



a PPL company

Mr. Jeff DeRouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

October 28, 2011

**RE: THE APPLICION OF LOUISVILLE GAS AND
ELECTRIC COMPANY FOR AN ORDER APPROVING
THE ESTABLISHMENT OF A REGULATORY ASSET -
CASE NO. 2011-00380**

Dear Mr. DeRouen:

Please find enclosed and accept for filing the original and seven (7) copies of the the Response of Louisville Gas and Electric Company to the First Request for Information dated October 14, 2011, in the above-referenced matter.

Should you have any questions concerning the enclosed, please contact me at your convenience.

Sincerely,

Rick E. Lovekamp

Enclosures

RECEIVED

OCT 28 2011

PUBLIC SERVICE
COMMISSION

**Louisville Gas and Electric
Company**

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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND)	
ELECTRIC COMPANY FOR AN ORDER)	
APPROVING THE ESTABLISHMENT OF A)	CASE NO. 2011-00380
REGULATORY ASSET)	
)	


LOUISVILLE GAS AND ELECTRIC COMPANY
RESPONSE TO THE COMMISSION STAFF'S
FIRST INFORMATION REQUEST
DATED OCTOBER 14, 2011

FILED: OCTOBER 28, 2011

VERIFICATION

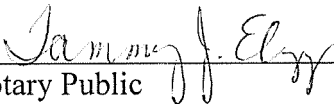
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Chris Hermann**, being duly sworn, deposes and says that he is Senior Vice President, Energy Delivery for Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Chris Hermann

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 28th day of October 2011.

 (SEAL)
Notary Public

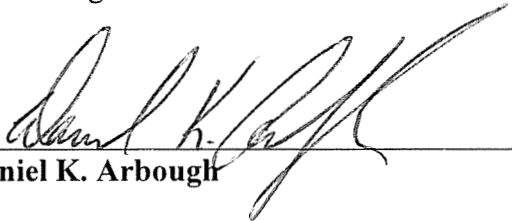
My Commission Expires:

November 9, 2014

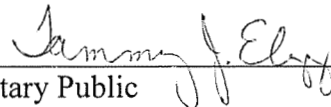
VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is Treasurer for Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.


Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 28th day of October 2011.

 (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Valerie L. Scott**, being duly sworn, deposes and says that she is Controller for Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge and belief.

Valerie L. Scott
Valerie L. Scott

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 28th day of October 2011.

Jammy J. Ely (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 1

Witness: Valerie L. Scott

- Q-1. Refer to pages 2 and 3 of LG&E's application ("Application"). Page 2 states, "[o]n the evening of August 13, 2011, a severe thunderstorm carrying high winds passed through the service territories of LG&E and its sister utility, Kentucky Utilities Company ("KU") (collectively, the "Companies")." Footnote number 3 at the bottom of page 3 states that "KU's restoration costs, while significant, were not as great as LG&E's, and KU is not requesting a regulatory asset for its costs." Provide separately, (1) the capital costs; and (2) the operations and maintenance expenses incurred by KU as a result of the severe thunderstorm (the "Windstorm").
- A-1. The costs recorded on the books as of September 30, 2011 for the KU storm are as follows:
- (1) Capital - \$250,664
 - (2) Operations & Maintenance Expenses - \$459,067

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 2

Witness: Chris Hermann

- Q-2. Item 9, page 4 of the Application, states, “[a]t their peak, these restoration efforts were carried out by 1,552 employees and contractors.”
- a. Provide a breakdown of the 1,552 employees and contractors by LG&E, KU, mutual assistance employees, and contractors.
 - b. Provide a list of contractors and mutual assistance crews that were involved in the restoration process.

A-2.

a.

LG&E	153
KU	62
Contractors	1,102
Mutual Assistance	235
Total	1,552

b.

Contractors

Davis H. Elliott
Fishel Company
Pike Electric
William E. Groves
Bowlin Electric
Hendrix Electric
Mastec
Asplundh Construction Company
Power Secure
Parr Electrical Contractors
J. W. Didado
Miller Construction
Thompson Electric

Townsend Tree Service
Wright Tree Service
UC Synergetic Design
United Pole Technologies
Nelson Tree
Phillips Tree
Bray Electrical Services
Brownstown Electric
Delta Services
Just Engineering
Ops Plus
United Electric

Mutual Assistance

AEP IN and MI
First Energy
West Penn Power
Mon Power
Salt River RECC
Nolin RECC

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 3

Witness: Chris Hermann / Valerie L. Scott

Q-3. Item 10, page 4 of the Application, states that 1,492 electric lines were downed and 88 poles were broken.

- a. Provide the capital costs incurred by LG&E as a result of restoration efforts due to the storm.
- b. Provide a list of the number of broken poles by size.

A-3.

- a. The capital costs recorded on the books for LG&E as of September 30, 2011 are \$1,029,735. These costs include actual charges received at this point as well as estimates for remaining work not yet invoiced.
- b. Upon further review, LG&E determined that 84 poles were broken as a result of the storm. Below is the number of poles by size that were broken in the windstorm.

Size	LG&E
30'	5
35'	7
40'	41
45'	27
50'	3
55'	1
	84

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

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Question No. 4

Witness: Chris Hermann

- Q-4. a. Explain whether any transmission lines were damaged as a result of the Windstorm and whether those costs are part of the proposed regulatory asset.
- b. If there were transmission line restoration costs due to the Windstorm, provide the amount of those costs whether or not they are included as part of the proposed regulatory asset.
- A-4. The LG&E and KU Transmission system sustained no damage during the event.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

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Question No. 5

Witness: Chris Hermann / Valerie L. Scott

Q-5. Refer to Exhibit 1 of the Application.

- a. LG&E's estimate of the Windstorm's restoration costs contains actual and estimated costs. Provide an updated Exhibit 1 based on the most recent information available for estimated and actual costs. Show the date on which the updated costs are based.
- b. Provide a detailed breakdown of miscellaneous costs, showing the actual amounts and estimated amounts separately.
- c. Provide a detailed breakdown of Contingency costs, showing the actual amounts and estimated amounts separately.
- d. When does LG&E expect to know the amount of the final actual costs?
- e. Refer to the costs identified as "Estimated Amount Considered Normal Operations." Provide a detailed description of how these costs were determined and calculated.

A-5.

- a. See attached for the actual costs and revised estimate. The total cost has been revised to \$8,505,713 based on actual invoices received, revised estimates on outstanding invoices and a 10 percent contingency on the estimated costs. The current estimate of costs in excess of normal costs is \$8,127,062 as of October 21, 2011.
- b. See attached.
- c. The \$628,468 Contingency in the original cost estimate is a calculation of 10 percent of estimated labor, contractors, material and general miscellaneous costs. It is included in the original estimate to allow for differences between actual and estimated costs. Therefore, there is not a detailed breakdown of those costs in the original estimate.

- d. LG&E expects the majority of costs should be finalized in the December 31, 2011 financial statements; however, some straggling invoices could continue to be received through the first quarter of 2012.
- e. The costs identified as “Estimated Amount Considered Normal Operations” represent the portion of the O&M cost charged to the storm that would have been incurred in normal operations during the storm period. For contractors, the costs associated with the “resident contractors” (those contractors that normally work for LG&E) were reviewed to determine the total expenses that these contractors would have charged to normal O&M work during the storm period. These totals were considered “normal operations” costs for contractors. For internal employee resource costs, the amounts that employees would have normally charged to O&M during the storm period were included as “normal operations”.

8/13/2011 Storm Restoration Cost Detail - Distribution

LG&E Storm Restoration Estimate Detail Summary					
(Actuals as of 9/30/2011)					
	Actuals	Estimated Costs Incurred	Totals	Estimated Remaining Costs	Total LG&E Operating Expenses
Internal Labor	1,203,344	-	1,203,344	356	1,203,700
Subtotal Employee Labor	1,203,344	-	1,203,344	356	1,203,700
Lineman Contractors	1,525,380	2,946,506	4,471,886	331,200	4,803,086
Tree Trimming Contractors	3,531	768,249	771,780	(74,701)	697,080
PSRT Contractors	160,070	257,248	417,318	-	417,318
All Other Contractors	41,005	-	41,005	-	41,005
Subtotal Contractors	1,729,986	3,972,003	5,701,989	256,499	5,958,488
Materials	511,063	-	511,063	130	511,193
Call Center/Business Office	-	75,827	75,827	3,862	79,689
Hotel/Staging Area	158,044	-	158,044	-	158,044
Miscellaneous	148,035	-	148,035	6,564	154,599
Contingency	-	-	-	440,000	440,000
Total Distribution Cost total	3,750,472	4,047,830	7,798,302	707,412	8,505,713

Estimated Amount considered Normal Operations:

Contractor Resource Costs - PSRT	(9,350)
Contractor Resource Costs - Operations	(16,123)
Contractor Resource Costs - Call Center	(10,314)
Internal Employee Resource Costs - LG&E Labor/Transportation	(256,808)
Internal Employee Resource Costs - Servco Labor/Transportation	(86,056)
Total Estimated Amount considered Normal Operation:	<u>(378,651)</u>

Total Regulatory Asset

8,127,062

8/13/2011 Storm Restoration Cost Detail - Distribution

LG&E Storm Restoration Estimate Detail Summary						
(Actuals as of 9/30/2011)						
	Actuals	Estimated Costs Incurred	Totals	Estimated Remaining Costs	Total LG&E Operating Expenses	
Miscellaneous						
Freight	1,625	-	1,625		1,625	
Insurance Claim	-	-	-	4,246	4,246	
Leased Vehicles	1,966	-	1,966		1,966	
Meals	137,318	-	137,318	9	137,327	
Mileage Reimbursement	1,589	-	1,589		1,589	
Miscellaneous	2,500	-	2,500	2,310	4,809	
Telecom	32	-	32		32	
Travel	3,005	-	3,005		3,005	
Total Miscellaneous Expenses					6,564	154,599

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 6

Witness: Valerie L. Scott

- Q-6. a. Provide LG&E's regulatory asset journal entry, including account numbers and account descriptions, recorded for the month of September 2011.
- b. Provide, when available, all October 2011 journal entries adjusting the amounts recorded in September 2011 for the regulatory asset.

A-6.

- a. Below is the journal entry recorded on LG&E's books, including account numbers and account descriptions, for the month of September 2011.

<u>Account</u>	<u>Account Description</u>	<u>Debit</u>	<u>Credit</u>
182.3	Other Regulatory Assets	\$ 7,419,650.67	
580	Operation Supervision and Engineering - Electric Distribution		\$ 981,239.30
583	Overhead Line Expenses - Electric Distribution		148,941.28
590	Maintenance Supervision and Engineering - Electric Distribution		66,955.57
593	Maintenance of Overhead Lines - Electric Distribution		5,910,819.93
594	Maintenance of Underground Lines - Electric Distribution		12,341.51
595	Maintenance of Line Transformers - Electric Distribution		2,576.03
598	Maintenance of Misc. Distribution Plant - Electric Distribution		296,777.05
		<u>\$ 7,419,650.67</u>	<u>\$ 7,419,650.67</u>

- b. No subsequent journal entries have been recorded to adjust the regulatory asset recorded in September 2011. All adjusting journal entries will be provided, when available.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 7

Witness: Daniel K. Arbough

Q-7. Refer to Item 12 of the Application.

