MI Power Grid Distribution System Data Access (DSDA) Workgroup Stakeholder Meeting Tuesday, August 16, 2022

There were just under 100 participants in attendance (see end of notes for attendee list and chat function transcript).

E-mail questions to Cole Bearden, DOE fellow: beardenc@michigan.gov

Commissioner Phillips kick-off of Workgroup (WG) – MI Power Grid launched in 2018 in partnership w/ Gov. Whitmer.

2018 Commission opened series of 5-yr distribution (D) investment plans. In 2020 CE & DTE filed 1st iteration of hosting capacity (HC) analyses. I&M also noted will observe.

Senate Resolution 143 requests C investigate reliability, interconnection, systems benefits, costs impacts. Expansion on grid integration study.

Dec. 2021, MPSC selected as national cohort to receive technical assistance on grid integration study. DOE and Nationals Renewable Energy Laboratory. July 7, 2022, in U-21251 initiated DSDA – better understand use cases and nuances and what needs to be improved on w.r.t. current hosting capacity resources. Best to bifurcate.

Cole: Presentations will be recorded, and slide decks made available.

Presentations

Andrew Galczyk - DTE: DER Hosting Capacity

- Hosting capacity map for installers to make better decisions for RE projects
- Only for IX < 2 MW
- Only D voltages
- Only certain sections displayed
- Can search address, x-roads, intersections, etc.
- Data pops up when click on polygons (represent circuits)
- Pop up circuit designation, circuit in progress, installed DER, single-site HC (category format),
 HC value, date of last update
- Data capable of being updated monthly, annually, quarterly
- Go to DTEenergy.com → service and price tab → top left image (IX process or rooftop solar) → scroll to tab that says HC map or scroll down
- https://dte.maps.arcgis.com/apps/webappviewer/index.html?id=64e9f4e0f82c42e7b7ed84727
 3ec2764
- Demo performed by Andrew pulled up a few locations and varying voltages
 - o Go no-go type map
 - Go through IX process to find # more applicable.
 - Will provide ball park estimate of what capable of hosting

Joseph Jacunski – DTE

- Service upgrade request process
- Econ development process looks @ existing sites and new sites. Can get info on new locations & what would take to serve. Quick turnround to assist customers in decisions for \$ and timeline for new development of size and locations of interest.
- Ensure to not share critical energy infrastructure & data and continue to maintain privacy and security for the grid.

Marco Bruzzano - DTE

• Part of early discussions in 2018/19 timeframe that led to MPG WGs and HC analysis.

Consumers Energy – Kyle Desser

- Phased-in approach
- Similar to DTE zonal-based go/no-go map
- DERs up to 2 MW
- Phase II still working on more specific detailed analysis
- Not intended for residential customer hoping to install 100 kW solar array (intent for larger projects)
- Criteria for go/no-go
 - 40% of peak load of circuit must be > 2MW
 - O No high voltage distribution (HVD) or transmission (T) circuits
 - Std D level circuits
 - o DSCADA must be present
- HVD circuits
- Update once/yr
- Next Steps: Phase 2 will have higher resolution answers, will be able to better understand criteria, want to make available list of pending IX queue

ITC – Kwafo Adarkwa (Electrification Efforts of ITC) & John Kopinski (HC)

John –

- Conducted HC Study
- T capability in MI focused on gen interconnection (IX)
- Looked @ 2025 summer peak analysis included MTEP 20 projects
- 225 pts of IX
- >100 kV, >3 T line extensions
- Excluded vs included \$s
 - Excluded were generation lead lines, tapping lines, directly attributable to generator and not system capability
- Included major system upgrades that would IX to T system \$s can be substantial major upgrades
- HC subtractable
- Available capacity in system is shared

- Conclusions & takeaways
 - HC can ID low \$ IX regions

Kwafo -

- Forward looking
- Thinking about what needs to be invested
- Actionable activities & layer into what is happening to electrification and how to plan for investments and next phase
- ITC's role rubric electrification helps with rates smooth out peaks & valleys
- Leadership
 - Building out T system
 - Support customer demand for EV charging
 - Midwest MISO LRTP
 - JTIQW efforts (regional electrification look)
 - More local working w/local utilities charging hub infrastructure
 - o Internally w/in ITC: grow and expand electrification @ company-owned offices
 - How become industry leader
 - Joined Natn'l Highway Electrification Coalition
 - o Comments to C re. IIJA
 - Involved in DTE electric rate case
 - Role paramount to growth and success of MI

Next steps

- o Rate case
- Grant \$s w.r.t. federal funding (project partners or on own offset rates)
- o Continue efforts in electrification notion

Commissioner Phillips Q: Public available info able to be exported? Security concerns? Appetite/challenges?

DTE (Sharon Pfeffer) has available in excel – possible to put into Excel format.

Q: Update/refresh of data? Broad sense of \$ and admin challenges to more frequent updates? Requires great amount of time from several different people. CE using annual refresh for now.

Is there any "usage" data or tracking on the frequency that these maps have been accessed since their creation?

DTE: We have been seeing about 7 or so site visits a week with the current map.

Charles Griffith Q: Completed state NEVI plan – determine how will use fed \$s to build out EV infrastructure. Tolls using today to ID sites where stations could be hosted? Using I NEVI or diff analyses?

