**APPROVED**

**Minutes of the Special Technical Advisory Committee (TAC) Meeting**

**ERCOT Austin – 8000 Metropolis Drive (Building E), Suite 100– Austin, Texas 78744**

**Friday, March 31, 2023 – 9:30 a.m.**

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| Attendance |  |  |
| *Members:* |  |  |
| Barnes, Bill | Reliant Energy Retail Services (Reliant) |  |
| Cochran, Seth | DC Energy |  |
| Bonskowski, Ned | Luminant Generation (Luminant) | Alt. Rep. for Ian Haley |
| Carpenter, Jeremy | Tenaska Power Services (Tenaska) |  |
| Dreyfus, Mark | City of Eastland | Via Teleconference |
| Fehrenbach, Nick | City of Dallas | Via Teleconference |
| Franklin, Russell | Garland Power and Light (GP&L) | Via Teleconference |
| Gaytan, Jose | Denton Municipal Electric (DME) | Via Teleconference |
| Goff, Eric | Residential Consumer |  |
| Gross, Blake | AEP Service Corporation (AEPSC) | Alt. Rep. for Richard Ross |
| Haley, Ian | Luminant Generation (Luminant) |  |
| Hanson, Kevin | National Grid Renewables (NG Renewables) |  |
| Harpole, Jay | APG&E | Via Teleconference |
| Helton, Bob | ENGIE | Via Teleconference |
| Jolly, Emily | Lower Colorado River Authority (LCRA) |  |
| Kee, David | CPS Energy |  |
| Kent, Garret | CMC Steel Texas (CMC Steel) | Via Teleconference |
| Lange, Clif | South Texas Electric Cooperative (STEC) |  |
| Loving, Alicia | Austin Energy |  |
| Martin, Collin | Oncor Electric Delivery (Oncor) | Via Teleconference |
| Mercado, David | CenterPoint Energy (CNP) | Via Teleconference |
| Nix, Keith | Texas-New Mexico Power (TNMP) | Via Teleconference |
| Pokharel, Nabaraj | Office of Public Utility Counsel (OPUC) |  |
| Powell, Christian | Pedernales Electric Cooperative (PEC) | Via Teleconference |
| Rich, Katie | Golden Spread Electric Cooperative (GSEC) | Alt. Rep. for Mike Wise via Teleconference |
| Ross, Richard | AEPSC | Via Teleconference |
| Sams, Bryan | Calpine Corporation (Calpine) | Via Teleconference |
| Schmitt, Jennifer | Rhythm Ops | Via Teleconference |
| Smith, Bill | Air Liquide | Via Teleconference |
| Smith, Caitlin | Jupiter Power |  |
| Surendran, Resmi | Shell Energy North America (SENA) |  |

The following proxy was assigned:

