MPSC MI Power Grid – DSDA EV Stakeholder Session Second Stakeholder Meeting Monday, August 22, 2022

Commissioner Phillips Kick-off of meeting.

If participants have questions, e-mail Cole Bearden: beardenc@michigan.gov

Ask Qs via chat function. Panelists Qs after presentations.

Session will be recorded, and slides will be included in workgroup website: <u>https://www.michigan.gov/mpsc/commission/workgroups/mi-power-grid/distribution-system-data-access</u>

Please place, name, title, organization in chat feature for attendance purposes.

MI Power Grid launched in fall 2019 in partnership with Gov. Whitmer – transition to cleaner, distributed resources.

How we got here: 2018 opened D investment plans for CE & I&M. 2020 directed DTE & CE to include 1st iteration of hosting capacity (HC) analyses in 2021 filings.

Senate Resolution 143 passed 2021. Dec 2021 MPSC selected as cohort for Technical Assistance – Grid integration and mapping.

In MPSC Case No. U-21251, the Commission initiated the Distribution System Data Access Workgroup (DSDA) (July 2022). 1st meeting held last week. Shift focus to distribution (D) system data electric vehicle (EV) community would like access to.

Agenda reviewed.

Utilities and ITC, followed by NREL.

Panel moderated by Dr. Sherman – discussing data needs in EV community. Guided discussion with stakeholders on call. Questions to stir discussion and sense of what data elements looking for and how best make data available to you. Better sense of how can work with utilities to advance HC resources and further access of D system data – critical to all looking to deploy EV infrastructure. With Inflation Reduction Act (IRA) passage, recent data may be stale and critical to get right and ensure all have data to most efficiently and effectively deploy those resources.

Marco Bruzzano – DTE

Presentation result of stakeholder session. Started 2019 prior to formalization of MI Power Grid. Distributed energy resources (DER) penetration levels low. Stakeholder input received. Need for HC maps going to increase over time. Looking forward to getting feedback.

Andrew Galczyk - DTE

DER Hosting Capacity

DTE developed HC map for customers & installers to use. Closely tied to interconnection (IX) fast-track rules. IX < 2MW. Only D circuits. Only certain sections. There are a few search methods available.

Map developed with data from varying sources. Includes EPRI DR Integration Evaluation tool. Data updated monthly, quarterly, annual basis.

Quick demonstration of map. Can use search bar in top, LH corner. Can view circuit designation, voltage, DER in progress, installed DER, HC. Go/no-go map.

dteenergy.com \rightarrow service and price \rightarrow IX process and look up solar – click on those links

Can also go on IX process page and click on link "here"

Joseph Jacunski – DTE

What already have that exists – service upgrade – what req'd to upgrade service to accommodate EV fast charging, other equipment, etc. What there, available and what upgrade req'd. Have econ development process. Contact info on slide: 855-367-0255.

Limitations re. keeping customer information confidential and energy infrastructure information is critical. Can see HC data demonstrated.

Kyle Desser – Consumers Energy

Link to CE map: <u>https://cms.maps.arcgis.com/apps/instant/lookup/index.html?appid=b90ff63b338043b7bcae43dd685a</u> <u>419d</u>

Phased-in approach. Zonal go/no-go map. Phase 2 – conduct specific, detailed analysis. Still working on ways to finalize and how to use.

HCA Base-level approach – Part 1 of phased-in approach. More for larger scale developments, but < 2 MW. If looking to install hundreds of MW, not for you. Meant to be used as if looking for area w/high confidence will be able to handle load.

Base-level criteria for a "go": 40% of peak load >2 MW, grounded wye circuits, DSCADA present (loading info so know performance of circuit), meet min feeder short-circuit. All LVD circuits assessed. Info updated annually.

Also, business \rightarrow RE \rightarrow Generator IX \rightarrow HC Map

Currently only have certain voltage, capacity available.

Phase 2 – Next Steps

Using EPRI DRIVE tool, study and see if can continue to use, and what might want to focus on. Will have higher resolution zones. List of pending generation queue in zone.

Jeff Myrom – Director CE EV programs

Power MIDrive 5 yr pilot until June 2024. Multiple rebates available.

Power MI Fleet 3-phase process. Using 3rd party analyzing customer needs. Want to ensure grid prepared.

HCA EV Perspective. Residential vehicle to load (V2L) likely to be used for emergencies or back-up, rather than export to grid.