Commissioner Phillips: NEVI state plan locations dictated by NEVO requirements on distances b/t charging stations, most demand and NEVI requirements.

ITC has also looked at the NEVI plan and engaged as well.

Shibani – Data & privacy concerns – what kind of feedback getting from users? Qs from developers as use tools? How make better, etc.?

DTE open to taking feedback on what folks would like to see in tools. Focused on development piece – residential DG rate.

ITC: HC and presentations well received from stakeholders. Have wanted updates. Appropriate locations for submittal of queues. Are seeing helpful for serving purpose intended to do. Likewise, from CE.

NREL Presenters – Model Engineering Researcher Michael Ingram Chief Engineer David Nerang – System Engineer

Question: DTE & Consumers - do you ever see getting beyond the manual review of DG interconnection? A from DTE: We do see increasing levels of automation as the volume of interconnections increase, the new interconnection rules and the fast track process will also help establish standards that support automation in the future.

Question from chat: DTE & Consumers - do you ever see getting beyond the manual review of DG interconnection.

A from DTE: We do see increasing levels of automation as the volume of interconnections increase, the new interconnection rules and the fast-track process will also help establish standards that support automation in the future. CE echoes DTE's response above regarding increased automation, especially with the adoption of updated interconnection rules.

Shibani Ghosh (NREL)

- NREL background
 - One of leading labs in RE space
- Major research pillars
 - RE, wind, solar, geothermal, EE Energy system integration (specialize in grid integration studies, security & resilience)
- MPSC Collaboration
 - Tech assistance to MPSC team
 - How data can be collected & use cases needed to elevate HCA uses
 - o Looking at adding PV & EV HC into mix how include in single map?
- HC Definition: PV focuses on feeder level vs zonal level, binding conditions
 - Violation when above 1.05
 - # customers affected, duration which customer affected with inclusion of scenarios
- EV: Calcs power flow-based solutions, nodal/feeder section.
- Key terms min & max HC
- PV process flow diagram
 - Tracking violations.
- Going Forward
 - Can see basic info EV HC can be another set of calculations behind the map; can include
 - Can consider worst-case scenarios

Michael Ingram (NREL) – GMLC Lead

• \$2.25M, 37 engagements across 20 states

Discussions: Important to keep less confusing to the user.

Break until 3:45 p.m.

Dr. Laura Sherman (President MEIBC)

Panel: Missy Stults (City of AA), Alex Sherman (SunPower), Ken Zebarah (Harvest)

- Ken: Who pays for upgrade? What does upgrade look like?
- Missy: Have hard time getting basic data. Need to be able to get GHG inventory data. Lots of work to do.
- #1 predictor if solar or EV is if neighbor get. Social science. Need to understand where grid has
 room and how continue growth, How dispatch alternatives. How use other approaches, such as
 storage.
- Alex: Shape files long coordinates strung together. Granularity and how public want data.
- Laura: Granularity what heard most about. Zoning decisions may need different data land-use or neighborhood level.
- Missy: Circuit level data more powerful. May be well intended, but as soon as others, need to be proactive.
- Storage? Alex: Storage & batteries looking for energy data to help size the system & if infrastructure upgrade needed. Topography.
- IX Applications will start to be several a day soon vs 10 all yr.
- Missy: Job to imagine what's possible and make it happen. Need to be strategic and think about
 what utility structure will look like. Don't think big, centralized utilities are going to be the
 future. Microgrids will have a large role to play. Need utilities as partners.

Open Discussion

Inflation Reduction Act signed today – good timing. Greater stimulus and demand for more options.

Commissioner Phillips: Feel free to e-mail Cole question comments, provide guidance or put into the chat: beardenc@michigan.gov

Will be responsible to senate request to compile grid integration report. Current forthcoming challenges/potential benefits to integration DG and EV infrastructure onto the grid. Request to not get into DG caps issue. Will continue to deliberate that issue w/legislature. Those Qs and issues will not be resolved in this forum – forthcoming opportunities to dive into those discussions.

Guiding Questions: Bi-directional HC access – how help reduce costs, planning, etc.

 Q#1: How can access to bi-directional hosting capacity maps reduce customer acquisition, project siting, or other administrative costs that limit increased adoption and deployment of DG systems and EV infrastructure in Michigan?

