# Interconnection Process Reform Task Force MC Webinar Update

July 26, 2021

#### **Issue Summary**

Interconnection New Service requests have drastically increased over the past few years. The Interconnection Process Reform Task Force (IPRTF) will discuss challenges related to the interconnection process and look for opportunities to improve the process via the Consensus Based Issue Resolution (CBIR) process.

Problem Statement Issue Charge

Problem Statement/Issue Charge approved at Planning Committee on April 6, 2021

Number of meetings: 3

#### 1. June 29, 2021

During the third meeting, an educational presentation was provided on the Interim Interconnection Service Agreement to help ensure everyone understood its use. The PJM team provided details for the solution options of their proposal they had completed. Additional design components were also provided at the meeting. The CBIR matrix now contains 98 design components.

The next meeting is scheduled for July 19, 2021. The PJM team will provide details for the remainder of their solution options. The group has been tasked with using the gathered design components to begin crafting their desired solution options. The participants were also asked to work with others that may share the same interests to help consolidate the proposals.

## **Appendix I: Problem Statement Matrix**

The current Problem Statement Matrix is located <u>here.</u>

### **Appendix II: Stakeholder Participation**

| Last Name | First Name | Company                               | Sector       |
|-----------|------------|---------------------------------------|--------------|
| Abed      | Abbas      | Innergex Renewable USA LLC            | Generation   |
|           |            |                                       | Owner        |
| Adams     | Darrin     | East Kentucky Power Cooperative, Inc. | Transmission |
|           |            |                                       | Owner        |

| Adams                     | Michael       | Public Service Electric & Gas Company          | Transmission<br>Owner |
|---------------------------|---------------|--|-----------------------|
| Ahmed                     | Hamad         | PJM Interconnection, LLC                       | None                  |
| Ainspan                   | Malcolm       | Energy Curtailment Specialists, Inc.           | Other Supplier        |
| Ali                       | Shadab        | PPL Electric Utilities Corp. dba PPL Utilities | Transmission<br>Owner |
| Anand                     | Gangadharan   | NOVI Energy LLC                                |                       |
| Anders                    | David         | PJM Interconnection, LLC                       | None                  |
| Arsalan                   | Qamar         | Public Service Electric & Gas Company          | Transmission<br>Owner |
| Awasthi                   | Shekhar       | PJM Interconnection, LLC                       | None                  |
| Barker                    | Jason         | Exelon Business Services Company, LLC          | Transmission<br>Owner |
| Bautista                  | Alejandro     | PJM Interconnection, LLC                       | None                  |
| Berger                    | Stephen       | PJM Interconnection, LLC                       | None                  |
| Berner                    | Aaron         | PJM Interconnection, LLC                       | None                  |
| Bernstein                 | Matthew       | PJM Interconnection, LLC                       | None                  |
| Berton                    | Tyler         | AEP Appalachian Transmission Company, Inc.     | Transmission<br>Owner |
| Bommareddy                | Chandana      | TRC Solutions                                  | None                  |
| Borgatti                  | Michael       | Gabel and Associates                           | None                  |
| Brodbeck                  | John          | EDP Renewables North America, LLC              | Generation<br>Owner   |
| Bruce                     | Susan         | McNees Wallace & Nurick LLC                    | None                  |
| Callen                    | Zachary (Zac) | Illinios Commerce Commission                   | None                  |
| Canter                    | David         | AEP Appalachian Transmission Company, Inc.     | Transmission<br>Owner |
| Carmean                   | Gregory       | OPSI   | None                  |
| Cham                      | Edrissa       | Tradewind Energy, Inc.                         | None                  |
| Chang                     | Sean          | Shell Energy North America (US), L.P.          | Other Supplier        |
| Chilukuri                 | Kalyan        | PSC Consulting                                 | None                  |
| Chmielewski               | Brian         | PJM Interconnection, LLC                       | None                  |
| Chocarro<br>Aguirrebengoa | lker          | E.ON Climate & Renewables North America, Inc.  | Generation<br>Owner   |
| Choi                      | Wonbae        | Samsung  | None                  |
| Christopher               | Mahila        | Public Utilities Commission of Ohio (The)      | None                  |
| Circelli                  | Roseanne      | Public Service Electric & Gas Company          | Transmission<br>Owner |
| Clark                     | Casey         | Diode Ventures                                 | None                  |
| Connell                   | Jason         | PJM Interconnection, LLC                       | None                  |
| Contino                   | Jarrett       | EDP Renewables North America, LLC              | Generation<br>Owner   |
| Copeland                  | Doug          | EDF Trading North America, LLC                 | Other Supplier        |
| Crawford                  | Byron         | Amazon Energy LLC                              | Other Supplier        |
| Curtis                    | Kenneth       | Drilling Info, Inc.                            | None                  |
| Cusick                    | Kerinia       | Center for Renewables Integration              | None                  |
| Dada                      | Noorgul       | PJM Interconnection, LLC                       | None                  |
| Dadourian                 | John          | Monitoring Analytics, LLC                      | None                  |

