%
CAISO North Fresco	$190 M	$381 M	101%
CAISO Wheeler Ridge (non-comp. part)	$140 M	$250 M	79%
CAISO Lockeford-Lodi	$105 M	$171 M	63%
SPP Valliant-NW Texarkana	$131 M	$186 M	42%
MISO Huntley-Wilmarth[2]	$81 M	$103 M	27%
PJM Susquehanna-Roseland	$1,161 M	$1,450 M	25%
SPP Balanced Projects	$691 M	$835 M	21%
SPP Priority Projects[3]	$1,145 M	$1,349 M	18%
CAISO Martin Bus Extension	$129 M	$140 M	9%
MISO MVP 2011-2019	$6,573 M	$6,645 M	1%
Total	**$10,586 M**	**$12,228 M**	**13%**

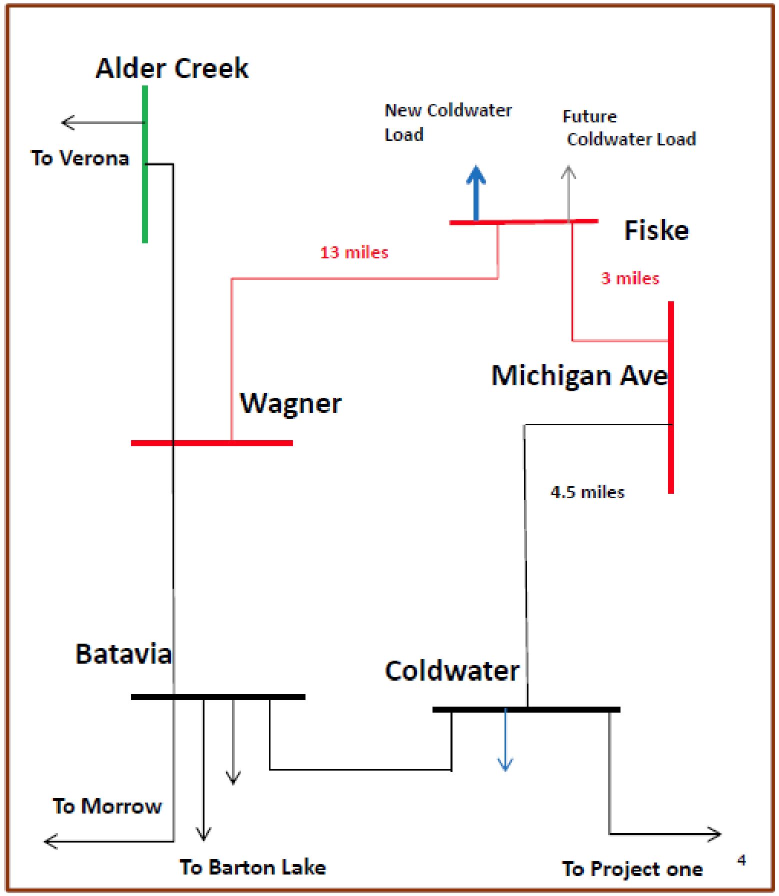
Source: RTO annual transmission expansion reports and quarterly status reports, company filings.
[1] Unless otherwise noted, costs are in nominal dollars and current estimate variances do not account for annual inflation escalation.
[2] Constant 2016 dollars. Following MN ROFR determination, MISO's Huntley-Wilmarth project was redefined and rerouted.
[3] In response to Balanced Portfolio Project cost overruns, SPP instituted controls for projects exceeding 110% of estimates.

Competition Works Outside Order 1000 - Coldwater, MI

- 138kV **radial** system serving **60 MW** in South Michigan
- Construction of a second source (17 miles) from a new MISO/ITC interconnection to serve an **additional 48 MW** for a meat packing plant, cheese manufacturing plant, and hydroponics facility
- **Competition works** but customers will save more if the rules are right
  - ITC Original proposal $65M
  - **GridLiance proposal $33M**
  - ITC final proposal $47M



