PENNSYLVANIA PUBLIC OPINION RELATING TO THE SITUATION AT THREE MILE ISLAND

AND A REPORT OF A REPORT OF

a survey conducted for

GENERAL PUBLIC UTILITIES CORPORATION

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Interviewing Period: March 1981

Field Research Corporation

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FOREWORD

This report contains a summary of the findings of a public opinion survey conducted in the State of Pennsylvania.

The purpose of the study was to examine public opinion regarding a number of issues relating to the situation at Three Mile Island. Personal interviews were conducted face-to-face in respondents' homes between March 12 and March 25, 1981.

The sample design called for dividing the state into three regions -- the TMI Area, Eastern Pennsylvania, and Western Pennsylvania. The results summarized here are analyzed statewide as well as by region.

The following is an explanation of the geographic definitions applicable to each area:

Statewide:

The entire State of Pennsylvania

TMI Area:

the area within a general radius of twentyfive miles from the Three Mile Island nuclear power plant which includes large portions of Dauphin, Lebanon, York, Perry, Lancaster and Cumberland counties.

Eastern Pennsylvania:

that portion of Pennsylvania east of and including the following counties -- Tioga, Lycoming, Snyder, Juniata and Franklin but excluding the TMI Area.

Western Pennsylvania:

that portion of Pennsylvania west of and including the following counties -- Potter, Clinton, Centre, Mifflin, Huntingdon and Fulton. In order to produce adequate statistical bases for each region, sampling was done on a disproportionate basis; that is, the number of interviews allocated to each region was not proportionate to the statewide population. When the three regions were combined to produce the "statewide" base, appropriate statistical weighting was used to restore each area to its proper population proportion.

The survey was conducted by Field Research Corporation, an independent public opinion research organization, working with Winner/Wagner and Associates. In behalf of Metropolitan Edison Company and its parent, General Public Utilities Corporation.

Where applicable, comparisons have been made between the current survey and a previous June 1980 statewide telephone survey also conducted for GPU by Field Research Corporation.

A complete description of the survey methodology can be found in the appendix of this report along with a copy of the questionnaire and all hand cards used in the survey. Four separate volumes of computer print-outs contain the detailed tabulations of the data.

THE FINDINGS

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I. Most serious problems facing Pennsylvania

At the beginning of the interview, respondents were asked to state in their own words what they felt were the most serious problems facing the State of Pennsylvania today. Answers were recorded verbatim and coded into general categories.

Statewide three issues predominate -- <u>unemployment</u>, which receives 44% mention, <u>inflation/cost of living</u> (42%), and <u>taxes/big government</u> (39%). Other issues mentioned by significant proportions of the statewide public are: <u>crime/law enforcement</u> (15%) the <u>cost of utility bills</u> (11%), <u>poor roads/lack of road</u> <u>maintenance</u> (11%) and <u>lack of economic growth</u> (9%). <u>TMI-related</u> <u>problems</u> are mentioned by 4% of the statewide public as a serious problem in the state.

Among residents in the TMI Area inflation/cost of living (43%) is cited more often as a serious state problem than any other concern, followed by <u>unemployment</u> (27%, and <u>taxes/big</u> <u>government</u> (23%). <u>TMI-related problems</u> are mentioned by 14% as a serious state problem among residents of the TMI Area.

<u>Crime/law enforcement</u> is mentioned by larger proportions of Eastern Pennsylvanians (22%) than Western Pennsylvanians (4%) as a serious state problem. On the other hand, <u>poor roads/lack</u> <u>of road maintenance</u> is mentioned more often by Western Pennsylvanians (22%) than by those living in Eastern Pennsylvania (4%).

TMI-related problems are mentioned by 5% of those living in Eastern Pennsylvania outside of the TMI Area, but by less than one-half of 1% of those living in Western Pennsylvania as a serious state problem.

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MOST SERIOUS PROBLEMS FACING THE STATE OF PENNSYLVANIA

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	15
UNEMPLOYMENT	44	27	48	44
INFLATION/COST OF LIVING	42	43	49	31
TAXES/BIG GOVERNMENT	39	23	40	40
CRIME/LAW ENFORCEMENT	15	13	22	4
COST OF UTILITY BILLS	11	10	11	11
POOR ROADS/LACK OF MAINTENANCE	11	4	4	22
LACK OF ECONOMIC GROWTH	9	3	7	12
EDUCATION/THE SCHOOLS	5	2	5	7
COST OF GASOLINE	5	5	5	5
TMI-RELATED PROBLEMS	4	14	5	*
ENVIRONMENTAL PROBLEMS/AIR POLLUTION	4	5	4	5
SEPTA STRIKE/MASS TRANSIT	4	1	6	3
LACK OF AFFORDABLE HOUSING	4	1	2	7
WELFARE FRAUD	4	3	5	2
USE OF DRUGS/ALCOHOLISM	3	2	4	3
OTHER MENTIONS	17	29	17	10

II.Most serious problems facing this general area

A second question asked respondents what they felt were the most serious problems facing their own general area.

Once again <u>unemployment</u> (35%) and <u>inflation/cost of living</u> (25%) are most frequently mentioned. Problems associated with <u>crime/law enforcement</u> (18%) and <u>taxes/big government</u> (17%) follow next in order. <u>TMI-related problems</u> are mentioned by 3% of all Pennsylvanians in this vein.

Among residents living in the TMI Area, however, <u>TMI-related</u> problems (24%) are cited more often than any other issue. The problems of <u>unemployment</u> (23%) and <u>inflation/cost of living</u> (22%) are also mentioned frequently by TMI Area residents.

Residents of Eastern Pennsylvania cite <u>crime/law enforcement</u> (24%) as a serious problem moreso than do residents of Western Pennsylvania(8%).

On the other hand, Western Pennsylvanians mention poor roads/lack of road maintenance (21%) as a serious problem in their area more than Eastern Pennsylvanians (4%).

TMI-related problems are mentioned by 1% or less of all Pennsylvanians living more than twenty-five miles from the TMI plant as a serious problem in their area.

MOST SERIOUS PROBLEMS FACING THIS GENERAL AREA

	STATE- WIDE	TM I AREA	EASTERN PA	WESTERN PA
	%	7	%	%
UNEMPLOYMENT	35	23	34	40
INFLATION/COST OF LIVING	25	22	30	18
CRIME/LAW ENFORCEMENT	18	17	24	8
TAXES/BIG GOVERNMENT	17	11	12	23
POOR ROADS/LACK OF MAINTANENCE	10	4	4	21
LACK OF ECONOMIC GROWTH	. 8	5	5	13
SEPTA STRIKE/MASS TRANSIT PROBLEMS	7		10	4
COST OF UTILITY BILLS	6	8	8	4
Use of drugs/alcoholism	5	3	6	4
COST OF GASOLINE	5	4	7	3
WATER SHORTAGES	4	4	6	1
EDUCATION/THE SCHOOLS	4	3	2	6
TMI - RELATED PROBLEMS	3	24	1	*
NO PROBLEMS	4	6	5	1
OTHER MENTIONS	19	21	20	22

III. Importance of business and industrial growth in the next ten years

Nearly all Pennsylvanians (93%) believe that in the next ten years it is important that business and industry grow in their area. Greater than three out of four statewide (76%) "Bel that growth in their area is "very" important.

The belief that business and industrial growth is important is held across each of the three regions of Pennsylvania.

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
IMPORTANT	93	89	91	96
VERY IMPORTANT	76	62	76	78
Somewhat important	17	27	15	18
NOT IMPORTANT	7	9	7	3
Somewhat unimportant	3	4	3	1
NOT VERY IMPORTANT	4	5	4	2
Don'T KNOW	1	1	1	*

IMPORTANCE OF BUSINESS AND INDUSTRIAL GROWTH IN THIS AREA IN THE NEXT TEN YEARS

Table 3

IV. Attitudes toward government regulation

Two questions were asked relating to government regulation. One dealt with the amount of regulation that exists in our lives, and a second concerned the amount of regulation of business and industry.

Six in ten Pennsylvanians (60%), believe that there is too much government regulation of people's lives today.

Slightly greater proportions of Western Pennsylvanians than Eastern Pennsylvanians hold this view, but in both regions majorities believe there is too much regulation of our lives.

A similar majority of Pennsylvanians (57%) also believes that there is too much government regulation of business and industry today.

Slightly greater proportions of Western Pennsylvanians than Eastern Pennsylvanians also believe this to be true.

PROPORTION WHO BELIEVE THERE IS TOO MUCH GOVERNMENT REGULATION

Table 4

	STATE- WIDE				WESTERN PA
	7	%	%	%	
Too much regulation of our lives	60	59	54	68	
Too much regulation of BUSINESS AND INDUSTRY	57	62	53	63	

V. Meaning of the term "energy crisis"

When Pennsylvanians are asked to describe in their own words what the term "energy crisis" means to them, nearly half (45%) state that it means we are running out of fuel and resources or that there are shortages. Next most frequently mentioned are higher prices in utility bills, cited by 31% statewide.

One in five Pennsylvanians (20%) <u>don't believe</u> <u>there is a crisis</u>. Other things cited frequently are <u>higher</u> prices for gasoline (14%) and the need to conserve (12%).

Opinions do not vary a great deal between residents of the TMI Area, Eastern Pennsylvania of Western Pennsylvania on this question.

Dangers relating to TMI/nuclear power are mentioned by 4% of the residents of the TMI Area in this context, by 2% of Eastern Pennsylvanians and by less than one-half of 1% of those in Western Pennsylvania.

MEANING OF THE TERM "ENERGY CRISIS"

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
Vieles -	%	7	%	7
WE'RE RUNNING OUT OF FUEL, RESOURCES/SHORTAGES	45	36	52	37
HIGHER PRICES FOR HEATING, COOLING/UTILITY BILLS	31	38	28	34
Don'T BELIEVE THERE IS A CRISIS	20	15	15	27
HIGHER PRICES FOR GASOLINE	14	15	16	10
WE'VE BEEN WASTING ENERGY/ NEED TO CONSERVE	12	14	11	14
NEED TO DEVELOP ALTERNATIVE SOURCES	6	7	5	6
DEPENDENCE ON FOREIGN OIL	3	3	2	5
DANGERS RELATING TO TMI/NUCLEAR POWER	1	4	2	
OTHER MENTIONS	3	4	*	5

VI. Causes of the "energy crisis"

Respondents were next asked what they thought were the causes of the "energy crisis."

Statewide about one in three (32%) mentions the oil companies as a cause. <u>Wastefulness/over-consumption</u> is mentioned by one in four (25%), the <u>government</u> receives 22% mention and <u>OPEC/</u> <u>our dependence of foreign oil/not promoting U.S. resources</u> is cited by 21%.

Wastefulness/over-consumption is mentioned more often by residents in the TMI Area and Eastern Pennsylvania than by those in Western Pennsylvania. <u>Oil companies</u> are mentioned as a cause somewhat less frequently in the TMI Area than elsewhere.

CAUSE OF THE ENERGY CRISIS

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
OIL COMPANIES	32	20	37	28
WASTEFULNESS/OVER-CONSUMPTION	25	33	29	13
GOVERNMENT	22	22	23	21
OPEC/DEPENDENCE ON FOREIGN OIL/NOT PROMOTING U.S RESOURCES	21	20	21	19
BIG BUSINESS	11	5	13	9
PRICE OF OIL/HIGHER COSTS/ INFLATION	7	6	7	ĝ
NOT DEVELOPING ALTERNATIVE ENERGY SOURCES	4	5	5	3
OTHER MENTIONS	19	12	16	24

VII. Blame for the "energy crisis"

When asked who in their own opinion is to blame for the "energy crisis" three general responses are mentioned more frequently than all others. These are: <u>government/the</u> <u>politicians</u> mentioned by 40%; <u>everybody/wastefulness</u> (31%); and the oil companies (30%).