DCFC sites: Volkswagen funds, charging corridors. Seeing existing businesses. Seeing large # of gas stations, big box stores, etc.

Seeing significant interest in how track fleets to Michigan. Distribution and warehouse centers most likely or need new capacity. Are seeing large increases in load growth.

Kwafo Adarkwa – ITC John Kopinski - ITC

John Kopinski - ITC

2021 ITC HC Study. Focused on generation IX, primarily solar. Transmission (T) analysis. Modeling approaches. Analyzed 2025. Identified pts of IX. 225 pts examined. Looked at transfers up to 1,000 MW. Looked at transfers all way up to 3,500 MW for 345 kV.

Included vs Excluded costs (\$s) – excluded \$s associated with building a new IX stations. Included \$s are looking for major system upgrades. Where uprates required or where can connect to system where may not needs to do upgrades.

HC: Common Pool Resource: Capacity shared w/in region and across MI regions. Look at capacity available in adjacent regions.

- 1. HC can identify lower \$ regions. Looking at where new gen may make sense.
- 2. Changing non-static analysis.
- 3. Tracking \$ assumptions important to know which \$s included vs excluded. T critical role in ensure resources get to grid.

Kwafo Adarkwa – ITC

Transmission (T) fulcrum of where need to go w/electrified future.

Looking ahead: Infrastructure key driver to EV adoption. Market demands or increased demands will drive. ITC well positioned to make right investments and those that make sense for MI customers. Looking at different HC data pts.

ITC major role in adoption of EV infrastructure. ITC goals to lead electrification. Several goals. On track with those. By 2024 to break ground on several long range transmission planning (LRTP) projects. Augmentation to help grow EV charging. Partner w/local utilities. Looking @ ways to have company-owned vehicles. Be an industry leader – discussions, seminars to discuss ITC role.

Have demonstrated leadership by hosting webinars, members of Nationals Highway Electric Coalition. IIJA funding.

Next Steps

Work with partners, agreements in place w.r.t. infrastructure. IIJA to offset investments. Talk with industry partners. Be thought leader in this space.

Q & A:

Stevan Bratic – Electrification coming from grid – what about working with natural gas divisions? How support generation of electricity using natural gas – less impact on grid, cleaner.

CE: Seeing more interest in carbon neutrality space and GHG profiles.

DTE: Most carbon goals point towards EVs charging off electric grid. Current integrated resource plan (IRP) looking to clean up into grid. For future discussions, may want to look at bringing the two together, because don't communicate as much. BWEC, building more solar. Gas also plays role.

ITC: provides flexibility. Can't site large gas projects in backyard.

SB: Large infrastructure upgrades needed on electric side. Wanted to bring to table for discussion.

Val Brader: Feedback from small companies that may be misunderstanding the maps? CE: Have not experienced confusion regarding maps. Questions on how much time to upgrade line. Don't expect everyone to have details. Can have long lead times for upgrades.

DTE: A lot of smaller customers look at HC maps for details. Get questions about a specific site.

ITC: Hope to give good info to make good decisions.

Charles Griffith – How approach for customers who may not all have same opportunity?

ITC: Advantage already existed, so some info in HC study is leveling the playing field. Don't look at as disadvantages, but leveling the field.

DTE agrees: capacity available. Goal to make more information available.

Stevan Bratic – Rebates are more electric prevalent? Any for gas?

CE: Rebates currently electric focused.

SB: Can look at for gas?

DTE: Pose Q for gas-side of business. Don't know is natural gas fueled vehicles will do much to change plans. Aging infrastructure.

If have further Q's, e-mail to Cole.

NREL presentation on Bidirectional HC

Shibani Ghosh and David Narang

EV and HC topics – discussions on collaborating. What done so far for EV HC. Path forward.

About NREL – researchers, academia. One main focus on Renewable Energy. Transportation, EE, energy integration systems.

Michael Ingram – GMLC Project (Grid Modernization Lab Consortium) Michael is lead. Involves several different labs. 37 projects, \$2.25M. Bidirectional HC project w/MPSC.

Planning to merge PV & EV HC in bi-directional.

Still same. How much existing feeder bound by operation. For EVs aligns w/existing HC studies. Can look at particular nodes. Violations – voltage & thermal loading. Looking at customer impact. Discussion of key terms. Min and max HC. Min – no violations. Max – deployment incurs violations. Snapshot – Dynamic HC.

Generate # of scenarios. Go to 10% scenario.

