

Long Term Regional Transmission Planning (LTRTP) Workshop WebEx July 21, 2023 9:00 a.m. – 12:00 p.m. EPT

Administration (9:00-9:05)

1. Ms. Bhavana Keshavamurthy and Ms. Julia Spatafore provided a welcome, announcements and review of the Anti-trust, Code of Conduct, and Public Meetings/Media Participation Guidelines.

Process and Work Plan (9:05-9:30)

- 2. Ms. Bhavana Keshavamurthy previewed the proceedings of the day.
- 3. Mr. David Souder provided opening remarks to kick off the LTRTP workshop series.

Education (9:30-12:00)

- 4. Mr. Asanga Perera and Mr. Jonathan Kern reviewed the existing PJM long term planning process and discuss the need for updates to the assumptions used in the RTEP analysis.
- 5. Ms. Jessica Lynch reviewed the existing long term/scenario language from the Operating Agreement
- 6. Mr. Emmanuele Bobbio and Mr. Michael Herman provided an update to the long term planning framework.

Informational Items

7. Enhanced 15-Year Long Term Planning (Master Plan) White Paper

| Future Meeting Dates | and Materials | | | Materials Published |
|-----------------------------|------------------|--------------|--------------------------------------|---------------------------|
| Date | Time | | Location | Materials Published |
| Tuesday, August 22, 2023 | 9:00 a.m. – 12:0 | 00 p.m. EPT | Conference & Training Center / Webex | Thursday, August 17, 2023 |
| Attendance | | | | |
| Last Name | First Name | Company | | Sector |
| Keshavamurthy (Facilitator) | Bhavana | PJM Interco | nnection | None |
| Spatafore (Secretary) | Julia | PJM Interco | nnection | None |
| Abdulsalam | Sami | PJM Interco | nnection | None |
| Ali | Shadab | NextEra En | ergy Transmission, LLC | Other Supplier |
| Anders | David | PJM Interco | nnection | None |
| Anderson | Jared | S&P Global | Inc. | None |
| Arsalan | Qamar | Public Servi | ce Electric and Gas Company | Transmission Owner |
| Bailey | Ronnie | Dominion V | irginia Power | Transmission Owner |
| Bainbridge | Thomas | American T | ransmission Systems, Inc. | Transmission Owner |

| Last Name | First Name | Company | Sector |
|-------------|------------|--|----------------------|
| Barker | Jason | Vitol Inc. | Generation Owner |
| Bautista | Alejandro | Exelon Business Services Company, LLC | Transmission Owner |
| Berner | Aaron | PJM Interconnection | None |
| Bernstein | Matthew | PJM Interconnection | None |
| Bhana | Rajesh | Exelon Business Services Company, LLC | Transmission Owner |
| Bobbio | Emmanuele | PJM Interconnection | None |
| Burger | Chaz | Mid-Atlantic Interstate Transmission, LLC | Transmission Owner |
| Callen | Zachary | Illinios Commerce Commission | None |
| Carmean | Gregory | Organization of PJM States, Inc. | None |
| Carroll | Rebecca | PJM Interconnection | None |
| Catenacci | Glenn | Public Service Electric and Gas Company | Transmission Owner |
| Cebrik | Jeffrey | Avangrid Networks, Inc. | Other Supplier |
| Chamberlain | Kevin | Commonwealth Edison Company | Transmission Owner |
| Chang | Sean | Shell Energy North America (US), L.P. | Other Supplier |
| Choi | Wonbae | Algonquin Energy Services Inc. | Generation Owner |
| Christopher | Mahila | Public Utilities Commission of Ohio | None |
| Clifford | Brigid | Pine Gate Mid-Atlantic, LLC | Generation Owner |
| Cobb | Patrick | PJM Interconnection | None |
| Cox | Jason | EQ Energy Advisors, LLC | None |
| Crim | Jacob | NextEra Energy Transmission, LLC | Other Supplier |
| Davis | David | Apex Clean Energy Holdings, LLC | None |
| Davis | James | Dominion Energy Generation Marketing, Inc. | Generation Owner |
| DeLosa | Joe | The Brattle Group, Inc. | None |
| Denby | Brett | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Dolan | Ryan | Electric Power Engineers | None |
| Dolan | Ryan | NextEra Energy Transmission, LLC | Other Supplier |
| Domian | Christin | Duquesne Light Company | Transmission Owner |
| Downs | Jere | PJM Interconnection | None |
| Du | Yuan | Virginia Electric & Power Company | Transmission Owner |
| Dugan | Chuck | East Kentucky Power Cooperative, Inc. | Transmission Owner |
| Dumitriu | Nicolae | PJM Interconnection | None |
| Eakins | Douglas | Commonwealth Edison Company | Transmission Owner |
| fan | zhenyu | PJM Interconnection | None |
| Filomena | Guy | Customized Energy Solutions, Ltd. | None |
| Fink | Regan | Pine Gate Mid-Atlantic, LLC | Generation Owner |
| Fink | Sari | American Wind Energy Association | None |
| Foladare | Kenneth | Geenex Solar LLC | Other Supplier |