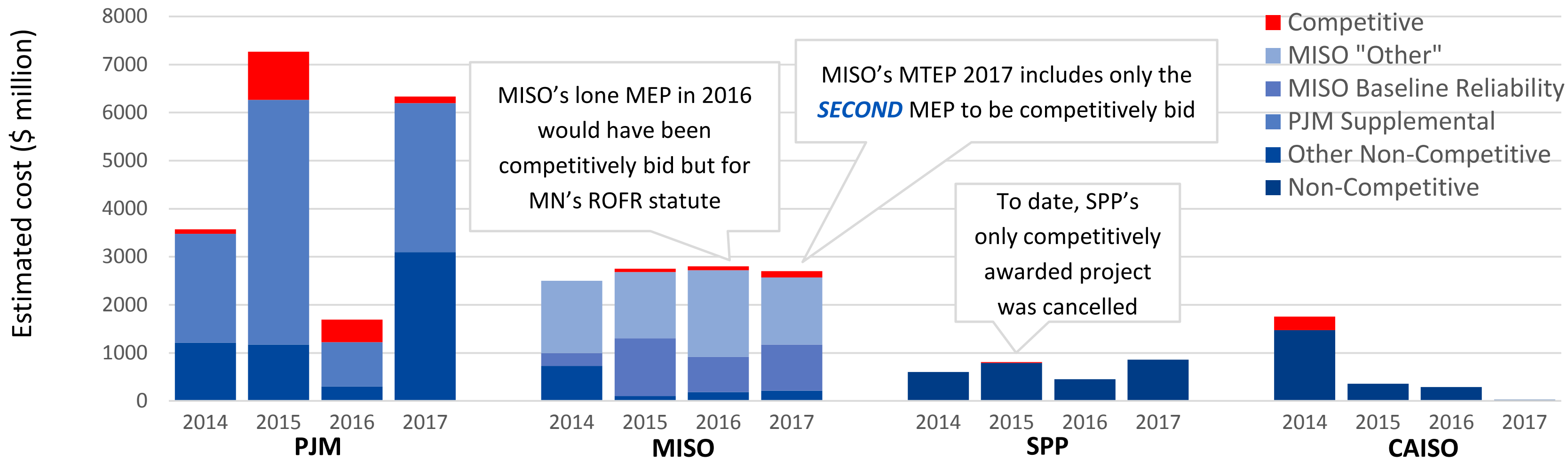
GridLiance proposed project



ITC proposed project

Order No. 1000 – Not Yet Promoting Efficient Transmission Development or Real Competition

- Across RTOs, projects are increasingly being developed outside of competition and without any meaningful oversight, sub-optimizing buildout of the system
- Unnecessary eligibility rules are artificially restricting competition for new transmission projects
  - **Categorical exclusions** enumerated in Order 1000 (*e.g.*, upgrades, State ROFRs in IN, MN, MT, ND, NE, OK, SD)
  - Significant **transmission expansion is not subject to regional cost allocation** and, therefore, subject to federal ROFRs (*e.g.*, MISO Baseline Reliability Projects, PJM Supplemental Projects)
  - Minimum voltage thresholds (*e.g.*, 345 kV for MISO MISO MEPs, 200 kV in PJM and CAISO)
- **Without reforms, customers will** continue to **pay** dramatically **more** than necessary



Source: Annual RTO transmission expansion reports.

