STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

Katie Sieben, Chair Joseph K. Sullivan, Vice Chair Hwikwon Ham, Commissioner Audrey Partridge, Commissioner John Tuma, Commissioner

May 8, 2025

RE: In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy (Docket No: E002/CI-24-318)

Initial Comments of the Union of Concerned Scientists

On behalf of our 12,042 members and supporters in Minnesota, the Union of Concerned Scientists ("UCS") submits these comments in response to the Notice of Comment Period issued April 7, 2025 In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy.¹ UCS is a non-profit organization that uses rigorous science to advocate for a healthier planet and safer world.

UCS commends the Commission for undertaking a deliberate and expedited stakeholder working group process to draft a framework for proactive upgrades to the distribution system. UCS participated in the working group and led a subgroup for the latter half of the process.

UCS Recommendations

UCS strongly recommends the Commission establish a Framework for Proactive Distribution Grid Upgrades ("Framework") for Xcel Energy. The urgency of meeting state energy goals as well as the increasing deployment of electrification and distributed energy resources necessitates the evolution of grid planning processes. Proactive distribution grid upgrades can help facilitate a more timely connection of both electrification loads and distributed generation resources, the latter of which has suffered long queues to connect to the grid for some time.² Historical grid planning practices will become increasingly ill-suited to meet the monopoly utility's obligation to serve the needs of all customers, both load and generation, as electrification and distributed generation

¹ Notice of Comment Period (April 7, 2025). *In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy* (Docket No: E002/CI-24-318). https://www.edockets.state.mn.us/documents/%7BE0831096-0000-CD13-930C-

¹⁷⁹⁷E172AFFA%7D/download?contentSequence=0&rowIndex=1

² Jossi, Frank (2022). "Minnesota regulators want Xcel to cut wait time for connecting solar to its grid." Canary Media. <u>https://www.canarymedia.com/articles/enn/minnesota-regulators-want-xcel-to-cut-wait-time-for-connecting-solar-to-its-grid</u>

increases in the future. Adopting a Proactive Distribution Grid Upgrade Framework is a key step to evolving utility planning to better serve the grid now and into the future.

Specifically, adopting critical elements of the draft framework, as identified below, will result in meaningful proactive upgrades to advance progress toward meeting state energy goals and enable customers who wish to adopt clean energy technologies to do so without undue delays.

UCS recommends the Commission adopt elements of the Draft Framework as follows in Table 1, and we provide recommendations for pursuing Phase 2 of the Working group in Table 2. We further recommend the Commission consider adopting a version of the Framework for the other investor owned utilities in the state.

Section of Framework	Recommended Items	Notes
A. Introduction	A.1, A.3, A.5, A.7, A.8, A.11,	Do not oppose A.6 (alt to A.7),
	A.14. A.15	Do not oppose A.9 (alt to A.8)
B. Definitions	B.2, B.3, B.4, B.5, B.6, B.9,	No position at this time on B.7
	B.10, B.11, B.12., B.14, B.16	or B.8, B.13, B.17
C. Process	C.1, C.2, C.3, C.4, C.6, C.8,	No position at this time on C.
	C.9, C.1(a-e)	11
D. Baseline Information	D.1, D.2, D.3, D.4, D.5	Support all items in Sec. D
E. Forecast	E.1, E.2, E.3, E.4, E.5, E.6	Support all items in Sec. E
F. Potential Sites for Proactive	F.1, F.2, F.3, F.4, F.5, F6 (a-j),	Support all items in Sec. F
Upgrades	F.7, F.8	
G. Proactive Upgrade Proposal	G.1, G.2, G.3, G.4, G.5, G.6,	
Evaluation Criteria	G.7, G.8, G.9, G.10, G.11,	
	G.12, G.13, G.15, G.16	
H. Proposal for non-locations	H.1, H.2	Support both items in Sec H.
specific proactive measures		
J. Cost Recovery	J.4, J.7, J.8., J.9, J.13, J.18	No position at this time on J.1,
		J.2, J.3
K. Cost Allocation	Reserve comment	Agree with principle that cost
		share or CIAC fees should
		offset the cost to ratepayers
L. Capacity Reservation	Reserve comment	
M. Reporting	M.1, M.3, M.4, M.5, M.6, M.7,	See additional comment
	M.8, M.9, M.10, M.11, M.12	below on M.6

Table 1. Recommendations on establishing a Proactive Distribution Grid Upgrade Framework

Table 2. Recommendations for pursuing Phase 2 of the Proactive Grid Upgrade Framework.