The idea that <u>everybody</u> is to blame is somewhat more pronounced among residents of the TMI Area than among other Pennsylvanians. On the other hand, residents of the TMI Area are somewhat less inclined to blame <u>oil companies</u> than are others in the state.

WHO IS TO BLAME FOR ENERGY CRISIS?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
GOVERNMENT/THE POLITICIANS	40	40	36	46
EVERYBODY/WASTEFULNESS	31	45	34	25
OIL COMPANIES	30	14	36	26
Business/industry	16	7	21	12
OPEC/OIL PRODUCING NATIONS	9	8	11	6
UTILITY COMPANIES	4	3	3	6
NOBODY IS TO BLAME	2	5	1	1
OTHER MENTIONS	5	5	6	5

VIII. Solutions to the "energy crisis"

When asked what can be done to solve the energy crisis one-third of the statewide public (33%) cites <u>conservation/</u> <u>using less energy</u> as a solution. Other ideas offered include: <u>developing alternative sources of energy</u> (19%); <u>developing our</u> <u>own resources/become less dependent on foreign oil</u> (16%); <u>developing solar energy</u> (11%); <u>imposing government controls and</u> <u>regulations</u> (10%); and using more coal (9%).

Opinions about possible solutions to the energy crisis do not vary substantially between the three different regions, although <u>developing our own resources/become less dependent</u> <u>on foreign oil</u> is mentioned somewhat more frequently among Eastern Pennsylvanians than among other residents in the state.

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WHAT CAN BE DONE TO SOLVE ENERGY CRISIS?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	76	%
CONSERVATION/USING LESS	33	38	37	26
DEVELOPING ALTERNATE SOURCES OF ENERGY	19	22	20	16
DEVELOP OUR OWN RESOURCES/ BECOME LESS DEPENDENT ON FOREIGN OIL	16	8	21	11
Develop solar energy	11	14	11	10
RATIONING/GOVERNMENT CONTROLS, REGULATION	10	6	11	9
USE MORE COAL	9	7	8	10
LESS GOVERNMENT CONTROLS/ DEREGULATION	5	6	3	6
DEVELOP MORE NUCLEAR POWER	4	6	3	5
GOVERNMENT SHOULD DO SOMETHING (GENERAL)	4	2	6	2
MAKE CARS MORE EFFICIENT	3	3	*	6
OTHER MENTIONS	25	33	23	33

IX. Availability of electric power in the next few years

A large majority of residents in all areas ranging from 68% to 77% believe that there will be enough electric power available for household needs in their area in the next few years. This compares to about one in five (21%) who believes there is likely to be a shortage.

The current results parallel the findings of a previous June 1980 survey on this same issue.

AVAILABILITY OF ELECTRIC POWER FOR HOUSEHOLD NEEDS IN NEXT FEW YEARS

	STATEWIDE		TMI AREA		EASTERN PA		WESTERN PA	
	MARCH 1981 %	JUNE 1980 %	MARCH 1981 %	JUNE 1980 %	MARCH 1981 %	JUNE 1980 %	MARCH 1981 %	JUNE 1980
ENOUGH AVAILABLE	71	71	68	68	68	69	77	% 75
LIKELY TO BE A SHORTAGE	21	15	24	18	24	16	16	14
Don'T KNOW	8	14	8	14	8	15	7	11

(IDENTICAL QUESTION ASKED IN JUNE 1980 TELEPHONE SURVEY)

(*March 1981 "TMI AREA" IS EQUIVALENT TO THE COMBINED RESULTS OF THE PRIMARY AND SECONDARY REGIONS OF THE JUNE 1980 SURVEY)

X. Job electric utility is doing in providing service

After respondents were asked to name the company which supplies their electricity, each was asked to appraise their utility company on several dimensions.

Most respondents statewide have a generally favorable opinion of the job their electric utility is doing in providing service. Statewide 80% of the public rate their electric service as "very good" or "good" compared to just 3% who rate it as "poor" or "very poor." Another 16% statewide give their utility a "fair" rating.

Most customers of the Metropolitan Edison Company rate its service favorably, although its ratings are slightly lower than the statewide average. Sixty-eight percent of Met Ed customers give the company "very good" or "good" ratings, while just 8% rate it "poor" or "very poor". About one in four (24%) give Met Ed a "fair" rating.

Seventy-six percent of the customers of the Pennsylvania Electric Company rate its service favorably compared to 4% who give it "poor" or "very poor" marks, similar to the statewide average.

JOB ELECTRIC UTILITY IS DOING IN PROVIDING SERVICE

					CUSTOMERS O	F		
		STATEWIDE AVERAGE	MET ED	PENN ELECTRIC	DUQUESNE LIGHT	PP&L	WEST PENN POWER	PECO
		%	%	%	%	%	%	%
VERY GOOD	(5)	34	18	25	31	48	53	31
Good	(4)	46	50	51	55	43	31	45
Average	(3)	16	24	21	14	7	13	20
Poor	(2)	2	7	2	•		3	3
VERY POOR	(1)	1	1	2	•	*	1	1
NO OPINION		1	1	*	*	1	•	•
MEAN RATING	i	4.11	3.78	3.93	4.15	4, <i>4</i> ,0	4,32	4.04

XI. Job electric utility is doing in keeping costs reasonable

Responses are mixed in regard to the job that utilities are doing in keeping costs reasonable. Statewide 28% give their utility company "very good" or "good" ratings in keeping costs reasonable, 36% rate its performance "fair" and 33% give their utility "poor" or "very poor" ratings.

Customers of the Metropolitan Edison Company rate its job performance in this area somewhat more negatively than the statewide average. Thirty-two percent of Met Ed customers give it "poor" or "very poor" ratings, while about one in six (18%)rates it in positive terms. About half (48%) rates Met Ed "fair" in the job it is doing in keeping costs reasonable.

Customers of the Pennsylvania Electric Company rate its job in keeping costs reasonable in much the same terms as the statewide average, with 27% giving it positive ratings, 45% rating it "fair" and 27% giving it negative ratings.

JOB ELECTRIC UTILITY IS DOING IN KEEPING COSTS REASONABLE

					CUSTOMERS	0F		
		STATEWIDE AVERAGE	MET ED	PENN ELECTRIC	DUQUESNE LIGHT	PP&L	WEST PENN POWER	PECO
		%	%	%	%	%	%	%
Very good	(5)	7	6	5	3	13	15	4
Good	(4)	21	12	22	24	38	17	14
Average	(3)	36	48	45	38	32	36	33
Poor	(2)	24	15	23	18	14	20	33
VERY POOR	(1)	9	17	4	14	3	11	11
NO OPINION		3	1	1	3	1	1	4
Mean rati	NG	2.92	2.74	3,00	2.84	3.45	3.07	2.64

XII. Electricity rates during the past year

The vast majority of Pennsylvania residents (84%) reports that their electricity rates increased during the past year. This compares to 10% who say their rates remained the same and less than one-half of 1% who reports that their rates have decreased during the past year. Six percent say that they do not know.

Greater than nine out of ten Metropolitan Edison Company customers (93%) say that their electricity rates increased during the past year, slightly greater than the statewide average.

Three out of four (75%) Pennsylvania Electric Company customers report their rates increased during the past year, slightly less than the statewide average.

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ELECTRICITY RATES DURING THE PAST YEAR

		CUSTOMERS OF								
	STATEWIDE AVERAGE	MET ED	PENN ELECTRIC	DUQUESNE LIGHT	PP&L	WEST PENN POWER	PECO %			
	%	%	%	%	%	2				
Increased	84	93	75	87	81	79	90			
REMAINED THE SAME	10	5	17	7	14	14	5			
Decreased	٠	*	*	*	*	•	٠			
Don'т кноw	6	2	8	6	5	7	5			

XIII. Reasons given for rate increase

Those persons who say their electricity rates increased during the past year were asked why they thought their rates had gone up.

The results reveal a wide range of opinions. Statewide one in four (25%) blames the rate hikes on <u>inflation</u>. About one in five (19%) attributes it to <u>increased costs of fuel</u>; another 15% mention <u>higher production costs</u>; 13% cite <u>higher labor costs</u>; 11% fault the utilities for <u>greed</u> and <u>profiteering</u>; while 7% statewide mention the added costs of the TMI accident.

Among Met Ed customers the top ranking reason given for rate increases has to do with the <u>added costs of the TMI accident</u> (39%). Next most frequently mentioned is the <u>increased cost</u> <u>of fuel</u> (24%). General <u>inflation</u> receives only a 10% mention among Met Ed customers.

About one out of eight (13%) of Pennsylvania Electric Company customers mentions the <u>added costs of the TMI accident</u> as a reason for rate increases during the past year.

REASONS GIVEN FOR RATE INCREASE

		CUSTOMERS OF							
	STATEWIDE AVERAGE	MET ED	PENN ELECTRIC	DUQUESNE LIGHT	PP&L	WEST PENN POWER	PECO		
	%	%	%	%	%	%	%		
MENTION RATE INCREASE	84	93	75	87	81	79	90		
INFLATION	23	10	21	27	21	30	25		
INCREASED COST OF FUEL	19	24	12	19	21	10	23		
HIGHER PRODUCTION COSTS	15	10	5	20	16	21	16		
HIGHER LABOR COSTS	13	11	14	22	14	11	11		
GREED, PROFITEERING BY THE UTILITY	11	12	18	9	7	13	13		
Added costs of TMI accident	7	39	13	1	3		6		
HIGHER TAXES, SURCHARGES TO UTILITY	3	3	3	6	3	6	1		
SHORTAGES OF NATURAL RESOURCES	3		3	9	1	1	3		
POOR MANAGEMENT BY UTILITY	2	7	1	1	2	3	3		
OTHER MENTIONS	19	6	19	18	20	19	21		

(*LESS THAN ONE-HALF OF 1%)

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XIV. Most serious concern relating to the dangers of over-dependence on foreign oil

For this question, respondents were handed a card listing five different concerns that have been raised as to the dangers of over-dependence on foreign oil and were asked which in their opinion was their most serious concern.

About one-third of the Pennsylvania public (34%) says their most serious concern about our over-dependence on foreign oil is that <u>it damages our entire national economy</u>. Next most frequently mentioned is that <u>it is creating a worldwide scramble</u> for oil and a new cold war (22%). Nineteen percent of the statewide public report their most serious concern is that <u>it</u> <u>endangers our national security</u>; 14% think <u>it will create</u> <u>crippling energy shortages in the future</u>; and 8% mention <u>it increases the most of electricity in Pennsylvania</u> as their most serious concern.

Responses do not vary substantially across the different regions, although a somewhat greater proportion of the residents of the TMI Area cites the belief that <u>it damages our entire national</u> economy (44%) than do others.