- Dr. Sherman Q for NREL: PV assessment & EV assessment? Ability for storage to play role – Are we going to have the right data to feed storage or new technologies we haven't even thought of yet?
- Shibani Ghosh (NREL) have thought of up-and-coming new techs storage is one. May
 not have exact data, where assumptions & scenarios come in. Focusing more on
 increasing self-consumption. Battery charged using PV, then consumed. Good start. SO
 far think about HC, has been just for PV bc what needed, now have influx of new tech –
 need to expand on load direction/growth.
- Q#2: What data would be helpful for DG and EV stakeholders to have access to, and what are the nuanced differences between the data requested to site DG projects and the data requested to site EV charging infrastructure?
 - Commissioner Phillips: Some response to this in Shibani's presentation. Will discuss during convos with those in EV community. What addn'l data pts are needed knowing there will be overlap w/ what V2G and nuanced differences. Will help better assess w/out assumptions.
 - Shibani Ghosh: IX requests utilities are getting what kind of data do they need to process the IX requests? – what kinds of Qs are they getting? Welcome thoughs and feedback from that perspective.
 - Q from Dr. Joy Wang from MPSC in chat: Will bi-directional hosting capacity maps recognize the potentially interrelated nature of EV and PV? For instance, a circuit can't handle EVs alone, but it might be able to handle EVs if storage is included. Would bidirectional hosting capacity maps provide information on the size of storage necessary to support EVs in a particular location, if EVs alone will present a problem?
 - Shibani: Can def be included in process flow and have been thinking about and including energy storage as expand on HC. One challenge is how much energy storage we should consider? A lot = expansion of EV capacity. What is realistic middle-ground when thinking of 'what-if" scenarios. How present that data on HC maps? Qs we have been thinking about & exploring. Ensure not getting too confusing when presenting.
 - David Nerang (NREL): Going from ID HC to mitigation. ES could be one way we improve HC. Once down path, many different options that need more data. E.g. \$ info of various solutions.
 - Dr. Sherman: lots of flexibility in projects. Certain characterizes able to be changed, so key to have level of granularity and detail. New phase provides info for best solution to fit needs to grid, utility, customer. Could benefit all parties when look @ next level of granularity.
- Q#3: What data would you need as DER and EV developers from utilities as far as hosting capacity maps are concerned? In what format and at what level of granularity is this data of use to these stakeholders? In what frequency should this information be refreshed and updated?
 - Similar to last Q.
 - No comments.
- Q#4: How might customer-owned energy storage resources augment both DG and EV hosting capacity?

- Dr. Sherman: Thought about connxn b/t 2 storage & V2G? Likely a future thing, but may not be that far off. EVs as storage and V2G assets. Keep in mind as thinking through.
- Commissioner Phillips: Top-of-mind for C and # of agencies, state-wide mobility strategy. Addn'l piloting needed and business model evaluation. Vehicles w/capabilities coming. May not have control over what car makers market to customers and then possibly answer Qs why can't so what is communicated to them. Need to be ready with communications and technologies solutions. Be ready to answer Qs.
- David Nerang: Campus charging one step prior to V2G.
- Shibani have done research can be active charging management. Asset owners can manage. Techniques to manage charging load.
- Alex Sherman: A lot of customers will procure energy storage by themselves. Use cases not frequent. When consider how customer-owned resources, Q of translating value of opportunity costs and resiliency given up to augment energy storage systems. Worth considering when think of energy storage, augment HC to incentivize customer-owner energy resources tio di that transaction.
- TP: Potential V2G may be used in emergencies. Different \$s and value associated for customer.
- Q#7: Are there specific improvements that you would suggest to the hosting capacity maps currently available and presented by DTE, Consumers, and ITC earlier today? Are there specific areas that are beneficial or should be replicated in further iterations of these tools?
 - No comments
 - Improvements, suggestions to make? General? Let us know.
- Skip to Q9: NREL's proposed bi-directional hosting capacity methodology can benefit from transformer level data. Will such aggregated data on the hosting capacity map provide more value while the hosting capacity calculation uses more granular consumer data?
 - Shibani: Do tools use transformer level data? Have been thinking about NREWL's
 proposed methodology. Can greatly benefit from granular data. Concerns re. publishing
 granular data. Valuable to add data in calcs, even if don't publish to make more
 realistic? Or good, not going to that level in HC maps? Thought process behind Q.
 - o DTE: Effort, time, \$ increases as start to drive down into further detail.

V2G Connection? Piloting of technologies \$recos for HC maps, bi-directional? Please share.

Question from Dr. Wang in chat: Examples from other states? Precedent for other utilities to include overlap to HC maps, e.g. high outage areas, energy storage, brownfield sites w/existing grid selections

Shibani Ghosh: Can see colored ratings where capacity tight. May have some green zones with plenty of capacity. Other kinds of info have not seen commonly. Good point. Maybe can be included in attribute table. Include in separate tab or spreadsheet for developers. Can also be data & privacy concerns.

Commissioner Phillips: Helpful for exportable data and then other can do analyses and overlays. Close out: Encourage stakeholders to provide insights or examples, presentation, documents, reports of assistance, please send to Cole via e-mail.

Thank you to NREL, all presenters, panelists, MPSC Staff support team.

Notes will be sent via e-mail.

EV-Centered discussions will be 2-5 p.m. August 22. Presentations will largely be same from utilities, but panel session will be different for stakeholders.

Thank you, everyone for your participation.

Attendees

- 1. 720-899-7569
- 2. Christine Adams, MPSC
- 3. Kwafo Adarkwa, Director, Public Affairs, ITC
- 4. Adella F Crozier, DTE Energy Regulatory Affairs
- 5. Malcolm Ainspan, NRG Business Solutions LLC
- 6. Alain Godeau, Strategic Governance International
- 7. Alex Sherman, Sun Power
- 8. Allen J Kryscynski, Manager, Utility Tree Trim Operations, DTE
- 9. Anand Pappuri, Spark Building Energy Solutions
- 10. Anna Munie, Integrated Resource Planning Implementation & Strategy Lead, Consumers Energy
- 11. Andrew T Galczyk, DTE Interconnections
- 12. Anne Lenzen, Senior Manager, Regulatory Affairs & Market Development, Opower
- 13. Anne M. Uitvlugt, Consumers Energy
- 14. Julie Baldwin, MPSC
- 15. Cole Bearden, MPSC
- 16. Brian C Hatt,
- 17. Nathan Burnand, MPSC