| Dale          | Douglas              | PECO Energy Company                            | Transmission<br>Owner |
|---------------|----------------------|--|-----------------------|
| D'Alessandris | Lou                  | FirstEnergy Corporation                        | Transmission          |
| Davis         | Elizabeth<br>(Becky) | PJM Interconnection, LLC                       | None                  |
| Davis         | James (Jim)          | Dominion Energy Generation Marketing, Inc.     | Generation<br>Owner   |
| Delaney       | Liz                  | Environmental Defense Fund                     | None                  |
| DeLosa        | Joseph               | DE Public Service Commission                   | None                  |
| Denby         | Brett                | NOVEC  | None                  |
| Dixit         | Anuj                 | Recurrent Energy, LLC                          | Other Supplier        |
| Domian        | Christin             | Duquesne Light Company                         | Transmission<br>Owner |
| Doroshkin     | Nelli                | CP Energy Marketing (US) Inc.                  | Other Supplier        |
| Doud          | Michael              | Matrix Development LLC                         | None                  |
| Dugan         | Chuck                | East Kentucky Power Cooperative, Inc.          | Transmission<br>Owner |
| Echeverri     | Julian               | OPD Energy                                     | None                  |
| Elkins        | Rachel               | FirstEnergy Corporation                        | Transmission<br>Owner |
| Ericson       | Christine            | Illinois Commerce Commission                   | None                  |
| Fan           | Zhenyu               | PJM Interconnection, LLC                       | None                  |
| Feller        | John                 | PPL Electric Utilities Corp. dba PPL Utilities | Transmission<br>Owner |
| Fernandes     | Anisha               | PJM Interconnection, LLC                       | None                  |
| Fidler        | Danielle             | Earthjustice                                   | None                  |
| Filomena      | Guy                  | Customized Energy Solutions, Ltd.*             | None                  |
| Fink          | Regan                | Pine Gate Mid-Atlantic, LLC                    | Other Supplier        |
| Fink          | Sari                 | American Clean Power Association               | None                  |
| Fleming       | Jacqueline           | Brandon Shores LLC                             | Generation<br>Owner   |
| Fleming       | Jacqueline           | Brandon Shores LLC                             | Generation<br>Owner   |
| Foladare      | Kenneth              | Geenex Solar LLC                               | Generation<br>Owner   |
| Ford          | Nicholas             | Hexagon Energy, LLC                            | Developer             |
| Franks        | Ed                   | PJM Interconnection, LLC                       | None                  |
| Fuerst        | Gary                 | American Transmission Systems, Inc.            | Transmission<br>Owner |
| Fuess         | Christian            | PBF Power Marketing, LLC                       | Generation<br>Owner   |
| Gahimer       | Michael              | IN Office of Utility Consumer Counselor        | End-Use<br>Customer   |
| Gangadharan   | Aditya               | NOVI Energy LLC                                | None                  |
| De la Mora    | Luis                 | Strom Power LLC                                | None                  |
| Gebauer       | Nick                 | Akuo Energy                                    | None                  |
| Gebolys       | Debbie               | Public Utilities Commission of Ohio (The)      | None                  |
| Ghayas        | Awais                | PJM Interconnection, LLC                       | None                  |

