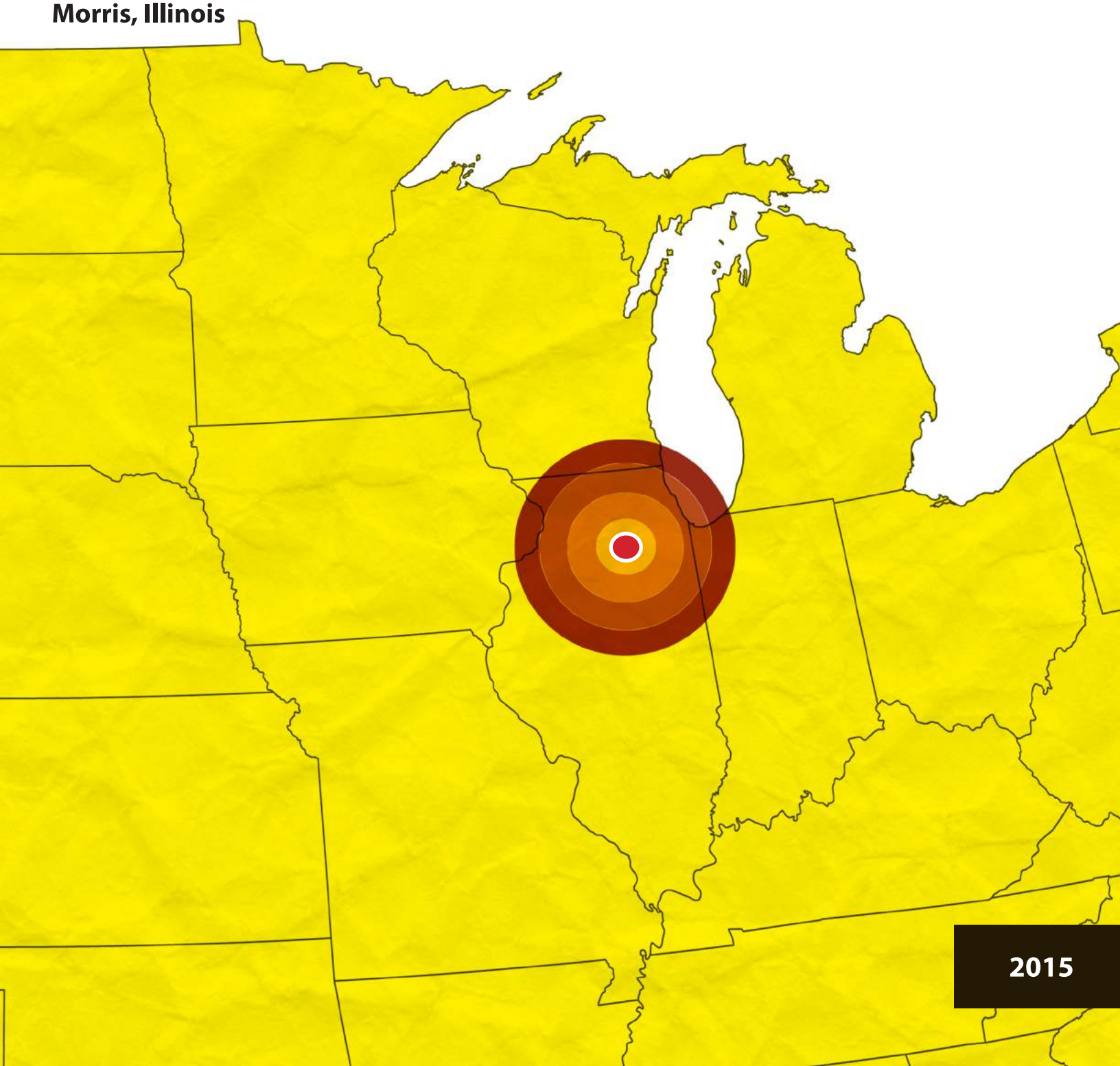
Disaster Accountability Project

Report On Emergency Evacuation Planning for Dresden Generating Station

Morris, Illinois



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About Disaster Accountability Project

Disaster Accountability Project (DAP) saves lives and reduces suffering after disasters by maximizing the impact of preparedness, response, and relief through citizen oversight and engagement, policy research and advocacy, and public education.

DAP is the leading nonprofit organization that provides long-term independent oversight of disaster management systems.

DAP engages a dedicated community to advance policy research and advocacy, promote transparency, and encourage the public to participate in oversight, community-based organizing, and discussions about disaster preparedness and relief.

Dedicated citizen oversight is necessary to ensure preparedness, relief, and recovery are effective, communities are sufficiently engaged and more resilient, and best practices and lessons learned are implemented so that mistakes are not repeated.

Prior to the creation of DAP, there was no organization providing independent oversight of the agencies and organizations responsible for these critical life-saving responsibilities.

Additional information concerning DAP's ongoing disaster accountability efforts can be found at the organization's web site: http://www.disasteraccountability.org/.