| Last Name | First Name | Company | Sector |
|---------------|------------|--|----------------------|
| Foster Cronin | Denise | East Kentucky Power Cooperative, Inc. | Transmission Owner |
| Gates | Jill | PJM Interconnection | None |
| Ghosh | Abhishek | Cypress Creek Renewables, LLC | Generation Owner |
| Glazer | Craig | PJM Interconnection | None |
| Glazer | Grant | MN8 Energy Operating Company LLC | None |
| Gledhill | Andrew | PJM Interconnection | None |
| Gordon | Jonathan | Advanced Energy Economy | None |
| Grady | Alison | PECO Energy Company | Transmission Owner |
| Grieve | Andrew | Pine Gate Mid-Atlantic, LLC | Generation Owner |
| Guidi | Nicholas | Southern Environmental Law Center | None |
| Gunn | Garan | Public Service Electric and Gas Company | Transmission Owner |
| Guntle | Vince | American PowerNet Management, L.P. | End-Use Customer |
| Haas | Howard | Monitoring Analytics | None |
| Hallett | Brian | ReliabilityFirst | None |
| Hannah | Kyle | Virginia Electric & Power Company | Transmission Owner |
| Hanser | Erik | Michigan Public Service Commission | None |
| Hastings | David | PJM Committee Voting Generic Account | Other Supplier |
| Hedayati | Mojgan | PJM Interconnection | None |
| Heinle | Frederick | Dynegy Marketing and Trade, LLC | Generation Owner |
| Helm | Gary | PJM Interconnection | None |
| Hepplewhite | Peter | Wrigley Capital LLC | Other Supplier |
| Herel | Suzanne | PJM Interconnection | None |
| Herling | Steven | Herling Power Grid Consulting, Inc. | None |
| Herman | Michael | PJM Interconnection | None |
| Hoatson | Tom | West Deptford Energy, LLC | Generation Owner |
| Hohenshilt | Jennifer | Talen Energy Marketing, LLC | Generation Owner |
| Holdbrook | Ruth | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Holliday | Randy | AEP Appalachian Transmission Company, Inc. | Transmission Owner |
| Horger | Tim | PJM Interconnection | None |
| Horning | Lynn Marie | American Municipal Power, Inc. | Electric Distributor |
| Horstmann | John | Dayton Power & Light Company (The) | Transmission Owner |
| Hoshmand | Mojtaba | PJM Interconnection | None |
| Hozempa | Lawrence | American Transmission Systems, Inc. | Transmission Owner |
| Hugee | Jacqulynn | Dominion Virginia Power | Transmission Owner |
| Huntoon | Stephen | Chesapeake Transmission LLC | Other Supplier |
| Hutt | Daniel | Public Service Electric and Gas Company | Transmission Owner |
| Jacobs | Mike | Union of Concerned Scientists | None |