- 18. Mike Byrne, MPSC
- 19. Chad E Mabry, Project Manager, American Electric Power
- 20. Charles Griffith, Ecology Center
- 21. Chelsea Alcock, Legislative Assistant, Michigan House of Representatives.
- 22. Colby R Davis
- 23. Cathy Cole, MPSCf
- 24. Dan Blair, Michigan Electric Cooperative Association
- 25. Dan Dundas, Michigan Electric & Gas Association
- 26. Daniel D Coleman, AEP, Distribution Modeling & Analysis
- 27. David Bender,
- 28. David M. Weicha, DTE Interconnections
- 29. Deandre Smith,
- 30. Denzil L. Welsh Jr., Mgr. I&M Regulatory Svcs.
- 31. Donald A Lynd, Consumers Energy, LVD System Planning
- 32. Douglas Jester, 5LakesEnergy
- 33. Donald Coffin, Technical Manager, Green Button Alliance, Inc.
- 34. Nick Evans, MPSC
- 35. Farzana N. Khan, Consumers Energy, Distribution Agreements & Programs
- 36. Al Freeman, MPSC
- 37. Shibani Ghosh, NREL
- 38. Kayla Gibbs, MPSC
- 39. Grace N. Musonera, DTE
- 40. Erik Hanser, MPSC
- 41. Michael Ingram, NREL
- 42. Theresa Isemann, Energy Markets, Distributed Resources, ICF
- 43. Ishaan Jena, Senior Power Engineer Lead, Amp Energy
- 44. Jason L Cochran.
- 45. Jason Price, Director, West Monroe
- 46. Jason Schaen, UPPCO Account Manager
- 47. Jeffrey A. Myrom, Consumers Energy EV programs,
- 48. Jeff Battley, President, CSI Utility Sales
- 49. Robert Joba, Director of Custom Programs, Consumers Energy
- 50. Johanna W. Bleckman, Data Privacy, Consumers Energy
- 51. John Richter (GLREA), SR. Policy Analyst
- 52. Jon C. Walter, Indiana Michigan Power
- 53. Joseph D. Jacunski, DTE Energy, Engineering Standards and Design
- 54. Joseph E. Robinson, DTE Distribution Engineering
- 55. Julia Friedman, Opower
- 56. Ken Zebarah, Harvest Solar
- 57. Kenneth J. Selander
- 58. Kimathi Boothe, VP, Energy Operations, Dunamis Clean Energy Partners LLC
- 59. Kirk R. Eisert, Engineer, AEP
- 60. John Kopinski, ITC
- 61. Kyle M. Desser, Consumers Energy, LVD Statewide Planning

- 62. Laura Sherman, Michigan EIBC
- 63. Laura Chappelle, Potomac Law Group
- 64. Lynne Mccollum, regulatory support, Consumers Energy
- 65. Marco A Bruzzano, SVP Corporate Strategy & Regulatory Affairs for DTE
- 66. Mary (Guest)
- 67. Johanna Mathieu, Assistant Professor, U of M Dept. of Electrical Engineering & Computer Science
- 68. Matt Deal, ChargePoint
- 69. Matthew G Menze,
- 70. Matthew S. Henry, Consumers Energy, LVD Statewide Planning
- 71. Michael C. Rampe, Attorney, Consumers Energy
- 72. Michael Weiss, AEE
- 73. Mike Buza, Chair, Michigan Sierra Club
- 74. Mike Westcott, Business Development Manager, Harvest Solar
- 75. Luther C Miller,
- 76. Sarah Mullkoff, MPSC
- 77. David Narang, NREL
- 78. Nicholas B. Tenney, Consumers Energy, Distribution Agreements & Programs (including DG and interconnection)
- 79. Robert O'Meara, ITC Holdings
- 80. Patrick Walters. Energy Program Manager at Lansing Board of Water & Light
- 81. Katherine Peretick, MPSC
- 82. Tremaine Phillips, MPSC
- 83. Erin Nicole Quetell, Oakland County
- 84. Regiana M Sistevaris, I&M Regulatory Services
- 85. Rev Joan Ross, North End Woodward Community Coalition
- 86. Richard J Mueller, DTE, Manager of Engineering Technology
- 87. Jill Rusnak, MPSC
- 88. Sharon G. Pfeuffer, DTE Distribution Engineering
- 89. Missy Stults, City of Ann Arbor
- 90. Karsten Szajner, MPSC
- 91. Valerie Brader, Rivenoak Law Group, representing Ford Motor Co.
- 92. Will Kenworthy, Vote Solar
- 93. Joy Wang, MPSC

Chat Comments Only

[1:56 PM] Narang, David Dave Narang (NREL) Joining

[1:57 PM] Rev Joan (Guest)
Rev Joan Ross North End Woodward Community Coalition

[1:58 PM] Jason Schaen Jason Schaen- UPPCO Account Manager

[1:58 PM] Denzil L Welsh Jr. Denzil Welsh, Mgr. I&M Regulatory Svcs.

[1:58 PM] Marco A Bruzzano Marco Bruzzano, SVP Corporate Strategy & Regulatory Affairs for DTE

[1:59 PM] Dan Blair - MECA (Guest)

Dan Blair Consultant to Michigan Electric Cooperative Association

[1:59 PM] Valerie Brader (Rivenoak) (Guest) Valerie Brader, Rivenoak Law Group, representing Ford Motor Co.