Acknowledgements

Many thanks to Justina LaSalle, Alexandria Arnold, Bryan Carey, Nicholas Santangelo, Meg Gilley, Mark Williams, Colin Wright, Erika Lancaster, and many other Disaster Accountability Project volunteers and interns for their assistance writing, collecting data, and assisting with this report.

The following report is part of a new initiative by DAP to investigate emergency planning and public awareness in the areas surrounding nuclear power plants operating in the United States.

The U.S. Government Accountability Office's Report Recommending Improved Emergency Preparedness Surrounding Nuclear Power Stations

In March 2013, the U.S. Government Accountability Office (GAO) released a report entitled *EMERGENCY PREPAREDNESS: NRC Needs to Better Understand Likely Public Response to Radiological Incidents at Nuclear Power Plants*, GAO-13-243 (*available at* http://www.gao.gov/products/GAO-13-243).[1] GAO prepared its report in response to the nuclear emergency that resulted from the March 2011 earthquake and tsunami that severely damaged the Fukushima Dai-ichi nuclear power plant in Japan, which led to the largest release of radiation since the 1986 Chernobyl nuclear plant disaster.[2] As a consequence of radiation release, Japanese authorities evacuated nearly 150,000 people located within 19 miles of the stricken plant.[3]

At the same time, the United States Nuclear Regulatory Commission (NRC) recommended that U.S. citizens in Japan evacuate the area if they were located within 50 miles of the Fukushima Dai-ichi plant.[4] The NRC recommendation states that "[u]nder *the guidelines for public safety that would be used in the United States under similar circumstances*, the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate."[5] The NRC recommendation also was broadcast to U.S. citizens in Japan via a travel warning on the U.S. Embassy website in Japan.[6] The NRC recommendation to evacuate a 50-mile zone exceeded the 10-mile emergency planning zone that is the current standard for nuclear plant emergency planning in the United States.

In the U.S., the Federal Emergency Management Agency (FEMA) is responsible for overseeing preparedness by state and local authorities situated near nuclear plants.[7] NRC regulations have established 10-mile emergency planning zones around domestic nuclear power plants.[8] Local and state authorities within the 10-mile zone must develop protective action plans for responding to a radiological incident that include evacuations and sheltering in place.[9] Local and state authorities also must provide information on radiation and protective actions to residents of the 10-mile zone on an annual basis.[10]

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[1] United States Government Accountability Office. Emergency Preparedness: NRC Needs to Better Understand Likely Public Response to Radiological Incidents at Nuclear Power Plants. Washington, D.C.: Government Accountability Office, March 2013.

[2] *Id.* at 1.

[3] *Id.*

[4] *See NRC Provides Protective Action Recommendations Based on U.S. Guidelines,* No. 11-050, March 16, 2011 (available at http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050.pdf).

[5] *Id.* (emphasis added).

[6] *See* U.S. Department of State Travel Warning, March 17, 2011, http://japan.usembassy.gov/e/acs/tacs-travel20110317.html.

[7] United States Government Accountability Office. Emergency Preparedness: NRC Needs to Better Understand Likely Public Response to Radiological Incidents at Nuclear Power Plants. Washington, D.C.: Government Accountability Office, March 2013. 2; *see also* http://www.fema.gov/radiological-emergency-preparedness-program.

[8] *See* 10 CFR 50.47(c)(2).

[9] United States Government Accountability Office, *supra* note 1, at 5.

[10] *See* 10 CFR 50 Appendix E Section IV.D.2.

NRC regulatory action subsequent to the Fukushima Dai-ichi disaster has considered the adequacy of the 10-mile emergency planning zone size and determined that no expansion is necessary.[11] The NRC concluded that a 1979 policy statement provides basis for the 10-mile emergency planning zone, including an assumption that the planning conducted for 10 miles provides a substantial basis for expansion of the emergency planning zone should it ever be necessary.[12] Even more recently, the NRC reiterated its position when it denied a petition for rulemaking filed by Nuclear Information and Resource Service and its co-petitioners in an effort to modify the NRC's emergency planning rules.[13] NRC's denial of the petition cited a lack of information available to government decision makers at the time of the 2011 Japanese incident and downplayed NRC's 50-mile evacuation recommendation as a "travel advisory."[14]

In support of maintaining the current 10-mile planning zone standard, NRC states that the information available to it during an incident on U.S. soil would be improved due to the presence of on-site NRC inspectors and direct communication lines from U.S. plants.[15] Further, the NRC emphasized that state and local governments are adequately prepared to handle evacuation scenarios.[16] (". . . State and local authorities have a robust capability to effectively evacuate the public in response to life-threatening emergencies."). It should be noted that DAP questions the veracity of NRC's assertions regarding preparedness adequacy and effectiveness, especially given the current lack of planning outside the 10-mile zone.