| Ghodsian     | Arash            | American Transmission Company, LLC                | None                  |
|--------------|------------------|---|-----------------------|
| Gilani       | Rehan            | ConEdison Energy, Inc.                            | Other Supplier        |
| Glatz        | Suzanne<br>(Sue) | PJM Interconnection, LLC                          | None                  |
| Glazer       | Craig            | PJM Interconnection, LLC                          | None                  |
| Glennon      | James            | PJM Interconnection, LLC                          | None                  |
| Goldberger   | Nitzan           | Borrego Solar Systems                             | None                  |
| Graf         | Walter           | PJM Interconnection, LLC                          | None                  |
| Greening     | Michele          | PJM Interconnection, LLC                          | None                  |
| Grieve       | Andrew           | Pine Gate Mid-Atlantic, LLC                       | Other Supplier        |
| Gunn         | Garan            | Public Service Electric & Gas Company             | Transmission<br>Owner |
| Guntle       | Vince            | American PowerNet Management                      | End-Use<br>Customer   |
| Haas         | Howard           | Monitoring Analytics, LLC                         | None                  |
| Hanser       | Erik             | Michigan Public Service Commission                | None                  |
| Hastings     | David            | Market Interconnection Consulting Services (MICS) | None                  |
| Hathcock     | Jason            | Strata Solar                                      | None                  |
| Hay          | Joseph           | PJM Interconnection, LLC                          | None                  |
| Heitmann     | Paul             | New Jersey Board of Public Utilities              | None                  |
| Herel        | Suzanne          | PJM Interconnection, LLC                          | None                  |
| Herman       | Michael          | PJM Interconnection, LLC                          | None                  |
| Hoatson      | Tom              | Riverside Generating, LLC                         | Generation<br>Owner   |
| Hodgdon      | Scott            | Burns & McDonnell                                 | None                  |
| Hohenshilt   | Jennifer         | Talen Energy Marketing, LLC                       | Generation<br>Owner   |
| Howe         | Cullen           | Natural Resources Defense Council                 | None                  |
| Hudis        | Gabriella        | Jersey Green Energy LLC                           | Other Supplier        |
| Hudson       | Jeff             | Urban Grid Solar Projects, LLC                    | Other Supplier        |
| Hyzinski     | Tom              | GT Power Group                                    | None                  |
| ller         | Arthur (Art)     | Indiana Office of Utility Consumer Counsel        | End-Use<br>Customer   |
| Janapareddy  | Anupama          | Green River Holdings, LLC                         | Generation<br>Owner   |
| Jayachandran | Marilyn          | PJM Interconnection, LLC                          | None                  |
| Jenna        | Warmuth          | Nexamp  |                       |
| Johnston     | David            | Indiana Utility Regulatory Commission             | None                  |
| Jones        | Peter            | Energy Endeavors, LLC                             | Other Supplier        |
| Kelly        | Stephen          | Brookfield Energy Marketing LP                    | Other Supplier        |
| Kester       | Colleen          | PPL Electric Utilities Corp. dba PPL Utilities    | Transmission<br>Owner |
| Kidwell      | Christopher      | Duke Energy Business Services LLC                 | Transmission<br>Owner |
| Kilgallen    | Kevin            | Avangrid Renewables LLC                           | Generation<br>Owner   |
| Koepplinger  | Alexandria       | Michigan Public Service Commission                | None                  |
| Kogut        | George           | New York Power Authority                          | Other Supplier        |
| Konidena     | Rao              | Solar Micronics, Inc.                             | Other Supplier        |