EV HC Approach – developed as part of DOE-funded project. Interest in limiting scenarios. E.g. residential – can limit more to Level 1 types of chargers.

Path Forward – Leverage existing HC map, can be question of what kind of loading scenario want to use. Introducing new technologies, like energy storage. Same for EVs – Charge EVs in evening. Considering and thinking about how can use energy storage in this tool.

Kirk Eisert comment – Sounds like Guidehouse study. Doing study similar to what Shibani was talking about. Study internally to look at impact of DERs on I&M's system.

Comment (Val Brader in chat): You should consider how current vehicle telematics may be able to ease the transition and aid the right-sizing of infrastructure. For instance, if Ford is provided a geo-fence and power limitation by the local utility, we have the technological capabilities to balance charging among Ford vehicles within that area to avoid overloading particular circuits or transformers (for instance). This cannot, of course, supplant the need to construct infrastructure that meets customer needs for power in the long run, or be a comprehensive solution given the unfortunate reality that not everyone in Michigan will purchase a Ford.

Stakeholder Panel Discussion – Moderator by Dr. Laura Sherman from MEIBC

3 panelists: Kimathi Boothe (KB) (Vice President, Energy Operations at Dunamis Clean Energy Partners, IIc), Cory Bullis (CB) (FLO), Erin Quetell (EQ) (Chief Environmental Officer for Oakland County)

What tying to do now related to EV charging and where EC chargers should be go, sized, etc, - that can't do now, but could do better if had access to EV data.

Oakland County partnering with Macomb County. ArcGIS map to learn about siting. Working on toolkit. Understand how to make technical data more digestible so decisions can be made at local level. 1st having equitable access.

CB – regional studies. One holistic map would be valuable. Making info more digestible. Not everyone engineers. Need people to be able to navigate maps. CE presentation spelling out each circuit, regional, polygon. Other maps, just coloring of circuits. How much available in terms of hosting EV chargers? Making maps downloadable. Download specific profiles, so data easily transferable.

KB – Energy management company. Started with Level 2 (L2) EV charger. Tremendous opportunity in energy efficiency & how many host of opportunities. Collaboration terms of sharing data. Common housing. Circuit level more granular in terms of available capacity. If can tackle EE capacity in energy space. Accessible and sharing of data.

EQ: Additional electrification of buildings. How do we project how many EVs there will be?

Question: How do we ensure maps are not getting misinterpreted? In terms of making sure existing data not misinterpreted and ability to pull correct data for maps.

EQ: Potential \$s and burdens of upgrades. Understanding how translate to economic development directors. Can the community actually enforce?

CB: Conferring with engineers, flagged looking at circuits, only tells one part of story. Missing piece – wouldn't know by looking at map if building needs upgrades.

KB: Reinforce all said. Want buildings for customers. Need to employ circuit sharing strategies. Additional information allows for more opportunity to explore integration.

EQ: Allows community planners to look at secondary corridors.

Dr. Sherman: Will be sites with higher \$s.

CB: Industry challenges to see charges. Path of least resistance. Guard rails guiding investments, tackling overloaded circuits. Don't want to always avoid red and focus on green without EJ overlap and circuit mapping.

KB: A mix is ideal. Planning on how commuter interacts with sites. Urban city circuits vs West Bloomfield (inequitable). Intentional efforts around those solutions.

Q: Stevan Bratic: Market. D of cars being sold. Bottleneck is availability if power out at those locations. Many possible things about available options and even microgrid technology. Better emissions. Benefits and different options.

EQ: Electrification reduces local emissions and public health. Find RE sources and alternative to energy generation.

Other things looking for in next iteration for utilities? EQ: EJ overlay layer. New corridors.

KB: Remote areas as well. GHG maps, poverty, air quality, asthma rates – all on same map. Utilities committed to serve al customer – LI, rural. Focus in on multi-impactful ways.

From chat regarding interoperability: <u>https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-</u> Policy/Electric-Transportation/Final-Joint-Interoperability-Paper.pdf

CB: Load profiles change with season. Synergy with commodities. Have more and understand that customer from load profile breakdown.

Q: Upgrade Costs: How think can better serve constituents, clients?

EQ: Help community members transition from ICE to EVs. Plugging into NEVI and leveraging federal funding – being strategic with it.

CB: Chasing grant opportunities. Challenging for people to say "yes" to free money. Hesitation because can get question after question about feasibility, O&M, capacity on site?