WHICH	FOLLOWING DANGERS			RELATIVE OIL?
		STATE- √IDE	TMI AREA	ERN WESTEI PA

	WIDE AREA		PA	PA	
	%	%	%	%	
IT DAMAGES OUR ENTIRE NATIONAL ECONOMY	34	44	30	36	
IT IS CREATING A WORLDWIDE SCRAMBLE FOR OIL AND A NEW COLD WAR	22	19	23	22	
IT ENDANGERS OUR NATIONAL SECURITY	19	18	18	21	
IT WILL CREATE CRIPPLING ENERGY SHORTAGES IN THE FUTURE	14	12	14	14	
IT INCREASES THE COST OF ELECTRICITY IN PENNSYLVANIA	8	7	10	6	
No answer	3	1	5	1	

XV. Attitudes toward the proposition that we should not burn oil for electric power

Nearly two-thirds of the Pennsylvania public (64%) agree with the proposition, "America would be better off if we used our limited oil resources for things like cars, heat, medicine and plastics instead of burning it to generate electric power." This compares to 26% who disagree and 10% who have no opinion.

Opinions on this issue are similar in each of the three regions with large majorities saying they agree with this statement.

AMERICA WOULD BE BETTER OFF IF WE USED OUR LIMITED OIL RESOURCES FOR THINGS LIKE CARS, HEAT, MEDICINE AND PLASTICS INSTEAD OF BURNING IT TO GENERATE ELECTRIC POWER

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
Agree	64	58	67	61
STRONGLY	28	23	30	26
Somewhat	36	35	37	35
DISAGREE	26	32	25	28
Somewhat	20	26	19	20
STRONGLY	6	6	6	8
NO OPINION	10	10	8	11

XVI. Position on increased use of various energy sources

Respondents were read four proposals for dealing with the energy crisis and asked whether they favored or opposed each one.

Greater than nine in ten Pennsylvanians (91%) say that they favor the increased exploration of oil in the United States.

Similarly 91% favor increasing our use of coal as an energy source.

About two out of three statewide (67%) favor a combination of the increased use of coal and nuclear energy.

About half of the Pennsylvania public (52%) supports the increased use of nuclear energy on its own.

Opinions toward these four energy options are generally similar across each of the three regions.

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POSITION ON INCREASED USE OF VARIOUS ENERGY SOURCES

(PROPORTION WHO FAVOR EACH)

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
INCREASE OUR EXPLORATION OF OIL IN THE U.S.	91	97	92	88
INCREASE OUR USE OF COAL	91	89	87	96
A COMBINATION OF THE INCREASED USE OF COAL AND NUCLEAR ENERGY	67	59	63	74
INCREASE OUR USE OF NUCLEAR ENERGY	52	53	48	56

XVII.Opinions toward the increased use of nuclear energy

Opinions are divided toward the increased use of muclear energy. Of the 52% who favor it, 24% support it "strongly," while 28% are "somewhat" in favor. Statewide 45% of the public oppose the increased use of nuclear energy, with 21% "somewhat" opposed and 24% "strongly" opposed.

Opinions within the TMI Area are generally similar to the statewide public, but are somewhat more polarized. For example, the support to opposition ratio is nearly the same with 53% in favor and 47% opposed. However, of those opposed 35% say they are "strongly" opposed, while just 12% are "somewhat" opposed.

Residents of Western Pennsylvania are more supportive of the increased use of nuclear energy than are the residents of Eastern Pennsylvania. In the West increasing the use of nuclear energy is supported by a 56% to 39% ratio. In the East, on the other hand, residents are evenly divided 48% to 48%.

POSITION ON INCREASED USE OF NUCLEAR ENERGY

Table 17

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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
Favor	52	53	48	56
STRONGLY	24	24	24	23
Somewhat	28	29	24	33
Oppose	45	47	48	39
Somewhat	21	12	20	24
STRONGLY	24	35	28	15
NO OPINION	4	_1	4	5

XVIII. Position on using nuclear energy to replace oil

Somewhat larger proportions of Pennsylvanians are supportive of nuclear energy when it is posed as an alternative to using foreign oil to produce electricity. Statewide 59% favor nuclear energy under this condition compared to 37% who are opposed.

Support for nuclear energy as a replacement for foreign oil, however, does not increase the level of support for nuclear energy among residents of the TMI Area. The support to opposition ratio for nuclear energy as a replacement for foreign oil (52% to 46%) is about the same as the ratio who support the increased use of nuclear energy on its own (53% to 47%).

Support for nuclear energy to replace foreign oil does draw greater support among Eastern Pennsylvanians (55% to 40%) than the argument for increasing the use of nuclear energy alone (48% to 48%).

Similarly support for nuclear energy as a replacement for foreign oil draws greater support among Western Pennsylvanians (66% to 25%) than does the argument for the increased use of nuclear energy alone (56% to 39%).

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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
FAVOR	59	52	55	66
STRONGLY	29	27	23	37
Somewhat	30	25	32	29
Oppose	37	46	40	25
Somewhat	15	18	15	9
STRONGLY	22	28	25	16
NO OPINION	7	2	6	9

POSITION ON USING NUCLEAR ENERGY TO REPLACE OIL

XIX. Position on nuclear energy plants that are already built and operating

Respondents were asked to place themselves on a seven-point "continue to operate" vs. "shut down" scale in regard to their position on nuclear energy plants that are already built and operating. The results show that attitudes toward currently operating nuclear energy plants divide roughly into four general camps-those strongly in favor of continued operations (26%), those strongly in favor of shutting down these plants (19%), those marginally in favor of continuing operations (18%) and those who can be considered "fence-sitters" neither in favor nor opposed (16%).

Residents in the TMI Area display somewhat greater support for the continued operations of currently operating nuclear energy plants than the statewide public as a whole. The ratio of those who strongly support their continued operations to those strongly in favor of shutting them down is 30% to 14% in the TMI Area compared to 26% to 19% statewide.

Residents of Eastern Pennsylvania, on the other hand, are somewhat more polarized against current nuclear energy plant operations. Those strongly in favor of shutting down plants currently in operation (27%) outnumber those strongly in favor of continued operations (20%).

Residents of Western Pennsylvania, on the other hand, display the strongest support for operating nuclear energy plants with 33% strongly in favor of their continued operations and just 10% strongly in favor of shutting them down.

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POSITION ON NUCLEAR ENERGY PLANTS THAT ARE ALREADY BUILT AND OPERATING

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	3%	%	%
STRONGLY FAVOR CONTINUED OPERATIONS (1)	26	30	20	33
(2)	9	8	10	8
(3)	18	17	18	18
(4)	16	15	15	17
(5)	8	7	6	11
(6)	2	7	2	2
STRONGLY FAVOR SHUTTING DOWN PLANTS (7)	19	14	27	10
NO OPINION	2	2	2	1
MEAN RATING	3.57	3.39	3.91	3.12

XX. Advantages of nuclear energy

All respondents regardless of their stance on nuclear energy were then asked to state in their own words what they felt were the advantages and disadvantages of nuclear energy.

Three out of ten statewide (30%) feel that nuclear energy is <u>cheaper</u>, less expensive than other forms of energy. Other advantages cited are that it is <u>efficient</u>, <u>self-sustaining</u> (16%); it <u>makes us less dependent of foreign oil</u> (15%); it is <u>easy to come by/zwcilable</u> (14%); it <u>helps us to conserve on</u> <u>other forms of energy</u> (9%); and it is <u>cleaner than other energy</u> <u>sources</u> (9%). Nineteen percent of the statewide public say that in their opinion there are <u>no advantages</u> to nuclear energy.

Opinions are generally similar across each of the three regions relative to the advantages of nuclear energy.

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ADVANTAGES OF NUCLEAR ENERGY

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	7.
CHEAPER, LESS EXPENSIVE THAN OTHER FORMS OF ENERGY	30	25	26	36
EFFICIENT, SELF-SUSTAINING	16	14	21	11
MAKES US LESS DEPENDENT ON FOREIGN OIL	15	10	12	20
EASY TO COME BY/AVAILABLE	14	7	15	12
HELPS US CONSERVE ON OTHER FORMS OF ENERGY	9	11	9	9
CLEANER THAN OTHER ENERGY SOURCES	9	11	8	11
No advantages	19	25	22	15
OTHER MENTIONS	5	4	3	8
NO OPINION	16	15	14	20

(COLUMNS ADD TO MORE THAN 100% DUE TO MULTIPLE MENTIONS)

XXI. Disadvantages of nuclear energy

Among all Pennsylvanians the main disadvantages of nuclear energy are related to its safety dangers. The <u>possibility of</u> (an) (another) occident is mentioned by 29% of the public. The general feeling that it isn't safe is cited by 23% and 22% fear the possibility of leaks and radiation dangers.

Nineteen percent of the statewide public mention the <u>disposal of wastes</u> as a disadvantage. Another 17% feel nuclear energy causes <u>potential harm to one's health</u>. Other reasons cited are that it <u>needs more research</u> (10%); that it <u>causes</u> <u>fear and anxiety for those living near the plant</u> (10%); and that the utilities <u>don't have enough qualified operators</u> (5%).

The <u>possibility of another accident</u> is mentioned somewhat more frequently among residents of the TMI Area than elsewhere, whereas the <u>possibility of leaks and radiation dangers</u> is mentioned somewhat less frequently by TMI Area residents.

DISADVANTAGES OF NUCLEAR ENERGY

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
Possibility of (an)(another) accident	29	35	27	30
IT ISN'T SAFE (GENERAL)	23	20	21	27
POSSIBILITY OF LEAKS/ RADIATION DANGERS	22	9	27	19
DISPOSAL OF WASTES	19	24	19	18
POTENTIAL HARM TO HEALTH/ CANCER, BIRTH DEFECTS	17	15	22	9
NEEDS MORE RESEARCH	10	14	9	11
CAUSES FEAR AND ANXIETY FOR THOSE LIVING NEAR THE PLANT	10	7	14	4
DON'T HAVE ENOUGH QUALIFIED OPERATORS, PERSONNEL	5	9	4	5
No disadvantages	4	2	3	6
OTHER MENTIONS	7	15	6	8
NO OPINION	12	6	10	15

(COLUMNS ADD TO MORE THAN 100% DUE TO MULTIPLE MENTIONS)

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XXII. Reaction to the 1979 TMI accident

Six dimensions of resident reaction to the accident at the time of the accident were posed in the current survey, repeating a series of questions that was first asked in June 1980.

The results reveal that there has been relatively little change in the hindsight view that residents have of how they felt at the time of the accident. Statewide a predominantly mixed set of emotions are described including feelings of <u>helplessness</u> (81%), <u>confidence that everything would be okay</u> (75%), and confusion (71%).

A majority of Pennsylvanians also described themselves as <u>satisfied that everything possible was being done</u> (59%), while a similar proportion (59%) said they <u>felt angry at the officials</u>. A somewhat smaller proportion statewide reported being frightened (43%).

As in the June 1980 survey, residents living in the TMI Area report somewhat greater proportions feeling <u>confused</u> (78%) and <u>frightened</u> (57%) than the statewide public, along with correspondingly less confidence that everything would be okay (62%).

REACTIONS TO THE ACCIDENT AT THE TIME OF THE ACCIDENT

	STATE	WIDE	TMI A	REA	EASTEI	RN PA	WESTE	RN PA
	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980
PROPORTION WHO SAID THEY FELT	%	%	%	%	7	%	%	%
HELPLESS	81	73	81	74	81	75	80	71
CONFIDENT IT WOULD BE OKAY	75	77	62	69	71	73	85	34
Confused	71	64	78	72	-2	63	68	62
SATISFIED EVERYTHING POSSIBLE WAS BEING DONE	59	58	52	60	63	54	54	63
ANGRY AT THE OFFICIALS	59	47	54	50	62	52	55	40
FRIGHTENED	43	34	57	50	52	37	25	26

(IDENTICAL QUESTION ASKED IN JUNE 1980 TELEPHONE SURVEY)

(*"TMI AREA" IN THE MARCH 1981 SURVEY EQUALS THE COMBINED RESULTS OF THE PRIMARY AND SECONDARY REGIONS OF THE JUNE 1980 SURVEY)

XXIII. Attitudes toward the TMI plant at the present time

The current survey asked respondents about their feelings toward the TMI plant at the present time.