[1:59 PM] O'Meara, Robert Robert O'Meara, ITC Holdings

[1:59 PM] Jason Price

Hello, this is Jason Price, Director, West Monroe working with various states and utilities on these topics.

[2:00 PM] Michael Weiss, AEE (Guest) Hi, this is Michael Weiss from AEE.

[2:00 PM] Will Kenworthy WIll Kenworthy (Vote Solar)

[2:01 PM] Sharon G Pfeuffer Sharon Pfeuffer, DTE Distribution Engineering

[2:01 PM] Kopinski, John Good Afternoon, this is John Kopinski - ITC (Planning)

[2:01 PM] Freeman, AI (LARA) AI Freeman, Mich Public Service Commission Staff.

[2:01 PM] Adella F Crozier Adella Crozier DTE Energy - Regulatory Affairs

[2:02 PM] Jeffrey A. Myrom

Jeff Myrom, Consumers Energy electric vehicle (EV) programs - i.e. PowerMIFleet and PowerMIDrive

[2:02 PM] Bearden, Cole (LARA-Contractor)

beardenc@michigan.gov

[2:03 PM] DONALD A. LYND

Don Lynd, Consumers Energy, LVD System Planning

[2:03 PM] Matthew S. Henry

Matt Henry, Consumers Energy, LVD Statewide Planning

[2:03 PM] Evans, Nicholas (LARA)

Nick Evans, MPSC Staff

[2:04 PM] David M Wiecha

David Wiecha DTE Interconnections

[2:04 PM] Quetell, Erin Nicole

Erin Quetell, Oakland County

[2:04 PM] Lynne Mccollum

Lynne McCollum, regulatory support, Consumers Energy

[2:04 PM] Andrew T Galczyk

Andrew Galczyk, DTE, Interconnections

[2:04 PM] Joseph D Jacunski

Joseph Jacunski - DTE Energy, Engineering Standards and Design

[2:04 PM] Kyle M. Desser

Kyle Desser, Consumers Energy, LVD Statewide Planning

[2:04 PM] Mathieu, Johanna

Johanna Mathieu, Associate Professor, University of Michigan Department of Electrical Engineering & Computer Science

[2:04 PM] Johanna W. Bleckman

Johanna Bleckman, Data Privacy, Consumers Energy

[2:04 PM] NICHOLAS B. TENNEY

Nick Tenney, Consumers Energy, Distribution Agreements & Programs (including DG and interconnection)

[2:05 PM] Regiana M Sistevaris

Regiana Sistevaris, I&M Regulatory Services

[2:05 PM] Farzana N. Khan

Farzana Khan, Consumers Energy, Distribution Agreements & Programs

[2:06 PM] Donald Coffin
Donald F. Coffin
Technical Manager
Green Button Alliance, Inc.
dcoffin@greenbuttonalliance.org

[2:06 PM] John Richter (GLREA) (Guest) John Richter, Sr. Policy Analyst, GLREA

[2:06 PM] Joseph E Robinson Joe Robinson, DTE - Distribution Engineering

[2:11 PM] Daniel D Coleman Dan Coleman, AEP, Distribution Modeling & Analysis

[2:14 PM] Regiana M Sistevaris is the tool on the DTE webpage? If so can you provide a link?

[2:15 PM] Cole, Cathy (LARA)

Here is a link to DTE's webpage: ArcGIS Web Application

ArcGIS Web Application [2:16 PM] Miller, Luther C

Does DTE have any concerns about customer data privacy or grid security by showing relatively bright-line connectivity in the public HCA map?

[2:24 PM] Adarkwa, Kwafo Kwafo Adarkwa, Director, Public Affairs, ITC

Here is a link to CE's HCA Map: Hosting Capacity (arcgis.com)

[2:42 PM] Adarkwa, Kwafo The slides are not moving on my end Cole

[2:54 PM] Regiana M Sistevaris What docket is the DTE Charging Hub filed in?

[2:55 PM] Stults, Missy Their current rate case

[2:55 PM] Freeman, Al (LARA) U-20836 like 2

[2:55 PM] Rusnak, Jill (LARA)

Regiana M Sistevaris

What docket is the DTE Charging Hub filed in?

U-20836 https://mi-psc.force.com/s/case/500t000000WH1HKAA1/in-the-matter-of-the-application-of-dte-electric-company-for-authority-to-increase-its-rates-amend-its-rate-schedules-and-rules-governing-the-distribution-and-supply-of-electric-energy-and-for-miscellaneous-accounting-authority

like 3

[3:02 PM] Jason L Cochran

Is there any "usage" data or tracking on the frequency that these maps have been accessed since their creation?

[3:02 PM] Will Kenworthy

Xcel in Minnesota makes HCA data available in a spreadsheet format updated quarterly. Current docket in MN in 21-767

[3:04 PM] Joseph D Jacunski

Jason L Cochran

Is there any "usage" data or tracking on the frequency that these maps have been accessed since their creation?

We have been seeing about 7 or so site visits a week with the current map.

[3:04 PM] Kirk R Eisert

DTE & Consumers - do you ever see getting beyond the manual review of DG interconnection?