KB: Customers on many different journeys. Looking to add chargers. If can get to macrolevel. Get customers in RE journey, incentivize customer who wants EV charger w/old halogen lights, while taking advantage of siting of more efficient building down street. Get to that kind of assessment & solution planning.

Stakeholder Questions:

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?

•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? 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?

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

•Are there examples of utilities nationally that have an ideal platform and process for making hosting capacity data publicly available to third-parties?

Shared in chat: Southern California Edison's map — super useful, colorful, and granular data. Could be informative for this discussion <u>Southern California Edison DRPEP (sce.com)</u>

Question from chat: When should written comments in response to these questions be filed in the docket to best inform the efforts? Answer from Commissioner Phillips: Questions most useful in next 4 weeks. Given timeline looking to respond to grid integration study from legislators.

Stevan Bratic: Loan compilations through State of Michigan. Anything the state will be offering? W.r.t. EV charging infrastructure. Through EGLE, Charge Up Michigan.

https://www.michigan.gov/egle/about/organization/materials-management/energy/rfps-loans/chargeup-michigan-program

Q: Customer acquisition \$s for companies electrifying fleets. Not aware of opportunities and incentives available to them?

CB: Following multiple channels. Leads from conferences.

For those wishing to submit commits in writing, please direct them to Cole Bearden at <u>BeardenC@michigan.gov</u>.

Comment from chat:

Also, the state's NEVI plan envisions scaling-up Charge-Up Michigan to deploy federal funds for EV charging infrastructure deployment.

Mike Buza: Areas where state can provide assistance?

Commissioner Phillips: Council on Climate Solutions and Office on Climate change looking at as one of the priorities for the next few years and moths, How better communicate and work with local communities – ease pathways to working with large renewable projects within the state.

Thank you to panelists. Valuable information to digest and consult with at partners at NREL and best advance and further evolve HC resources and tools in MI. Still opportunity to provide feedback – responses to Qs, documents, resources, best practices in other states. Send to Cole Bearden: <u>beardenc@michigan.gov</u>

Thank you to MPSC team, NREL.

Chat – link to Distribution Data Access Workgroup webpage: will post presentations and recordings. <u>https://www.michigan.gov/mpsc/commission/workgroups/mi-power-grid/distribution-system-data-access</u> Listserv to MI Power Grid WG and information on slides and further information in how to participate in WG. If not on listserv, reach out to Cole Bearden to be on that list.

Attendees and Chat Log

Attendees

- 1. Wang, Joy MPSC
- 2. 574-323-3509
- 3. 720-899-7569
- 4. Adams, Christine MPSC
- 5. Adarkwa, Kwafo -Director, Public Affairs, ITC
- 6. Adella F. Crozier DTE
- 7. Adriane E Jaynes, EV Program Manager, AEP
- 8. Ainspan, Malcolm NRG Business Solutions LLC
- 9. Alain Godeal Strategic Governance International
- 10. Andrew T Galczyk, DTE Interconnections
- 11. Anna Munie, Carbon Neutrality Programs at Lansing BWL
- 12. Anne Lenzen Senior Manager, Regulatory Affairs & Market Development, Opower
- 1. Anne M. Uitvlugt Consumers Energy
- 13. Anthony J. Tomczak (Tony) DTE, VP Electric Sales & Marketing
- 14. Bearden, Cole- MPSC
- 15. Brett Steudle, DTE EV Programs
- 16. Burnand, Nathan- MPSC
- 17. Byrne, Michael MPSC
- 2. Chad E Mabry Project Manager, American Electric Power
- 3. Charles Griffith Ecology Center
- 18. Colby R. Davis -
- 19. Cole, Cathy- MPSC
- 20. Cory Bullis FLO
- 21. Dan Blair MECA
- 4. Daniel D. Coleman AEP, Distribution Modeling & Analysis
- 5. Dan Dundas Michigan Electric & Gas Association
- 22. Dax Patel -
- 23. DeCooman, Jon MPSC
- 24. Dibella, Bob Principal, Energy, ICF
- 6. Donald Coffin Technical Manager, Green Button Alliance, Inc.
- 25. Douglas Jester 5Lakes
- 26. Nick Evans MPSC
- 27. Freeman, Al- MPSC