GAO's report, however, ultimately concluded that because residents beyond the 10-mile planning zone do not receive the safety and planning information that residents within the 10-mile zone do and, due to their lack of knowledge, may choose to evacuate even though they may be outside of the hazard area. Such "shadow evacuations" have the potential to delay evacuation of people most immediately in danger of exposure to radiological materials and are incorporated into evacuation time estimates.[17] The GAO Report states:

> [C]ommunities outside the 10-mile zone generally do not receive the same level of information as those within the 10-mile zone and therefore may not be as knowledgeable about appropriate conduct during a radiological emergency as those inside the zone and may not respond in a similar manner. If the public outside the zone evacuates unnecessarily at a greater rate than expected, these shadow evacuations would put additional traffic on roadways, possibly delaying the evacuation of the public inside the emergency planning zone and potentially increasing the risk to public health and safety. However, because neither NRC nor FEMA have examined public awareness outside of the 10-mile emergency planning zone, they do not know how the public outside this zone will respond. Specifically, they do not know if a 20-percent estimate of shadow

[11] *See Program Plan for Basis of Emergency Planning Zone Size,* July 13, 2012 (ADAMS Accession No. ML12208A210).
[12] *Id.; see also* 44 FR 61123, Oct. 23, 1979.
[13] *See* Petition for Rulemaking; denial, 79 FR 19501 (Apr. 9, 2014).
[14] *See id.* at 19506-07.
[15] *Id*.
[16] *Id.* at 19505.
[17] *See* NRC, *Criteria for Development of Evacuation Time Estimate Studies*, NUREG/CR-7002 (Albuquerque, New Mexico: November 2011) at viii (available at http://pbadupws.nrc.gov/docs/ML1130/ML113010515.pdf).

> evacuations is reasonable. Therefore, licensee evacuation time estimates may not accurately consider the impact of shadow evacuations. Without estimates of evacuation times based on more solid understanding of public awareness, licensees and NRC and FEMA cannot be confident about the reliability of their estimates. If shadow evacuations are not correctly estimated, planning for a radiological emergency may not sufficiently consider the impact of the public outside the emergency planning zone.[18]

In light of the GAO's findings and conclusions, DAP surveyed current local emergency preparedness efforts and the level of information provided to the public regarding radiological emergencies within a 50-mile radius of Dresden Generating Station, a nuclear power station located less than 50 miles from Chicago, the third largest metropolitan area in the United States.[19]

Dresden Generating Station and the Population within 50 Miles

Dresden Generating Station (Dresden) is a nuclear power station with two operating units, and one in SAFSTOR.[20] The plant is located in Morris, Illinois, 34 miles southwest of Chicago. The power station is capable of generating about 1,750 megawatts of electricity. The plant is owned and operated by Exelon Nuclear, a part of Exelon Corporation.[21] Every nuclear power plant operator is responsible for maintaining evacuation time estimate reports for NRC inspection and filing any updated reports with the NRC.[22]

Exelon's evacuation time estimate report filed with the NRC contemplates shadow evacuations from within the 10-mile emergency planning zone as well as a shadow region that is defined as the area between the 10-mile emergency planning zone border to a radius of approximately 15 miles from the Dresden plant.[23] The Exelon report estimates that half a million people live within the shadow zone and assumes that 20% of those people would evacuate in a radiological emergency.[24] Any expansion of the shadow region to a 50-mile radius would significantly increase the population implicated in shadow evacuations as that geographic area is home to a population of approximately eleven million people, according to U.S. Census Bureau estimates.

Applied elsewhere, days after the Fukushima Dai-ichi incident when Americans were encouraged to evacuate 50 miles away from the troubled plant, Entergy Energy's own

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[18] *Id*. at 26.

[19] DAP determined Chicago's rank from a list of the 100 most populous cities in the U.S. *See* http://www.city-data.com/top1.html.

[20] SAFSTOR is a method of decommissioning a nuclear facility by maintaining it in a condition that permits its safe storage and subsequent decontamination. *See* http://www.nrc.gov/reading-rm/basic-ref/glossary/safstor.html.

[21] *See* http://www.exeloncorp.com/assets/energy/powerplants/docs/Dresden/Dresden_Generating_Station_Fact_Sheet_2013.pdf.

[22] *See* 10 CFR 50 Appendix E Section IV.5.

[23] *See* http://pbadupws.nrc.gov/docs/ML1302/ML13023A025.pdf at Section 7.1.

[24] *Id.*

Director of Emergency Planning expressed that neither the company nor the NRC had sufficient information to draw up plans to evacuate New York City (located 38 miles from the Indian Point nuclear plant) which has a population of 8,336,697[25] million people.[26]

Figures 1 and 2 show the stark geographic variation between the established 10-mile emergency planning zone for Dresden and a larger 50-mile geographic radius which corresponds to the recommended NRC evacuation area for the Fukushima Dai-ichi plant in 2011.[27]

[25] Most recent estimate by U.S. Census Bureau as of June 2014. *See* http://quickfacts.census.gov.

[26] *See* Operators of Indian Point Say Changes are Likely, New York Times at A23 (Mar. 22, 2011).

[27] The NRC also designates a 50-mile ingestion exposure pathway emergency planning zone from nuclear plants in its regulations. *See* 10 CFR 50.47(c)(2). The 50-mile emergency planning zone, however, is designated for the protection of food sources from radioactive fallout and the planning for the ingestion pathway does not contemplate evacuation or sheltering of the public beyond the 10-mile emergency planning zone. *See* United States Government Accountability Office, *supra* note 1, at 6. DAP chose to survey the local jurisdictions in the geographic area within 50 miles of Dresden based on the real-world evacuation recommendation made by the U.S. government for Fukushima Dai-ichi emergency and not based on the current 50-mile ingestion exposure pathway standard.