| Last Name | First Name | Company | Sector |
|-------------|------------|--|--------------------|
| Janicki | Diane | Boston Energy Trading and Marketing LLC | Other Supplier |
| Jardot | Gina | NRG Curtailment Solutions, Inc. | Other Supplier |
| Johnson | Carl | Customized Energy Solutions, Ltd. | None |
| Johnson | Michael | Oriden LLC | None |
| Johnston | David | Indiana Utility Regulatory Commission | None |
| Jones | Scott | Indiana Office of Utility Consumer Counselor (IN OUCC) | End-Use Customer |
| Kamruzzaman | MD | EDF Renewable Development, Inc. | None |
| Kaplan | Donald | K&L Gates | None |
| Kapoor | Ashish | Piedmont Environmental Council | None |
| Kaslavage | Brian | UGI Utilities, Inc. | Transmission Owner |
| Kelly | Stephen | Brookfield Renewable Trading and Marketing LP (BSMH) | Other Supplier |
| Kent | Janessa | Duquesne Light Company | Transmission Owner |
| Khadr | Esam | Public Service Electric and Gas Company | Transmission Owner |
| Kilgallen | Kevin | Avangrid Renewables, LLC | Generation Owner |
| Kim | Caleb | Dayton Power & Light Company (The) | Transmission Owner |
| Kirk | Steven | NextEra Energy Marketing, LLC | Other Supplier |
| Koehler | Nicolas | Appalachian Power Company (AEP Transmission) | Transmission Owner |
| Kogut | George | New York Power Authority | Other Supplier |
| Kuchan | Meagan | Dayton Power & Light Company (The) | Transmission Owner |
| Laios | Takis | Appalachian Power Company (AEP Transmission) | Transmission Owner |
| Lawson | Ryen | Dominion Virginia Power | Transmission Owner |
| Lawton | Nick | Earthjustice | None |
| Leeming | Thomas | Exelon Business Services Company, LLC | Transmission Owner |
| Lin | Nathan | Virginia Electric & Power Company | Transmission Owner |
| Lockwood | Craig | Appalachian Power Company (AEP Transmission) | Transmission Owner |
| Lockwood | Daniel | PJM Interconnection | None |
| Lyakhovich | Leonid | Public Service Electric and Gas Company | Transmission Owner |
| Mahoor | Mohsen | Virginia Electric & Power Company | Transmission Owner |
| Maucher | Andrea | Delaware Division of the Public Advocate | End-Use Customer |
| McClelland | Maura | Public Utilities Commission of Ohio | None |
| McCormick | Katharine | Illinois Commerce Commission | None |
| McDewell | Christian | Pennsylvania Public Utility Commission | None |
| McGill | Susan | PJM Interconnection | None |
| McNeil | Justin | Kentucky Public Service Commission | None |
| McNicholas | Daniel | Nautilus Power, LLC | Generation Owner |
| Midgley | Sharon | Exelon Business Services Company, LLC | Transmission Owner |
| Moff | Justin | American Transmission Systems, Inc. | Transmission Owner |