- a. LG&E states that property and casualty insurance for distribution and transmission storm damage is prohibitively expensive. Explain whether LG&E, given its experience related to Hurricane Ike and the 2009 ice storm, had revisited the issue of carrying storm insurance prior to incurring the additional costs related to this event.
- b. In Case No. 2009-00175,¹ LG&E indicated in its responses to data requests² that that it planned to explore the process for performing the underwriting modeling associated with a new electric industry catastrophic coverage program. Provide an update of LG&E's evaluation of the program and related costs to provide catastrophic coverage.

A-7.

- a. LG&E has continued to search the insurance markets for electric distribution and transmission storm damage insurance structures which provide financially efficient risk transfer. To date we have received two proposals. They are as follows:

The first indication is from Associated Electric and Gas Insurance Services. This program would provide a \$10 million annual aggregate coverage limit. To trigger coverage, LG&E would have to have at least 25% of its customers out of service due to a single insured event. When the 25% threshold is met, the insurance coverage would be available with no deductible. The indicated cost of this coverage is \$1.75 million annually. As proposed, after less than six years of paying premiums, the Company would have paid out the full amount of coverage being provided. Given its cost, the proposal was not determined to be attractive because of the low frequency of historically meeting the 25% threshold amount combined with the relatively low insurance coverage amount of \$10 million.

¹ Case No. 2009-00175, Application of Louisville Gas and Electric Company for an Order Approving the Establishment of a Regulatory Asset (Ky. PSC Sept. 30, 2009).

² Id. LG&E's Response to Initial Data Request of Commission Staff, Question 4.b., filed June 15, 2009; and LG&E's response to Second Data Request of Commission Staff, Question 2., filed July 7, 2009.

The second proposal was coordinated with Guy Carpenter & Co LLC. Guy Carpenter approached thirteen insurance markets from the United States, Europe and Bermuda. Guy Carpenter utilized the EQECAT study referenced in response 7.b below and detailed distribution and transmission system data for underwriting information for the insurance carriers. The initial feedback from the insurance carriers was that there would only be interest in providing catastrophic coverage in excess of a \$50 million loss per occurrence. The \$50 million amount is referred to as the self insured retention (SIR). The Company would be exposed to the first \$50 million of risk under these scenarios. Only one storm in the history of LG&E has exceeded \$50 million, so the policy would only have provided benefit to the Company on one occasion and then only to the policy limit. Guy Carpenter requested two proposals, 1) \$25 million of coverage per occurrence in excess of a \$50 million per occurrence SIR and 2) \$50 million of coverage per occurrence in excess of a \$50 million per occurrence SIR. The insurance carriers indicated there was not sufficient capacity in the market for option 2.

Guy Carpenter secured a proposal which would provide \$25 million in coverage per occurrence in excess of a \$50 million per occurrence SIR for an annual premium of \$3.75 million before taxes. As proposed, after less than seven years of paying premiums, the Company would have paid out the full amount of coverage being provided. As a follow up, Guy Carpenter requested a proposal of \$25 million in annual aggregate coverage in excess of a \$50 million per occurrence and annual aggregate SIR and received indications at an annual premium of approximately \$6 million before taxes. As proposed, after slightly more than four years of paying premiums, the Company would have paid out the full amount of coverage being provided. These proposals do not appear economically feasible due to the cost of the insurance coverage coupled with the significant self insured retention level. The \$50 million per occurrence or annual aggregate loss level has not been breached with the frequency to provide a reasonable return on the premium cost. This determination is supported by the results of the storm damage modeling study discussed in part (b) below which would suggest a loss of more than \$50 million only once in 25 years.

- b. LG&E has continued to explore the feasibility of purchasing storm insurance for the damage to the distribution and transmission system.

LG&E and KU initiated an underwriting modeling analysis in order to quantify the probability and severity of future storm damage events based on the past history. EQECAT-ABS Consulting was contracted to perform the analysis based on their modeling programs. EQECAT, an ABS Group Company, provides state of the art catastrophe risk models, software and consulting products and services. EQECAT is an advisor to insurance carriers and buyers, reinsurance providers and financial services companies enabling them to manage their business risk associated with catastrophic events. Since the most catastrophic loss resulted from the 2009 ice storm it was decided to model ice storm damage. LG&E and KU provided EQECAT with

details of the LG&E and KU distribution and transmission systems as well as detailed information regarding storm losses by type of storm for each recorded event for the period 2000-2009. The summary conclusion from the EQECAT study (included as an attachment) is as follows:

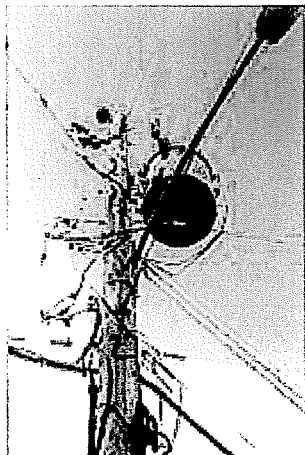
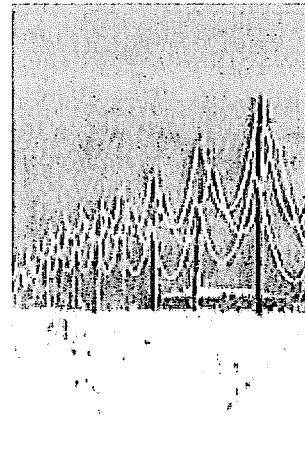
- LG&E and KU have about a 16% chance per year of experiencing ice storm damage to the distribution and transmission assets of \$10 million or more.
- LG&E and KU have about a 4% chance per year of experiencing ice storm damage to the distribution and transmission assets of \$50 million or more.
- LG&E and KU have about a 1.5% chance per year of experiencing ice storm damage to the distribution and transmission assets of \$100 million or more.
- The expected average damage to the LG&E and KU distribution and transmission assets from ice storms over the long term is estimated to be \$8.9 million per year.

The EQECAT analysis was utilized to approach the insurance market to secure proposals for distribution and transmission storm damage coverage. See the response in 7.a above.



eOn U.S.

Transmission and Distribution Assets Ice Storm Loss Analyses



September 2010



An ABS Group Company

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Executive Summary

OVERVIEW OF STUDY

On behalf of eOn, EQECAT has analyzed the exposure of eOn's transmission and distribution ("T&D") assets to damage from ice storms.

Ice Storm Damage

Key study conclusions related to ice storm risk are as follows:

- eOn has about a 16% chance per year of experiencing ice storm damage to T&D assets of \$10 million or more.
- eOn has about a 4% chance per year of experiencing ice storm damage to T&D assets of \$50 million or more.
- While ice storms causing more than \$100 million in damage are possible, the chance that occurring in any given year is about 1.5%.
- The expected average damage to eOn T&D assets from ice storms over a long period of time is estimated to be \$8.9 million per year.

ICE STORM ASSESSMENT

EQECAT considered four basic elements in modeling the risk of ice storms to eOn's T&D assets:

- **Assets at risk:** First, eOn determined the replacement cost of T&D assets and mapped the location of those assets.
- **Perils:** EQECAT used its proprietary storm damage model to simulate thousands of possible ice storms that could affect eOn's assets. This model calculated the probabilities of each of these potential storms occurring in a given year.
- **Asset vulnerabilities:** The EQECAT models evaluated the vulnerability of eOn's T&D assets to damage from simulated ice storm events.
- **Portfolio Damage:** Lastly, this peril and vulnerability information is used to estimate the expected damage to eOn's asset from thousands of simulated ice storms.

From this analysis, a probabilistic database of ice storm damage was developed. The anticipated frequencies and expected damage to eOn's assets for all storms were combined to calculate the expected annual damage (EAD) and annual aggregate damage exceedance probabilities for eOn's system. The results of these analyses are summarized in Table ES-1 below.

Table ES-1
eOn Transmission and Distribution Risk Profile

ASSETS	Transmission and distribution assets consisting of: aerial transmission structures, and conductors; distribution poles, transformers, conductors, lighting and other miscellaneous assets
LOCATION	All T&D assets located within the States of Kentucky, and Virginia
ASSET VALUE	Normal replacement value is approximately \$2 billion, of which approximately 20% is transmission and 80% is distribution
PERILS	Ice Storms
EXPECTED ANNUAL DAMAGE	\$8.9 million total damage
10% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$20 million total damage
5% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$45 million total damage
1% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$123 million total damage

The **Expected Annual Damage** or EAD is the estimated annual cost of restoring service, given ice storm damage, averaged over a long period of time. The EAD from ice storms is estimated to be \$8.9 million. Ice storms can be catastrophic but infrequent events. The EAD is an average of all storm damage over many years and is not expected to occur every year.

The **Aggregate Damage Exceedance Value** is the likelihood of damage to eOn's T&D assets exceeding the given value from all storms in a year.

- The **10% Aggregate Damage Exceedance Value** indicates that there is a 10% chance each year (one-in-ten) that eOn's damage from ice storms will exceed \$20 million.
- The **5% Aggregate Damage Exceedance Value** indicates that there is a 5% chance each year (one-in-twenty) that eOn's ice storms damage will exceed \$45 million.
- The **1% Aggregate Damage Exceedance Value** indicates that there is a 1% chance each year (one-in-one hundred) that eOn's ice storms damage will exceed \$123 million.

1.0 Transmission and Distribution Assets

The assets of eOn's transmission and distribution operations are exposed to and in the past have sustained damage from ice storms. The exposure of these transmission and distribution assets to ice storm damage is described and quantified. EQECAT developed damage estimates for possible ice storm events using a computer model simulation program developed by EQECAT, Inc., an ABS Group company. Ice storm damage is simulated using this data provided by eOn.

Methodology Overview

The basic elements of the ice storm analysis include:

- **Assets at risk:** define and locate
- **Define the hazard:** apply probabilistic ice storm model for the region
- **Asset vulnerabilities:** severity (ice load) versus damage
- **Portfolio Damage:** probabilistic analysis - damage

This portfolio risk analysis process is idealized in Figure 1-3

These analyses take into consideration historical experience as well as meteorological, topographical, valuation, and structural data provided by eOn or otherwise available to EQECAT. The actual damage and financial consequences caused by an ice storm will vary according to the precise nature of the event and many variables including the storm severity and location, actual asset vulnerabilities, cost and time required to repair and restore electrical service which may cause the actual losses to differ from those estimated in this report.

Transmission and Distribution Assets

The distribution and transmission asset replacement values provided by eOn are approximately \$2 billion. Transmission and distribution asset values are shown by County in Figures 1-1 and 1-2 below.