Fig. 1 - 10-mile radius from Dresden Generating Station - Emergency Planning Zone (shaded area)

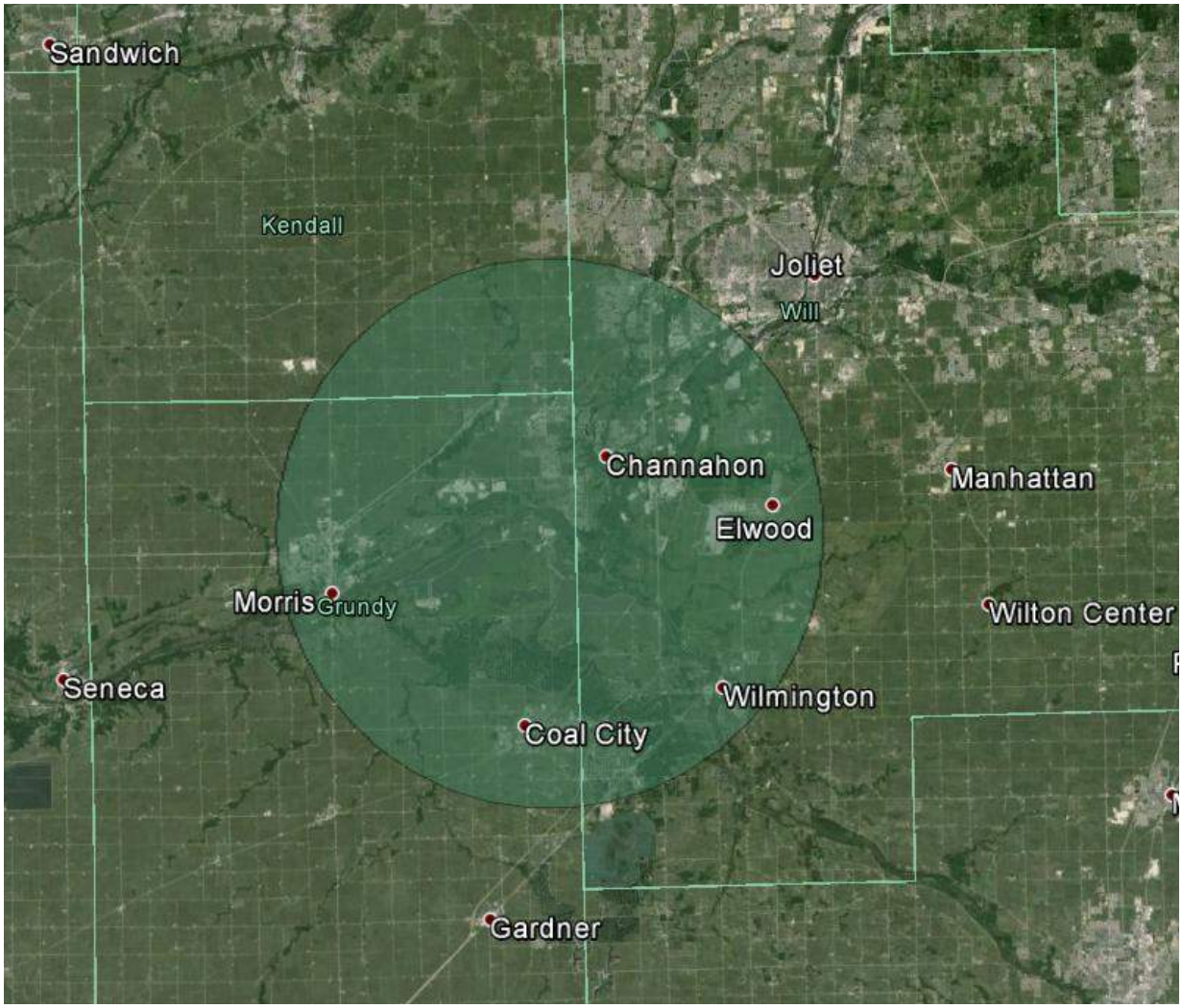
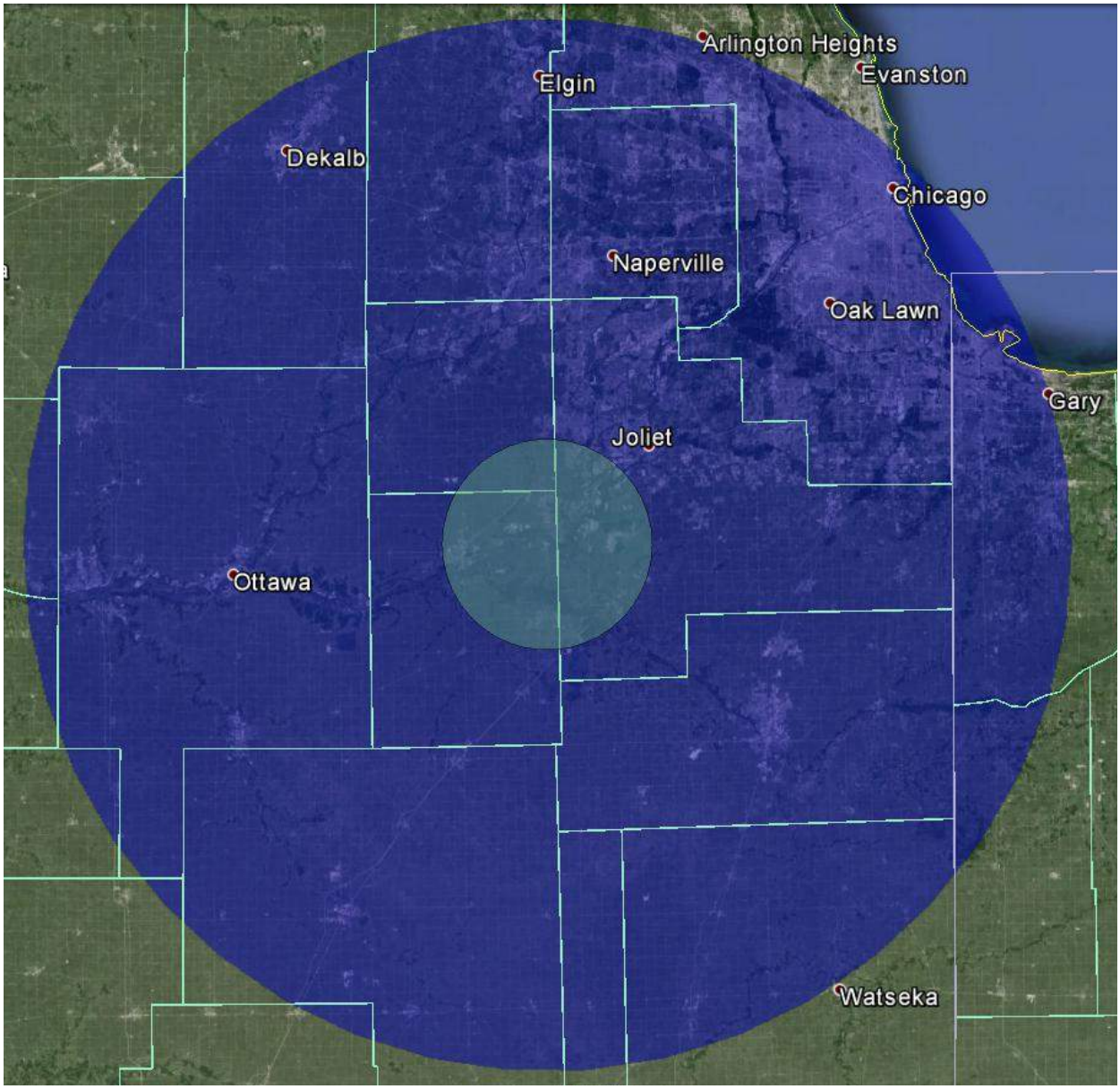


