Dykema Gossett PLLC
Capitol View
201 Townsend Street, Suite 900
Lansing, MI 48933
WWW.DYKEMA.COM
Tel: (517) 374-9100
Fax: (517) 374-9191

Richard J. Aaron
Direct Dial: (517) 374-9198
Direct Fax: (855) 230-2517
Email: RAaron@dykema.com

July 26, 2024

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Hwy, 3rd Floor
Lansing, MI 48909

Re: Case U-21534 - 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

Dear Ms. Felice:

Enclosed for electronic filing are International Transmission Company d/b/a ITCTransmission's Direct Testimony of Kwafo Adarkwa, Direct Testimony of Pushkar Chindhade, and Proof of Service in the above-referenced matter.

Sincerely,

DYKEMA GOSSETT PLLC

Richard Aaron

Digitally signed by: Richard Aaron
DN: CN = Richard Aaron email = raaron@dykema.com C = US O = Dykema
Date: 2024.07.26 14:34:24 -04'00'

Richard J. Aaron

STATE OF MICHIGAN
BEFORE THE
MICHIGAN PUBLIC SERVICE COMMISSION

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.	Case No. U-21534

DIRECT TESTIMONY OF KWAFO L. ADARKWA

Q. Please state your name and business address.

A. My name is Kwafo Adarkwa. My business address is 27175 Energy Way, Novi, Michigan 48377.

Q. By whom are you employed and in what capacity?

A. I am employed by ITC Holdings Corp. ("ITC") and serve as the Director of Public Affairs for the Michigan Business Unit, which is comprised of ITC Transmission Company d/b/a ITC*Transmission* ("ITCT") and Michigan Electric Transmission Company ("METC").

Q. Please briefly describe your educational background.

A. I hold a Bachelor of Science degree in Electrical Engineering from Michigan State University that was granted in 2003 and a Master's Degree in Business Administration from The Eli Broad Graduate School of Management of Michigan State University that was granted in 2013.

Q. Please describe your professional background.

A**.** Prior to joining ITC, I was a Public Utilities Engineer with the Michigan Public Service Commission ("MPSC" or the "Commission") from October 2004 through August 2008. I

began my employment with ITC in August of 2008 as a Regulatory Specialist responsible for liaising with the MPSC and collecting and analyzing data. In April 2011, I was promoted to Senior Regulatory Analyst responsible for shaping transmission policy positions, analyzing rate information, and liaising with the MPSC. In May 2015, I was promoted to Manager of Regulatory Strategy for the company. In April 2021, I was promoted to Director of Public Affairs for ITC, my current role.

Q. What are your duties and responsibilities in your current position?

A. As the Director of Public Affairs, my responsibilities include overseeing the state regulatory and legislative affairs of ITC for the ITC Michigan business unit. This includes interacting with federal- and state-level regulators and shaping ITC public policy. I am also the Leader of the Company's Electrification Efforts.

Q. Have you previously testified before the MPSC?

A. Yes. I have previously provided testimony before the MPSC, including in DTE Electric Company's last rate cases in Case Nos. U-20836 and U-21297. I have also testified in Consumers Energy's rate cases in Case Nos. U-21224 and U-21389.

Q. What is the purpose of your testimony?

A. I am testifying on behalf of ITC in DTE Electric Company's ("DTE" or the "Company") rate case proceeding. My testimony is in support of DTE's proposal to extend the Charging Hubs pilot program for electric vehicle charging. My testimony will also discuss ITC's concerns with new customer load growth, particularly ensuring that Michigan's electric infrastructure can support this growth.

Q. Do you sponsor any exhibits with your direct testimony?

A. No, I do not.

Q. What is ITC's role in this proceeding?

A. ITC is an independent, standalone transmission company, and the owner of the transmission system that serves DTE. ITC's transmission system functions as backbone infrastructure in DTE's service territory and will ensure reliability while managing new demands on the system associated with electric vehicle ("EV") charging, electrification and load growth. Collaboration among DTE, ITC, the Commission and third-party electric vehicle supply equipment ("EVSE") charging providers will be essential to ensuring that charging infrastructure is built out in a manner that best utilizes available capacity on the grid, ensures reliable service, minimizes the cost of infrastructure and provides equitable access to EV charging to all communities in DTE's service territory. Additionally, transmission planning, including close coordination between transmission providers and distribution utilities, is essential to supporting the investment in electric infrastructure that is needed to support large load growth projects, such as data centers.