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|-------------|-------------|--|----------------------|
| Mooney | Molly | PJM Interconnection | None |
| Mulvaney | Katie | RMI | None |
| Murteira | Ana | Public Service Electric and Gas Company | Transmission Owner |
| Nadel | Steven | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Nagurney | John | Public Service Electric and Gas Company | Transmission Owner |
| Nareshkumar | Koushy | Potomac Electric Power Company | Electric Distributor |
| Nekolny | Christopher | Exelon Business Services Company, LLC | Transmission Owner |
| Ng | Perry | PJM Interconnection | None |
| Noel Jeune | Reynaldo | Orsted Onshore North America, LLC | Generation Owner |
| Ondayko | Brock | AEP Energy Partners, Inc. (AEP Gen Resources) | Transmission Owner |
| Orphanides | Lindsay | PPL Electric Utilities Corp. dba PPL Utilities (LSE) | Transmission Owner |
| Parrot | Sarah | Public Utilities Commission of Ohio | None |
| Patel | Komal | Bitter Ridge Wind Farm, LLC | Generation Owner |
| Pham | Bao | Lincoln Generating Facility, LLC | Generation Owner |
| Picardi | Matthew | Shell Energy North America (US), L.P. | Other Supplier |
| Pierpoint | Thomas | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Porter | John | PPL Electric Utilities Corp. dba PPL Utilities (LSE) | Transmission Owner |
| Prokop | Brenda | Silver Run Electric, LLC | Transmission Owner |
| Rao | Anish | Apex Clean Energy Holdings, LLC | None |
| Rasmussen | Jay | Duke Energy Business Services LLC | Transmission Owner |
| Razze | Scott | Potomac Electric Power Company | Electric Distributor |
| Reagan | Ryann | New Jersey Board of Public Utilities | None |
| Richards | Wade | Apex Clean Energy Holdings, LLC | None |
| Roach | Temujin | EDF Renewable Development, Inc. | None |
| Roberts | Casey | Sierra Club | None |
| Robison | Michael | American Transmission Systems, Inc. | Transmission Owner |
| Rumsey | Amanda | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Rutigliano | Tom | Natural Resources Defense Council | None |
| Samuel | Allison | Virginia State Corporation Commission | None |
| Scheirer | Alexandra | PJM Interconnection | None |
| Scherer | Paul | Commonwealth Edison Company | Transmission Owner |
| Schleicher | David | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Schmidt | Thomas | Buckeye Power, Inc. | Electric Distributor |
| Schreim | Morris | MD PSC | None |
| Scott | Hugh | Baltimore Gas and Electric Company (TO) | Transmission Owner |
| Segner | Sharon | Silver Run Electric, LLC | Transmission Owner |
| Shaarbafi | Karim | PJM Interconnection | None |

| Last Name | First Name | Company | Sector |
|------------|------------|---|----------------------|
| Shah | Pulin | PECO Energy Company | Transmission Owner |
| shegarfi | roozbeh | Constellation Energy Generation, LLC (NEV_XLON) | Generation Owner |
| Shi | Ally | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Singh | Harliv | Invenergy, LLC | Generation Owner |
| Sloan | Ben | Organization of PJM States, Inc. | None |
| Snyder | David | PJM Interconnection | None |
| Sparks | Bridget | sPower Development Company, LLC | None |
| Stearney | Ben | ACES | None |
| Steinkuhl | Steve | Duke Energy Business Services LLC | Transmission Owner |
| Stern | Alexander | Exelon Business Services Company, LLC | Transmission Owner |
| Stolz | Chris | Pine Gate Mid-Atlantic, LLC | Generation Owner |
| Stuchell | Jeff | American Transmission Systems, Inc. | Transmission Owner |
| Sun | Haibin | Exelon Business Services Company, LLC | Transmission Owner |
| Svenson | Heather | Public Service Electric and Gas Company | Transmission Owner |
| Sweeney | Rory | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Sweeney | Rory | Power Prose, Inc. | None |
| Taylor | Miles | Northern Indiana Public Service Company | Other Supplier |
| Taylor | Robert | Invenergy, LLC | Generation Owner |
| Tekle | Zelalem | Bath County Energy, LLC | Generation Owner |
| THOMAS | AMBER | Exelon Business Services Company, LLC | Transmission Owner |
| Торро | Shilpa | 174 Power Global | None |
| Tubridy | Meg | Rockland Electric Company | Transmission Owner |
| Uddin | Shahab | Old Dominion Electric Cooperative | Electric Distributor |
| Unger | Matthew | State Corporation Commission (Commonwealth of Virginia) | None |
| VanBlargan | Bryna | Sabinsville SunPower, LLC | None |
| Vaughan | Evan | MAREC Action | None |
| Wagner | Emily | Galehead Development | None |
| Walker | Preston | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Wallace | Colleen | Virginia Electric & Power Company | Transmission Owner |
| Wand | David | New Jersey Division of Rate Counsel | End-Use Customer |
| Wayner | Claire | RMI | None |
| Webb | Becky | Exelon Business Services Company, LLC | Transmission Owner |
| Wharton | Matthew | PJM Interconnection | None |
| Whitehead | Jeffrey | GT Power Group | None |
| Williams | Eric | AEP Appalachian Transmission Company, Inc. | Transmission Owner |
| Wilson | James | Wilson Economics | None |
| Wimer | Stephanie | Pennsylvania Public Utility Commission | None |