Fig. 2 - 50-mile radius from Dresden Generating Station (blue-shaded area).



The 10-mile emergency planning zone encompasses three jurisdictions in Illinois, whereas the 50-mile radius stretches to fourteen different Illinois jurisdictions and ventures to include two jurisdictions in Indiana. Further, the 10-mile zone contains an estimated population of 852,405. But by recent U.S. Census Bureau estimates, the bulk of the jurisdictions located within 50 miles of Dresden contains a population of approximately 11 million people.

DAP Survey of Jurisdictions within 50 miles of Dresden

Between May and July 2014, DAP sent 19 information requests to local jurisdictions[28] within the 50-mile radius of Dresden seeking the following four categories of documents and information:

1. Educational materials or plans provided to residents up to 50 miles away from the Dresden Generating Station regarding how to respond to a radiological incident at that plant;

2. All-hazard emergency plans and/or evacuation plans, including any materials regarding procedures to provide real-time information or instructions to residents during an emergency;

3. Emergency plans specific to radiological incidents at the Dresden Generating Station; and

4. Any studies conducted on the likely rate of "shadow evacuations," defined by the GAO as "residents who evacuate during an emergency despite being told by authorities that evacuation is not necessary." If no such studies exist, the local governments were requested to direct DAP to any third parties that have compiled such data.

The table on the following pages detail the responses from each jurisdiction. Appendix A lists the documents received from each jurisdiction.

[28] DAP canvassed the entire geographic area within a 50-mile radius around Dresden by contacting every county government and major city within the region.

