S. No	Chapter	Section	Subsection	
1	**Literature review**			
		Definition	Qualitative definition of resilience	
		Scope of the guide		
		IEEE other WGs DS	Findings of other working groups and their scope	
2	**Resilience Goal (Resilience Objectives??)**			
		High Impact weather/storm Events	target thresholds of duration (minutes) of outages (per size of outage/storm/event)	
			restoration time (minutes) after an outage	
			acceptable amount (kWh) of energy not served	
			target thresholds for number of customers served during storm	
			acceptable share ($) of the disaster risk reduction and/or recovery cost for the components	
3	**High Impact weather/storm Event Risk Identification**			
		Categorizing different Weather Impact, Likelihood of disruption to the distribution grid	the likelihood of the storm occurrence	
			the likelihood of severe consequences should a storm be realized	
			Likelihood of Disruption	
			Disruption Level	
4	**Quantification of Resiliency**			
		Resiliency Metric	Utility Impact to an event	
			Community Impact	
			Pre/Post Storm Grid Impact Analysis	
			?	
			?	
			?	

S. No	Chapter	Section	Subsection	
5	**System Modeling and Storm Simulation**			
		System modeling for disruption study (Network Modeling)	development of hazard scenarios	
			Weather/Storm RISK EXPOSURE	
			Methods to obtain disruption level	
		Data driven Hostorical based analysis	Storm vs Disruption level in each sub kV levels/area/city etc.	
			Methods to obtain disruption level	
6	**Guide for Infrastructure and Operational Improvements**			
		Infrastructure Improvement (Helps in mitigating impact of storms)	Undergrounding?	
			Reconductoring?	
			DER deployment?	
			Microgrids?/Nanogrids?	
		Operational Improvemnt (Helps in faster restoration)	Pre-deployment of crews?	
			Installation of weather stations?	
			More resources required? (Trucks, Mobile DERs etc)	
7	**Case Study and Resiliency Study**	Microgrid/DER use cases	Microgrid construction vs resiliency improvement usecase	
			Deployment of DER	
			Behind the meter DER?	
			Other progarms and initiatives?	
		Severe Storm case studies	Wildfire and proposed improvements	
			Hurricane vs porposed improvements	
			Other Storm cases - Impact of Predictive Maintenance	
				§ system models
				o resilience impacts of various alternatives

S. No	Chapter	Section	Subsection	
				o approaches to analyze and synthesize the outputs
				- availability of resources and budget constraints

Below is the link to the Outline for Chapters, Section and Subsection
T&D_DSC_DResWGTF_Guide_Outline - Google Sheets

Below is the link to the Resiliency Guide Outline
Resilience Framework_Outline_SP - Google Docs

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CHAPTER 6: Guide for Infrastructure and Operational Improvements	Julio Ramano				
CHAPTER 7: Case Study and Resiliency Study	Gary Huffman				

Time frame	Tentative action items	Possible outcome
GM 2021- JTCM 2022	Finish Target 1 Start Target 2	oIdentity and build the team oQualitative definition of resilience •Factors affecting resilience of the grid against different disturbances oIdentify data to be gathered for Targets 1-4
JTCM 2022- GM 2022	Finish Target 2 Start Target 3	oBaseline resilience against different events •Sharing experience of last events oMethods to quantify resilience oBriefing the important factors from the qualitative study oGathering data on common industry/DOE/utility definitions oGathering data on common tools oGathering data on available research and academia literature
GM 2022- JTCM 2023	Continue Target 3	oBuild consensus on resilience metrics between the following factors oCommon tools among utilities oCommon tools among research oBring a consensus among available data to utilities, data infrastructure, and research methods
JTCM 2023- JTCM 2024	Finish Target 3 Start Target 4 TBD	oCreating a common framework for quantitative metrics of resilience with focus on available data oStart risk-benefit analysis of investments on both new infrastructure and gird hardening