1. T & D Assets

County	Replacement Value
Jefferson	513,095,507
Fayette	250,890,213
Hopkins	95,520,507
Hardin	55,017,839
Scott	44,992,651
Wise	43,779,167
Madison	43,611,478
Shelby	38,390,311
Oldham	36,471,840
Muhlenberg	33,072,147
Laurel	30,882,006
Boyle	29,151,344
Mason	26,602,107
Bell	25,526,998
Clark	21,588,535
Woodford	20,142,975
Lee	15,759,147
Franklin	15,603,638
Harlan	15,060,241
Pulaski	13,793,838
Montgomery	13,346,223
Mercer	11,782,294
Bullitt	10,731,746
All others	206,919,313
Total	1,611,732,065

Table 1-1: Distribution Replacement Values (\$) by County
 in Kentucky and Virginia

1. T & D Assets

County	Replacement Value
Jefferson	78,305,894
Mercer	65,802,776
Fayette	34,693,158
Wise	29,131,142
Carroll	20,732,914
Bourbon	20,630,508
Harlan	17,620,683
Garrard	8,983,402
Bell	8,367,939
Oldham	8,156,348
Floyd	8,028,878
Ballard	7,298,391
Jessamine	6,297,935
Daviess	6,282,658
Bracken	6,231,447
Muhlenberg	6,000,512
Hopkins	5,984,776
Ohio	5,978,650
Hardin	5,960,986
Scott	5,683,276
Estill	5,548,951
Anderson	5,124,971
Madison	4,563,947
Trimble	4,108,126
All others	56,839,516
Total	432,357,782

Table 1-2: Transmission Replacement (\$) Values by County
 in Kentucky and Virginia

1. T & D Assets

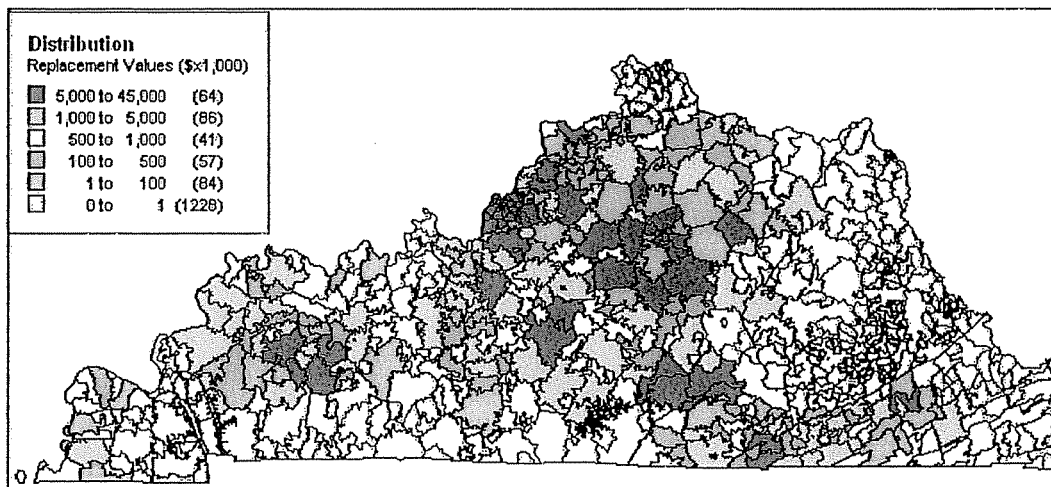


Figure 1-1: Distribution Assets Replacement Values by Zip Code

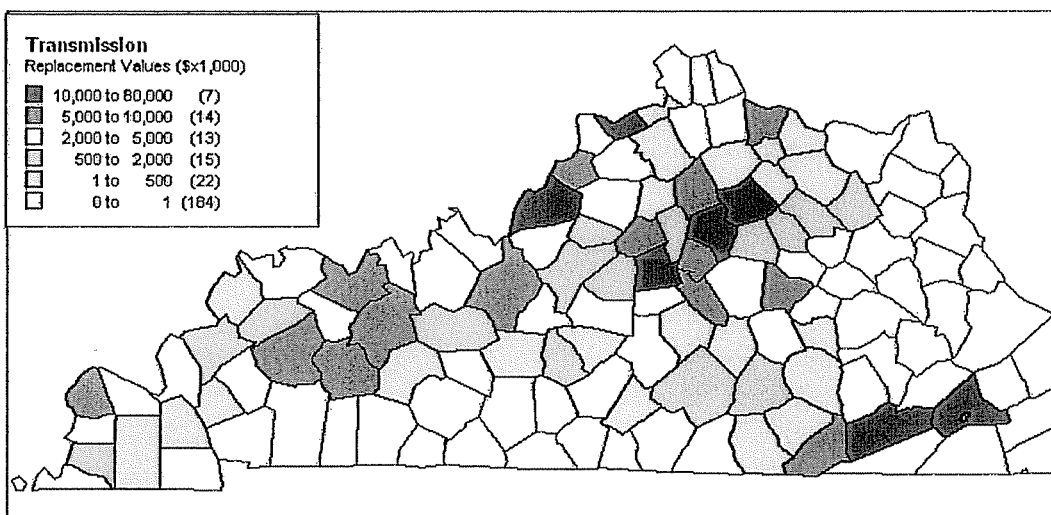


Figure 1-2: Transmission Assets Replacement Values by County

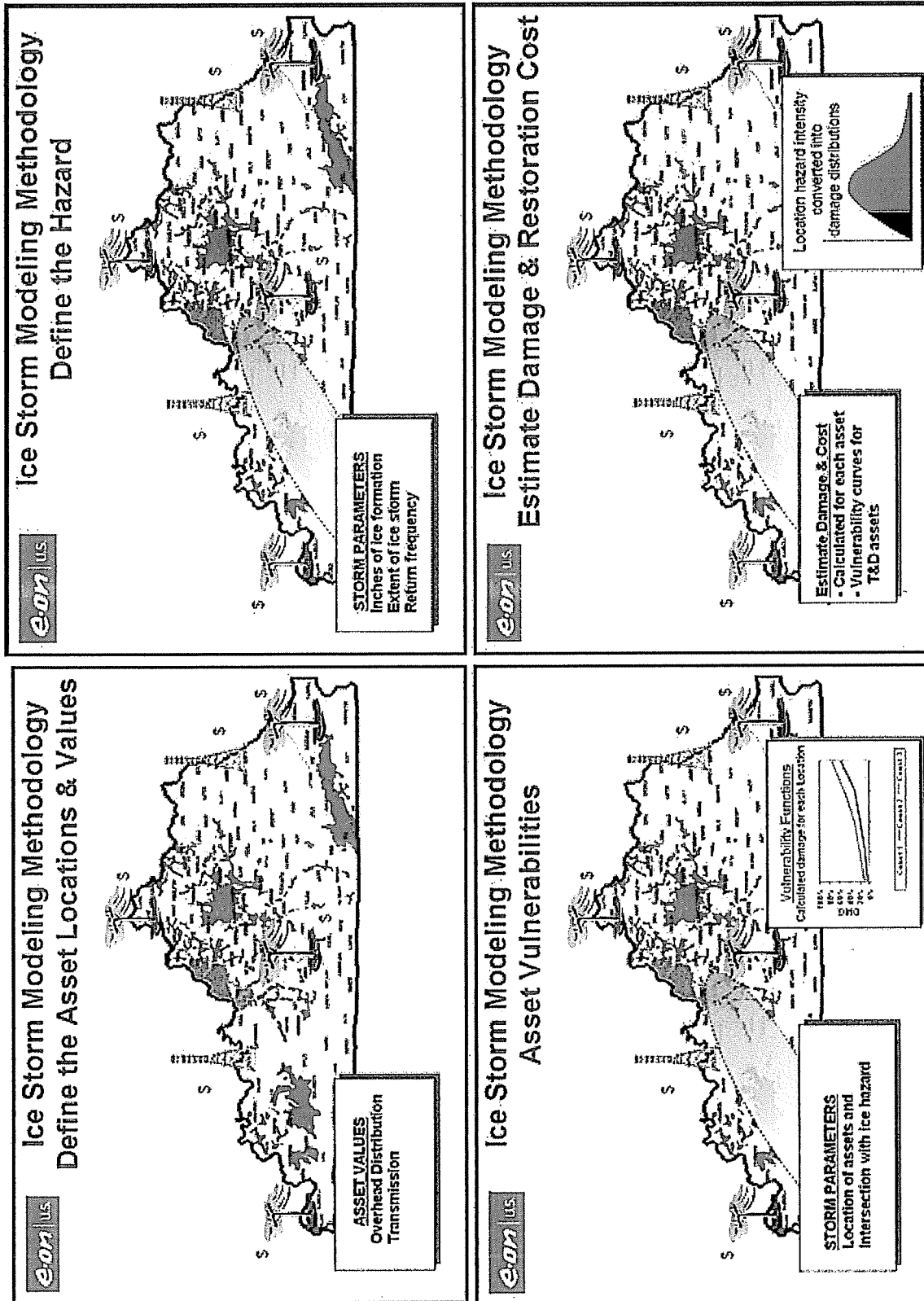


Figure 1-3: Portfolio Analysis Methodology

2.0 Ice Storm Analysis

Ice Storm Exposure

The ice storm exposure is analyzed from a probabilistic approach, which considers the *full range of potential ice accretion characteristics and corresponding damage*.

Probabilistic analyses identify the probability of damage exceeding a specific dollar amount. USWinterStorm™ is a probabilistic model designed to estimate damage due to the occurrence of ice and winter weather.

Most winter precipitation is the result of overrunning, a condition in which the air from a warm sector of the low-pressure system catches up to colder air ahead. Because the warm air is lighter, it is forced up and over the slow-moving, denser cold air near the ground (Figure 2-1). Most freezing rain occurs on the cold side of warm fronts (thermal stratification) in arctic air masses (Figure 2-2). Air masses with relatively high moisture content appear to be most efficient at creating freezing rain. Mountains, such as the Appalachians, can act as a barrier to cold air trapping it in the valleys and adjacent low elevations. Warm air and moisture moves over the cold, trapped air. Rain falls from the warm layer onto a cold surface below becoming ice. Winter storms also result from cold air moving from the lee of the Rockies and penetrating south across Texas, and the Southeast.

There is high spatial variability in the annual frequency of freezing precipitation across the United States, with the most frequent occurrences across the central and eastern portions of the United States. Freezing precipitation events occur most often from December to March. The months of maximum occurrence for freezing precipitation are January, February, and December. Freezing precipitation events when they occur are often short lived.

The types of precipitation that can fall from a winter storm include snow, sleet, freezing rain and rain. The precipitation type that reaches the ground depends on the air mass structure through which the precipitation falls and the relative position of the low-pressure center and its associated warm and cold fronts.

2. Ice Storm Analysis

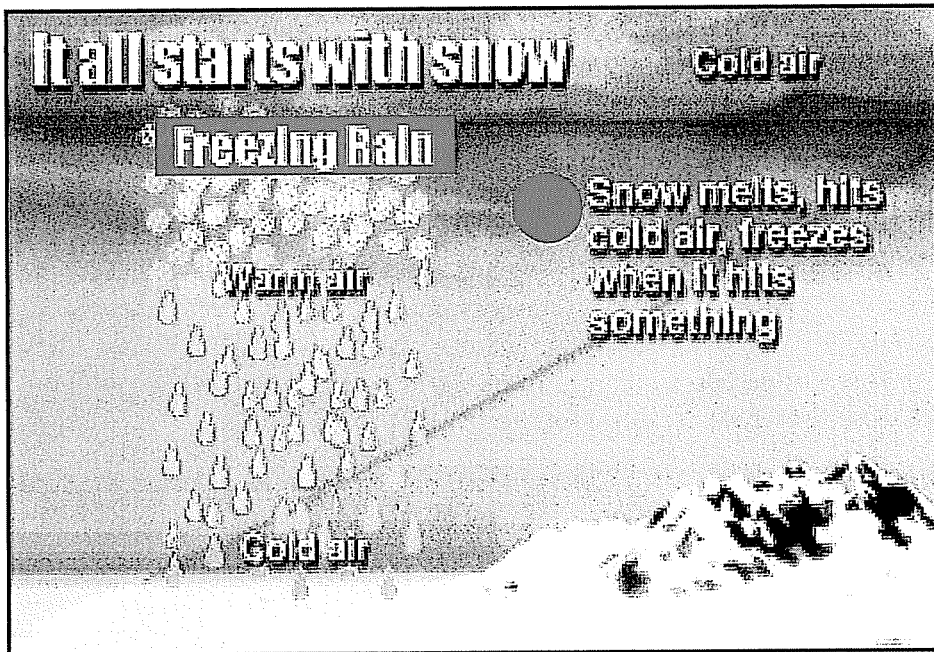


Figure 2-1: Various types of precipitation resulting from overrunning, when warm air rides over colder air near the ground.