| Kou         | Derek          | Virginia Electric & Power Company              | Transmission<br>Owner   |
|-------------|----------------|--|-------------------------|
| Kovler      | Ed             | PJM Interconnection, LLC                       | None                    |
| Kozhuharov  | Dimitar        | Delaware Municipal Electric Corporation, Inc.  | Electric<br>Distributor |
| Krizenoskas | Lisa           | PJM Interconnection, LLC                       | None                    |
| Kuchan      | Meagan         | PPL Electric Utilities Corp. dba PPL Utilities | Transmission<br>Owner   |
| Kurthakoti  | Divya          | Orsted US Trading LLC                          | Other Supplier          |
| Laios       | Takis          | AEP Appalachian Transmission Company, Inc.     | Transmission<br>Owner   |
| Lambert     | Andrew         | PJM Interconnection, LLC                       | None                    |
| Lawson      | Ryen           | Dominion Virginia Power                        | None                    |
| Linder      | Nicholas       | Ulteig   | None                    |
| Lopez-Lopez | Anthony        | Bryndan Associates, Inc.                       | None                    |
| Lousos      | Alexandros     | AMP Transmission, LLC                          | Transmission            |
| Lowe        | Connie         | Dominion Virginia Power                        | None                    |
| Lyakhovich  | Leonid         | Public Service Electric & Gas Company          | Transmission<br>Owner   |
| Mabry       | David          | McNees Wallace & Nurick LLC                    | None                    |
| Malcolm     | Kimberly       | FirstEnergy Corporation                        | Transmission<br>Owner   |
| Malladi     | Brindavani     | Arevo Energy                                   | None                    |
| McArdle     | Brian          | NextEra Energy Power Marketing, LLC            | Other Supplier          |
| McCarthy    | Tom            | Capital Power (US) Holdings Inc.               | None                    |
| McDewell    | Christian      | Commonwealth of PA                             | None                    |
| McGill      | Susan          | PJM Interconnection, LLC                       | None                    |
| McGlynn     | Paul           | PJM Interconnection, LLC                       | None                    |
| McManus     | Kathleen (Kat) | Armada Power, LLC                              | Other Supplier          |
| Medina      | Jorge          | OPD Energy                                     | None                    |
| Mehta       | Gaurav         | Enel Trading North America, LLC                | Other Supplier          |
| Mekala      | Karthik        | RWE Renewables Americas, LLC                   | Generation<br>Owner     |
| Menhorn     | Tiffany        | Line Vision Inc.                               | None                    |
| Midgley     | Sharon         | Exelon Business Services Company, LLC          | Transmission<br>Owner   |
| Morias      | Matt           | National Grid Renewables, LLC                  | None                    |
| Mott        | Colin          | Dominion Virginia Power                        | None                    |
| Murphy      | Shaun          | PJM Interconnection, LLC                       | None                    |
| Nadel       | Steven         | PPL Electric Utilities Corp. dba PPL Utilities | Transmission<br>Owner   |
| Nelis       | Liz            | NOVI Energy LLC                                | None                    |
| Nestel      | Stacey         | PJM Interconnection, LLC                       | None                    |
| Niu         | Hui (Grace)    | PJM Interconnection, LLC                       | None                    |
| Nix         | Emma           | Gable and Associates                           | None                    |
| Okenfuss    | James          | Savion, LLC                                    | None                    |
| Ondayko     | Brock          | AEP Appalachian Transmission Company, Inc.     | Transmission<br>Owner   |

| Panegal     | Ash                | Apex Clean Energy  | None                    |
|-------------|--------------------|--|-------------------------|
| Patel       | Komal              | PJM Interconnection, LLC                                 | None                    |
| Peacey      | Denelle            | TransAlta Energy Marketing (U.S.) Inc.                   | Other Supplier          |
| Pezalla     | William            | Old Dominion Electric Cooperative                        | Electric<br>Distributor |
| Pham        | Вао                | Old Dominion Electric Cooperative                        | Electric<br>Distributor |
| Plummer     | Angela             | GridSME  | None                    |
| Poulos      | Greg               | CAPS   | None                    |
| Pratt       | Nicholas<br>(Nick) | PPL Electric Utilities Corp. dba PPL Utilities           | Transmission<br>Owner   |
| Price       | Ruth               | Division of the Public Advocate of the State of Delaware | End-Use<br>Customer     |
| Ptak        | Anton              | EDF Renewable Energy                                     | None                    |
| Qiu         | Wenzheng           | PJM Interconnection, LLC                                 | None                    |
| Quevada     | Jason              | PJM Interconnection, LLC                                 | None                    |
| Rahman      | Subomi             | Public Service Electric & Gas Company                    | Transmission<br>Owner   |
| Rainey      | John               | Northern Virginia Electric Cooperative                   | Electric<br>Distributor |
| Rana        | Deepesh            | Apex Clean Energy  | None                    |
| Ray         | Bhaskar            | Q Cells America Inc.                                     | None                    |
| Redding     | Andrew             | Heelstone Renewable Energy                               | None                    |
| Richards Jr | Cleveland          | Price Waterhouse Cooper                                  | None                    |
| Robichaud   | Donna              | Geenex   | None                    |
| Robinson    | Clayton            | Cordelio Power   | None                    |
| Rodriguez   | Tomas              | OPSI   | None                    |
| Rooney      | Alexa              | PPL Electric Utilities Corp. dba PPL Utilities           | Transmission<br>Owner   |
| Sajja       | Pavan              | Northern Indiana Public Service Company                  | Other Supplier          |
| Samb        | Massamba           | Public Service Electric & Gas Company                    | Transmission<br>Owner   |
| Sasser      | Jonathan           | Customized Energy Solutions, Ltd.*                       | None                    |
| Schmitt     | David              | New Jersey Board of Public Utilities                     | None                    |
| Schreim     | Morris             | Maryland Public Service Commission                       | None                    |
| Schuyler    | Ken                | PJM Interconnection, LLC                                 | None                    |
| Seide       | Richard            | Apex Clean Energy  | None                    |
| Seiler      | Kenneth (Ken)      | PJM Interconnection, LLC                                 | None                    |
| Shah        | Pulin              | PECO Energy Company                                      | Transmission<br>Owner   |
| Sharpe      | lan                | Leeward Renewable Energy, LLC                            | None                    |
| Shoemaker   | Jason              | PJM Interconnection, LLC                                 | None                    |
| Sims        | Mark               | PJM Interconnection, LLC                                 | None                    |
| Singh       | Harliv             | Northern States Power Company                            | Other Supplier          |
| Sotkiewicz  | Paul               | E-Cubed Policy Associates                                | None                    |
| Souder      | David (Dave)       | PJM Interconnection, LLC                                 | None                    |
| Staples     | Boone              | Tenaska Power Services Co.                               | Generation<br>Owner     |