Phase 2 Proposal Section	Recommended Items	Notes		
Timing	1	Do not oppose 2		
Topics	3(a-c), 4, 5, 6, 7, 8	All items		

Discussion of Select Framework Provisions and Phase 2 Topics

For the purposes of these initial comments, UCS focuses on briefly describing a few key issues within the draft framework, including Section A – Introduction, Section C – Process, and Section M – Reporting. We also elaborate on select topics in the Phase 2 Proposal. We reserve the right to elaborate on other recommendations, as enumerated above, in reply comments.

• Section A – Introduction

As the grid evolves with electrification and distributed energy resources, the traditional relationship between supply and demand is changing. While those clean energy technologies may impose costs on the grid to interconnect, they can also provide benefits to the grid when they are leveraged through grid supporting programs. Those grid benefits, in turn, benefit all ratepayers. Thus, it is appropriate to consider the benefits in cost allocation, as proposed in provisions A.14 and A.15.

• Section C – Process

The stakeholder process outlined in section C.10 (a-e) is important for transparency, which has three key benefits. First, transparency in forecasting and creating proactive investment proposals builds trust among stakeholders in the process and the outcomes of the forecasting exercise. Second, transparently sharing the forecasting analysis and giving opportunities for feedback creates space for stakeholders to share information that may enhance the certainty of the forecast. Third, the requirement that the utility report back on the feedback received, whether it was incorporated into the forecast, and why creates accountability. Such accountability further creates trust and confidence in the process and outcomes. The result will be better proactive plan proposals to meet future needs.

• Section M – Reporting

Importantly, the definition of DERs in Section B.6 includes "electrified end uses that can be used as a resource". Electrified end uses are not listed in the reporting table M.6. However, electrified end uses should be captured in the reporting on DERs. UCS does not oppose using the "other category" of the M.6 table for reporting on those DERs in the inaugural iteration of the Framework, and we encourage the commission to consider whether electrified load resources should be explicitly included in the table when the Framework is updated in the future. Notably, at least one such electrified end use, namely electric vehicles, also has the potential to conduct grid-parallel discharging from its battery (a form of "V2G"). As programs for grid-parallel battery discharging become more widely available in the service territory, V2G may merit its own line in the DER reporting table.

• Topic 5 – Flexible Interconnection

Flexible interconnection agreements are an important way to enable timely interconnection of distributed generation resources. They are also a key opportunity for incorporating new load, such

as a fleet of electric vehicles onto the grid.³ Flexible interconnection for load, in addition to generation, should be explicitly included in the Phase 2 scope of topics.

Conclusion

UCS appreciates the opportunity to comment on the Framework for Proactive Distribution Grid Upgrades. We recommend the Commission establish the Framework, with the provisions recommended herein, to apply to Xcel Energy and consider establishing a substantially similar framework for the other investor owned utilities in the state.

Sincerely,

<u>/s/ Sam Houston</u> Union of Concerned Scientists 1825 K Street NW, Suite 800 Washington, DC 20006 shouston@ucs.org

³ Horan, Casey et al. (2025). "Let's Get Flexible: Considerations for Unlocking Grid Capacity Using Flexible Interconnection." Environmental Defense Fund. <u>https://library.edf.org/AssetLink/q812pd5afr3hboi61cm503fprla5ge0p.pdf</u>

CERTIFICATE OF SERVICE

I, Sam Houston, hereby certify that I have this day, served a copy of the following document to the attached list of persons by electronic filing and electronic mail.