* Chris Hendrix to Jennifer Schmitt

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| *Guests:* | |  |  |
| Aldridge, Ryan | | AB Power | Via Teleconference |
| Anderson, Connor | | AB Power Advisors | Via Teleconference |
| Ansari, Ammar | | LCRA | Via Teleconference |
| Ashley, Kristy | | CES | Via Teleconference |
| Barati, Camron | | Potomac Economics | Via Teleconference |
| Bell, Brad | | Solar Proponent | Via Teleconference |
| Benson, Mariah | | PUCT | Via Teleconference |
| Bernier, Benjamin | | Mercuria | Via Teleconference |
| Berry, Danny | | LCRA | Via Teleconference |
| Bertin, Suzanne | |  | Via Teleconference |
| Bezwada, Neelima | | Potomac Economics | Via Teleconference |
| Bivens, Carrie | | Potomac Economics |  |
| Blakey, Eric | | PEC | Via Teleconference |
| Block, Laurie | | L Block Consulting, LLC | Via Teleconference |
| Boggs, Callie | | Eric Winters Goff, LLC | Via Teleconference |
| Bunch, Kevin | | EDF Trading | Via Teleconference |
| Burwen, Jason | | GridStor, LLC | Via Teleconference |
| Burke, Tom | | RWE | Via Teleconference |
| Callender, Hudson | | CPS Energy |  |
| Carter, Tim | |  | Via Teleconference |
| Claiborn-Pinto, Shawnee | | PUCT | Via Teleconference |
| Clark, Jack | | Next Era Energy | Via Teleconference |
| Clifford, Brigid | | PG Renewables | Via Teleconference |
| Coleman, Diana | | CPS Energy |  |
| Cortez, Sarai | | Trailstone Group | Via Teleconference |
| Daigneault, Ralph | | Potomac Economics | Via Teleconference |
| De La Rosa, Lewis | | Texas Reliability Entity | Via Teleconference |
| Deleon, Amanda | | Tenaska | Via Teleconference |
| DeLeon, Seth | | DME | Via Teleconference |
| Detelich, David | | CPS Energy | Via Teleconference |
| Dollar, Zachary | | PUCT | Via Teleconference |
| Donaldson, Rodica | | EDF | Via Teleconference |
| Donohoo, Ken | | APA/GU |  |
| Elsik, Alex | | Geosol Capital | Via Teleconference |
| Ghosh, Josh | | CC Renew | Via Teleconference |
| Ghoshal, Orijit | | Invenergy | Via Teleconference |
| Glotfelty, Jimmy | | PUCT | Via Teleconference |
| Gross, Blake | | AEPSC |  |
| Guermouche, Sid | | Austin Energy | Via Teleconference |
| Hall, Matthew | | Invenergy | Via Teleconference |
| Havemann, Steven | | Austin Energy | Via Teleconference |
| Headrick, Bridget | | CES | Via Teleconference |
| Henson, Martha | | Oncor | Via Teleconference |
| Holt, Blake | |  | Via Teleconference |
| Hubbard, John | | TIEC | Via Teleconference |
| Inman, Grant | | BP | Via Teleconference |
| Johnson, Stephen | | DME Power | Via Teleconference |
| Kirby, Brandon | | GEUS | Via Teleconference |
| Kopp, Casey | | Broad Reach Power | Via Teleconference |
| Koz, Brian | | Alpha Taraxia | Via Teleconference |
| Kremling, Barry | | GVEC | Via Teleconference |
| Khayat, Maribel | | CNP | Via Teleconference |
| Lacek, Mollie | | Talen Energy | Via Teleconference |
| Lasher, Warren | | Lasher Energy Consulting | Via Teleconference |
| Laughlin, Madeline Gould | | Enel | Via Teleconference |
| Lee, Jim | | CNP |  |
| Liu, Wei | | Austin Energy | Via Teleconference |
| Loo, Ivan | | Geosol Capital | Via Teleconference |
| Lotter, Eric | | GridMonitor | Via Teleconference |
| Lyons, Glen | |  | Via Teleconference |
| Macaraeg. Tad | | Stem | Via Teleconference |
| Mayers, Sharon | | Worley | Via Teleconference |
| McClellan, Suzi | | Good Company | Via Teleconference |
| McIntyre, Ken | | Plus Power | Via Teleconference |
| McKeever, Debbie | | Oncor | Via Teleconference |
| McWyman, Constance | | AEP | Via Teleconference |
| Mercado, David | | CNP | Via Teleconference |