Q. Why does ITC support DTE's current proposal to extend the Charging Hubs pilot?

A. ITC believes DTE's proposal to extend the Charging Hubs pilot is a reasonable approach to spur additional fleet electrification in Michigan. The state needs to make progress on EV infrastructure development with the anticipated number of EVs coming to market in Michigan.[1] A recent study showed that EV sales in the United States are expected to increase by 85% through 2040.[2] If EV adoption follows anticipated trends,

[1] See, e.g., DTE Electric, *2022 DTE Electric 2022 Integrated Resource Plan Summary*, at 25 ("[DTE] expect[s] light-duty EV stock will grow nearly 20% annually on average from 2023 through 2042 in [DTE's] service territory.")

[2] Goldman Sachs, *Electric Vehicles are Forecast to be Half of Global Car Sales by 2015* (February 10, 2023), available at https://www.goldmansachs.com/intelligence/pages/electric-vehicles-are-forecast-to-be-half-of-global-car-sales-by-2035.html.

DTE should consider planning for additional Charging Hubs in its next rate case to ensure electrification of medium-duty ("MD") and heavy-duty ("HD") vehicle fleets is as seamless and expedient as possible.[3]

Q. What does ITC request regarding DTE's EV programs in this case?

A. The Commission should support and encourage DTE to work with ITC to ensure that system improvements developed to support EV load growth are optimized with transmission planning.

Q. Can you explain the need for regional transmission expansion and how it will support EV charging and new demands on the grid?

A. Through the MI Healthy Climate Plan[4], Governor Whitmer has established a goal to build the infrastructure needed to support two million EVs on Michigan roads by 2030. This 2030 timeframe converges with current state and utility goals to generate roughly sixty percent of the state's electricity from renewable resources and phase out the state's remaining coal-fired power plants. Taken together, these goals require significant expansion of the transmission network in Michigan and throughout the MISO region by the end of this decade.

Fortunately, MISO's Long-Range Transmission Planning ("LRTP") initiative is designed to meet this need. Planning for Tranche 2, a second tranche of backbone projects, is currently underway. Tranche 2 will be needed to maintain reliability in the 10-

[3] The deployment of additional infrastructure by third-party EVSE providers should be tracked throughout this period and could alter this outlook.

[4] Michigan Department of Environmental, Great Lakes and Energy, *MI Healthy Climate Plan*, at 5 (April 2022), available at https://www.michigan.gov/egle/-/media/Project/Websites/egle/%20Documents/Offices/OCE/MI-Healthy-Climate-Plan.pdf?rev=d13f4adc2b1d45909bd708cafccb%20fffa&hash=99437BF2709B9B3471D16FC1EC692588.

20 year-out timeframe. In fact, conventional resource retirements and the transition to renewable generation sources is occurring at a more rapid pace throughout the region than what was anticipated at the outset of the LRTP initiative. Renewables are projected to reach 30% system-wide penetration—an inflection point for operational complexity[5]—10 years *sooner* than what was forecast in the first series of MISO futures scenarios.[6] As renewable resource integration continues to accelerate, regional transmission expansion is needed to both interconnect new resources coming online and to efficiently move energy across the region.

Regional transmission initiatives, like LRTP Tranche 2, will support the Governor's goals for widespread adoption of EVs and electrification in a renewable energy-based future by providing essential reliability services beyond what local resources are able to provide. Transmission infrastructure, by design, is dynamic, bi-directional, and can react to a system need nearly instantaneously offering system operators much needed flexibility to operate a decentralized generation fleet. In a future that depends on intermittent renewable energy sources like wind and solar, it is critical that we have sufficient access to geographically diverse generator resources to manage reliability risks associated with low local resource availability and high demand. These conditions can occur during extreme weather events—like those during Winter Storm Uri[7]—or during more mundane