Table 1. Responses to DAP's Document Requests

Key
E - Jurisdiction stated that documents responsive to the request are exempt from disclosure
N - Jurisdiction stated that no documents exist
NR - Jurisdiction did not provide documents or substantive written responses to the request
O - Jurisdiction did not provide responsive documents for another specified reason
P - Jurisdiction provided documents or provided confirmation that a third party has possession of the documents in response to the request

State	Jurisdiction	Distance from Dresden (miles)[29]	Population[30]	Req. No. 1	Req. No. 2	Req. No. 3	Req. No. 4
IL	Grundy County	0	50,228	N[31]	P	P	N[32]
IL	Will County	1	682,829	P	P	P	P[33]
IL	Kendall County	5	119,348	P	NR/P[34]	P	N
IL	Kankakee County	13	112,120	NR	NR	NR	NR
IL	LaSalle County	17	112,183	N	P	N	P[35]
IL	Livingston County	19	38,186	NR	NR	NR	NR
IL	City of Aurora	20	199,963	NR	NR[36]	NR	NR

[29] DAP used a web-based tool to find these distances. *See* http://www.daftlogic.com/projects-google-maps-distance-calculator.htm.
[30] Most recent estimate by U.S. Census Bureau as of June 2014. *See* http://quickfacts.census.gov/qfd/states/12/12011.html
[31] Denied "because Grundy County is not a keeper of these records" and told to go to the Exelon website.
[32] "The County of Grundy is not the keeper of these records. However, we believe that Exelon maintains this data."
[33] "The utility is responsible for conducting evacuation studies related to the Dresden Generating Station...The utility is currently conducting a revision to this study which addresses issues related to 'shadow evacuations.'"
[34] Two annexes were provided, not the plan.
[35] "We have not conducted such studies and consequently do not have such documents; but would refer you to Exelon Corporation as a contact for that information."
[36] City submitted a 6 page response with only 3 pages of information amounting to an emergency operations checklist, not an all-hazard emergency plan or evacuation plan as requested.

IL	City of Naperville	20	144,864	N	P	N	N
IL	Cook County	22	5,240,700	N	P	N	N
IL	DuPage County	24	932,126	N	E	N	N[37]
IL	Kane County	24	523,643	N[38]	P	N	N
IL	DeKalb County	25	104,741	N	P/NR[39]	N	N
IL	Ford County	27	13,832	N	P	N	N
IL	Iroquois County	28	28,982	N	P	N	N
IL	City of Chicago	34	2,718,782	E	E	E	E
IN	Lake County	38	491,456	NR	NR	NR	NR
IL	Lee County	40	34,858	N	NR[40]	N	N
IN	Newton County	41	14,087	NR	NR	NR	NR
IL	Bureau County	46	34,056	N	E[41]	NR	NR

Summary of Responses: Overall

- 15 out of 19 (79%) of the jurisdictions provided substantive responses to the information requests.
- Four out of 19 (21%) of the jurisdictions did not respond at all.
- Not one of the jurisdictions furnished a shadow evacuation plan or study. Overall, only two out of 19 jurisdictions (11%) made concrete referrals to third parties to obtain information about shadow evacuation plans or studies.

[37] "We are not in possession, nor are we aware of such studies. The Illinois Emergency Management Agency (IEMA) might have this information, as they are the primary agency responsible for planning related to radiological incidents."

[38] "As the State of Illinois does not require Kane County to have plans addressing incidents located at the Dresden Generating Station located in Grundy County, Kane County does not have specific plans for said facility nor do we provide radiological incident public education materials to our residents."

[39] The only planning documents provided were 13 pages speaking to county evacuations.

[40] The call of the question was for the county's all-hazard emergency plans in general and not those specific to Dresden.

[41] Offered in-person viewing of basic plan only.

- Jurisdictions representing 10.8 million people within 50 miles of the Dresden plant reported that they do not possess and/or are not aware of shadow evacuation plans specific to the Dresden plant.
- Two out of three jurisdictions (67%) within 10 miles of the plant and not one out of 16 jurisdictions between 10-50 miles of Dresden reported sharing public information specific to the plant and/or radiological emergencies.
- Jurisdictions representing 10.7 million people within 50 miles of the Dresden plant could not provide emergency plans specific to radiological incidents at the plant.

Summary of Responses: Within the 10-mile zone

- All three jurisdictions within 10 miles of the plant shared emergency plans specific to radiological incidents at Dresden.

Summary of Responses: Outside the 10-mile zone

- Not one of the 16 jurisdictions outside the 10-mile zone shared emergency plans specific to radiological incidents at Dresden.

Jurisdictions Located within 10 Miles: Not One Provided a Shadow Evacuation Plan

Of the three jurisdictions in Illinois (Grundy, Will, and Kendall) that constitute the 10-mile emergency planning zone, only Will County provided documents or a concrete referral for documents in the possession of a third party, for all four of DAP's information requests.

Question 1. Only two counties, Will and Kendall, provided educational materials and/or plans as mandated by the NRC in the Code of Federal Regulations. Grundy County failed to furnish any educational materials or plans stating it was not the keeper of such records and consequently, referred DAP to Exelon's website. This is notable since Grundy County lies within the 10-mile radius and is therefore legally required to provide residents with information on radiation and protective actions annually, and yet, Grundy could not provide DAP with such inherently public and mandated information.

Question 2. Both Grundy and Will counties provided their all-hazard emergency plans and/or evacuation plans, however, Kendall County only provided two annexes and therefore did not furnish its plan/s.

Question 3. All three of the jurisdictions, Grundy, Will, and Kendall, provided emergency plans specific to incidents at the Dresden plant.