Statewide the predominant feeling is now one of <u>confidence</u> <u>that everything will be okay</u>, reported by 76% of the public. However, nearly two out of three (64%) report feeling <u>helpless</u>, and 58% say they are still <u>confused by what is happening</u>. Another 58% say they feel <u>satisfied that everything possible</u> <u>is being done</u>. On the other hand, feelings of <u>anger at the</u> <u>officials</u> or being <u>frightened</u> by what is happening are reported less frequently now than at the time of the accident.

Attitudes toward the TMI plant along these six dimensions are similar across each of the three regions.

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ATTITUDES TOWARD THE TMI PLANT AT THE PRESENT TIME

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
ROPORTION WHO NOW	7.	%	7	%
CONFIDENT IT WILL BE	76	71	74	81
Helpless	64	63	64	64
CONFUSED BY WHAT IS HAPPENING	58	54	62	53
SATISFIED EVERYTHING POSSIBLE IS BEING DONE	58	51	63	54
ANGRY AT THE OFFICIALS	43	43	45	41
Frightened	25	30	30	17

XXIV. Things that frighten people about TMI now

When asked to describe in their own words what it is that frightens people about TMI at the present time, two things are expressed more than all others. These are the <u>possibility</u> of radiation exposure (35%) and the <u>possibility of another</u> accident (34%).

Other comments made among the statewide public about TMI include a <u>fear of the unknown</u> (13%) and the <u>risk of cancer/</u> birth defects (13%).

Residents of the TMI Area appear to be somewhat more concerned about the <u>possibility of another accident</u> (34%) than they are about the <u>possibility of radiation exposure to themselves or the</u> <u>environment</u> (16%). A <u>fear of the unknown</u> is mentioned more frequently by residents of the TMI Area than by other Pennsylvanians.

WHAT FRIGHTENS PEOPLE ABOUT TMI NOW?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
POSSIBILITY OF RADIATION EXPOSUR THREAT TO HEALTH, ENVIRONMENT POSSIBILITY OF ANOTHER ACCIDENT	35 34	16 34	42 39	30 28
FEAR OF THE UNKNOWN	13	24	10	16
CANCER/BIRTH DEFECTS	13	11	8	22
THAT WE ARE NOT BEING TOLD THE TRUTH	6	10	4	8
PEOPLE OPERATING IT AREN'T PROPERLY TRAINED	6	3	7	3
CONTAMINATION OF WATER/THE RIVER	5	5	6	5
DISPOSAL OF WASTES	4	9	2	7
MEDIA FRIGHTENING EVERYONE	4	3	4	4
IT MIGHT BLOW-UP	4	3	5	3
OTHER MENTIONS	7	13	5	9

(COLUMNS ADD TO MORE THAN 100% DUE TO MULTIPLE MENTIONS)

XXV. Attitudes toward the dangers of radiation

Pennsylvanians were asked to describe their fears about the dan ers posed by radiation. The greatest fear reported is that it <u>causes or might cause cancer or leukemia</u> mentioned by 50% of the public statewide. Other major concerns are that it <u>causes or might cause birth defects</u> (29%); that it <u>creates</u> <u>long-range health problems or complications</u> (25%); that it <u>causes or might cause death</u> (22%); and that <u>it is harmful or</u> hazardous to your health (19%).

Residents of the TMI Area mention the fear that <u>radiation</u> <u>causes or might cause cancer</u> and that <u>it causes or might cause</u> <u>birth defects</u> somewhat less frequently than does the overall Pennsylvania public.

ATTITUDES ABOUT THE DANGER OF RADIATION

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
CAUSES OR MIGHT CAUSE CANCER/ LEUKEMIA	50	39	56	45
CAUSES OR MIGHT CAUSE BIRTH DEFECTS/ DEFORMITIES	29	16	32	29
CREATES LONG-RANGE HEALTH PROBLEMS/ COMPLICATIONS	25	25	27	22
CAUSES OR MIGHT CAUSE DEATH/IT'S LETHAL	22	17	20	25
Is HARMFUL, HAZARDOUS TO YOUR HEALTH (GENERAL)	19	23	15	24
IS DANGEROUS TO THE ENVIRONMENT	11	7	8	15
CAUSES BURNING OF THE SKIN	7	6	5	11
CAUSES OR MIGHT CAUSE DAMAGE TO CROPS, FARMLAND	7	8	8	5
OTHER MENTIONS	7	8	4	9

(COLUMNS ADD TO MORE THAN 100% DUE TO MULTIPLE MENTIONS)

XXVI. Sources of radiation

The vast majority of Pennsylvanians (87%) recognize that there are sources of radiation other than that coming from nuclear energy plants. Just 5% of the public statewide say they think that radiation only comes from nuclear energy plants, while 8% say they don't know.

The knowledge that there are sources of radiation other than nuclear power plants is very high in each of the three regions of the state.

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DOES RADIATION COME ONLY FROM NUCLEAR ENERGY PLANTS OR ARE THERE OTHER SOURCES?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
	72	%	%	%	
There are other sources	87	93	84	91	
Comes only from nuclear energy plants	5	4	6	4	
Don'T KNOW	8	3	10	5	

XXVII.Other sources of radiation

Those respondents who said that they were aware of other sources of radiation were asked to mention some of these other radiation sources. Most frequently mentioned are <u>x-ray</u> <u>treatments</u> cited by a majority 53% of the Pennsylvania public. About one in three (34%) mentions <u>the sun</u> as a source of radiation, while one in four (25%) says <u>color television sets</u>. Other mentions include <u>microwave ovens</u> (16%); <u>nuclear weapons</u> (10%); <u>the earth/the natural environment</u> (9%); and <u>radioactive</u> elements such as uranium, radium (7%).

TMI Area residents seem to be disproportionately more aware of such radiation sources as the sun, color television sets and microwave ovens and ranges.

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SOURCES OF RADIATION OTHER THAN NUCLEAR ENERGY PLANTS

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
X-RAYS TREATMENTS/DOCTOR'S CHECK-UPS	53	57	57	46
The sun	34	46	36	28
COLOR TELEVISION SETS	25	32	27	20
MICROWAVE OVENS, RANGES	16	22	16	14
NUCLEAR WEAPONS, BOMBS	10	10	9	11
THE EARTH/THE NATURAL ENVIRONMENT	9	13	8	9
RADIOACTIVE ELEMENTS SUCH AS URANIUM, RADIUM	7	6	9	4
ELECTRICAL DEVICES, APPLI- ANCES	4	11	4	3
INDUSTRIAL PLANTS, FACTORIES	3	3	1	6
OTHER MENTIONS	12	15	9	16

XXVIII. Sources that would expose a person to the most radiation

Respondents were read a list of five potential sources of radiation and asked to state which source in his or her opinion would expose a person to the most radiation. The choices on the list included: (1) a cross-country flight in a jet airplane; (2) living in the State of Colorado for a year; (3) living next door to an operating nuclear energy plant for a year; (4) medical and dental examinations of a typical person during a year; and (5) living in a brick building for a year.

A majority of the public statewide (54%) says that living next door to an operating nuclear energy plant for one year would expose a person to more radiation than the other sources. Next most frequently cited (33%) are medical and dental examinations of a typical person during a year. All other choices are each cited by 5% or less of all statewide respondents.

TMI Area residents and Wester, Pennsylvanians are less inclined than are Eastern Pennsylvanians to believe that living next door to a nuclear energy plant is the source of the most radiation.

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
	%	%	%	%	
LIVING NEXT DOOR TO AN OPERATING NUCLEAR ENERGY PLANT FOR ONE YEAR	54	45	59	48	
THE MEDICAL AND DENTAL EXAMINATIONS OF A TYPICAL PERSON DURING A YEAR	33	39	28	39	
LIVING IN THE STATE OF Colorado for a year	5	8	5	4	
TAKING A CROSS-COUNTRY FLIGHT IN A JET AIRPLANE	4	3	4	5	
LIVING IN A BRICK BUILDING FOR A YEAR	2	2	3	•	
Don't know	3	3	2	3	

SOURCE THAT WOULD EXPOSE A PERSON TO THE MOST RADIATION

(*LESS THAN ONE-HALF OF 1%)

XXIX. Concern about the danger of radiation from a nuclear energy plant when informed about their relatively low radiation exposure levels

About four in ten Pennsylvanians (39%) say they would be less concerned about the danger of radiation from an operating nuclear energy plant if they knew that the amount of radiation they would receive from living next door to such a plant is less than the other four alternatives listed. Another 45% say that knowing this would not make any difference to them.

Slightly more Eastern Pennsylvanians than residents of the TMI Area or Western Pennsylvania say they would be less concerned about the dangers of radiation from nuclear energy plants if they knew this information.

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SUPPOSE IT WERE A FACT THAT THE AMOUNT OF RADIATION YOU WOULD RECEIVE FROM LIVING NEXT DOOR TO AN OPERATING NUCLEAR ENERGY PLANT FOR ONE YEAR EXPOSED YOU TO LESS RADIATION THAN ANY OF THE OTHER FOUR SOURCES. WOULD YOU BE MORE OR LESS CONCERNED ABOUT THE DANGER OF RADIATION FROM AN OPERATING ENERGY PLANT?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	07 /o	76	%
LESS CONCERNED	39	35	44	34
No DIFFERENCE	45	58	43	45
More concerned	13	6	11	17
NO OPINION	2		1	4

(*LESS THAN ONE-HALF OF 1%)

XXX. Knowledge of the specific number of nuclear energy plants on TMI

When the public is asked how many nuclear energy plants there are on Three Mile Island, slightly greater than one in five statewide (22%) correctly states that there are two plants on TMI. This compares to about one in three (34%) who says there are three plants at TMI, 19% who think there is just one plant at TMI, 5% who say there are four or more plants and 20% who say they don't know.

Residents of the TMI Area and Eastern Pennsylvania choose the correct alternative in somewhat greater proportions than do residents of Western Pennsylvania.

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SPECIFIC NUMBER OF NUCLEAR ENERGY PLANTS ON TMI

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
One	19	22	14	25
Тwo	22	33	30	7
Three	34	29	35	34
Four or more	5	5	5	4
Don't know	20	11	16	29

XXXI. Knowledge of whether both or only one plant was damaged during the 1979 accident on TMI

After all respondents were informed of the fact that there are two nuclear energy plants on TMI, seven in ten of the statewide public (70%) say that they understand that only one plant was damaged during the 1979 TMI accident. Less than one in ten (8%) believes that both plants were damaged, while 22% say they don't know.

Residents of the TMI Area are somewhat more knowledgeable on this point than are others in the state. Nearly nine in ten (86%) of those living within twenty-five miles of the plant know that only one of the two plants was damaged during the accident. This compares to 76% recognition in Western Pennsylvania and less than two-thirds recognition (63%) in Eastern Pennsylvania.

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WERE BOTH TMI PLANTS DAMAGED DURING THE 1979 ACCIDENT OR ONLY ONE?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
DAMAGED ONLY ONE PLANT	70	86	63	76
Damaged both plants	8	3	6	12
Don'T KNOW	22	11	31	12

XXXII. Knowledge that neither TMI plant is currently operating

About half of the statewide public (48%) is aware that neither of the two nuclear energy plants at TMI is currently operating. One in three statewide (30%) incorrectly believes that either one or both plants are operating, while 22% of the public say they don't know.