Figure 2-2: Typical winter jet stream and US winter storm geographic pattern and the affected regions.

2. Ice Storm Analysis

Transmission and Distribution Asset Vulnerabilities

Aerial T&D lines and structures have suffered damage in past winter ice storms. eOn's recent ice storm history includes the 2009, and 2003 Ice Storms as well as other ice events. These storms have been produced significant ice accumulation in parts of eOn's service territory that has resulted in damage to T&D assets.

Damage from ice storms results from ice accumulation on structures, conductors and components causing direct damage. Damage also occurs from the ice accumulation and failure of trees and tree branches that impact poles and conductors. Vulnerability of T&D assets are based upon the ice accumulation modeled in stochastic storm events and eOn's recent ice storm experience. The costs incurred in the repair of ice storm damage includes the effects of many factors including the post storm costs of labor, mutual aid and other factors associated with the service restoration process utilized by eOn.

Damage Exceedance and Expected Annual Damage

A probabilistic database of damage is developed using the ice hazard, assets at risk and their vulnerabilities. For each stochastic ice storm event, the temperature, barometric pressure, precipitation, elevation, wind speeds and duration were defined. The ice accumulation for each storm is integrated with the asset vulnerability and the asset locations to compute the damage. The annual frequency and the portfolio damage for each simulated ice storm is determined. By using this database of thousands of ice storm damage, various damage exceedance or non-exceedance distributions are generated.

The frequencies and computed damage for all ice storms are combined to calculate the expected annual damage and the annual aggregate exceedance relations.

Aggregate damage exceedance calculations are developed by keeping a running total of damage from **all possible events** in a year. At the end of each year, the aggregate damage for all events is determined by probabilistically summing the damage distribution from each event, taking into account the event frequency. The process considers the probability of having zero events, one event, two events, etc. during the year. The analysis calculates the probability of damage from all ice storms and aggregates the total.

2. *Ice Storm Analysis*

Per-Occurrence and Annual Aggregate Damage Exceedance

Another approach to quantify damage is to calculate the damage from the single largest and most likely event. This is called a per-occurrence exceedance curve. The exceedance curve considers the possibility that damage may be from any event in the probabilistic storm database. Because it includes effects from only the largest event, the per-occurrence probabilities are always less than the aggregate probabilities. The amount of difference between the two cases indicates the damage contributions from more than one event in any year. For eOn's portfolio most of the risk of damage is associated with one major storm as opposed to two or more storms for a given period.

A series of probabilistic analyses were performed, using the vulnerability derived for eOn T&D assets and the computer program USWinterStorm™. A summary of the analyses are presented in Table 2-1, which shows the per-occurrence and aggregate damage exceedance probability for damage levels between zero and \$200 million dollars.

Table 2-1. provides the damage exceedance probabilities for the combined eOn Kentucky Utilities and LG&E asset T&D assets for a series of damage levels at \$10 million intervals. For each damage level shown, the probability of damage exceeding a specified value is shown. For example, the probability of annual aggregate damage exceeding \$10 million in one year for ice storm hazard is 16%.

The second and third columns of the table, labeled 1 year Exceedance Probability, provides the 1-year modeled probability of either Per-Occurrence or Annual Aggregate damage exceeding the level.

Aggregate annual damage exceedance probabilities, for the eOn operating entities Kentucky Utilities and LG&E T&D assets are shown in Tables 2-2 and 2-3.

Expected Annual Damage

The expected annual damage (EAD) to T&D assets from the ice storm hazard is \$8.9 million. The EAD contributed from Kentucky Utilities and LG&E is \$6.8 million and is \$2.1 million respectively. This value represents the average damage from all simulated ice storms. The EAD is not expected to occur each and every year. Some years will have no damage from ice storms, some years will have small amounts of damage and a few years will have large amounts of damage. The EAD represents the average of all ice storm damage over a long period of time.

2. Ice Storm Analysis

Table 2-1

**eOn T & D ASSETS
(KENTUCKY UTILITIES AND LG&E COMBINED)
EXCEEDANCE PROBABILITIES
ICE STORM HAZARD**

Damage Level	Per Occurrence	Annual Aggregate
(\$- millions)	1 Year Exceedance Probability	1 Year Exceedance Probability
≥1	59%	64%
10	14%	16%
20	8.9%	10%
30	6.7%	7.3%
40	5.0%	5.6%
50	3.9%	4.4%
60	3.1%	3.5%
70	2.3%	2.7%
80	1.9%	2.2%
90	1.6%	1.8%
100	1.3%	1.5%
110	1.1%	1.2%
120	0.89%	1.0%
130	0.73%	0.86%
140	0.60%	0.71%
150	0.53%	0.60%
160	0.44%	0.53%
170	0.37%	0.43%
180	0.30%	0.36%
190	0.26%	0.30%
200	0.21%	0.26%

2. Ice Storm Analysis

Table 2-2

**eOn KENTUCKY UTILITIES T & D ASSETS
EXCEEDANCE PROBABILITIES
ICE STORM HAZARD**

Damage Layer (\$ M)	1 Year Exceedance Probability
> 1	48%
10	11%
20	6.8%
30	4.9%
40	3.7%
50	2.8%
60	2.3%
70	1.6%
80	1.4%
90	1.1%
100	0.9%

Table 2-3

**eOn LG&E T & D ASSETS
EXCEEDANCE PROBABILITIES
ICE STORM HAZARD**

Damage Layer (\$ M)	1 Year Exceedance Probability
> 1	22%
10	4%
20	2.5%
30	1.5%
40	0.9%

3.0 Limitations

There are many factors that can affect ice storm damage and service restoration cost that may vary from event to event. These factors include the age and material conditions of eOn infrastructure, among others. There have been changes in vegetation due to recent storms which generate damaging debris. Utility restoration practices, extent of damage, schedules, mutual aid agreements, and availability of contract services and materials also can affect service restoration costs.

Much of the damage experienced in 2009 and 2003 required repair or replacement of damaged infrastructure. New eOn infrastructure may be designed to more recent design standards, and age and maintenance of infrastructure may be may also vary regionally.

Ice storm events also exhibit significant variability in wind and ice fields. High moisture content of soils are also associated with higher amounts of damage to distribution assets due to fallen trees and lower strength of poles. Transmission and distribution system damage and system restoration costs in future events should therefore be expected to subject to these types of variability. The modeled damage estimates for specific future events will not and should not be expected to precisely reflect actual system restoration costs due to the unknown nature of future events and the variability associated with the damage and the restoration processes.

4. References

1. Kathleen F. Jones, "Ice Accretion in Freezing Rain", April 1996, U.S. Army Corps of Engineers Cold Regions Research & Engineering Laboratory Report 96-2

London

Newport Beach

New York

Oakland

Paris

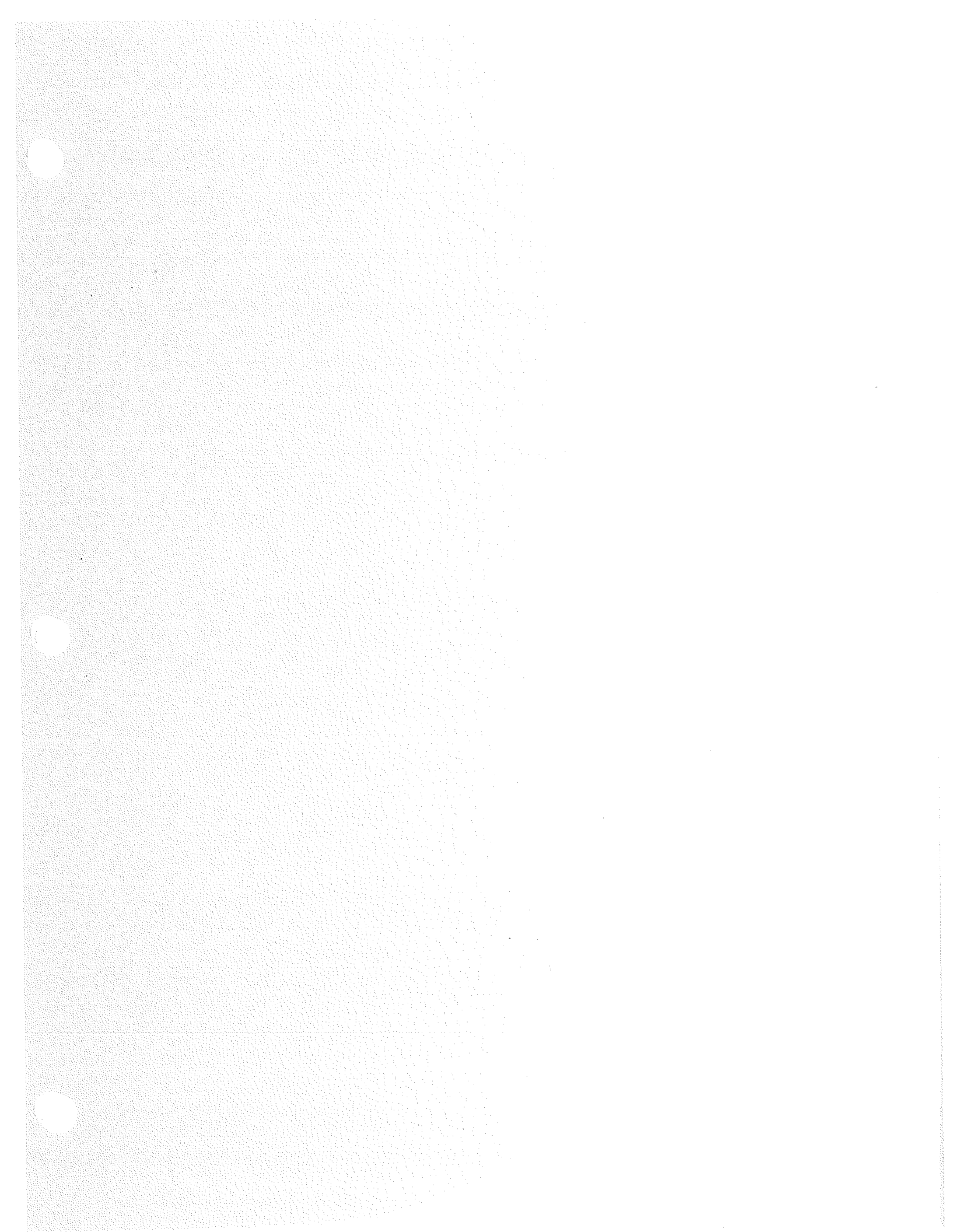
Tokyo

Warrington

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Oakland, CA 94612 USA
Tel: 510-817-3100/Fax: 510-663-1046
www.eqecat.com



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Creating Value Through Increased Transparency

eOn Ice Storm Risk Study for Transmission and Distribution Assets

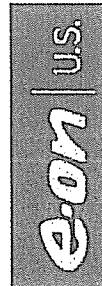
October 2010

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eOn Ice Storm Risk to Transmission & Distribution Assets

- **Ice Storm Hazard in Kentucky**
- **EQECAT Ice Storm Model**
- **Ice Storm Damage and Modeling**
- **Probabilistic and Loss Analyses**
- **Expected Annual Damage**



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eOn Ice Storm Risks

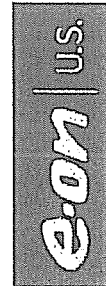
- Kentucky has in the recent past experienced extreme winter weather and storms including:
 - Heavy snow
 - Strong winds and blizzards
 - Extreme wind chill and
 - Ice storms
- Kentucky has recent experience from ice storms in
 - 2009, 2003, 1998, 1994 and 1951, as well as events in the prior 100 years
- Simulation modeling is a standard method utilized by the insurance industry to assess catastrophe including severe ice storms risks
- EOECAT's Ice Storm simulation model, part of the Worldcatenterprise suite of catastrophe models, is used to assess eOn's ice storm risk.