| Miller, Alexandra | | EDF | Via Teleconference |
| Mock, Christopher | | BP | Via Teleconference |
| Moeller, Jason | | LCRA | Via Teleconference |
| Moss, Steven | | RWE | Via Teleconference |
| Noyes, Theresa | | LCRA |  |
| Nguyen, Andy | | Constellation Energy Generation | Via Teleconference |
| Okenfuss, James | | Savion Energy | Via Teleconference |
| Oliver, Jon | | PUCT | Via Teleconference |
| Orr, Rob | | Lone Star Transmission | Via Teleconference |
| Pfefferle, Ryan | | Oxy | Via Teleconference |
| Pietrucha, Doug | | Texas Advanced Energy | Via Teleconference |
| Pyka, Greg | | Schneider Engineering | Via Teleconference |
| Rao, Anish | | Apex Clean Energy | Via Teleconference |
| Richmond, Michele | | TCPA | Via Teleconference |
| Ritch, John | | NextEra Energy |  |
| Rosenthal, Peter | | CCI | Via Teleconference |
| Roybal, Tony | | DME | Via Teleconference |
| Ryall, Jean | | APA |  |
| Sager, Brenden | | Austin Energy | Via Teleconference |
| Scott, Kathy | | CNP | Via Teleconference |
| Shaffer, Jarred | | Office of the Texas Governor | Via Teleconference |
| Showalter, Dana | | Plus Power | Via Teleconference |
| Sickafoose, Lauren | | EDF | Via Teleconference |
| Siddiqi, Shams | | Crescent Power Consulting |  |
| Sisk, Linden | |  | Via Teleconference |
| Smith, Chase | | Southern Power | Via Teleconference |
| Snyder, Bill | | AEP | Via Teleconference |
| Souter, Mark | | Sun Chase Power | Via Teleconference |
| Stanton, Spencer | | Orsted | Via Teleconference |
| Stephenson, Zach | | Texas Electric Cooperatives |  |
| Teng, Shuye | | LCRA | Via Teleconference |
| Thompson, Bobby | | LCRA | Via Teleconference |
| True, Roy | | ACES | Via Teleconference |
| Turner, Lucas | | STEC | Via Teleconference |
| Varnell, John | | Tenaska | Via Teleconference |
| Velasquez, Ivan | | Oncor | Via Teleconference |
| Walcavich, Colin | | NG Renewables | Via Teleconference |
| Walker, Floyd | | PUCT | Via Teleconference |
| Wall, Perrin | | CNP | Via Teleconference |
| Watson, Mark | |  | Via Teleconference |
| Wittmeyer, Bob | | Longhorn Power |  |
| Wu, Tiffany | | PUCT | Via Teleconference |
| Xie, Fei | | Austin Energy | Via Teleconference |
| Yu, Joel | | Enchanted Rock | Via Teleconference |
| Zang, Hailing | | TC Energy | Via Teleconference |
| Zarnikau, Jay | | University of Texas at Austin | Via Teleconference |
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| *ERCOT Staff:* |  | |  |
| Albracht, Brittney |  | |  |
| Anderson, Troy |  | |  |
| Arth, Matt |  | | Via Teleconference |
| Azeredo, Chris |  | | Via Teleconference |
| Billo, Jeff |  | |  |
| Boren, Ann |  | |  |
| Chen, Jian |  | | Via Teleconference |
| Clifton, Suzy |  | |  |
| Dovalina, Julio |  | | Via Teleconference |
| Du, Pengwei |  | | Via Teleconference |
| Garcia, Freddy |  | | Via Teleconference |
| Gonzalez, Ino |  | | Via Teleconference |
| Green, Alex |  | | Via Teleconference |
| Holden, Curry |  | | Via Teleconference |
| Khodabakhsh, Fred |  | | Via Teleconference |
| King, Ryan |  | |  |
| Lee, Alex |  | | Via Teleconference |
| Magarinos, Marcelo |  | | Via Teleconference |
| Maggio, Dave |  | |  |
| Mantena, Dan |  | | Via Teleconference |
| McGuire, Joshua |  | | Via Teleconference |
| Miller, Megan |  | | Via Teleconference |
| Ögelman, Kenan |  | |  |
| Patterson, Mark |  | | Via Teleconference |
| Pedigo, Jake |  | | Via Teleconference |
| Phillips, Cory |  | |  |
| Schmidt, Matthew |  | | Via Teleconference |
| Shaw, Pamela |  | | Via Teleconference |
| Thomas, Shane |  | | Via Teleconference |
| Troublefield, Jordan |  | |  |
| Wasik-Gutierrez, Erin |  | |  |