[5] Midcontinent Independent System Operator, *MISO's Renewable Integration Impact Assessment*, at. 5, (February 2021), available at https://cdn.misoenergy.org/RIIA%20Executive%20Summary520053.pdf.
[6] Midcontinent Independent System Operator, *Future 2A Expansion & Preliminary Siting: LRTP Workshop*, at 7 (March 10, 2023), available at https://cdn.misoenergy.org/20230310%20LRTP%20Workshop%20Item%2002%20MISO%20Future%202A%20Expansion%20and%20Preliminary%20Siting628178.pdf.
[7] Federal Energy Regulatory Commission, *FERC - NERC - Regional Entity Staff: The February 2021 Cold Weather Outages in Texas and the South Central United States*

conditions, in particular, cold winter mornings and hot summer evenings. Regional transmission expansion is the only way to manage changing generation and weather risks while ensuring reliability throughout the resource transition.

Maintaining system reliability and affordable electric service through access to a broad network of generation resources is also critical for EV adoption itself to continue and accelerate. Vehicle and fleet owners will be reluctant to electrify if there is uncertainty with respect to cost or reliability. Thus, widespread EV adoption in the future will rely on the infrastructure we plan today. ITC's proactive transmission planning process will identify no-regrets projects that will serve as the backbone for electric infrastructure that, regardless of where and how large electrified loads or renewable energy resources locate, will deliver the energy from where it is produced to where it is consumed in a reliable and cost effective manner.

Q. What does ITC request with regard to DTE's load growth and electrification efforts?

A. There is a pressing need in Michigan for improved regional transmission to ensure reliability but also access to low-cost energy resources. The Commission and DTE should continue to support and participate actively in Tranche 2 of MISO's LRTP planning process.

Q. Does that conclude your testimony?

A. Yes.

(November 16, 2021), available at https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and.

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DIRECT TESTIMONY OF PUSHKAR CHINDHADE

Q. Please state your name and business address.

A. My name is Pushkar Chindhade. My business address is 27175 Energy Way, Novi, Michigan 48377.

Q. By whom are you employed and in what capacity?

A. I am the Principal Operations Engineer for ITC Holdings Corp. ("ITC").

Q. Please briefly describe your educational background.

A. I hold a Bachelor of Science degree in Electrical Engineering from M.S. University of Baroda (India) and a master's degree in Electrical Engineering from University of Tennessee at Chattanooga.

Q. Please describe your professional background.

A. Prior to joining ITC, I worked with Honeywell Technology Services for a Big Dig project in Boston as an Electrical Test Engineer, from June 2002 through January 2006. I began my employment at ITC in 2006 as a TMS Supervisory Control and Data Acquisition ("SCADA") Engineer in TMS support team and focused on Energy Management System

("EMS") implementation. I then moved to Operations Engineering Department supported Operations Training Simulator, Real Time Operations support, Network Modeling and became primary subject matter expert for the North American Electric Reliability Corporation ("NERC") EOP-005, which governs system restoration plans ("SRP"). am currently working as Principal Operations Planning Engineer.

Q. What are your duties and responsibilities in your current position?

A. As Principal Operations Planning Engineer, I support Real Time Operations Planning, Conduct Forward and Next Day Study in ITC's Michigan footprint and maintain ITC's SRP.

Q. Have you previously testified before the MPSC?

A. No, I have not previously testified before the MPSC.

Q. What is the purpose of your testimony?

A. I am testifying on behalf of ITC in DTE Electric Company's ("DTE" or the "Company") rate case proceeding. My testimony is in support of DTE's proposal to prioritize blackstart resource investment.

Q. Do you sponsor any exhibits with your direct testimony?

A. No, I do not.

Q. What is ITC's role in this proceeding?

A. ITC is an independent, standalone transmission company, and the owner of the Bulk Electric System ("BES") infrastructure that transmits electric energy from electric generators onto the subtransmission and distribution systems owned by DTE. In the event of a major grid event, DTE has invested in blackstart resources to start the grid back up on its own power. As such, support of DTE's blackstart resources has a direct impact on the reliability of the transmission system owned by ITC*Transmission* ("ITCT").