A majority of those living in the TMI Area and Eastern Pennsylvania recognizes that neither plant is now operating, compared to only about one in three (37%) of those in Western Pennsylvania aware of this.

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ARE EITHER OF THE TMI PLANTS OPERATING NOW?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	72	%
No, none are operating	48	56	55	37
YES, ONE IS OPERATING	23	33	18	27
Yes, both are operating	7	2	3	13
Don't know	22	10	23	23

XXXIII. Position as to whether the undamaged plant at TMI should be allowed to operate

After informing all respondents that neither of the TMI nuclear power plants is currently operating, respondents were asked for their position as to whether or not the undamaged plant should be allowed to operate.

At present 47% of the statewide public favor operating the undamaged plant, while 40% are opposed.

There are very different opinions, however, across the three regions of Pennsylvania on this issue.

Those who live in the TMI Area favor allowing the undamaged plant to operate by a 56% to 40% margin.

Among Western Pennsylvnanians there is even greater support with 67% favoring its return to operations and 25% opposed.

However, opinions among residents of Eastern Pennsylvania contrast sharply on this issue. Half (50%) of those living in the Eastern part of Pennsylvania opposes allowing the undamaged plant to operate, while just one in three (33%) favors its return to operations.

OPERA	ATE OR NOT	?				
	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA		
	%	%	%	%		
Should be allowed to operate	47	56	33	67		
SHOULD NOT BE ALLOWED TO OPERATE	40	40	50	25		
NO OPINION	13	4	18	8		

SHOULD THE UNDAMAGED PLANT AT TMI BE ALLOWED TO OPERATE OR NOT?

XXXIV. Cost of replacement electricity vs. cost of electricity if TMI plants were operating

It is widely held throughout the state that the cost of replacement electricity is more expensive than the cost would be if the TMI plants were operating. Approximately three out of four residents in each of the three regions believe that replacement electricity is more expensive. This compares to less than one in five who believes the cost of replacement electricity is about the same as the cost of electricity if the TMI plants were operating.

Very few persons in any region believe the cost replacement electricity is less expensive.

COST OF REPLACEMENT ELECTRICITY COMPARED TO COST OF ELECTRICITY IF TMI PLANTS WERE OPERATING

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
EPLACEMENT ELECTRICITY IS	%	%	%	%
MORE EXPENSIVE	74	77	73	76
A GREAT DEAL MORE	36	31	35	40
Somewhat more	38	46	38	36
About the same	16	11	18	14
LESS EXPENSIVE	3	6	2	2
Somewhat Less	2	5	1	2
A GREAT DEAL LESS	1	1	1	•
NO OPINION	8	6	8	8

(*LESS THAN ONE-HALF OF %)

XXXV. "Likely" reasons why the undamaged plant has not been allowed to operate

Various alternatives were offered to respondents as possible reasons why the undamaged plant at TMI has not been allowed to operate. Respondents were asked to state whether they believed each was a "very likely," "somewhat likely," or "not a likely" reason.

The statement that the greatest proportion of people believes is either a "very likely" or "somewhat likely" reason why the undamaged plant has not been allowed to operate is that <u>the</u> <u>radioactive waste from the accident has not been removed</u>. Greater than eight in ten (81%) feel this is a likely reason.

Next in frequency of likelihood according to the statewide public is that <u>political pressure is against it</u> (77%). <u>Government red tape and bureaucratic delays</u> receives 72% mention as a likely reason, while the belief that <u>the basic design has</u> <u>serious flaws</u> is cited by 71%. About two out of three Pennsylvanians (65%) believe a likely reason is that <u>it is</u> <u>unsafe to operate one plant until the other plant is cleaned up or</u> that it is <u>too difficult to evacuate the area in case of another</u> accident.

Smaller majorities concur with the view that the plants are too close together (56%) or that the utility company is not competent (52%) is a likely reason why the plant has not returned to operation.

Less than half of the public (47%) believes that <u>the plants</u> have interconnected systems or that it is <u>not economically</u> feasible to operate one plant and not the other (33%) is a likely reason for the undamaged plant not being allowed to operate.

For most of these issues public opinion is generally similar across the three regions of the state.

PUBLIC'S PERCEPTION OF WHY THE UNDAMAGED PLANT HAS NOT BEEN ALLOWED TO OPERATE

(PROPORTION DESCRIBING EACH AS A "LIKELY" REASON)

THE UNDAMAGED DUANT HAS	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
THE UNDAMAGED PLANT HAS NOT BEEN ALLOWED TO OPERATE BECAUSE	76	%	76	07 /o
THE RADIOACTIVE WASTE FROM THE ACCIDENT HAS NOT BEEN REMOVED	81	76	80	84
POLITICAL PRESSURE IS AGAINST	77	79	76	80
GOVERNMENT RED TAPE AND BUREAUCRATIC DELAYS	72	78	62	83
THE BASIC DESIGN HAS SERICUS FLAWS	71	74	72	70
UNSAFE TO OPERATE ONE PLANT UNTIL THE OTHER PLANT IS CLEANED UP	65	61	73	53
Too difficult to evacuate area in case of another accident	65	54	71	60
THE PLANTS ARE TOO CLOSE TOGETHER	56	53	60	52
UTILITY COMPANY IS NOT COMPETEN	т 52	64	54	45
THE PLANTS HAVE INTERCONNECTING SYSTEMS	47	27	52	46
NOT ECONOMICALLY FEASIBLE TO OPERATE ONE PLANT AND NOT THE OTHER	33	32	37	27

XXXVI. Opinions as to why Unit 1, the undamaged plant, is not now operating

When the public is offered the alternative of whether the federal government/the NRC is proceeding cautiously and protecting the public in regard to allowing the undamaged plant to operate or whether it is simply causing unnecessary delays because of political haggling and bureaucratic red tape, most of the public (60%) believe the government/the NRC is proceeding cautiously. This compares to 30% who believe that unnecessary delays due to political haggling and bureaucratic red tape are causing the delay.

The results do not vary significantly across the three regions of the state.

UNIT 1 THE UN	NDAMAGED PLANT	, IS NOT NOW OPERATI	NG?
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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
FEDERAL GOVERNMENT/THE NRC IS PROCEEDING CAUTIOUSLY AND PROTECTING THE PUBLIC	60	57	59	62
FEDERAL GOVERNMENT/THE NRC IS CAUSING UNNECESSARY DELAYS BECAUSE OF POLITICAL HAGGLING AND BUREAUCRATIC RED TAPE	30	37	27	33
No opinion	10	6	14	5

XXXVII. Statements about the undamaged plant which a majority believes are true

Eleven statements regarding restarting the undamaged plant at TMI were read to respondents. For each one, respondents were asked whether they believed the statement was "very much true," "somewhat true," or "not true at all."

Six statements are believed to be "very much true" or "somewhat true" by majorities ranging from 55% to 78%. These statements appear in Table 37 opposite.

The most widely believed statement statewide has to do with the belief that the plants at TMI have had more safety study than any other plants in the country, to which 76% statewide concur. Other statements which majorities of the public believe are true include: the idea that all studies conducted since the accident show the undamaged plant can be operated safely (63%); that restarting the undamaged plant would mean a substantial financial savings for customers served by the company operating the plant (61%); that restarting the undamaged plant will save over 5 million barrels of oil each year (59%); that the Union of Concerned Scientists has raised many challenges to the restart of the undamaged plant (56%); and that it is not safety considerations but bureaucratic delays that have kept the undamaged plant from restarting (55%).

Opinions of the TMI Area residents do not differ substantially from the statewide public on most issues. One exception, however, is the statement that all studies since the accident show the undamaged plant can be operated safely is viewed somewhat more skeptically by TMI Area residents than others.

Western Pennsylvanians report proportionally higher levels of belief than Eastern Pennsylvanians on most of the six statements listed opposite.

STATEMENTS ABOUT THE UNDAMAGED PLANT WHICH A MAJORITY

BELI	EVE ARE T	RUE		
	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
THE PLANTS AT TMI SINCE THE ACCIDENT HAVE HAD MORE SAFETY STUDY AND RESEARCH THAN ANY OTHER PLANTS IN THE COUNTRY	76	79	74	79
ALL STUDIES CONDUCTED SINCE THE ACCIDENT AT TMI SHOW THAT THE UNDAMAGED UNIT 1 PLANT CAN BE OPERATED SAFELY	63	48	56	77
THE RESTART OF UNIT 1, THE UNDAMAGED PLANT, WOULD MEAN A SUBSTANTIAL FINANCIAL SAVINGS FOR CUSTOMERS WHO ARE SERVICED BY THE COMPANY WHICH OPERATES TMI		55	54	72
RESTARTING THE UNDAMAGED PLAN WILL SAVE OVER 5 MILLION BARRELS OF OIL EACH YEAR	т 59	53	58	60
THE UNION OF CONCERNED SCIEN- TISTS HAS RAISED MANY CHALLENGES AND OBJECTIONS TO THE RESTART OF UNIT 1, THE UNDAMAGED PLANT	56	50	51	64
IT IS NOT SAFETY CONSIDERATIO BUT ONLY BUREAUCRATIC DELAY THAT HAVE KEPT UNIT 1, THE UNDAMAGED PLANT, FROM RE- STARTING		58	49	62

XXXVIII. Statements about the undamaged plant which less than half of the public believes are true

Less than half of the statewide public believes that five statements about the undamaged plant are true. These are: the damaged plant is only 100 yards away from the undamaged plant at TMI (44%); since the accident the company operating the plant has obtained new and highly qualified management (39%); eighteen months before the accident the government had information that would have prevented the accident but neglected to inform the operator (39%); since the accident the company operating the plant has added technical personnel and staff to where they now have over 3000 years of combined experience in nuclear operations (3^r%); and if the undamaged plant is not restarted the shortage of electricity will create rolling "brown-outs" and "black-out." (30%).

Somewhat larger proportions of TMI Area residents believe that the government had information prior to the accident that would have prevented the accident than do other Pennsylvanians. On the other hand, fewer TMI Area residents believe that the company operating the plant has obtained new and highly qualified management since the accident than is generally believed statewide.

STATEMENTS ABOUT THE A MAJORI	UNDAMAGED TY BELIEVE			THAN
	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	2	72	%	72
THE DAMAGED UNIT AT TMI IS ONLY 100 YARDS AWAY FROM THE UNDAMAGED PLANT	44	49	45	42
SINCE THE ACCIDENT THE COMPA OPERATING THE PLANT HAS OBTAINED NEW AND HIGHLY QUALIFIED MANAGEMENT	39	28	31	52
18 MONTHS BEFORE THE ACCIDEN THE GOVERNMENT HAD INFORMA THAT WOULD HAVE PREVENTED ACCIDENT, BUT NEGLECTED TO INFORM THE OPERATOR ABOUT THIS INFORMATION	TION	50	33	44
SINCE THE ACCIDENT THE COMPA OPERATING THE PLANT HAS AN ED TECHNICAL PERSONNEL AND NOW THE STAFF HAS OVER 300 YEARS OF COMBINED EXPERIEN IN NUCLEAR OPERATIONS)D-))))	52	34	39
IF UNIT 1, THE UNDAMAGED PLA IS NOT RESTARTED THE SHORTAGE OF ELECTRICITY WILL CREATE ROLLING "BROWN OUTS" AND "BLACK-OUTS"		45	31	27

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XXXIX. Various other statements to which large proportions of Pennsylvanians agree

Respondents were also read another set of statements concerning the restart of the undamaged plant at TMI and asked whether they agreed or disagreed with each. The results are rank ordered on the following pages according to the proportion of people agreeing with each statement.