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How Do Winter Storms Develop?

- **Cold front:** Cold polar air down from the north.
- **Warm front:** Warm air mass accompanied by plenty of moisture from the south.
- **Low pressure center:** The warmer air from the south begins to flow northward on the eastern side of the low pressure center; colder air from the north flows southward around the low's west side.
- **Net Result:** Snow, rain, sleet, freezing rain, blizzard.



It all starts with SNOW

Rain

1 Snow falls into warm air, melts into rain

Cold air

Warm air

Cold air

It all starts with SNOW

Freezing Rain

2 Snow melts, hits cold air, freezes when it hits something

Cold air

Warm air

Cold air

● **Ice Storm:** Generally, low pressure in deep south brings moisture from Gulf of Mexico and low temperature brings significant precipitation in the form of freezing rain, sleet, and snow.

It all starts with SNOW

Sleet

3 Snow melts, refreezes into sleet as it travels through cold air

Cold air

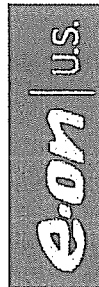
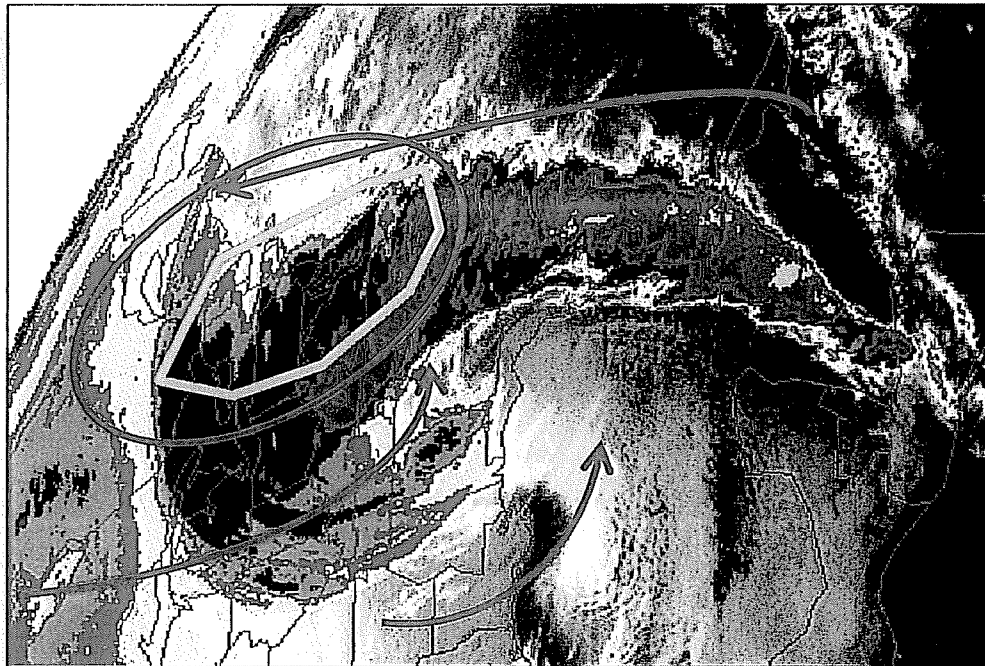
Warm air

Cold air

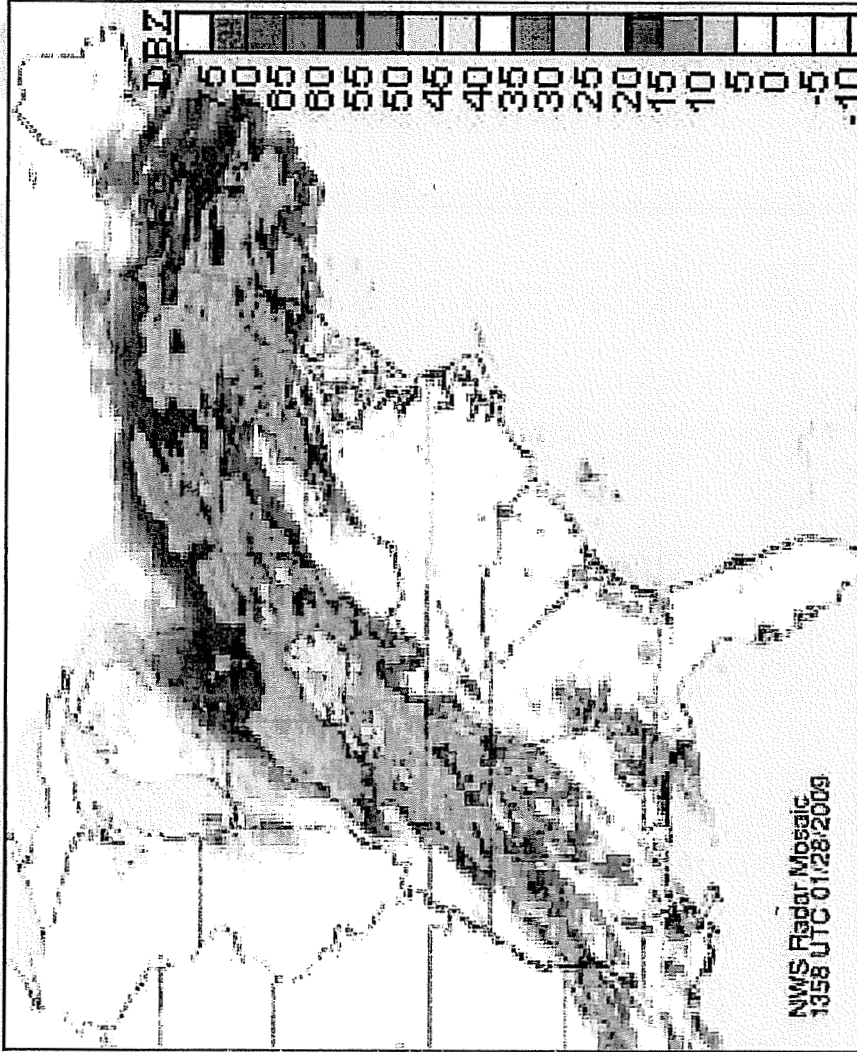
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Winter Storm: Moisture, Lift



January 27 through 29, 2009 Ice Storm



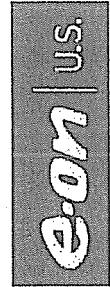
\$150 Million in damage to eOn T&D assets

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The EOECAT Ice Storm Model

- EOECAT's probabilistic model is used to analyze winter storms (ice/wind) affecting risks in the United States
- Historical data from many sources
- Data obtained by hourly observation, ice accretion model data
- Parameters include:
 - Ice
 - Wind
 - Footprints
- Historical data forms the basis for over 11,000 synthetic stochastic ice event sets



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Ice Storm Hazard: Why Historical Records?

- Since the frequency of winter storm is high, large numbers of historical storm data are available.
- Very accurate historical weather records from 1961 are available from National Weather Service.

The reconstruction and perturbation of the historical events has been adopted to model the complex weather system of winter storm as opposed to the synthetic model, where the complex winter storm is derived based on a few parameters. The stochastic perturbation of reconstructed historical footprints will be able to capture the complexity and variability of winter storm.

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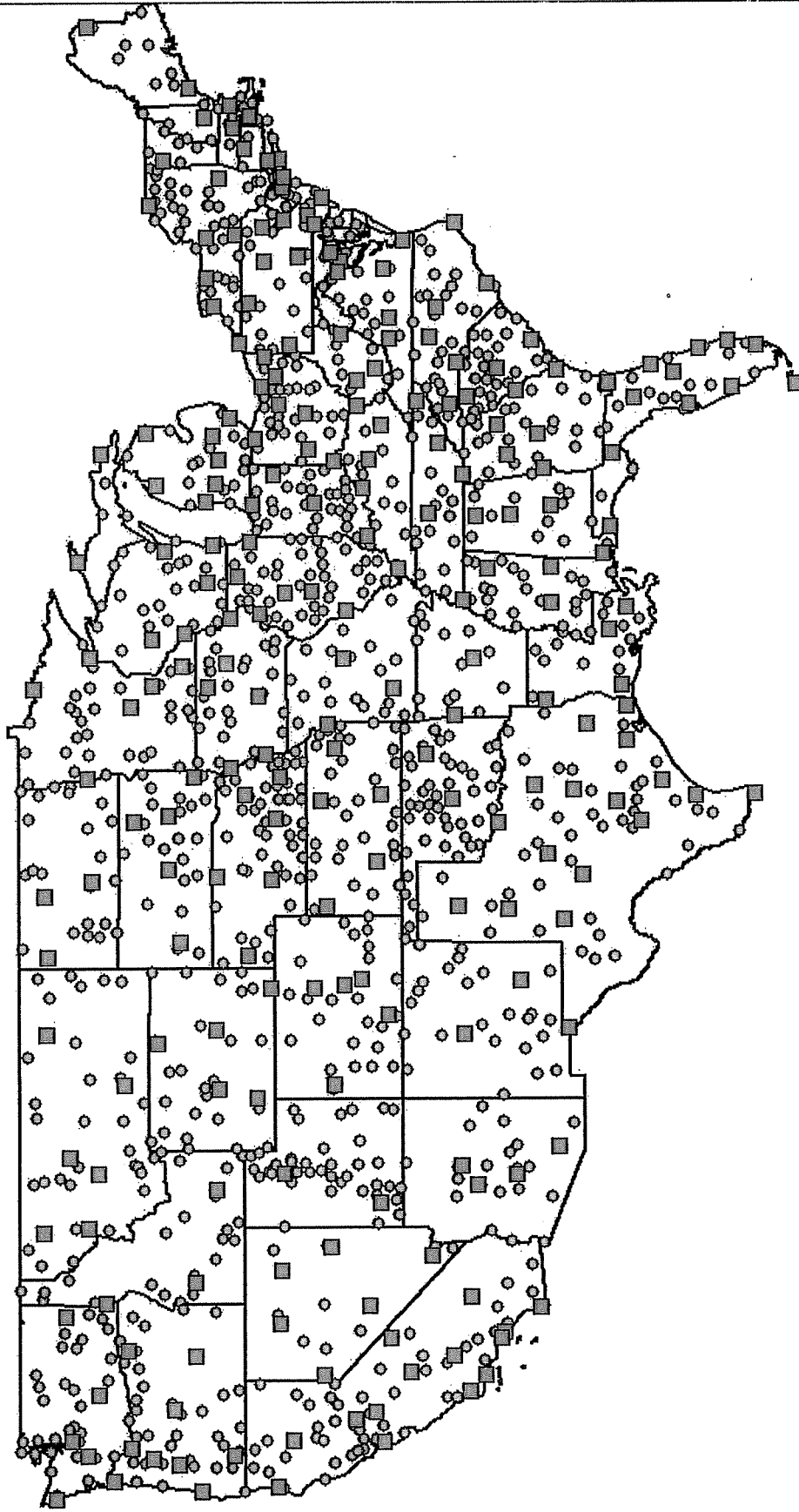
Weather Data