Q. Why are blackstart resources important to the transmission system and the wider electric grid?

A. Each Transmission Operator ("TOP") is required to have an SRP under NERC standards. Blackstart resources are a key component to a TOP's SRP. NERC requires TOPs (such as ITCT) to have an SRP allowing for restoration of that TOP's System following a disturbance in which one or more areas of the BES shuts down. NERC's current requirement is found in EOP-005-3, which generally requires Transmission Operators to develop and implement a restoration plan approved by the Reliability Coordinator (i.e., MISO)). EOP-005-3 also has requirements for the entities operating the generators identified as blackstart resources in a restoration plan. The use of blackstart resources is required to restore the shut-down area. Due to the federal and state regulatory limitations placed on ITCT and its independent nature, ITCT is prohibited from owning generating facilities. Thus, it is necessary for ITCT to partner with generation owners, such as DTE, to establish the required blackstart resources.

Blackstart resources are procured through contracts with generation owners to complete and maintain a viable SRP. A blackstart unit is one that can start on its own power without support from the grid in the event of a major grid event, such as the 2003 blackout; which estimates suggest cost the U.S. economy between $4 and $10 billion, and the Detroit area alone $220 million.[1] Blackstart resources are essential to establishing grid control and restarting power plants following a grid blackout and are critical to the safety and resilience of the grid, public safety, and the economy. Construction of DTE's blackstart resources are nearly complete, and DTE has requested approval of the remaining funding for blackstart resources that support ITC's System Restoration Plan ("SRP").

Q. Is there a current need in Michigan for blackstart resources?

A. Yes. As the generation fleet continues to undergo an unprecedented transformation, blackstart resources are being lost due to conventional generation retirements across the nation. MISO's Local Resource Zone 7 is no exception. Local Resource Zone 7 is losing a number of blackstart resources due to generation retirements, and blackstart resources are and will continue to be critical for ITC's SRP in DTE's service territory. To ensure Michigan has sufficient blackstart resources, ITC (parent to ITCT) formalized a state-wide RFP for new blackstart resources, to which DTE responded with the economical solutions included in this case. DTE's investments will ensure that Michigan is prepared for any unforeseen system disturbances through a reliable and resilient SRP. DTE should be

[1] See "The Economic Impacts of the August 2003 Blackout," Electric Consumer Research Council (ELCON), February 2, 2004 available at https://www.nrc.gov/docs/ML1113/ML111300584.pdf.

commended on actively pursuing its blackstart resource plan and working to improve the reliability and security of Michigan's electric grid.

Q. Are blackstart resources generally subject to confidential treatment?

A. Yes. It is also important to note that these blackstart resource projects are intended for use in critical grid events and preserving the security of these resources is of paramount importance.

Q. What does ITCT recommend with regard to DTE's blackstart resource costs?

A. ITCT requests that the Commission approve the remaining costs for these projects in full without disallowance or further conditions.

Q. Does that conclude your testimony?

A. Yes.

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PROOF OF SERVICE

Melissa A. Goodrich, an employee of Dykema Gossett PLLC, being first duly sworn, deposes and says that on the 26th day July, 2024, she served International Transmission Company d/b/a ITCTransmission's Direct Testimony of Kwafo Adarkwa, Direct Testimony of Pushkar Chindhade, and Proof of Service on the parties listed on the attached service list via electronic mail.

Melissa A. Goodrich

Digitally signed by: Melissa A. Goodrich
DN: CN = Melissa A. Goodrich email = MGoodrich@dykema.com C = AD
Date: 2024.07.26 14:35:16 -04'00'

Melissa A. Goodrich

DYKEMA GOSSETT PLLC • Capitol View, 201 Townsend Street, Suite 900, Lansing, Michigan 48933