Initial Comments of Union of Concerned Scientists

Docket No. E002/CI-24-318

Dated this 8th day of May 2025

/s/Sam Houston

Union of Concerned Scientists 1825 K Street NW, Suite 800 Washington, DC 20006 shouston@ucs.org

Last Name	First Nam e	Email	Organi zation	Agency	De liv ery Me th od	Alt ern ate Del iver y Me tho d	Vi ew Tra de Se cr et	Service List Name
Allen	Brian	brian.allen@alle nergysolar.com	All Energy Solar, Inc		Elec c Se	troni rvice	No	24- 318E00 2-Cl- 24-318
Bains	Anjali	bains@fresh- energy.org	Fresh Energy		Elec c Se	troni rvice	No	24- 318E00 2-Cl- 24-318
Ballew	Jared	jared.ballew@ev .energy	EV.ENE RGY CORP		Elec c Se	troni rvice	No	24- 318E00 2-Cl- 24-318
Banton	Shay	shayb@irecusa. org	Interstat Council	e Renewable Energy	Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318
Bell	Mathi as	mathias@weave grid.com	Weave Grid		Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318
Brolin	Ed	ed.brolin@rwe.c om	RWE Clean Energy		Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318
Clement	Eric	eclement@mnp ower.com	Minnes ota Power		Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318
Cohen	Joshu a	josh.cohen@swt chenergy.com	SWTC H Energy, Inc.		Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318
Coleman	Steve	stevecolemanpu ma@gmail.com			Elec c Se	troni rvice	No	24- 318E00 2-CI- 24-318

Commer	Gene	commerce.attor		Office of the	Electroni	Ye	24-
се	ric	neys@ag.state.		Attorney General -	c Service	s	318E00
Attorney		mn.us		Department of			2-CI-
S				Commerce			24-318
Damian	Geor	gdamian@clean	Clean Er	nergy Economy MN	Electroni	No	24-
	ge	energyeconomy			c Service		318E00
		mn.org					2-CI-
							24-318
Davis	Cody	cdavis@epecon	Electric	Power Engineers	Electroni	No	24-
		sulting.com	(ELPC/V	S)	c Service		318E00
							2-CI-
D 14	D .						24-318
Demarre	Dani	danielle.demarre	All		Electroni	NO	24-
	elle	@allenergysolar.	Energy		c Service		318E00
		com	Solar				2-01-
DonHord	Timot	timothy@coopor	Coopera	tivo Eporav Euturoo	Electroni	No	24-310
or	hv	ativeenergyfutur	Coopera	live Energy Futures	c Service		24- 318E00
Thomas	iiy	es com			COCIVICE		2-CI-
momas		03.0011					24-318
Dennisto	lame	iames r dennisto	Xcel Ene	rgy Services Inc	Electroni	No	24 010
n	s	n@xcelenergy.co	XOOT EITE	15) corvices, me.	c Service	110	318F00
	•	m					2-CI-
							24-318
Dietz	Dian	diane.dietz@stat		Department of	Electroni	No	24-
	е	e.mn.us		Commerce	c Service		318E00
							2-CI-
							24-318
Ehrlich	Willia	wehrlich@tesla.	Tesla,		Electroni	No	24-
	m	com	Inc.		c Service		318E00
							2-CI-
							24-318
Farrell	John	jfarrell@ilsr.org	Institute	for Local Self-	Electroni	No	24-
			Reliance	9	c Service		318E00
							2-CI-
F .	01						24-318
Ferguson	Shar	sharon.ferguson		Department of	Electroni	NO	24-
	on	@state.mn.us		Commerce	c Service		318E00
							2-01-
Gleekner	Allon	adlecknor@olpo	Environr	nental Law & Policy	Electroni	No	24-310
GIEGKIIEI		ord	Center	nemai Law & Fullby	c Service		24- 318E00
			Conter		0.0011100		2-CI-
							24-318
Gross	Tim	tgross@fuelingm	Fueling		Electroni	No	24-
		n.com	Minnes		c Service		318E00
			ota				