| Steinkuhl    | Steve               | Duke Energy Business Services LLC     | Transmission<br>Owner |
|--------------|---------------------|---------------------------------------|-----------------------|
| Stern        | Alexander<br>(Alex) | Public Service Electric & Gas Company | Transmission<br>Owner |
| Streeter     | Jason               | AES Ohio Generation, LLC              | Generation<br>Owner   |
| Sunderman    | Derek               | Tradewind Energy, Inc.                | None                  |
| Swagata      | Sengupta            | Public Service Electric & Gas Company | Transmission<br>Owner |
| Swalwell     | Brad                | Tangent Energy Solutions, Inc.        | Other Supplier        |
| Sweeney      | Rory                | GT Power Group                        | None                  |
| Szot         | Lisa                | Enel Trading North America, LLC       | Other Supplier        |
| Taylor       | Robert              | Exelon Business Services Company, LLC | Transmission<br>Owner |
| Tekle        | Zelalem             | Baltimore Gas and Electric Company    | Transmission<br>Owner |
| Thomas       | Amber               | Exelon Business Services Company, LLC | Transmission<br>Owner |
| Thomas       | Jack                | PJM Interconnection, LLC              | None                  |
| Thompson     | Jonathan            | PJM Interconnection, LLC              | None                  |
| Tribulski    | Jennifer            | PJM Interconnection, LLC              | None                  |
| Vander Vorst | Aaron               | Tradewind Energy, Inc.                | None                  |
| Walch        | lan                 | Enchanted Rock, LLC                   | None                  |
| Watson       | Jeanine             | PJM Interconnection, LLC              | None                  |
| Wehnes       | Kathleen            | Maryland Public Service Commission    | None                  |
| White        | Brett               | Other                                 | None                  |
| Whitehead    | Jeffrey             | GT Power Group                        | None                  |
| Widom        | Stuart              | PJM Interconnection, LLC              | None                  |
| Williams     | Lesley              | Geenex Solar LLC                      | Other Supplier        |
| Wisersky     | Megan               | Madison Gas & Electric Company        | Other Supplier        |
| Wolfe        | Art                 | PJM Interconnection, LLC              | None                  |
| Yochelson    | Cheri               | Dominion Virginia Power               | None                  |
| Young        | Brandon             | Public Service Electric & Gas Company | Transmission<br>Owner |
| Yovanovich   | Laura               | PJM Interconnection, LLC              | None                  |
| Zamani       | Vahraz              | Grid Bright                           | None                  |
| Zhou         | Feng                | Plus Energy Storage                   | None                  |