SERVICE LIST
MPSC CASE NO: U-21534

ADMINISTRATIVE LAW JUDGE Sally L. Wallace	wallaces2@michigan.gov
ASSOCIATION OF BUSINESSES ADVOCATING TARIFF EQUITY Stephen A. Campbell Michael J. Pattwell Consultant: Jessica York	scampbell@clarkhill.com mpattwell@clarkhill.com jyork@consultbai.com
ATTORNEY GENERAL, DANA NESSEL Joel B. King	KingJ38@michigan.gov ag-enra-spec-lit@michigan.gov
CITY OF ANN ARBOR Valerie Jackson Valerie J.M. Brader Linda Hofrichter Rick Bunch	VJackson@agov.org valerie@rivenoaklaw.com lhd@rivenoaklaw.com rick@mi-maui.org ecf@rivenoaklaw.com
DTE ELECTRIC COMPANY Andrea E. Hayden Paula Johnson-Bacon Breanne K. Reitzel Jon P. Christinidis John A. Janiszewski	andrea.hayden@dteenergy.com paula.bacon@dteenergy.com breanne.reitzel@dteenergy.com jon.christinidis@dteenergy.com john.janiszewski@dteenergy.com mpscfilings@dteenergy.com
ELECTRIFY AMERICA, LLC Stephen Bright Jennifer A. Morante Krystal D. Hermiz	steve.bright@electrifyamerica.com jmorante@grsm.com khermiz@grsm.com
EVGO SERVICES LLC Nikhil Vijaykar Michael G. Oliva	nvijaykar@keyesfox.com moliva@fosterswift.com
GREAT LAKES RENEWABLE ENERGY ASSOCIATION Don L. Keskey Brian W. Coyer	donkeskey@publiclawresourcecenter.com bwcoyer@publiclawresourcecenter.com

LOCAL 223 UTILITY WORKERS UNION of AMERICA (UWUA), AFL-CIO, MI BUILDING & CONSTRUCTION TRADES COUNCIL Benjamin L. King	bking@michworkerlaw.com
MICHIGAN CABLE TELECOMMUNICATIONS ASSOCIATION Sean P. Gallagher	sgallagher@fraserlawfirm.com
MICHIGAN ENERGY INNOVATION BUSINESS COUNCIL (MEIBC), INSTITUTE for ENERGY INNOVATION (IEI), ADVANCED ENERGY UNITED, THE FOUNDRY ASSOCIATION OF MICHIGAN, AND ENERGY MICHIGAN, INC., Laura A. Chappelle Timothy J. Lundgren Justin K. Ooms	lchappelle@potomaclaw.com tlundgren@potomaclaw.com jooms@potomaclaw.com
MICHIGAN ENVIRONMENTAL COUNCIL (MEC), NATURAL RESOURCES DEFENSE COUNCIL (NRDC), SIERRA CLUB Tracy Jane Andrews Christopher M. Bzdok Breanna Thomas	tjandrews@tropospherelegal.com chris@tropospherelegal.com breanna@tropospherelegal.com
MPSC STAFF Amit T. Singh Heather M.S. Durian Michael J. Orris Monica Stephens Lori Mayabb Jon DeCooman Joseph Ufolla	singha9@michigan.gov durianh@michigan.gov orrism@michigan.gov stephensm11@michigan.gov mayabbl@michigan.gov decoomanj@michigan.gov ufollaj@michigan.gov
PROTEC Michael J. Watza	mike.watza@kitch.com
SOULARDARITY, WE WANT GREEN, TOO Amanda Urban D. Samuel Heppell Jacob R. Schuhardt Mark N. Templeton	t-9aurba@lawclinic.uchicago.edu heppell@uchicago.edu jschuhardt@uchicago.edu templeton@uchicago.edu
THE ECOLOGY CENTER,	

ENVIRONMENTAL LAW & POLICY CENTER (ELPC), UNION OF CONCERNED SCIENTISTS, AND VOTE SOLAR Daniel Abrams Nicholas Wallace Alondra Estrada Carolyn Boyce	 dabrams@elpc.org nwallace@elpc.org aestrada@elpc.org cboyce@elpc.org mpscdocket@elpc.org
THE KROGER CO. Kurt J. Boehm Jody Kyler Cohn Justin Bieber Michael L. Kurtz	 kboehm@bkllawfirm.com jkylercohn@bkllawfirm.com jbieber@energystrat.com mkurtz@BKLlawfirm.com
WALMART INC. Melissa M. Horne, Esq.	 mhorne@hcc-law.com