							2-CI-
							24-318
Haeg	Nich	haeg@fresh-			Electroni	No	24-
	olas	energy.org			c Service		318E00
							2-CI-
							24-318
Halso	Joe	joe.halso@sierra	Sierra		Electroni	No	24-
		club.org	Club		c Service		318E00
							2-CI-
							24-318
Havey	Kim	kim.havey@min	City of		Electroni	No	24-
		neapolismn.gov	Minne		c Service		318E00
			apolis				2-CI-
							24-318
Hedlund	Amb	amber.r.hedlund	Northern	n States Power	Electroni	No	24-
	er	@xcelenergy.co	Compar	iy dba Xcel Energy-	c Service		318E00
		m	Elec				2-CI-
							24-318
Heinen	Ada	aheinen@dakota	Dakota E	Electric Association	Electroni	No	24-
	m	electric.com			c Service		318E00
							2-CI-
			1550				24-318
Hernand	Marı	mari@irecusa.or	IREC		Electroni	NO	24-
ez		g			c Service		318E00
							2-01-
Hindarlia	Katha	katharing hindarl		Office of the	Flootropi	No	24-318
ппаение	rino	io@og stato mp		Attornov Gonoral		INU	24- 210E00
	TITE			Residential Litilities	C Service		2-CL
		43		Division			24-318
Horan	Case	choran@edf.org	Environr	nental Defense Fund	Electroni	No	24 010
lioian	v	onoraneocanorg	Linvironi		c Service		318E00
	,						2-CI-
							24-318
Houston	Sama	shouston@ucsu	Union of	^c Concerned Scientists	Electroni	No	24-
	ntha	sa.org			c Service		318E00
		C C					2-CI-
							24-318
Jones	Philip	phil@evtranspor			Electroni	No	24-
		tationalliance.or			c Service		318E00
		g					2-CI-
							24-318
Kenwort	Willia	will@votesolar.o			Electroni	No	24-
hy	m	rg			c Service		318E00
							2-CI-
							24-318

King	Bobb y	bking@solarunit edneighbors.org	Solar Un	ited Neighbors	Electroni c Service	No	24- 318E00 2-CI- 24-318
Kostiuk	Nath an	nathan.c.kostiuk @xcelenergy.co m	Xcel Energy		Electroni c Service	No	24- 318E00 2-CI- 24-318
Li	Beck y	bli@rmi.org			Electroni c Service	No	24- 318E00 2-CI- 24-318
Londo	Jody	jody.l.londo@xc elenergy.com	Xcel Energy		Electroni c Service	No	24- 318E00 2-CI- 24-318
Lydon	Made line	madeline.k.lydo n@xcelenergy.co m	Xcel Energy		Electroni c Service	No	24- 318E00 2-CI- 24-318
Mamme n	Tom	thomas.j.mamm en@xcelenergy.c om	Xcel Energy		Electroni c Service	No	24- 318E00 2-CI- 24-318
Mast	Greg g	gmast@cleanen ergyeconomymn .org	Clean Energy Economy Minnesota		Electroni c Service	No	24- 318E00 2-CI- 24-318
McConn ell	Erica	emcconnell@el pc.org	Environmental Law & Policy Center		Electroni c Service	No	24- 318E00 2-CI- 24-318
Melewski	Matt hew	matthew@thebo utiquefirm.com	Nokomis Energy LLC & Ole Solar LLC		Electroni c Service	No	24- 318E00 2-CI- 24-318
Monson	Brian	brian.t.monson @xcelenergy.co m	Xcel Energy		Electroni c Service	No	24- 318E00 2-CI- 24-318
Mudd	Susa n	smudd@elpc.or g	Environmental Law and Policy Center		Electroni c Service	No	24- 318E00 2-CI- 24-318
Najmaie	Pouy a	najm0001@gmai l.com	Coopera	tive Energy Futures	Electroni c Service	No	24- 318E00