[3:09 PM] Phillips, Tremaine (LARA)

I encourage others to field questions to our presenters via the chat. We will either try and have them answered today or follow up for a response.

[3:12 PM] Joseph D Jacunski

Kirk R Eisert

DTE & Consumers - do you ever see getting beyond the manual review of DG interconnection?

We do see increasing levels of automation as the volume of interconnections increase, the new interconnection rules and the fast track process will also help establish standards that support automation in the future.

[3:22 PM] NICHOLAS B. TENNEY

Consumers Energy echoes DTE's response above regarding increased automation, especially with the adoption of updated interconnection rules.

[3:39 PM] Stults, Missy

Just in time to watch the president sign the Inflation Reduction Act: https://www.pbs.org/newshour/politics/watch-live-biden-signs-inflation-reduction-act-affecting-health-climate-and-the-economy

like 1 heart 2

WATCH LIVE: Biden signs Inflation Reduction Act affecting health, climate and the economy The legislation includes the most substantial federal investment in history to fight climate change — some \$375 billion over the decade — and would cap prescription drug costs at \$2,000 out-of-pock...

[3:58 PM] Bearden, Cole (LARA-Contractor)

If you have questions for the panelists, feel free to write them in the chat.

[4:19 PM] Bearden, Cole (LARA-Contractor)

Please feel free to write answers to these questions or other comments/questions on these topics in an email to beardenc@michigan.gov

[4:23 PM] Cole, Cathy (LARA)

 How can access to bi-directional hosting capacity maps reduce customer acquisition, project siting, or other administrative costs that limit increased adoption and deployment of DG systems and EV infrastructure in Michigan?

[4:26 PM] Cole, Cathy (LARA)

• What data would be helpful for DG and EV stakeholders to have access to, and what are the nuanced differences between the data requested to site DG projects and the data requested to site EV charging infrastructure?

[4:28 PM] Wang, Joy (LARA)

Will bi-directional hosting capacity maps recognize the potentially interrelated nature of EV and PV? For instance, a circuit can't handle EVs alone, but it might be able to handle EVs if storage is included. Would bi-directional hosting capacity maps provide information on the size of storage necessary to support EVs in a particular location, if EVs alone will present a problem?

like 1

[4:31 PM] Alex Sherman

Just a note that bi-directional EVs would also function as local storage. It doesn't always need to be storage capacity to accommodate EVs like 1

[4:35 PM] Cole, Cathy (LARA)

• What data would you need as DER and EV developers from utilities as far as hosting capacity maps are concerned? In what format and at what level of granularity is this data of use to these stakeholders? In what frequency should this information be refreshed and updated?

[4:37 PM] Cole, Cathy (LARA)

 How might customer-owned energy storage resources augment both DG and EV hosting capacity?

[4:45 PM] Cole, Cathy (LARA)

• Are there specific improvements that you would suggest to the hosting capacity maps currently available and presented by DTE, Consumers, and ITC earlier today? Are there specific areas that are beneficial or should be replicated in further iterations of these tools?

[4:48 PM] Cole, Cathy (LARA)

 NREL's proposed bi-directional hosting capacity methodology can benefit from transformer level data. Will such aggregated data on the hosting capacity map provide more value while the hosting capacity calculation uses more granular consumer data?

[4:49 PM] Wang, Joy (LARA)

• Is there precedent for utilities to include other information overlays in hosting capacity maps, such as an overly of problematic areas of the utility grid with high outages or where the utility would like extra storage to be sited to further support the grid locally? Another interesting overlay might be one with locations such as brownfield sites with existing grid connections where projects might be sited. Such overlays may help direct development to certain areas. Are such overlays of interest and possible?

[4:51 PM] Ingram, Michael

- Cole my question is to request that these questions be scooped and included in the meeting notes.
- like 1

[4:52 PM] Wang, Joy (LARA)

Hi, Michael. I'm capturing chat comments and we also have a note taker.

like 1

Full Chat on 8/17 with Participant Entries/Exits

[Yesterday 1:45 PM]

Yesterday 1:45 PM Meeting started

[Yesterday 1:56 PM]

Jason Price and 2 others were invited to the meeting.

[Yesterday 1:56 PM]

Jason Schaen was invited to the meeting.

[Yesterday 1:56 PM] Narang, David

Dave Narang (NREL) Joining

[Yesterday 1:57 PM] Rev Joan (Guest)

Rev Joan Ross North End Woodward Community Coalition

[Yesterday 1:57 PM]

Marco A Bruzzano and Denzil L Welsh Jr. were invited to the meeting.

[Yesterday 1:57 PM]

Adarkwa, Kwafo was invited to the meeting.

[Yesterday 1:57 PM]

Dan Blair - MECA (Guest) and Michael Weiss, AEE (Guest) were invited to the meeting.

[Yesterday 1:58 PM] Jason Schaen

Jason Schaen- UPPCO Account Manager

[Yesterday 1:58 PM] Denzil L Welsh Jr.

Denzil Welsh, Mgr. I&M Regulatory Svcs.

[Yesterday 1:58 PM]

Valerie Brader (Rivenoak) (Guest) was invited to the meeting.

[Yesterday 1:58 PM] Marco A Bruzzano

Marco Bruzzano, SVP Corporate Strategy & Regulatory Affairs for DTE

[Yesterday 1:58 PM]

Kirk R Eisert was invited to the meeting.