- 28. Ghosh, Shibani -NREL
- 29. Gibbs, Kayla MPSC
- 30. Grace N Musonera DTE
- 31. Hanser, Erik- MPSC
- 32. Ingram, Michael NREL
- 33. Isabelle A Brogna, DTE EV Programs
- 34. James A Brunell DTE
- 35. Jeffrey A. Myrom Consumers
- 36. Jeremy J Roberts General Manager & Executive Director, Green Button Alliance
- 37. Johanna W. Bleckman, Consumers Energy, Data Privacy
- 38. John Peracchio, Senior Advisor, Michigan Council on Future Mobility and Electrification
- 39. Jon C. Walter I&M
- 40. Joseph D. Jacunski DTE
- 41. Joseph E Robinson, DTE
- 42. Kaldunski, Benjamin G NSPW Policy Analyst
- 43. Katherine M Legates Engineer Principal, AEP
- 44. Kenneth J. Selander, Regulatory Strategist, Consumers Energy
- 45. Kimanthi Boothe -Dunamis Clean Energy Partners, VP of Energy Operations
- 46. Kirk R. Eisert Engineer, AEP
- 47. Kopinski, John, ITC Planning
- 48. Kyle M. Desser, Consumers Energy, Statewide Distribution Planning
- 49. Laura Chappelle Potomac Law Group
- 50. Laura Sherman Michigan EIBC
- 51. Lynne Mccollum, Consumers Energy Regulatory Support
- 52. Marco A. Bruzzano, SVP Corporate Strategy & Regulatory Affairs, DTE
- 53. Matthew S. Henry, Consumers Energy Statewide Planning
- 54. Matthew G Menze -
- 55. Merideth A. Hadala- Consumers
- 7. Michael C. Rampe Attorney, Consumers Energy
- 56. Michael Weiss, AEE
- 57. Mike Buza Sierra Club
- 58. Narang, David, NREL
- 59. Nicholas B. Tenney, Consumers Energy Interconnection/DG
- 60. Phillips, Tremaine MPSC
- 61. Quetell, Erin Nicole Oakland County
- 62. Raluca Lascu Principal Engineer Transmission Planning, DTE Energy
- 63. Jill Rusnak, MPSC
- 64. Sharon G. Pfeuffer DTE
- 65. Steven Q. McLean Director Customer Regulatory and Compliance, Consumers Energy
- 66. Stevan Bratic Bratic Enterprises, LLC
- 67. Stults, Missy City of Ann Arbor
- 68. Subin T. Mathew Director of Reliability and Grid Modernization, I&M
- 69. Thomas R. Lentz AEP
- 70. Valerie Brader Rivenoak for Ford Motor Company

71. William J Tokash – Manager Clean Energy Solutions

Chat Comments Only

[1:28 PM] 1:28 PM Meeting started

[1:51 PM] Dan Blair - MECA (Guest) Dan Blair consultant to Michigan Electric Cooperative Association like 2

[1:57 PM] Wang, Joy (LARA) Joy Wang, MPSC Electric Operations like 1

[1:57 PM] Adarkwa, Kwafo Kwafo Adarkwa, Director, Public Affairs, ITC like 1

[1:57 PM] Cole, Cathy (LARA) Cathy Cole, MPSC Strategic Operations like 1

[1:58 PM] Freeman, Al (LARA) Al Freeman, Mich PSC Staff

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[1:58 PM] Rusnak, Jill (LARA) Jill Rusnak - MPSC like 1

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[4:09 PM] Phillips, Tremaine (LARA) Stevan Bratic (Guest), if you have a presentation or document that you would like for the workgroup to review, please feel free to forward those resources to Bearden, Cole (LARA-Contractor).

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

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https://www.michigan.gov/egle/about/organization/materials-management/energy/rfps-loans/charge-up-michigan-program

like 3

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[4:24 PM] Cole, Cathy (LARA) For those wishing to submit commits in writing, please direct them to Cole Bearden at BeardenC@michigan.gov. like 1

[4:26 PM] John Peracchio

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[4:28 PM] Rusnak, Jill (LARA)

Quetell, Erin Nicole

I apologize if I missed a question directed towards me, another call came in. Q was directed more towards Cory and Kimathi, but question was regarding customer acquisition costs if you have thoughts as well: Customer acquisition \$s for companies electrifying fleets. Have you seen customers not aware of opportunities and incentives available to them? like 2

[4:33 PM] Bearden, Cole (LARA-Contractor) beardenc@michigan.gov

[4:33 PM] Anna Munie left the chat.