Question 4. None of the 10-mile emergency zone jurisdictions provided any documents on shadow evacuations, either claiming that no such documents existed or not providing the documents for another specified reason. Will County suggested contacting the utility for the shadow evacuation study since it is responsible for conducting the studies and is presently revising shadow evacuation issues in their study. Although Grundy provided an adequate response based on the call of the question, the county only directed DAP to contact a third party that *may* be in possession of such studies. This is unsettling as unplanned shadow

evacuations could hinder planned evacuations of residents and put them at significant risk. The GAO report discussed at length the shadow evacuation issue as cited earlier in this report.

Jurisdictions Located Between the 10-Mile and 50-Mile Radius: None provided any educational materials, radiological information for residents, or documents on shadow evacuations

Twelve out of the sixteen jurisdictions within the 10-mile to 50-mile geographic area surrounding the Dresden plant provided some type of response.

Question 1: Not one jurisdiction beyond the 10-mile emergency planning zone indicated that it provided its residents with educational materials and/or plans regarding how to respond to a radiological incident at the Dresden plant. Ten jurisdictions stated that no such documents existed, one claimed an exemption and another five either failed to provide these documents or substantive written responses to the request.

Question 2: The following jurisdictions furnished plans: The City of Naperville and LaSalle, Cook, Kane, DeKalb, Ford, and Iroquois counties. Nine out of sixteen jurisdictions located between 10 to 50 miles from the Dresden plant failed to share all-hazard emergency plans.

Lee County responded that it did not have any all-hazard emergency plans specific to Dresden, however, the question only asked for the county's all-hazard emergency plans.

The City of Aurora provided a response of six pages, with three of the six redacted, constituting only a basic emergency checklist. This response paled in comparison to the documents received from the majority of the jurisdictions and therefore cannot be deemed a sufficient response. Bureau County claimed an exemption, but invited DAP to physically view its plan.

Question 3: Not one jurisdiction between the 10-mile and 50-mile emergency planning zone submitted responsive radiological information. Most responses fell into one of the following two categories: counties claiming that no information existed (nine) or counties providing information that was non-responsive to the request (six). Lastly, the City of Chicago claimed an exemption.

Question 4. None of the jurisdictions between 10 and 50 miles from the Dresden plant provided any documents on shadow evacuations, the majority either claiming that no such documents existed or not providing the documents for another specified reason. LaSalle County was the only county that made a concrete referral by directing DAP to contact Exelon for the study. DuPage County did not possess any shadow evacuation studies, was unaware of their existence, and was only able to suggest that the Illinois Emergency Management Agency *may* possess such studies.

As the GAO pointed out in its report referenced earlier:

> "Without estimates of evacuation times based on more solid understanding of public awareness, licensees and NRC and FEMA cannot be confident about the reliability of their estimates. If shadow evacuations are not correctly

estimated, planning for a radiological emergency may not sufficiently consider the impact of the public outside the emergency planning zone." [42]

Consequently, real gaps in emergency planning may occur without valid shadow evacuation estimates.[43]

Conclusion: Public Education and Shadow Evacuation Planning are Grossly Inadequate within the 50-mile radius of the Dresden Plant

Illinois and Indiana should not wait for the federal government to act. The states, counties, and cities within 50 miles of the Dresden plant can and should voluntarily plan for emergencies beyond what is mandated by the federal government.

DAP agrees with the GAO Report's conclusion that more study is required to understand the level of public knowledge and the likely public reaction to a nuclear plant emergency, especially beyond the current 10-mile emergency planning zone.

The NRC only mandates an emergency planning zone of 10-miles for the areas surrounding the Dresden plant. In contrast, the NRC's public guidance for the actual major nuclear plant disaster at the Fukushima Dai-ichi nuclear power plant recommended that U.S. citizens evacuate if they were located within 50 miles of the damaged Japanese nuclear plant. The NRC and FEMA have not satisfactorily reconciled this disparity between current planning and real-world implementation.[44]

Shadow evacuations from populated areas beyond the current 10-mile emergency planning zones could result from a public informed and influenced by readily-available guidance even if local authorities instruct certain members of the public that no evacuation is necessary from their location.

Members of an uninformed public, who have not received the annual emergency preparedness information, likely will turn to other convenient sources of information in order to respond to an actual emergency. A search of the Internet easily turns up several recommendations and suggestions for evacuation to points more than 50 miles away from a stricken nuclear plant, including the NRC's own press release about Fukushima Dai-ichi. In addition, other credible organizations such as Physicians for Social Responsibility and the Smithsonian Institution have web sites discussing 50-mile evacuations.[45] Also, reliable,

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[42] *See* NRC, *Criteria for Development of Evacuation Time Estimate Studies*, NUREG/CR-7002 (Albuquerque, New Mexico: November 2011) at 26 (available at http://pbadupws.nrc.gov/docs/ML1130/ML113010515.pdf).

[43] *Id.*

[44] NRC recently has stated that it "plans long-term action involving [emergency planning zones]" that will rely on a forthcoming Probabilistic Risk Assessment, the United Nations Scientific Committee on the Effects of Atomic Radiation's forthcoming report assessing radiation doses and associated effects on health and the environment, and from Fukushima Prefecture's Health Management Survey and that it will commence rulemaking efforts to make changes if those research efforts warrant changes. *See* Petition for Rulemaking; denial, 79 FR 19501, 19504 (Apr. 9, 2014).