*Unless otherwise indicated, all Market Segments participated in the votes.*

Clif Lange called the March 31, 2023 meeting to order at 9:30 a.m.

Antitrust Admonition

Mr. Lange directed attention to the displayed Antitrust Admonition and noted that the Antitrust Guidelines are available for review on the ERCOT website.

Credit Finance Sub Group (CFSG) (see Key Documents)[[1]](#footnote-2)

*Confirmation of CFSG Members*

Brenden Sager presented designated CFSG Members, and requested TAC approval.

**Bill Barnes moved to approve the CFSG Membership as revised by TAC. Ian Haley seconded the motion. The motion carried unanimously.** *(Please see ballot posted with Key Documents.)*

Mr. Lange stated that CFSG leadership would be considered at the April 25, 2023 TAC meeting.

Phase 2 Bridging Options (see Key Documents)

*ERCOT Recommendation*

Kenan Ögelman presented the ERCOT recommendation for a multi-step floor to On-Line Operating Reserve Demand Curve (ORDC) price adders as the Phase 2 Market Redesign bridge solution; noted that ERCOT had modified the proposal following the March 3 and March 15, 2023 Phase 2 Bridging Options Workshops and Stakeholder comments received; and reviewed the ORDC, revenue, and fuel-mix analyses. Mr. Ögelman summarized the benefits of this solution, including that it aligns with the Performance Credit Mechanism (PCM), targets the right resources at the right time, and helps address the Reliability Unit Commitment (RUC) issues. Mr. Ögelman responded to Stakeholder questions and concerns, stated that if this solution is implemented ERCOT would continue to evaluate it, offered to provide TAC additional analysis when observable functional data is available, and commented that any future changes would be at the direction of the Public Utility Commission of Texas (PUCT).

*TAC Recommendation*

Market Participants debated the pros and cons of the six proposed bridge solutions developed at the March 3 and March 15, 2023 Phase 2 Bridging Options Workshops and from Stakeholder comments; discussed the ERCOT recommendation; and proposed a straw poll to maximize efficiencies.

Mr. Lange conducted a straw poll to remove the following proposed solutions from consideration:

* Basic, manual implementation of PCM
* Backstop Reserve Service
* Contracts for Capacity

Market Participants expressed support for publishing indicative PCM values, but noted that it would not meet the requirements of a bridging solution due to ongoing regulatory activity and recognizing that it would only provide indicative prices and not direct revenues.

Market Participants discussed the enhancements to ORDC as recommended by ERCOT and two proposed modifications, an alternate multi-step floor or removing the proposed floors and instead determining a level of Value-of-Lost-Load (VOLL) decoupled from the System-Wide Offer Cap (SWCAP). Mr. Lange requested ERCOT provide additional back-cast analysis on potential modifications to ORDC that would yield similar annual revenues as ERCOT’s recommended bridging option at the April 10, 2023 Special TAC meeting. Some members of the Consumer segment expressed support for procuring additional Ancillary Services, including exploring Dispatchable Reliability Reserve Service (DRRS) as a new Ancillary Service procured by ERCOT. Clif Lange encouraged Market Participants to provide pros and cons of the solutions and specific reasons to support a solution as the TAC recommendation, for consideration at the March 31, 2023 Special TAC meeting.

*Discussion on TAC Communication to Reliability and Markets Committee*

Mr. Lange reminded Market Participants of the deadline to present the TAC recommendation on the bridging solutions for consideration at the April 17, 2023 Reliability and Markets Committee meeting and April 18, 2023 Board of Directors meeting.

Other Business

Mr. Lange noted the April 10, 2023 Special TAC meeting would be Webex only.

Mr. Lange adjourned the March 31, 2023 TAC meeting at 12:55 p.m.

1. Key Documents referenced in these minutes may be accessed on the ERCOT website at:

   <https://www.ercot.com/calendar/03312023-Special-TAC-Meeting> [↑](#footnote-ref-2)