							2-CI-
							24-318
Nelson	Alex	anelson@dakota	Dakota I	Electric Association	Electroni	No	24-
		electric.com			c Service		318E00
							2-CI-
							24-318
O'Grady	Loga	logrady@mnseia	Minneso	ta Solar Energy	Electroni	No	24-
	n	.org	Industrie	es Association	c Service		318E00
							2-CI-
				Γ			24-318
Pierce	Ryan	ryan.m.pierce@	Xcel		Electroni	No	24-
		xcelenergy.com	Energy		c Service		318E00
							2-CI-
Dubuncted	N4 - ++		NISLESS		F 1 +	NI -	24-318
Privratsk	Matt	matt@nokomise	покот		Electroni	NO	24-
У		nergy.com	IS Enorm		c Service		318EUU
			Energy				2-01-
Residenti	Gene	residential utiliti		Office of the	Electroni	Vo	24-510
al	ric	es@ag state mn		Attorney General -	c Service	9	24- 318E00
Utilities	Notic			Residential Litilities		3	2-CI-
Division	e	40		Division			24-318
Safo	Kwad	ksafo@dakotael	Dakota F	Electric Association	Flectroni	No	24-010
ouro	wo	ectric.com	Ballota		c Service		318E00
							2-CI-
							24-318
Schiro	Dean	dean.e.schiro@x	Xcel		Electroni	No	24-
		celenergy.com	Energy		c Service		318E00
							2-CI-
							24-318
Scholtz	Peter	peter.scholtz@a		Office of the	Electroni	No	24-
		g.state.mn.us		Attorney General -	c Service		318E00
				Residential Utilities			2-CI-
				Division			24-318
Schroed	Paul	pauls@hourcar.	HOUR		Electroni	No	24-
er		org	CAR		c Service		318E00
							2-CI-
O a las			Maal		Else t	N	24-318
Schwartz	Chris	regulatory.recor	Xcel		Electroni	NO	24-
	tine	us@xcelenergy.c	Energy		c Service		318E00
							2-01- 21 210
Sooroon	Emm	asaarsan@aalar	Solarium	lited Neighberg	Electroni	No	24-310
30015011	2000	unitedneighbors	Solar Of	IIIEN INEISIINOIS		INU	24- 318F00
	a	Arro					2-CI-
		<u>~'</u> ъ					24-318
Searson	tine Emm a	ds@xcelenergy.c om esearson@solar unitedneighbors. org	Energy Solar Ur	ited Neighbors	c Service Electroni c Service	No	318E00 2-CI- 24-318 24- 318E00 2-CI- 24-318

Seuffert	Will	will.seuffert@sta		Public Utilities	Electroni	Ye	24-
		te.mn.us		Commission	c Service	s	318E00
							2-CI-
							24-318
Stegall	Linds	lindsey.stegall@	EVgo		Electroni	No	24-
	ey	evgo.com	Servic		c Service		318E00
			es, LLC				2-CI-
							24-318
Stevenso	Chad	chad.stevenson		Office of the	Electroni	No	24-
n		@ag.state.mn.us		Attorney General -	c Service		318E00
				Residential Utilities			2-CI-
				Division			24-318
Sundbo	Tam	tsundbom@mnp	Minnes		Electroni	No	24-
m	my	ower.com	ota		c Service		318E00
			Power				2-CI-
_							24-318
Tan	Borat	btan@votesolar.	Vote		Electroni	No	24-
	ha	org	Solar		c Service		318E00
							2-CI-
Terden	Deer	altar da «Oral» sia a	Disatis		El contra de la	NI -	24-318
Taylor	Dean	dtaylor@plugina	Plug in		Electroni	NO	24-
		merica.org	Americ		c Service		318E00
			а				2-01-
Tikk	Doni	danial tikk@atat		Donortmont of	Electroni	No	24-310
TIKK	Dani			Commerce	c Service	INU	24- 318E00
	ει	e.m.us		Commerce	C Service		2-CL
							24-318
Tohme	Kate	ktohme@newlea	New		Electroni	No	24 010
lonno	Rato	fenergy.com	Leaf		c Service		318E00
			Energy				2-CI-
							24-318
Tople	Taige	taige.d.tople@xc	Northerr	n States Power	Electroni	No	24-
•	0	elenergy.com	Compar	ny dba Xcel Energy-	c Service		318E00
		0,7	Elec	, 0,			2-CI-
							24-318
Van Arkel	Matt	mvanarkel@new			Electroni	No	24-
		leafenergy.com			c Service		318E00
							2-CI-
							24-318
Volkman	Curt	curt@newenergy	Fresh		Electroni	No	24-
n		-advisors.com	Energy		c Service		318E00
							2-CI-
							24-318
Whebbe	Sarah	swhebbe@mnse	MnSEI		Electroni	No	24-
		ia.org	А		c Service		318E00

							2-CI-
							24-318
Williams	Joshu	joshua@highlan	Highland	d Electric Fleets	Electroni	No	24-
	а	dfleets.com			c Service		318E00
							2-CI-
							24-318
Williams	Lauri	laurie.williams@	Sierra		Electroni	No	24-
	е	sierraclub.org	Club		c Service		318E00
							2-CI-
							24-318
Willingha	Anth	anthony.willingh	Electrif		Electroni	No	24-
m	ony	am@electrifyam	у		c Service		318E00
		erica.com	Americ				2-CI-
			а				24-318
Zwick	Ari	ari.zwick@state.		Department of	Electroni	No	24-
		mn.us		Commerce	c Service		318E00
							2-CI-
							24-318