| Last Name | First Name | Company | Sector |
|-------------|-------------|---|--------------------|
| Yasutake | Sarah | Jersey Green Energy LLC | Other Supplier |
| Yochelson | Cheri | Dominion Virginia Power | Transmission Owner |
| Yoho | Trey | American Transmission Systems, Inc. | Transmission Owner |
| Young | Brandon | Public Service Electric and Gas Company | Transmission Owner |
| Yovanovich | Laura | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Zhou | Ming | DXT Commodities North America Inc. | Other Supplier |
| Zhou | Zhangxin | Virginia Electric & Power Company | Transmission Owner |
| Mohler | Tina | PJM Interconnection | None |
| Caven | Augustine | PJM Interconnection | None |
| Qiu | Wenzheng | PJM Interconnection | None |
| Bhat | Ashwini | PJM Interconnection | None |
| Mauroschadt | Erich | PJM Interconnection | None |
| Hsia | Eric | PJM Interconnection | None |
| Widom | Stu | PJM Interconnection | None |
| Souder | Dave | PJM Interconnection | None |
| Robinson | Evelyn | PJM Interconnection | None |
| D'Antonio | Phil | PJM Interconnection | None |
| Wu | Mia | PJM Interconnection | None |
| Сгоор | Danielle | PJM Interconnection | None |
| Kshatriya | Niraj | PJM Interconnection | None |
| Rohrbach | John | Aces Power Marketing | None |
| Zoeller | Christopher | Public Utilities Commission of Ohio | None |
| Selick | Sam | Customized Energy Solutions, Ltd. | None |
| Ericson | Christine | Illinios Commerce Commission | None |
| Sajja | Pavan | Linea Energy LLC | None |
| Sammartino | Michael | MD PSC | None |
| Summers | Clara | Illinois Citizen Utility Board | End-Use Customer |
| Davies | Steve | Indiana Utility Regulatory Commission | None |
| Sussler | Philip | MD PSC | None |
| Apostolou | Nick | New Jersey Board of Public Utilities | None |
| Rode | Advait | Michigan Public Service Commission | None |
| Circelli | Roseanne | Public Service Electric and Gas Company | Transmission Owner |
| Hayes | Christina | Americans for a Clean Energy Grid | None |
| Poulos | Greg | CAPS | None |
| Schmitt | Catherine | Public Service Electric and Gas Company | Transmission Owner |
| Rettig | Kacie | Rockland Electric Company | Transmission Owner |
| Tasnim | Samia | Public Service Electric and Gas Company | Transmission Owner |
| | | | |

Last Name First Name Company Sector Transmission Owner Percarpio Nick Public Service Electric and Gas Company Exelon Business Services Company, LLC Kwok Jordan Transmission Owner Holzbaur New Jersey Board of Public Utilities Patrick None Ochsenhirt Virginia State Corporation Commission Fred None Avangrid Renewables, LLC Generation Owner theyer thomas VanOrder Pennsylvania Public Utility Commission Jordan None Strate Ben Constellation Energy Services, Inc. None aslam nabeel Public Service Electric and Gas Company Transmission Owner Lojek American Transmission Systems, Inc. Transmission Owner Jacquelyn New Jersey Board of Public Utilities Brown David None

Author: Julia Spatafore

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