Statewide most agree that government safety hearings on the restart of the undamaged plant are now in progress and that it makes no sense to restart the plant before a decision from these hearings is made (79% agreement) and that restarting the plant before these hearings are completed would make a mockery of the hearings (69% agreement).

Two out of three Pennsylvanians also agree with two other statements. They are: it is not fair to consumers to pay higher rates for electricity because a licensed and undamaged nuclear energy plant, which could provide cheaper electricity, sits idle (67% agreement); and the company is anxious to restart the undamaged plant not only to generate revenue for itself but out of a desire to save its customers money (63% agreement).

Opinions toward these issues do not differ substantially across the three regions, although Eastern Pennsylvanians are slightly less disposed than other Pennsylvanians to agree that it's not fair for consumers to pay more when another plant sits idle.

PROPORTION WHO AGREE WITH STATEMENTS ABOUT RESTARTING THE UNDAMAGED PLANT

1. MOST WIDELY BELIEVED STATEMENTS

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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
GOVERNMENT SAFETY HEARINGS ON THE RESTART OF UNIT 1 ARE NOW IN PROGRESS. IT MAKES NO SENSE TO RESTART UNIT 1	%	%	%	%
BEFORE THE DECISION FROM THESE HEARINGS IS MADE	79	79	78	82
GOVERNMENT SAFETY HEARINGS ON THE RESTART OF UNIT 1 ARE NOW IN PROGRESS, RESTARTING UNIT BEFORE THESE HEARINGS ARE COMPLETED WILL MAKE A MOCKERY OF THE HEARINGS	1 69	77	71	64
It's not fair to consumers to pay higher rates for electrici because a licensed and undamag nuclear power energy plant whi could provide cheaper electric sits idle	ED CH	71	58	78
THE COMPANY IS ANXIOUS TO REST UNIT 1 NOT ONLY TO GENERATE REVENUE FOR ITSELF BUT ALSO OU OF A DESIRE TO SAVE ITS CUSTOM MONEY	т	68	62	63

XL. Other statements about restarting the undamaged plant to which smaller majorities agree

Smaller majorities of the public statewide agree with five other statements about restarting the undamaged plant.

These include: the only reason the company wants to restart the undamaged plant is so that it can make more money (59% agreement); because all the other nuclear energy plants around the country similar to TMI have been allowed to operate, the undamaged plant at TMI should be allowed to operate (56% agreement); the undamaged plant has benefited from all the study brought about by the accident and should therefore be allowed to operate (56% agreement); restarting the undamaged plant will help to strengthen our economy (56% agreement); and as long as there is any problem with one of the plants, the other shouldn't be allowed to operate (54% agreement).

Residents of the TMI Area show somewhat less agreement than other Pennsylvanians on several of these issues. They are that because all other nuclear energy plants similar to TMI have been allowed to operate, TMI should be allowed to operate (38% agreement), that restarting Unit 1 will help to strengthen our economy (36% agreement) and that Unit 1 has benefited from all the study brought about by the accident and should therefore be allowed to operate (41% agreement).

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PROPORTION WHO AGREE WITH STATEMENTS ABOUT RESTARTING THE UNDAMAGED PLANT

2. STATEMENTS TO WHICH SMALLER MAJORITIES AGREE

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
THE ONLY REASON THE COMPANY WANTS TO RESTART UNIT 1 IS	%	%	%	%
SO THAT IT CAN MAKE MORE MONEY	59	62	63	52
BECAUSE ALL THE OTHER NUCLEAR ENERGY PLANTS AROUND THE COUN WHICH ARE SIMILAR TO THE ONE TMI HAVE BEEN ALLOWED TO RETU TO OPERATION, UNIT 1, THE UN- DAMAGED PLANT AT TMI, SHOULD BE ALLOWED TO OPERATE	AT	38	59	57
UNIT 1, THE UNDAMAGED PLANT, BENEFITED FROM ALL OF THE RES AND STUDY BROUGHT ABOUT BY TH ACCIDENT AT UNIT 2 AND SHOULD THEREFORE BE PERMITTED TO OPERATE	EARCH	41	58	60
RESTARTING UNIT 1 WILL HELP TO STRENGTHEN OUR ECONOMY	56	36	59	56
As long as there is any probl with one of the plants, the other one shouldn't be allowed to operate		48	59	48

XLI. Statements about restarting the undamaged plant to which half or less of the public agrees

Half or less of the statewide public agrees with six other statements in regard to restarting the undamaged plant at TMI.

These include the following: the undamaged plant should be allowed to operate so that the revenue from the plant can be used to pay for the cleanup of the damaged plant (50% agreement); now when we're trying to relieve our dependence on foreign oil it doesn't make sense to keep Unit 1, which doesn't use foreign oil, from operating (50% agreement); the way in which the utility company in the past two years has handled the problems resulting from the accident demonstrates that the company is competent to operate the undamaged plant at TMI (49% agreement); no matter what the government, scientists and company executives say, restarting any unit at TMI would not be a safe thing to do (46% agreement); the way in which the utility company in the past two years has handled the problems resulting from the accident demonstrates that the company is incompetent to operate the undamaged plant at TMI (42% agreement); and the company wants to restart Unit 1 regardless of what impact it will have on the health and safety of people living in this area (25% agreement).

TMI Area residents display proportionally greater agreement than the statewide public that the undamaged plant should be allowed to operate so that it's revenues can be used to pay for the cleanup and that the actions of the utility company demonstrate that it is incompetent. Approximately two out of three TMI Area residents agree with each of these statements compared to less than four in ten Eastern Pennsylvanians who agree with them.

Western Pennsylvanians show less agreement than others that no matter what people say, restarting any unit at TMI wouldn't be a safe thing to do and that the company wants to restart Unit 1 regardless of what impact it will have on the people living in the area.

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PROPORTION WHO AGREE WITH STATEMENTS ABOUT RESTARTING THE UNDAMAGED PLANT

3. STATEMENTS TO WHICH HALF OR LESS OF THE PUBLIC AGREE

		STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
THE UNDAMAGED PLANT ALLOWED TO OPERATE S REVENUE FROM THAT PL TO PAY FOR THE CLEAN PLANT	O THAT THE ANT CAN BE USED	%	%	% 39	% 60
Now when we're tryin dependence on foreig make sense to keep u doesn't use foreign operating	N OIL, IT DOESN'T NIT 1, WHICH	50	59	42	58
THE WAY IN WHICH THE IN THE PAST TWO YEAR PROBLEMS RESULTING F DEMONSTRATES THAT TH COMPETENT TO OPERATE PLANT AT TMI	S HAS HANDLED THE ROM THE ACCIDENT E COMPANY IS	49	38	56	42
No matter what the g tists and company ex restarting any unit be a safe thing to d	AT TMI WOULD NOT	46	50	53	33
THE WAY IN WHICH THE IN THE PAST TWO YEAR PROBLEMS RESULTING F DEMONSTRATES THAT TH INCOMPETENT TO OPERA PLANT AT TMI	S HAS HANDLED THE ROM THE ACCIDENT E COMPANY IS	42	67	36	44
THE COMPANY WANTS TO REGARDLESS OF WHAT I ON THE HEALTH AND SA LIVING IN THIS AREA	MPACT IT WILL HAV	е 25	40	29	15

XLII. Satisfaction with how the problems of cleaning up TMI are being handled

Public opinion toward the way the problems of cleaning up TMI are being handled has become more negative than positive during the past year. Last year when an identical question was posed, 49% of the statewide public said they were satisfied with the cleanup and 35% said they were dissatisfied. However the results of the current survey show that a plurality of the statewide public (40%) now say they are dissatisfied with the cleanup, while 34% are satisfied. Twenty-seven percent of the public statewide have no opinion.

The proportion of people dissatisfied with the cleanup is greatest in the TMI Area. Among residents living within twentyfive miles of the plant 56% are now dissatisfied with the cleanup,while 35% are satisfied.

Among residents of Eastern and Western Pennsylvania attitudes toward the cleanup have also shifted. Whereas about half of those living in both Eastern and Western Pennsylvania said they were satisfied with the cleanup in June 1980, 37% of Western Pennsylvanians and 31% of Eastern Pennsylvanians now take this position. Significantly larger proportions of residents in both areas now take the don't know position.

SATISFACTION WITH HOW THE PROBLEMS OF CLEANING UP TMI ARE BEING HANDLED

	STATEWIDE		TMI ar	EA	Easter	N PA	WESTERN PA	
	March 1981	June 1980	March 1981	JUNE 1980	March 1981	June 1980	March 1981	June 1980
	%	%	%	%	%	%	%	%
SATISFIED	34	49	35	41	31	50	37	51
STRONGLY	6	14	5	13	6	12	5	18
Somewhat	28	35	30	28	25	38	32	33
DISSATISFIED	40	35	56	46	39	35	38	33
Somewhat	22	17	24	21	21	17	23	15
STRONGLY	18	18	32	25	18	18	15	18
Don'T KNOW	27	16	10	13	30	16	25	16

(IDENTICAL QUESTION ASKED IN JUNE 1980 TELEPHONE SURVEY)

(*MARCH 1981 "TMI AREA" IS EQUAL TO THE COMBINED RESULTS OF THE PRIMARY AND SECONDARY REGIONS OF THE JUNE 1980 SURVEY).

XLIII. Confidence that TMI cleanup problems will be solved

While the public reports greater dissatisfaction with the way the cleanup is proceeding compared to last year, seven in ten statewide (70%) still maintain that they are confident the problems of cleaning up TMI will be solved. Fewer than three in ten (29%) say they are not confident. This is virtually unchanged from the level of expressed confidence reported in the June 1980 survey.

Confidence that the cleanup problems will be solved is somewhat less in the TMI Area. However, the proportion of residents who are confident that the cleanup problems will be solved still outnumbers those who are not confident by a 57% to 43% margin.

CONFIDENCE THAT TMI CLEANUP PROBLEMS WILL BE SOLVED

	STATEWIDE TMI AF		TMI AREA		EASTERN PA		WESTERN PA	
	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980
	%	%	ay 	%	%	%	%	%
CONFIDENT	70	67	57	60	72	64	70	71
VERY CONFIDENT	21	23	24	21	15	19	28	29
SOMEWHAT CONFIDENT	49	44	33	39	57	45	42	42
NOT CONFIDENT	29	30	43	35	27	32	26	26
NOT TOO CONFIDENT	22	19	34	23	20	21	21	15
NOT AT ALL CONFIDENT	7	11	9	12	7	11	5	11
NO OPINION	2	3	1	5	_1	_4	3	3

XLIV. Who is not doing a proper job in the TMI cleanup?

Among those people who said they were dissatisfied with the cleanup in June 1980 and March 1981, a follow-up question was posed asking who in their opinion was not doing a proper job.

At present 19% of the statewide public mention <u>Metropolitan</u> <u>Edison Company</u> or <u>the utility</u> for its role in the cleanup process, while 18% mention the federal government/the NRC.

Each of these proportions represents slight increases from the proportion citing them in June 1980.

About one in three (32%) of the residents in the TMI Area now fault <u>Met Ed</u> for not doing a proper job, a nine point increase over June 1980. About one in five TMI Area residents (21%) now mentions the <u>federal government</u> or <u>the NRC</u>, about the same as the proportion blaming federal agencies in June 1980.