- Solar and Meteorological Surface Observation Network (SAMSON) 1961-1990: 239 stations
- Hourly United States Weather Observations 1990 - 1995: 262 stations
- Local Climatological Data 1996 - Latest: 820 - 933 stations
- United States Historical Climatology Network (USHCN) daily temperature, precipitation and snow data 1950-1995: 1050 stations
- United States Snow Climatology - Daily Snowfall and Snow-Depth Data through 1996: 5525 stations

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HCN Stations and 1990-95 Hourly Weather Stations



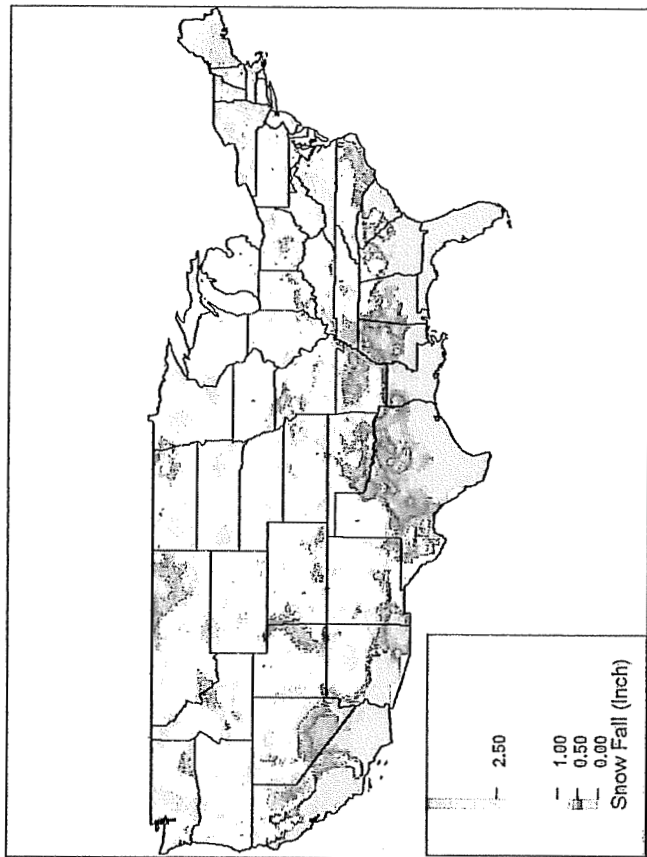
Simple Flux Model: Estimation of Ice Thickness

- Simple flux model includes:
 - Precipitation rate
 - Air temperature
 - Wind speed
- Rain impinging on structure freezes in a uniform radial accretion.
- Winter rain, snow, wind speed, and temperature can be obtained from weather data.
- Ice thickness needs to be estimated from weather data.
- American Society of Civil Engineers (ASCE) considers simple flux model for ice load calculations.

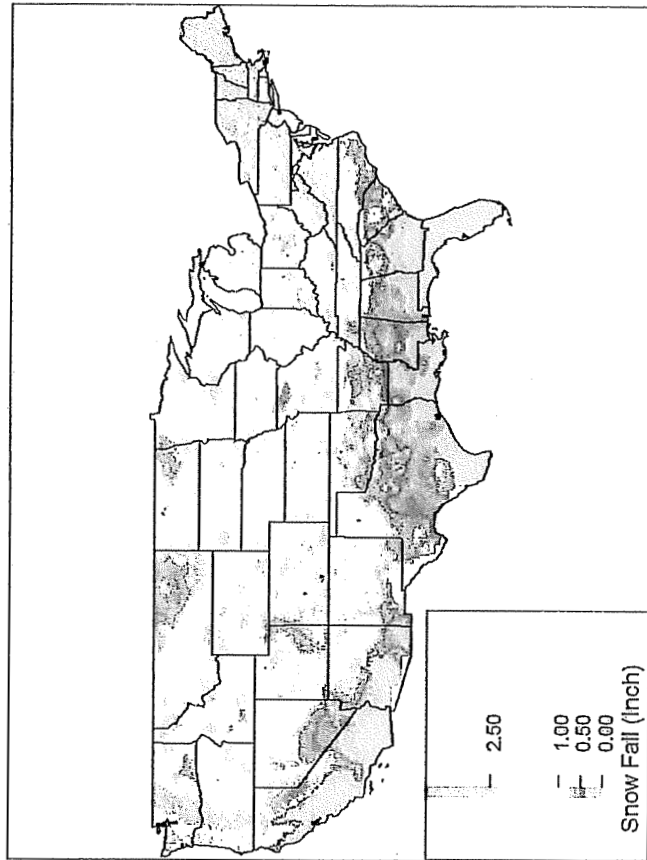
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Historical footprint (50-year ice accretion: inches)



Historical Data Set

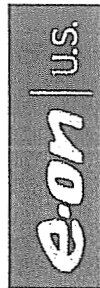


EOECAT Stochastic Event Set



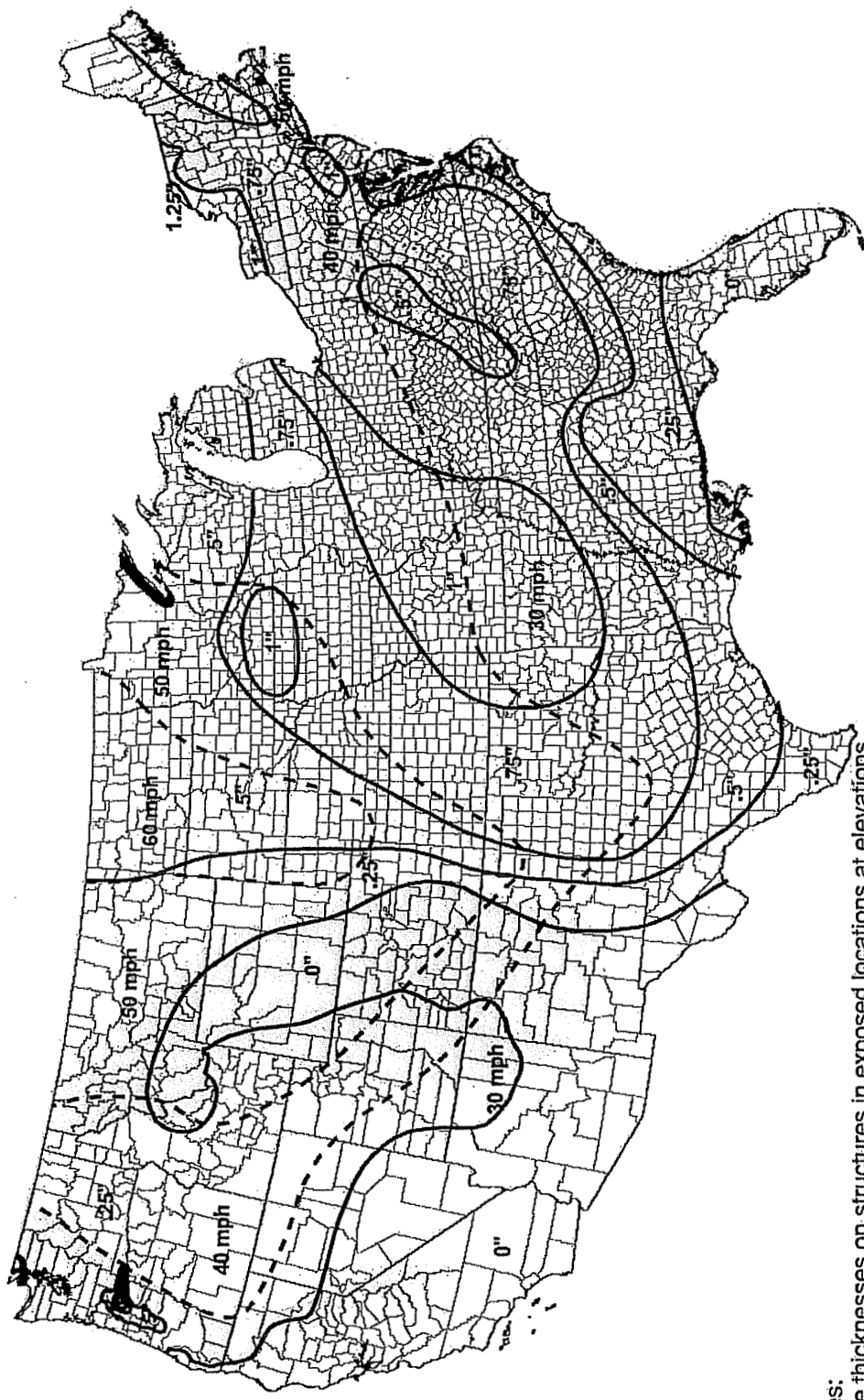
Ice Hazard Maps

- Several published ice hazard maps
- ASCE 7 & American Lifeline Alliance
- EPRI and others
- The EOECAT ice hazard compares well with recent hazard mapping



ASCE-7 50-Year Ice Load

Equivalent radial ice thicknesses due to freezing rain with concurrent gust speeds, for a 50-year mean recurrence interval

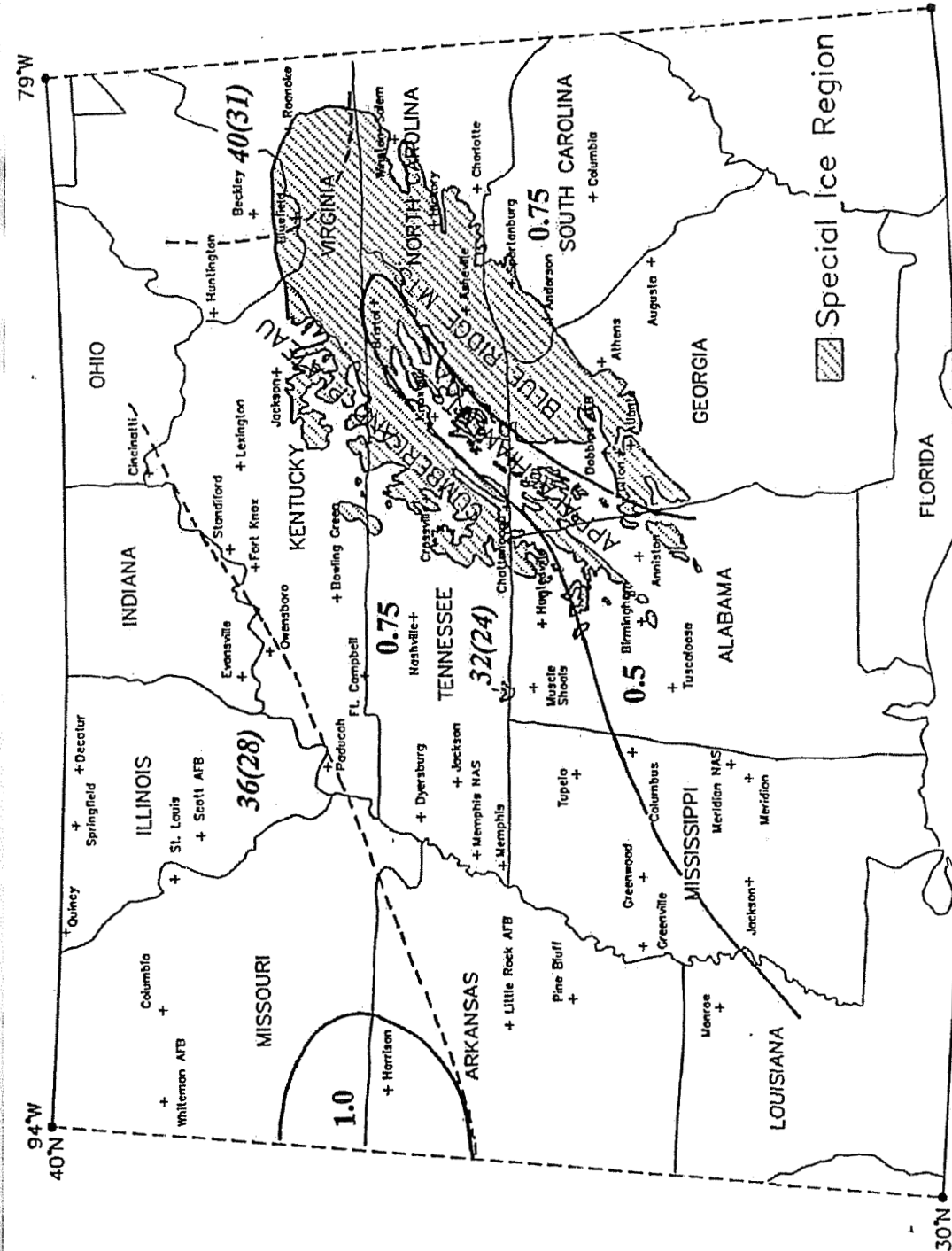


Notes:

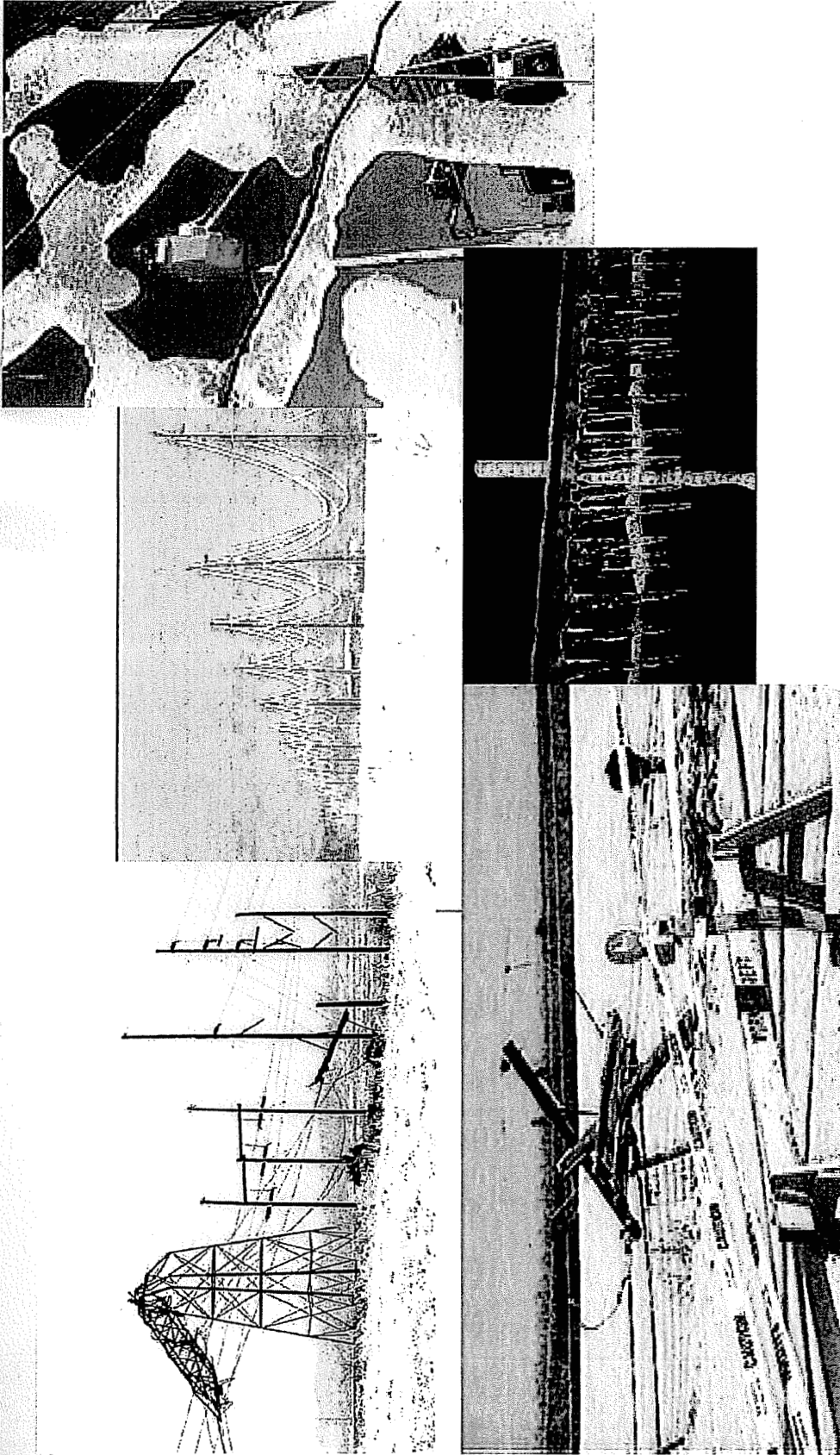
1. Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.
2. In the mountain west, indicated by the shading, ice thicknesses may exceed the mapped values in the foothills and passes. However, at elevations above 5,000 ft, freezing rain is unlikely.
3. In the Appalachian Mountains, indicated by the shading, ice thicknesses may vary significantly over short distances.

Ice thickness zones ———
 Gust speed zones - - - -

EPRI 50-Year Ice Load



Ice Storm Damage and Modeling



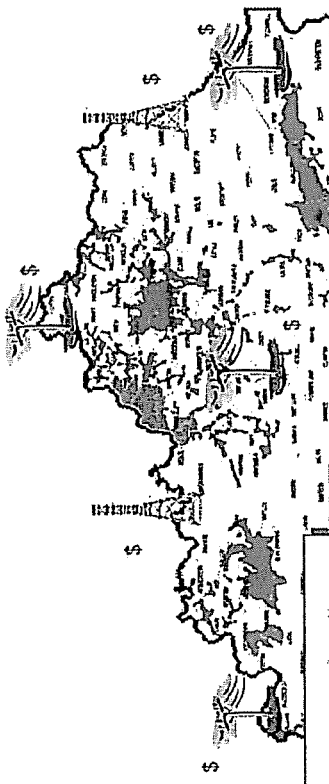
Ice Storm Simulation Modeling Methodology

Four Elements in modeling the risk of ice storms

- **Assets at risk:** eOn replacement cost of T&D assets mapped
- **Ice Storm Perils:** EOECAT used its proprietary storm damage model to simulate thousands of possible ice storms, considering the vulnerability of eOn's assets.
- **Portfolio Damage:** The peril and vulnerability information is used to estimate the damage and restoration costs to eOn's asset from thousands of simulated ice storms.

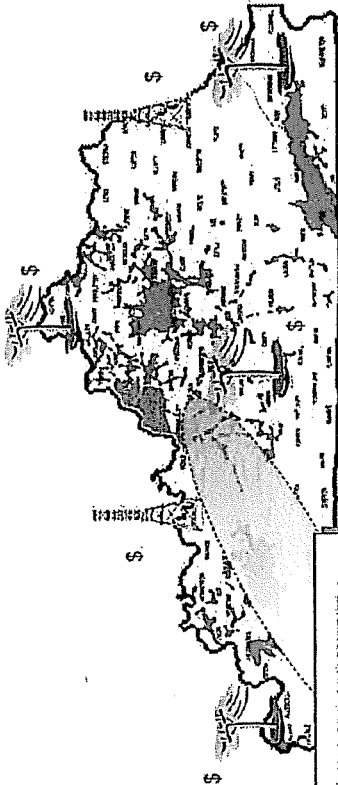
Ice Storm Simulation Methodology

Ice Storm Modeling Methodology
 Define the Asset Locations & Values



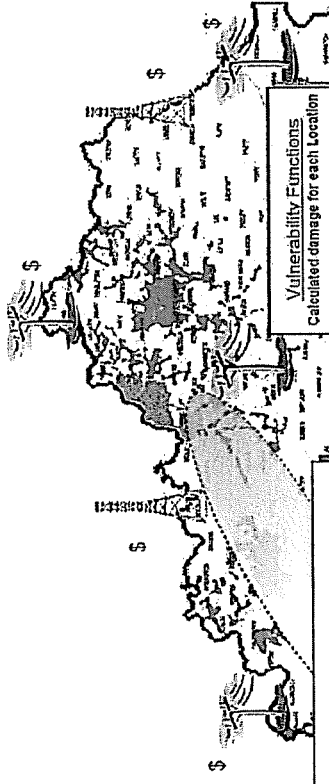
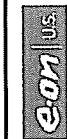
ASSET VALUES
 Overhead Distribution
 Transmission

Ice Storm Modeling Methodology
 Define the Hazard

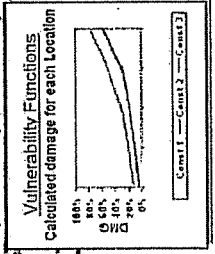


STORM PARAMETERS
 Inches of ice formation
 Extent of ice storm
 Return frequency

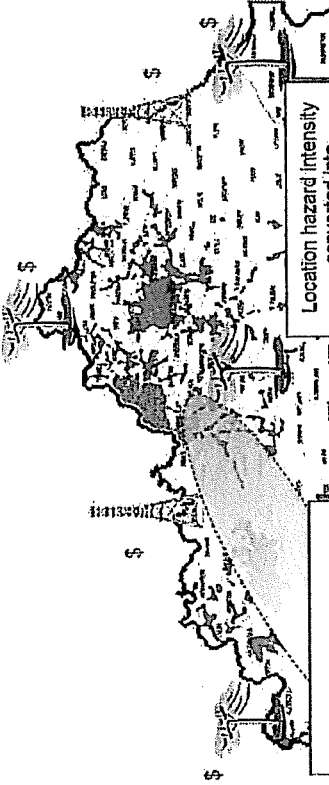
Ice Storm Modeling Methodology
 Asset Vulnerabilities



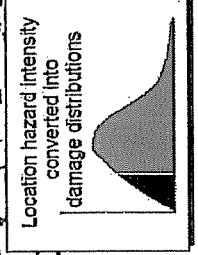
STORM PARAMETERS
 Location of assets and
 Intersection with ice hazard