[Yesterday 1:58 PM]

Anne M. Uitvlugt was invited to the meeting.

[Yesterday 1:58 PM]

O'Meara, Robert was invited to the meeting.

[Yesterday 1:59 PM] Dan Blair - MECA (Guest)

Dan Blair Consultant to Michigan Electric Cooperative Association

[Yesterday 1:59 PM]

Chelsea Alcock was invited to the meeting.

[Yesterday 1:59 PM]

David M Wiecha was invited to the meeting.

[Yesterday 1:59 PM] Valerie Brader (Rivenoak) (Guest)

Valerie Brader, Rivenoak Law Group, representing Ford Motor Co.

[Yesterday 2:02 PM] Jeffrey A. Myrom

Jeff Myrom, Consumers Energy electric vehicle (EV) programs - i.e. PowerMIFleet and PowerMIDrive

[Yesterday 2:02 PM]

Allen J Kryscynski was invited to the meeting.

[Yesterday 2:02 PM]

Anne Lenzen (Guest) was invited to the meeting.

[Yesterday 2:02 PM]

Mathieu, Johanna was invited to the meeting.

[Yesterday 2:02 PM]

Jon C Walter was invited to the meeting.

[Yesterday 2:02 PM]

NICHOLAS B. TENNEY was invited to the meeting.

[Yesterday 2:02 PM]

Colby R Davis was invited to the meeting.

[Yesterday 2:02 PM]

Mullkoff, Sarah (LARA) was invited to the meeting.

[Yesterday 2:02 PM]

Quetell, Erin Nicole was invited to the meeting.

[Yesterday 2:02 PM] Bearden, Cole (LARA-Contractor)

beardenc@michigan.gov

like 1

[Yesterday 2:03 PM]

Alex Sherman was invited to the meeting.

[Yesterday 2:03 PM] DONALD A. LYND

Don Lynd, Consumers Energy, LVD System Planning

[Yesterday 2:03 PM]

Johanna W. Bleckman was invited to the meeting.

[Yesterday 2:03 PM]

Dan Blair - MECA (Guest) left the chat.

[Yesterday 2:03 PM]

Alain Godeau (Guest) was invited to the meeting.

[Yesterday 2:03 PM]

Dan Dundas was invited to the meeting.

[Yesterday 2:03 PM] Matthew S. Henry

Matt Henry, Consumers Energy, LVD Statewide Planning

[Yesterday 2:03 PM] Evans, Nicholas (LARA)

Nick Evans, MPSC Staff

[Yesterday 2:04 PM]

John Richter (GLREA) (Guest) was invited to the meeting.

[Yesterday 2:54 PM] Regiana M Sistevaris

What docket is the DTE Charging Hub filed in?

[Yesterday 2:55 PM] Stults, Missy

Their current rate case

[Yesterday 2:55 PM]

Kimathi Boothe was invited to the meeting.

[Yesterday 2:55 PM] Freeman, Al (LARA)

U-20836

like 2

[Yesterday 2:55 PM]

Matt Deal, ChargePoint (Guest) left the chat.

[Yesterday 2:55 PM] Rusnak, Jill (LARA)

Regiana M SistevarisWhat docket is the DTE Charging Hub filed in?

U-20836 https://mi-psc.force.com/s/case/500t000000WH1HKAA1/in-the-matter-of-the-application-of-dte-electric-company-for-authority-to-increase-its-rates-amend-its-rate-schedules-and-rules-governing-the-distribution-and-supply-of-electric-energy-and-for-miscellaneous-accounting-authority

like 3

E-Dockets Community

[Yesterday 2:56 PM]

Dan Blair - MECA (Guest) was invited to the meeting.

[Yesterday 2:58 PM]

Rev Joan (Guest) left the chat.

[Yesterday 2:58 PM]

Quetell, Erin Nicole left the chat.

[Yesterday 3:02 PM] Jason L Cochran

Is there any "usage" data or tracking on the frequency that these maps have been accessed since their creation?

[Yesterday 3:02 PM] Will Kenworthy

Xcel in Minnesota makes HCA data available in a spreadsheet format updated quarterly. Current docket in MN in 21-767

like 1

[Yesterday 3:04 PM] Joseph D Jacunski

Jason L Cochranls there any "usage" data or tracking on the frequency that these maps have been accessed since their creation?

We have been seeing about 7 or so site visits a week with the current map.

[Yesterday 3:04 PM] Kirk R Eisert

DTE & Consumers - do you ever see getting beyond the manual review of DG interconnection?

[Yesterday 3:05 PM]

Julia Friedman Opower (Guest) was invited to the meeting.

[Yesterday 3:09 PM] Phillips, Tremaine (LARA)

I encourage others to field questions to our presenters via the chat. We will either try and have them answered today or follow up for a response.

like 3

[Yesterday 4:20 PM]

Stults, Missy left the chat.

[Yesterday 4:23 PM] Cole, Cathy (LARA)

How can access to bi-directional hosting capacity maps reduce customer acquisition, project siting, or other administrative costs that limit increased adoption and deployment of DG systems and EV infrastructure in Michigan?

[Yesterday 4:26 PM] Cole, Cathy (LARA)

What data would be helpful for DG and EV stakeholders to have access to, and what are the nuanced differences between the data requested to site DG projects and the data requested to site EV charging infrastructure?