[4:34 PM] Cole, Cathy (LARA)
Details: <u>Distribution System Data Access (michigan.gov)</u>
like 1
Distribution System Data Access
Information about the utility distribution system - where projects can interconnect to the system, how big those projects can be, and how the system would be impacted - is essential to understandin...

[4:34 PM] Quetell, Erin Nicole Thank you!

[4:34 PM] Jeffrey A. Myrom Thank you MPSC staff for hosting!

Chat in Full

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The Charge Up Michigan Program is an EV Charger Placement project that aims to build the infrastructure for DC fast charging stations in the state of Michigan to ensure feasibility of all long dist...

[4:24 PM] Cole, Cathy (LARA) For those wishing to submit commits in writing, please direct them to Cole Bearden at BeardenC@michigan.gov. like 1

[4:26 PM] John Peracchio Also, the state's NEVI plan envisions scaling-up Charge-Up Michigan to deploy federal funds for EV charging infrastructure deployment. like 1

[4:26 PM] Quetell, Erin Nicole I apologize if I missed a question directed towards me, another call came in.

[4:28 PM] Rusnak, Jill (LARA)

Quetell, Erin Nicole

I apologize if I missed a question directed towards me, another call came in. Q was directed more towards Cory and Kimathi, but question was regarding customer acquisition costs if you have thoughts as well: Customer acquisition \$s for companies electrifying fleets. Have you seen customers not aware of opportunities and incentives available to them? like 2

IIKC Z

[4:31 PM] Anthony J Tomczak left the chat.

[4:32 PM] Anthony J Tomczak was invited to the meeting.

[4:32 PM] Chad E Mabry left the chat.

[4:32 PM] Dan Dundas left the chat.

[4:33 PM] Bearden, Cole (LARA-Contractor) beardenc@michigan.gov

[4:33 PM] Anna Munie left the chat. [4:34 PM] Cole, Cathy (LARA) Details: <u>Distribution System Data Access (michigan.gov)</u> like 1 Distribution System Data Access

Information about the utility distribution system - where projects can interconnect to the system, how big those projects can be, and how the system would be impacted - is essential to understandin...

[4:34 PM] Quetell, Erin Nicole Thank you!

[4:34 PM] Jeffrey A. Myrom Thank you MPSC staff for hosting!

[4:34 PM] Raluca Lascu left the chat.

[4:34 PM] Colby R Davis left the chat.

[4:34 PM] Quetell, Erin Nicole left the chat.

[4:35 PM] Laura - Michigan EIBC (Guest) left the chat.

[4:35 PM] Lynne Mccollum left the chat.

[4:35 PM] Joseph E Robinson left the chat.

[4:35 PM] Charles Griffith (Guest) left the chat.

[4:35 PM] Anne M. Uitvlugt left the chat.

[4:35 PM] Matthew G Menze left the chat.

[4:35 PM] John Peracchio left the chat. [4:35 PM] Jeffrey A. Myrom left the chat.

[4:35 PM] Merideth A. Hadala left the chat.

[4:35 PM] Jeremy J. Roberts (Guest) left the chat.

[4:35 PM] Thomas R Lentz left the chat.

[4:35 PM] Grace N Musonera left the chat.

[4:35 PM] Michael C. Rampe left the chat.

[4:35 PM] Ghosh, Shibani left the chat.

[4:35 PM] Ingram, Michael left the chat.

[4:35 PM] Adarkwa, Kwafo left the chat.

[4:35 PM] Jon C Walter left the chat.

[4:35 PM] Dax Patel left the chat.

[4:35 PM] Anthony J Tomczak left the chat.

[4:35 PM] Valerie Brader (Rivenoak) (Guest) left the chat.

[4:35 PM] Kopinski, John left the chat.

[4:35 PM] Kirk R Eisert left the chat.

[4:35 PM]

Johanna W. Bleckman left the chat.

[4:35 PM] Matthew S. Henry left the chat.

[4:35 PM] Mike Buza (Guest) left the chat.

[4:35 PM] Ainspan, Malcolm left the chat.

[4:35 PM] Isabelle A Brogna left the chat.

[4:35 PM] NICHOLAS B. TENNEY left the chat.

[4:35 PM] Daniel D Coleman left the chat.

[4:35 PM] Kyle M. Desser left the chat.

[4:35 PM] Joseph D Jacunski left the chat.

[4:35 PM] Kimathi Boothe left the chat.