Ice Storm Modeling Methodology
 Estimate Damage & Restoration Cost



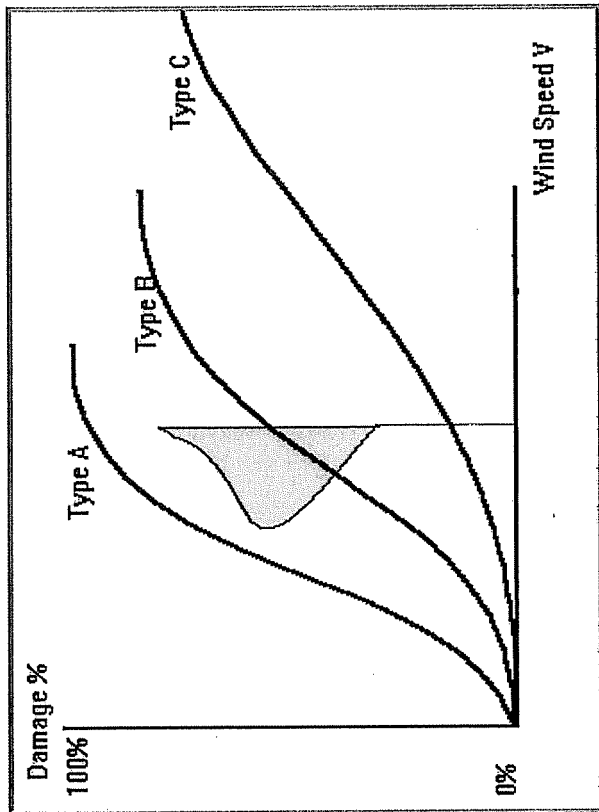
Estimate Damage & Cost
 - Calculated for each asset
 - Vulnerability curves for T&D assets



T&D Vulnerability Functions

Damage Based on Wind Speed & Ice Accumulation

- Specialized post event repair and restoration cost curves for distribution and transmission assets



Probabilistic and Loss Analyses

- **Utility T & D assets are distributed assets over the service territory**
- **Use of probabilistic analyses capture portfolio characteristics of distributed assets subject to hazard severity and frequency**
- **The importance of asset concentrations is also captured in the risk analyses**

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Expected Annual Damage and Restoration Cost

- Expected Annual Damage is \$8.9 million
- Mean value of funding required, on an annual basis and funded over a long period of time required to:
 - Cover cost to repair T&D assets and restore electric service
- “Pure Risk Cost” of exposure coverage

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Probabilistic Aggregate Damage Exceedance

- **Aggregate Damage Exceedance is the likelihood of damage to eOn's T&D assets and restoration costs exceeding the given value from all storms in a year.**

10% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$20 million
5% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$45 million
1% AGGREGATE DAMAGE EXCEEDANCE VALUE	\$123 million

Conclusion

- **EOECat™ has developed stochastic model for ice storms which account for eOn damage and restoration cost from ice storms.**
- **Model is based on about 50 years of historical *measured hourly and daily* weather data.**
- **Vulnerability functions are based on eOn damage and restoration cost data.**
- **Model provides credible results based on eOn damage data and Kentucky ice hazard.**



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LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Information Request Dated October 14, 2011

Case No. 2011-00380

Question No. 8

Witness: Valerie L. Scott

- Q-8. Provide a list of regulatory assets currently on the books of LG&E.
- a. Include the case number approving the regulatory asset, the reason for the regulatory asset, the total original amount of the regulatory asset, the date amortization of the regulatory asset began, the date amortization of the regulatory asset is to end, and the annual amortization expense.
 - b. Identify the regulatory assets on the books of LG&E for which the costs are not included in its base rates.

- A-8.
- a. The case number approving the regulatory asset, the total original amount of the regulatory asset, the date amortization of the regulatory asset began, the date amortization of the regulatory asset is to end, and the annual amortization expense are set forth in the attachment. The accounting rationale for the regulatory asset is as follows:

Regulatory assets are recorded in accordance with Accounting Standards Codification ("ASC") 980, *Regulated Operations*, which states the following at ASC 980-340-25-1, *Other Assets and Deferred Costs*:

“Rate actions of a regulator can provide reasonable assurance of the existence of an asset. An entity shall capitalize all or part of an incurred cost that would otherwise be charged to expense if both of the following criteria are met:

- a. It is probable that future revenue in an amount at least equal to the capitalized cost will result from inclusion of that cost in allowable costs for rate-making purposes.
- b. Based on available evidence, the future revenue will be provided to permit recovery of the previously incurred cost rather than to provide for expected levels of similar future costs. If the revenue will be provided through an automatic rate-adjustment clause, this criterion requires that the regulator's intent clearly be to permit recovery of the previously incurred cost.

A cost that does not meet these asset recognition criteria at the date the cost is incurred shall be recognized as a regulatory asset when it does meet those criteria at a later date.”

- b. See attached.

Louisville Gas and Electric Company
Summary of Regulatory Assets
September 30, 2011

Case #	Description	Balance at 9/30/2011	Original Balance	Amortization Start Date	Amortization End Date	Annual Amortization Expense	Included in Base Rates	Comments
2003-00266	MISO Exit Fee	\$ 947,090	\$ 13,139,016	Mar-09	Feb-14	749,834	Yes	
2003-00433	SFAS 158 - Pension and Postretirement	213,180,670	126,288,471	Jan-07	(1)	21,822,178	Yes	(2)
2008-00252	2008 Rate Case Expenses - Electric	103,232	743,270	Mar-09	Feb-12	247,757	Yes	
2008-00252	2008 Rate Case Expenses - Gas	34,581	248,979	Mar-09	Feb-12	82,993	Yes	
2008-00252	EKPC FERC Transmission Costs	409,800	847,862	Mar-09	Feb-14	169,572	Yes	
2008-00308	Carbon Management Research Group	178,860	975,600	Aug-10	Jul-20	97,560	Yes	(3)
2008-00308	KY Consortium for Carbon Storage	621,944	878,041	Aug-10	Jul-14	219,510	Yes	
2008-00456	Wind Storm 2008	20,793,961	23,540,333	Aug-10	Jul-20	2,354,033	Yes	
2009-00175	Winter Storm 2009 - Electric	38,575,786	43,670,702	Aug-10	Jul-20	4,367,070	Yes	
2009-00175	Winter Storm 2009 - Gas	148,126	167,689	Aug-10	Jul-20	16,769	Yes	
	SFAS 109 - Income Taxes Related to							
2009-00549	TC2 Investment Tax Credit	14,832,021	15,120,704	Jan-11	Jan-48	408,668	Yes	
2009-00549	Swap Termination	9,001,841	9,303,396	Aug-10	Apr-35	258,476	Yes	
2009-00549	2009 Rate Case Expenses - Electric	513,024	839,494	Aug-10	Jul-13	279,831	Yes	
2009-00549	2009 Rate Case Expenses - Gas	293,594	480,426	Aug-10	Jul-13	160,142	Yes	
2003-00426	Asset Retirement Obligation - Electric	8,200,113	n/a	n/a	n/a	n/a	Yes	(4)
2003-00426	Asset Retirement Obligation - Gas	790,279	n/a	n/a	n/a	n/a	Yes	(4)
2003-00426	Asset Retirement Obligation - Common	7,119	n/a	n/a	n/a	n/a	Yes	(4)
n/a	Coal Contracts	6,003,040	11,265,929	Nov-10	Dec-15	4,282,428	No	(5)
n/a	Unamortized Debt Expense	3,527,822	3,698,836	Various	Various	186,562	No	(5)
n/a	Corporate Headquarters Lease	641,347	794,713	Nov-10	Jul-15	167,308	No	(5)
n/a	Fuel Adjustment Clause	4,505,000	n/a	n/a	n/a	n/a	No	(6)
n/a	Gas Supply Clause	2,728,448	n/a	n/a	n/a	n/a	No	(6)
n/a	Gas Performance-Based Rates	2,532,181	n/a	n/a	n/a	n/a	No	(6)
n/a	Long-Term Interest Rate Swap	57,262,329	52,395,060	n/a	n/a	n/a	No	(7)
2011-00380								
pending	2011 Windstorm	7,419,651	7,419,651	n/a	n/a	n/a	No	(8)
n/a	KY Commission PSC General Management Audit - Electric	90,545	n/a	n/a	n/a	n/a	No	(9)
n/a	KY Commission General Management Audit - Gas	29,487	n/a	n/a	n/a	n/a	No	(9)

- (1) The regulatory asset will be amortized through pension expense and will be included in rates as long as the pension benefit exists.
- (2) In its Order in Case No. 2003-00433, the Kentucky Commission granted the LG&E's request to record the minimum pension liability calculated under Financial Accounting Standard (FAS) No. 87, *Employers' Accounting for Pensions* (now ASC 715) as a regulatory asset instead of an adjustment to equity in other comprehensive income. The minimum pension liability reflected an amount equivalent to the unfunded accumulated benefit obligation. Since the unfunded obligation was subject to market price fluctuations in the value of plan assets, the minimum pension liability could result in a reduction in equity for a loss, or increase in equity for a gain, that may never be incurred. FAS No. 87 was amended by FAS No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans* (now ASC 715). Under ASC 715-30 those gains and losses are expensed in future periods and subject to inclusion in future base rates. Accordingly it was appropriate to record a regulatory asset related to that future recovery, rather than impact current rates through the reduction in capital. Under ASC 715-20, no minimum pension liability is recorded, rather the funded status of the pension plans using the projected benefit obligation is now recorded as the pension liability on the balance sheet. LG&E continues to record a regulatory asset for the portion of the obligation that will be expensed in future periods and subject to inclusion in future base rates instead of recording an adjustment to equity in other comprehensive income.
- (3) The original balance of \$975,600 represents the balance upon which amortization was approved by the Kentucky Commission. LG&E has agreed provide cash contributions to the Carbon Research Management Group over a ten year period.
- (4) LG&E recognizes various legal obligations associated with the retirement of long-lived assets as liabilities in the financial statements. Initially this obligation is measured at fair value. An equivalent amount is recorded as an increase in the value of the capitalized asset and allocated to expense over the useful life of the asset through depreciation. Until the obligation is settled, the liability is increased, through the recognition of accretion expense in the income statement, for changes in the obligation due to the passage of time. An offsetting regulatory asset is recognized to reverse the depreciation and accretion expense related to the ARO such that there is no income statement impact. The regulatory asset is relieved when the ARO has been settled.
- (5) In purchase accounting, the fair value of deferred liabilities, including certain coal contracts, unamortized debt expense and the corporate headquarters lease, were recorded as deferred liabilities and have been reflected on the balance sheet with offsetting regulatory assets. Prior to the acquisition, LG&E recovered the cost of the coal contracts, unamortized debt expense, and the corporate headquarters lease and this rate treatment will continue after the acquisition. As a result, the regulatory assets created to offset the fair value adjustments meet the recognition criteria established by ASC 980-430-25-1 and eliminate any ratemaking impact of the fair value adjustments. LG&E's customer rates will continue to reflect these items at their original contracted prices. Purchase accounting for LG&E was approved by the FERC in Docket No. AC11-83-000.
- (6) LG&E's rates contain rate mechanisms whereby increases and decreases in the cost of fuel and gas are reflected in LG&E's rates. These mechanisms are based on actual costs incurred and allow for under-collections of costs from prior periods, which are recorded as regulatory assets, to be recovered.
- (7) The regulatory asset represents the unrealized losses (mark-to-market changes) on the long-term interest rate swaps. Realized losses are recognized on the income statement and are included in base rates. This regulatory asset was created in accordance with ASC 980-340-25-1 based on the precedent set by the regulatory asset treatment of the swap termination in Case No. 2009-00549.

(8) Approval for this regulatory asset has been requested in Case No. 2011-00380, which is currently pending with the Kentucky Commission.

(9) This management audit was directed by the KPSC per the September 30, 2010 order in Case No. 2009-00549 which initiated an investigation into the customer service operations of LG&E, the Commission performed the audit pursuant to KRS 278.255. This statute states the commission shall include the cost of conducting any audits required in this section in the cost of service of the utility for ratemaking purposes. These regulatory assets were recorded in accordance with ASC 980-340-25-1.