WHO IS NOT DOING A PROPER JOB IN THE TMI CLEANUP?

	STATEWIDE		TMI AREA		EASTERN PA		WESTERN PA	
	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980
	%	%	%	%	%	%	%	%
DISSATISFIED WITH THE CLEANUP	40	35	56	46	39	35	38	33
MET ED/THE UTILITY	19	14	32	23	19	13	18	12
FEDERAL GOVERNMENT/THE NRC	18	14	21	19	17	15	20	12
EVERYONE CONNECTED WITH IT	3	1	5	4	3	٠	2	1
ALL OTHER MENTIONS	3	1	3	3	2	1	3	1
No ANSWER	5	5	9	7	6	5	4	4

(COLUMNS ADD TO MORE THAN SUBTOTALS DUE TO MULTIPLE MENTIONS)

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XLV. Who is doing a proper job in the TMI cleanup?

Those satisfied with the way the problems of the TMI cleanup are being handled were asked in the current survey who they felt was doing a proper job.

Thirteen percent statewide mention the <u>federal government</u> or <u>the NRC</u> as doing a proper job in the cleanup, while 9% mention Met Ed/the utility.

These proportions do not vary substantially across the three regions of Pennsylvania.

(This question was not asked in the June 1980 survey).

WHO	IS	DOING	A	PROPER	JOB	IN	THE	TMI	CLEANUP?	

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
SATISFIED WITH THE CLEANUP	34	35	31	37
Federal government/the NRC	13	11	13	13
MET ED/THE UTILITY	9	10	9	9
ALL OTHER MENTIONS	2	3	2	4
No ANSWER	13	14	12	14

(COLUMNS ADD TO MORE THAN SUBTOTALS DUE TO MULTIPLE MENTIONS)

XLVI. Safety risk if Unit 2, the damaged plant, is left as is

Nearly three out of four Pennsylvanians (73%) believe that there is a greater safety risk if Unit 2, the damaged plant at TMI, is left as it is and nothing else is done to clean it up. This compares to 15% of the statewide public who feel that there is little or no safety risk if the damaged plant is simply left as it is.

Compared to the statewide average, a slightly greater proportion of TMI Area residents (81%) believe that leaving the damaged plant as is would present a greater safety risk.

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SAFETY RISK IF UNIT #2, THE DAMAGED PLANT, IS LEFT AS IS

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	76	%	%
GREATER RISK IF LEFT AS IS	73	81	72	72
LITTLE OR NO RISK IF LEFT AS IS	15	13	14	18
Don't know	12	6	14	10

XLVII. Who should have overall responsibility for managing the cleanup?

By a five to three margin (49% to 29%) Pennsylvanians support the utility company, General Public Utilities Corporation, rather than the federal government to maintain overall responsibility in managing the cleanup.

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Residents of the TMI Area, however, are divided on this issue. Among residents of the TMI Area 40% prefer the federal government assuming overall responsibility for the cleanup, while 38% believe GPU should maintain responsibility.

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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA			
	%	%	%	%			
GPU/THE UTILITY	49	38	52	47			
Federal government	29	40	25	33			
NEITHER	9	13	8	9			
Вотн	2	1	1	4			
No opinion	11	8	14	8			

WHO SHOULD HAVE OVERALL RESPONSIBILITY FOR MANAGING THE CLEANUP?

XLVIII. Who should have overall responsibility for operating the plant after it is cleaned up?

By a five to two margin (50% to 20%) Pennsylvanians believe GPU rather than the federal government should have overall responsibility for operating the plant after it is cleaned up and assuming it is restarted.

While residents in the TMI Area are divided over who should maintain the responsibility for the cleanup, by a two to one margin (54% to 26%) they prefer that GPU maintain responsibility for operating the TMI plant after it is cleaned up.

Similarly in both Eastern and Western Pennsylvania the public is much more supportive of having GPU rather than the federal government operate the plant after it is cleaned up.

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AFTER THE DAMAGED PLANT IS CLEANED UP AND ASSUMING IT IS RESTARTED, WHO SHOULD HAVE OVERALL RESPONSIBILITY FOR OPERATING THE PLANT?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
GPU	50	54	43	60
Federal government	20	26	21	17
NEITHER	14	11	15	12
Вотн	1	2	•	3
NO OPINION	15	7	21	8

(*LESS THAN ONE-HALF OF 1%)

XLIX. Awareness of water inside the damaged reactor

Greater than seven in ten (71%) of the statewide public are currently aware that there is a large amount of water inside the damaged reactor at TMI. This represents an increase of 13 percentage points from the 58% who reported being aware of the water in June 1980.

Eighty-five percent of the residents in the TMI Area say they are aware of the water inside the TMI reactor, up from 74% who reported this in June 1980.

A slightly lower proportion of the residents in Western Pennsylvania (64%) than Eastern Pennsylvania (73%) say they have heard about the water in the damaged reactor at TMI.

AWARENESS OF WATER INSIDE THE DAMAGED REACTOR

	STATEW	IDE	TMI AR	EA	EASTER	N PA	WESTER	N PA
	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980
	%	%	%	72	z	%	%	%
Yes, have heard	71	58	85	74	73	59	64	51
No, have not heard	29	42	15	26	27	41	36	49

L. Importance of removing the radioactive water from inside the damaged reactor as soon as possible

Greater than eight in ten Pennsylvanians (84%) now believe that it is important to remove the radioactive water from inside the damaged reactor as soon as possible, 61% of whom describe it as "extremely" important.

This view extends across each of the three regions of Pennsylvania.

The proportion of people who now feel it is important that the water be removed has increased in each region compared to last year.

IMPORTANCE OF REMOVING THE RADIOACTIVE WATER FROM INSIDE THE DAMAGED PLANT AS SOON AS POSSIBLE

	STATEW	!DE	TMI AR	REA	EASTERN PA		WESTER	N PA
	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980	MARCH 1981	JUNE 1980
	%	%	%	%	%	%	%	%
IMPORTANT	84	69	86	69	85	69	83	68
Extremely	61	45	57	43	62	45	61	44
Somewhat	23	24	29	26	23	24	22	24
Not Important	9	15	8	15	9	13	9	17
Νοτ τοο	6	10	6	9	6	8	5	13
NOT AT ALL	3	5	2	6	3	*	4	4
NO OPINION	_7	17	_5	16	6	18	8	15

LI. Attitudes toward the radioactive water that is inside the TMI plant

A series of statements concerning the radioactive water that remains inside the damaged plant at TMI was read to which respondents could either agree or disagree.

The results of this line of questioning show that two of the statements are accepted by large proportions of the Pennsylvania public. These include the statement that the damaged plant can't be cleaned up until the radioactive water is removed (83% agreement) and the longer that the radioactive water is left standing in the damaged reactor the greater the danger it represents (70% agreement).

On the other hand, fewer than one in three statewide agrees with two other statements having to do with the water inside the damaged plant. These are that it is possible in a relatively short period of time to decontaminate the radioactive water in the damaged TMI plant (32% agreement) and that once the radioactive water in the damaged TMI Unit 2 plant is decontaminated it can be safely discharged into the Susquehanna River (25% agreement).

Attitudes toward each of these statements are similar across each of the three regions.

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ATTITUDES TOWARD THE RADIOACTIVE WATER INSIDE THE DAMAGED PLANT

(PROPORTION WHO AGREE WITH EACH STATEMENT)

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
THE DAMAGED PLANT CAN'T BE CLEANED UP UNTIL THE RADIOACTIVE WATER IS REMOVED	83	87	84	82
THE LONGER THAT THE RADIOACTIVE WATER IS LEFT STANDING IN THE DAMAGED REACTOR THE GREATER THE DANGER IT PRESENTS	70	73	72	69
IT IS POSSIBLE IN A RELATIVELY SHORT PERIOD OF TIME TO DECONTAMINATE THE RADIO- ACTIVE WATER IN THE DAMAGED TMI UNIT 2 PLANT	32	23	33	31
ONCE THE RADIOACTIVE WATER IN THE DAMAGED TMI UNIT #2 PLANT IS DECONTAMINATED IT CAN BE SAFELY DISCHARGED INTO THE SUSQUEHANNA RIVER	25	24	25	26

LII. Statements about the damaged plant where there is greater than 80% agreement

Seventeen statements were posed to respondents concerning the damaged plant at TMI. The results are rank ordered on the following pages according to the proportion of people who agrees with each statement.

Those statements to which greater than 80% of the public statewide agree are shown on the opposite page in Table 52.

These include the following: because of inflation the longer we wait to clean up the damaged plant the more it will cost us in the long run (95% agreement); if they let the damaged plant sit there on the Island without cleaning it up, they have in effect created a major nuclear waste storage site in Pennsylvania (83% agreement); the opinions of the people living near the TMI plant should be given more weight on questions concerning TMI than the opinions of people living farther away" (87% agreement); and the longer we wait for the federal government to solve the problem of permanent nuclear waste storage, the more the risk of equipment failure and radioactive leaks from the damaged plant" (83% agreement).

Opinions do not vary greatly across the three regions.

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STATEMENTS ABOUT THE DAMAGED PLANT WHERE THERE IS GREATER THAN 80% AGREEMENT

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
BECAUSE OF INFLATION THE LONGER WE WAIT TO CLEAN UP THE DAMAGED PLANT	%	%	%	%
THE MORE IT WILL COST US IN THE LONG RUN	95	93	94	96
IF THEY LET THE DAMAGED PLANT SIT THERE ON THE ISLAND WITHOUT CLEANIN IT UP, THEY HAVE IN EFFECT CREATED A MAJOR NUCLEAR WASTE STORAGE SITE IN PENNSYLVANIA	G 88	96	88	86
THE OPINIONS OF THE PEOPLE LIVING NEAR THE TMI PLANT SHOULD BE GIVEN MORE WEIGHT ON QUESTIONS CONCERNING TMI THAN THE OPINIONS OF PEOPLE LIVING FARTHER AWAY	87	82	89	86
THE LONGER WE WAIT FOR THE FEDERAL GOVERNMENT TO SOLVE THE PROBLEM OF PERMANENT NUCLEAR WASTE STORAGE, THE MORE THE RISK OF EQUIPMENT FAILURE AND RADIOACTIVE LEAKS FROM THE DAMAGED PLANT	83	88	83	82

LIII. Statements about the damaged plant where agreement ranges between 60% and 80%

Approximately seven in ten Pennsylvanians agree with four other statements having to do with the damaged plant at TMI and what should be done about it.

These include: the utility that owns the damaged plant is justified in pushing the government as hard as it can to get the damaged plant cleaned up (71% agreement); the longer they take to clean up the damage at the damaged plant the more dangerous the plant becomes (71% agreement); federal bureaucratic and political haggling is the major reason the cleanup at the damaged plant is not proceeding more rapidly (70% agreement); and a rapid cleanup of the damaged plant will improve the real estate values and business prospects in the area near the plant (68% agreement).

Levels of agreement do not vary a great deal across each of the regions.