[45] *See* http://www.psr.org/resources/evacuation-zone-nuclear-reactors.html and http://www.smithsonianmag.com/science-nature/do-you-live-within-50-miles-nuclear-power-plant-180950072/?no-ist.

well-known media sources reiterate the NRC's 2011 Fukushima Dai-ichi evacuation recommendation and display maps showing the 50-mile radius for every U.S. nuclear plant.[46] This readily available, web-based information is a likely source to which the public will turn for guidance, especially in a moment of crisis and in the absence of other information from state and local governments.

State and local authorities should not wait for the imposition of federal regulatory mandates in order to implement this planning into state and local preparedness efforts.

In light of its findings, DAP believes that planning and information to increase public awareness of the potential for radiological emergencies beyond the current 10-mile emergency planning zones is warranted. At a minimum, emergency planning authorities from jurisdictions beyond the 10-mile mandatory planning zones should provide better emergency response guidance to the public, conduct shadow evacuation studies and plan accordingly, even if the federal government does not require it.

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Upon request, DAP will provide copies of correspondence with local governments in response to its information requests. A high-level index of the documents received from the survey effort is attached to this report in Appendix A.

[46] *See* http://www.wsj.com/articles/SB10001424052748703362904576219031025249872.

Appendix A

Index of Documents Received From Local Emergency Planning Authorities within 50 Miles of Dresden

State	Local Jurisdiction	Documents
Illinois		
	City of Aurora	A six-page Annex document on general procedures for protective actions (sheltering in place or evacuation) during times of disaster was provided. Three of the six pages were redacted.
	Bureau County	
	City of Chicago	
	Cook County	County of Cook Emergency Operation Plan (October, 2012)
	DeKalb County	DeKalb County evacuation planning documents
	DuPage County	
	Ford County	Ford County Emergency Operations Plan
	Grundy County	Grundy County Emergency Operations Plan (2012) Illinois Plan for Radiological Accident-Dresden IPRA Plan D-Chapter 2 [Grundy County] (August 2013)
	Iroquois County	Emergency Operations Plan of Iroquois County (January, 2014)
	Kane County	Kane County All-Hazards Emergency Operations Plan (2014)
	Kankakee County	

	Kendall County	
		Brochures: Be Prepared in Kendall (Kendall County), Emergency Planning for the Dresden Area (Exelon), Need to Know about Nuclear Power Plants & Radiation (Exelon) Illinois Plan for Radiological Accidents-IPRA-Dresden-Kendall County (August, 2013) Evacuation Annex Public Warning Annex
	LaSalle County	
		LaSalle County Emergency Operations Plan, Basic Document (April, 2013) Annex D: Warning/Emergency Public Information Annex E: Evacuation
	Lee County	
	Livingston County	
	City of Naperville	
		City of Naperville Emergency Operating Plan (October, 2013)
	Will County	
		Emergency Planning or the Dresden Area (Exelon) Emergency Information Booklet provided to farmers, processors, distributors, and others associated with food production in the 50-mile Ingestion Pathway Zone (IPZ) (Illinois Emergency Management Agency) (December, 2013) Will County Emergency Operations Plan (April, 2013) Illinois Plan for Radiological Accidents-IPRA-Dresden-Will County (August, 2013) Evacuation Time estimates with the Plume Exposure Pathway Emergency Planning Zone for the Dresden Nuclear Generating Station, by Commonwealth Edison Company (September, 1994)
Indiana		
	Lake	
	Newton	

Appendix B

DAP's prior work includes the following projects:

- Published field reports concerning disaster accountability and relief transparency include:
    - One Year Follow Up Report on the Transparency of Relief Organizations Responding to the 2010 Haiti Earthquake (Jan. 5, 2011);
    - Report on the Transparency of Relief Organizations Responding to the 2010 Haiti Earthquake (July 12, 2010); and
    - Report on Southern Louisiana Emergency Preparedness (Spring 2009).
- The Disaster Policy Wiki that currently holds over 1,000 post-disaster policy recommendations designed to improve disaster management systems, save more lives and minimize suffering.
- SmartResponse.org, initiated after the 2010 Haiti earthquake, and relaunching in 2015, is a web-based clearinghouse that will improve efficiency and effectiveness in disaster relief and humanitarian aid by increasing sector-wide transparency and the amount of information available to potential donors, survivors, the media, aid groups, and governments.
- The Disaster Accountability Real-Time Hotline serves as a touchpoint after disasters and provides disaster survivors, workers, and volunteers with an outside line to call to report gaps in services. After Hurricane Ike, the Hotline received over 100 calls reporting gaps in services across Texas.
- Citizen Engagement: In 2009, teams of legal volunteers visited 22 parishes across Southern Louisiana to request all-hazard emergency plans. We found that only half the plans were available to the public and fewer were updated and comprehensive. DAP's report received significant media coverage and the resulting attention led to community-level conversations and real plan improvements.