[Yesterday 4:27 PM]

Douglas Jester left the chat.

[Yesterday 4:28 PM] Wang, Joy (LARA)

Will bi-directional hosting capacity maps recognize the potentially interrelated nature of EV and PV? For instance, a circuit can't handle EVs alone, but it might be able to handle EVs if storage is included. Would bi-directional hosting capacity maps provide information on the size of storage necessary to support EVs in a particular location, if EVs alone will present a problem? like 1

[Yesterday 4:29 PM]

Mike Westcott left the chat.

[Yesterday 4:31 PM] Alex Sherman

Just a note that bi-directional EVs would also function as local storage. It doesn't always need to be storage capacity to accommodate EVs like 1

[Yesterday 4:32 PM]

Chad E Mabry left the chat.

[Yesterday 4:32 PM]

Chad E Mabry was invited to the meeting.

[Yesterday 4:35 PM] Cole, Cathy (LARA)

What data would you need as DER and EV developers from utilities as far as hosting capacity maps are concerned? In what format and at what level of granularity is this data of use to these stakeholders? In what frequency should this information be refreshed and updated?

[Yesterday 4:37 PM]

Dan Blair - MECA (Guest) left the chat.

[Yesterday 4:37 PM] Cole, Cathy (LARA)

How might customer-owned energy storage resources augment both DG and EV hosting capacity?

[Yesterday 4:39 PM]

Dan Blair - MECA (Guest) was invited to the meeting.

[Yesterday 4:41 PM] Jon C Walter left the chat.

[Yesterday 4:44 PM] Mary (Guest) left the chat.

[Yesterday 4:44 PM]
Dan Blair - MECA (Guest) left the chat.

[Yesterday 4:44 PM] Jason Price left the chat.

[Yesterday 4:45 PM] Cole, Cathy (LARA)

Are there specific improvements that you would suggest to the hosting capacity maps currently available and presented by DTE, Consumers, and ITC earlier today? Are there specific areas that are beneficial or should be replicated in further iterations of these tools?

[Yesterday 4:57 PM]

Adella F Crozier left the chat.

[Yesterday 4:57 PM]

Allen J Kryscynski left the chat.

[Yesterday 4:57 PM]

Joseph E Robinson left the chat.

[Yesterday 4:57 PM]

Laura - Michigan EIBC (Guest) left the chat.

[Yesterday 4:57 PM]

Isemann, Theresa left the chat.

[Yesterday 4:57 PM]

Lynne Mccollum left the chat.

[Yesterday 4:57 PM]

Dan Dundas left the chat.

[Yesterday 4:57 PM]

Grace N Musonera left the chat.

[Yesterday 4:57 PM]

Jeffrey A. Myrom left the chat.

[Yesterday 4:57 PM]

Narang, David left the chat.

[Yesterday 4:57 PM]

David M Wiecha left the chat.

[Yesterday 4:57 PM]

Kenneth J. Selander left the chat.

[Yesterday 4:57 PM]

Farzana N. Khan left the chat.

[Yesterday 4:57 PM]

DONALD A. LYND left the chat.

[Yesterday 4:57 PM]

Alex Sherman left the chat.

[Yesterday 4:57 PM]

Johanna W. Bleckman left the chat.

[Yesterday 4:57 PM]

Sharon G Pfeuffer left the chat.

[Yesterday 4:57 PM]

Kimathi Boothe left the chat.

[Yesterday 4:57 PM]

Ishaan jena (Guest) left the chat.

[Yesterday 4:57 PM]

Matthew G Menze left the chat.

[Yesterday 4:57 PM]

Michael Weiss, AEE (Guest) left the chat.

[Yesterday 4:57 PM]

Ghosh, Shibani left the chat.

[Yesterday 4:57 PM]

Denzil L Welsh Jr. left the chat.

[Yesterday 4:57 PM]

Charles Griffith (Guest) left the chat.

[Yesterday 4:57 PM]

Kyle M. Desser left the chat.

[Yesterday 4:57 PM]

Kirk R Eisert left the chat.

[Yesterday 4:57 PM]

Dan Blair - MECA (Guest) left the chat.

[Yesterday 4:57 PM]

Ingram, Michael left the chat.

[Yesterday 4:57 PM]

Matthew S. Henry left the chat.

[Yesterday 4:57 PM]

Kopinski, John left the chat.

[Yesterday 4:57 PM]

Richard J Mueller left the chat.

[Yesterday 4:57 PM]

Andrew T Galczyk left the chat.

[Yesterday 4:57 PM]

Joseph D Jacunski left the chat.

[Yesterday 4:57 PM]

John Richter (GLREA) (Guest) left the chat.

[Yesterday 4:57 PM]

NICHOLAS B. TENNEY left the chat.

[Yesterday 4:57 PM]

Anne M. Uitvlugt left the chat.

[Yesterday 4:57 PM]
Jason L Cochran left the chat.
[Yesterday 4:57 PM]
Brian C Hatt left the chat.
[Yesterday 4:59 PM]
Valerie Brader (Rivenoak) (Guest) left the chat.
[Yesterday 5:13 PM]
Yesterday 5:13 PM Meeting ended: 3h 28m 41s
[Yesterday 5:13 PM]
Mike Buza (Guest) left the chat.