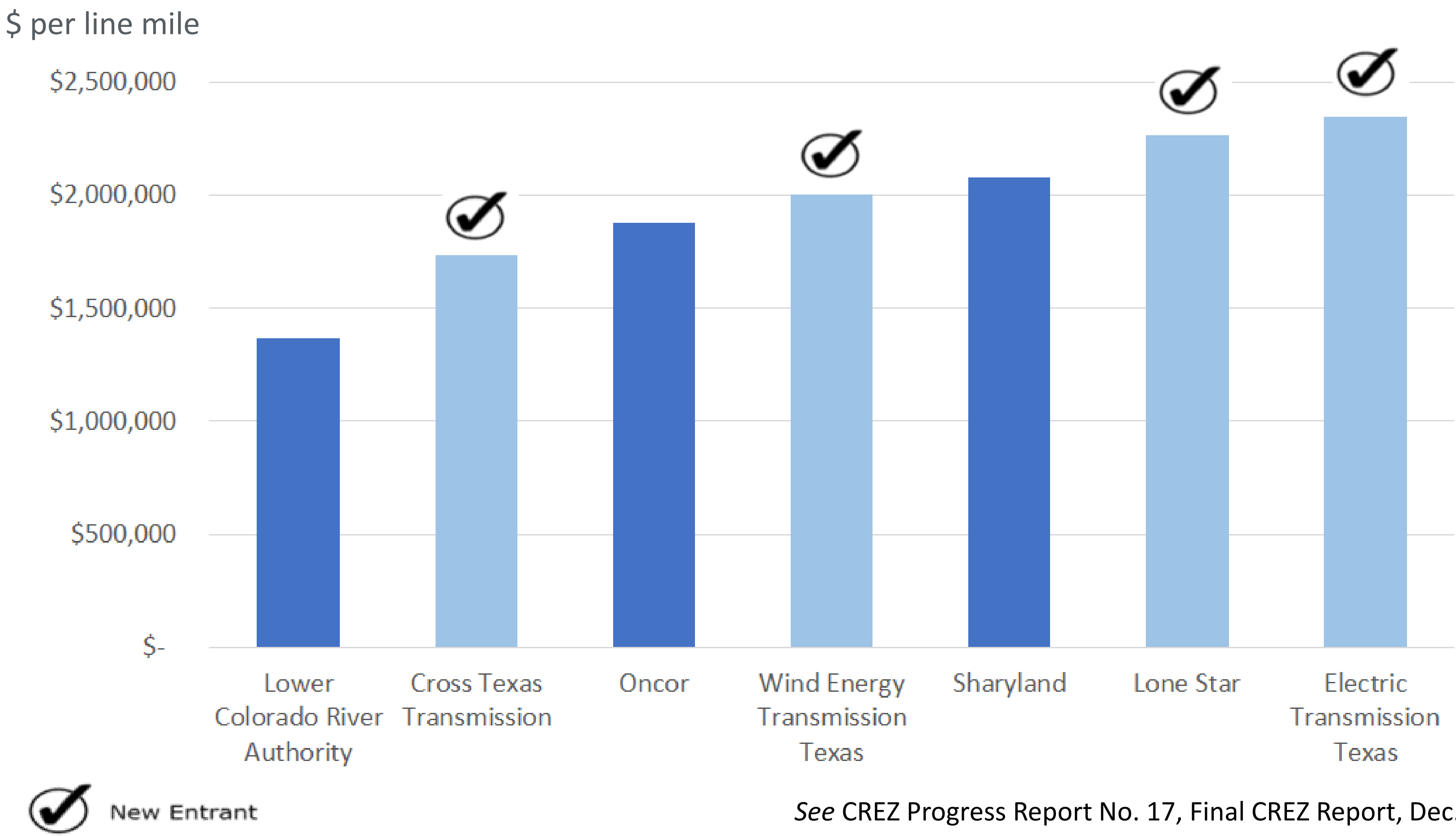
Getting the Rules Right at FERC

- **Transparency in transmission expansion costs**
  - FERC should require **RTOs** to **track and disclose construction costs** for all approved projects **by planning estimate**, interim **changes in cost,** and **final cost**, distinguishing between those that are competitive and those designated to incumbents
    - » **Documents** the **value of** transmission **competition** for electric ratepayers
    - » **Remedies unexpected consequence of forward-looking formula rates** by making RTO-planned project costs (and overruns) transparent
- **Narrow the carve-outs** granted for “immediate need reliability” projects
- **Enhance** overall RFP process t**ransparency, fairness, and scalability**
- **Greater emphasis on cost and cost caps** in developer selection

New Entrants Can Be Competitive in ERCOT

Texas CREZ lines first real opportunity – **no bids or incentives for cost caps**

- **But** real impact of bright light on costs through public reporting



See CREZ Progress Report No. 17, Final CREZ Report, Dec. 2014

Getting the Rules Right in Texas

- **Facilitate real competition in ERCOT – Eliminate ERCOT ROFR**
  - **Protocols** (not state law or regulation) that **impose a "right of first refusal"** or ROFR on all new ERCOT transmission projects
  - Wording that is **almost verbatim to "Federal ROFR"** that FERC deleted from RTO tariffs in Order 1000
  - **Protocol 3.11.4.8** gives project to owner of interconnection point (Transmission Service Provider or TSP) and if two TSPs own endpoints they share
- **Affirm legal basis for competition outside of ERCOT** (*SPS v. PUCT*)
  - TX legislature has expressly endorsed electric competition[1]
  - PUCT Commissioners, Commission Administrative Law Judges, and Third Court of Appeals have repeatedly found PUCT's authority to grant CCNs to TOUs outside of ERCOT

[1]PURA § 31.001(c) ("The wholesale electric industry … is becoming a more competitive industry that does not lend itself to traditional electric utility regulatory rules…. As a result, the public interest requires that rules … be formulated and applied to protect the public interest in a more competitive marketplace. *The development of a competitive wholesale electric market that allows for increased participation by electric utilities and certain nonutilities is in the public interest*….") (emphasis added)

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Harlingen is Broad and Not Restricted to ERCOT

- Third Court of Appeals cites PURA §§ 31.002(6), 37.056(a), and 37.154(a), all of which are not specific to ERCOT and none of which were amended by H.B. 3309
- The broad holding speaks for itself: "PURA authorizes the Commission to grant a CCN to an electric utility that provides only transmission services"
- Parties in the appeal post that the court's analysis is *narrow and restricted* to ERCOT because otherwise "serving the ERCOT power region" in PURA §37.051 would be surplusage
  - They ignore the other additions to PURA that occurred in 2009, which would be rendered meaningless if their interpretation of the law is accepted
  - PURA §§ 37.051(a), 37.053(a), and 37.055(a) were all expanded to enable not only electric utilities but also "other person(s)" to obtain CCNs, without limitation to the ERCOT area
  - Interpreting PURA §§ 37.051(d) and (e) as *clarifying* PUCT's authority given the litigation ongoing at the time gives meaning to every word of PURA's plain language.

Questions?

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