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STATEMENTS ABOUT THE DAMAGED PLANT WHERE AGREEMENT RANGES BETWEEN 60% AND 80%

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	7
THE UTILITY THAT OWNS THE DAMAGED PLANT IS JUSTIFIED IN PUSHING THE GOVERNMENT AS HARD AS IT CAN TO GET THE DAMAGED PLANT CLEANED UP	71	72	71	73
THE LONGER THEY TAKE TO CLEAN UP THE DAMAGE AT THE DAMAGED PLANT THE MORE DANGEROUS THE PLANT BECOMES	71	72	70	67
FEDERAL BUREAUCRATIC AND POLITICAL HAGGLING IS THE MAJOR REASON THE CLEANUP AT THE DAMAGED PLANT IS NOT PROCEEDING MORE RAPIDLY	70	66	71	69
À RAPID CLEANUP OF THE DAMAGED PLANT WILL IMPROVE THE REAL ESTATE VALUES AND BUSINESS PROSPECTS IN THE AREA NEAR THE PLANT	68	72	71	64

LIV. Statements about the damaged plant where agreement ranges between 50% and 59%

Between 50% and 59% of the statewide public agree with five of the statements posed having to do with the damaged plant.

These include: until the federal government approves a permanent place to store nuclear waste, there is no sense in moving forward with the cleanup of the damaged plant (59% agreement); until the damaged plant is cleaned up and the accident is put behind us, economic growth in this area will be stifled (59% agreement); anti-nuclear activists are largely responsible for the delays in cleaning up the damaged plant (58% agreement); the utility company's main concern with the cleanup is saving money (54% agreement); and if it weren't for the government watch-dogs, the utility company would simply dump the untreated radioactive water into the Susquehanna River (54% agreement).

Residents of Eastern Pennsylvania show proportionally greater agreement and residents of the TMI Area show proprotionally less agreement with statements having to do with nuclear waste storage, economic growth and anti-nuclear activities.

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STATEMENTS ABOUT THE DAMAGED PLANT WHERE AGREEMENT RANGES BETWEEN 50% AND 59%

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
UNTIL THE FEDERAL GOVERNMENT APPROVES A PERMANENT PLACE TO STORE NUCLEAR WASTE, THERE IS NO SENSE IN MOVING FORWARD WITH THE CLEANUP OF THE DAMAGED PLANT	59	44	62	55
UNTIL THE DAMAGED PLANT IS CLEANED UP AND THE ACCIDENT IS PUT BEHIND US, ECONOMIC GROWTH IN THIS AREA WILL BE STIFLED	59	47	69	44
ANTI-NUCLEAR ACTIVISTS ARE LARGELY RESPONSIBLE FOR THE DELAYS IN CLEANING UP THE DAMAGED PLANT	58	35	67	48
THE UTILITY COMPANY'S MAIN CONCERN WITH THE CLEANUP IS SAVING MONEY	54	56	55	51
IF IT WEREN'T FOR THE GOVERNMENT WATCH-DOGS, THE UTILITY COMPANY WOULD SIMPLY DUMP THE UNTREATED RADIOACTIVE WATER INTO THE SUSQUEHANNA RIVER	54	59	54	53

LV. Statements about the damaged plant where agreement is less than 50%

Less than half of the statewide public agrees with four of the statements posed.

These include: an accident as bad as the one at TMI Unit 2 proves that the plant is too dangerous to be permitted to operate again (47% agreement); since the utility company was responsible for the accident in the first place they are obviously not competent to handle the cleanup (39% agreement); even though it might cost more to quarantine and isolate the plant than it would be to clean it up, it's worth the extra money to make sure that the plant never operates again (30% agreement); and instead of spending time and money to cleanup and salvage the damaged plant, the plant should simply be encased in concrete and covered with dirt (21% agreement).

Proportionally fewer residents of the TMT Area agree with the statement that TMI should simply be encased in concrete and covered with dirt than do other Pennsylvanians.

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STATEMENTS ABOUT THE DAMAGED PLANT WHERE AGREEMENT IS LESS THAN 50%

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
AN ACCIDENT AS BAD AS THE ONE AT TMI UNIT 2 PROVES THAT THE PLANT IS TOO DANGEROUS TO BE PERMITTED TO OPERATE AGAIN	47	36	50	44
SINCE THE UTILITY COMPANY WAS RESPONSIBLE FOR THE ACCIDENT IN THE FIRST PLACE, THEY ARE OBVIOUSLY NOT COMPETENT TO HANDLE THE CLEANUP	39	45	45	26
EVEN THOUGH IT MIGHT COST MORE TO QUARANTINE AND ISOLATE THE PLANT THAN IT WOULD BE TO CLEAN IT UP, IT'S WORTH THE EXTRA MONEY TO MAKE SURE THAT THE PLANT NEVER OPERATES AGAIN	30	28	27	35
INSTEAD OF SPENDING TIME AND MONEY TO CLEAN UP AND SALVAGE THE DAMAGED PLANT, THE PLANT SHOULD SIMPLY BE ENCASED IN CONCRETE AND COVERED WITH DIRT	21	8	25	21

LVI. Awareness of the GPU lawsuit against the federal government

Less than one in four (22%) residents statewide are aware of the GPU lawsuit against the federal government for the government's role in the TMI accident.

The proportion of people who are aware of the lawsuit does not vary substantially across the three regions.

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AWARENESS OF GPU LAWSUIT AGAINST FEDERAL GOVERNMENT FOR ITS ROLE IN THE TMI ACCIDENT

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
	%	%	%	%	
Yes, have heard	22	25	24	18	
No, have not heard/ not sure	78	75	76	82	

LVII. Opinions toward GPU suing the government

Regardless of whether or not they had heard of the lawsuit, respondents were asked for their initial opinion in regard to the GPU lawsuit.

By greater than a two to one margin (45% to 20%) the statewide public disapproves of the idea of the GPU lawsuit. Thirtyfive percent of the public reports having no opinion.

A somewhat greater proportion of TMI Area residents (54%) disapproves of GPU suing the government than do residents in other regions.

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OPINION OF GPU SUING THE GOVERNMENT

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
Approve	20	18	19	21
DISAPPROVE	45	54	44	45
NO OPINION	35	28	37	34

LVIII. Effect of knowing that the government had information that could have prevented the accident upon opinion of the GPU lawsuit

Respondents were then read the following statement:

"If you knew that it was a fact that eighteen months before the accident the government had information that could have prevented the accident but neglected to tell GPU this information, would you be more or less inclined to approve of GPU's suing the government or won't this make any difference."

Approximately two-thirds of the statewide public (67%) say that if they knew this information it would make them more inclined to support GPU in its lawsuit against the government. This compares to about 19% who say that this would not make any difference to them.

Western Pennsylvanians appear to be slightly more inclined than TMI Area residents or Eastern Pennsylvanians to support the GPU lawsuit after they are told this information.

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IF YOU KNEW 18 MONTHS BEFORE THE ACCIDENT THE GOVERNMENT HAD INFORMATION THAT COULD HAVE PREVENTED THE ACCIDENT BUT NEGLECTED TO TELL GPU, HOW WOULD THIS AFFECT YOUR OPINION OF GPU'S LAWSUIT AGAINST THE GOVERNMENT

		STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
IT WOULD MAKE ME .		%	%	%	7.	
MORE INCLINED T	O SUPPORT GPU	67	65	62	75	
Would make no d	IFFERENCE	19	28	20	15	
LESS INCLINED T GPU	O SUPPORT	5	5	3	9	
NO OPINION		9	2	16	1	

LIX. Is the lawsuit a legitimate way to force the government to bear its fair share or is GPU just trying to blame the government for its own mistakes?

Respondents were read two arguments that have been made regarding GPU's lawsuit against the government. The arguments were posed as follows:

"Some people say that GPU in this lawsuit is just trying to blame the government for the company's own mistakes. Others say that the lawsuit is a legitimate way to force the government to bear its fair share of the costs of the accident. Which of these two is closer to your own view?

When given this choice, nearly half of the statewide public (49%) maintains that the lawsuit is a legitimate way to force the government to bear its fair share of the cost of the accident. This compares to about one in three (32%) who believer that GPU in its lawsuit is just trying to blame the governm. . for its own mistakes.

Residents in Western Pennsylvania are somewhat more inclined than residents of the TMI Area or Eastern Pennsylvania to believe that the lawsuit is a legitimate way to force the government to help pay for the accident.

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IS THE LAWSUIT A LEGITIMATE WAY TO FORCE THE GOVERNMENT TO BEAR ITS FAIR SHARE OR IS GPU JUST TRYING TO BLAME THE GOVERNMENT FOR ITS OWN MISTAKES?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	7.	%	%	%
THE LAWSUIT IS A LEGITIMATE WAY TO FORCE THE GOVERNMENT TO BEAR ITS FAIR SHARE OF THE COST OF THE ACCIDENT	49	46	43	58
GPU IS JUST TRYING TO BLAME THE GOVERNMENT FOR THE COMPANY'S OWN MISTAKES	32	38	32	31
NO OPINION	19	16	25	10

LX. Should ratepayers of GPU help pay for the costs of the cleanup or not?

Respondents were asked whether GPU ratepayers should pay for the cleanup costs or whether ratepayers should not pay the costs even if it means that the plant won't get cleaned up.

By greater than a three to one margin (65% to 20%) the statewide public takes the position that ratepayers of GPU should not pay for the cleanup costs.

This view is shared across each of the three regions of Pennsylvania.

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	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
RATEPAYERS SHOULD NOT HELP PAY EVEN IF IT MEANS THE PLANT WON'T GET CLEANED UP	65	72	63	67
RATEPAYERS SHOULD HELP PAY FOR CLEANUP COSTS	20	21	17	24
NO OPINION	15	7	21	9

SHOULD RATEPAYERS OF GPU HELP PAY FOR THE COSTS OF THE CLEANUP OR NOT?

LXI. Should the government pay a substantial part of the cleanup costs or should GPU, if it can't pay the costs of the cleanup, just go bankrupt?

About half of the public statewide (49%) maintains that the government should not let GPU go bankrupt and should pay for a substantial part of the cleanup costs. This compares to 32% who feel that the company should just go bankrupt if it can't pay for the costs of the cleanup itself.

Residents in the TMI Area are somewhat more evenly divided on this issue, with 46% favoring substantial government payments and 43% believing that GPU should just go bankrupt if it can't pay the cleanup costs.

Residents of Western Pennsylvania are somewhat more supportive of substantial government payments for the TMI cleanup than are Eastern Pennsylvanians.

SHOULD THE GOVERNMENT PAY A SUBSTANTIAL PART OF THE CLEANUP COSTS OR SHOULD GPU, IF IT CAN'T PAY THE COSTS OF THE CLEANUP, JUST GO BANKRUPT?

Table 61

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA
	%	%	%	%
GOVERNMENT SHOULD PAY SUBSTANTIAL PART OF CLEANUP COSTS	49	46	44	58
GPU SHOULD JUST GO BANKRUPT IF IT CAN'T PAY COSTS	32	43	34	27
NO OPINION	19	11	22	15

LXII. Should GPU stockholders, ratepayers and the government all pay for the cleanup costs or should GPU, if it can't pay, just go bankrupt?

Attitudes toward GPU stockholders, ratepayers and the government all sharing in the costs of the TMI cleanup costs are quite similar to public sentiment toward a purely government bail-out approach. About half of the public (48%) endorses the shared costs idea, while about one in three (35%) would let GPU just go bankrupt if it can't pay for the cleanup costs.

As in the case with the purely government payment idea, residents in the TMI Area are more evenly divided between the two alternatives than are others in the state.

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SHOULD GPU STOCKHOLDERS, RATEPAYERS AND THE GOVERNMENT ALL PAY FOR THE CLEANUP OR SHOULD GPU, IF IT CAN'T PAY THE COSTS OF THE CLEANUP, JUST GO BANKRUPT?

	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
	%	%	%	%	
STOCKHOLDERS, RATEPAYERS AND GOVERNMENT SHOULD ALL PAY	48	46	48	49	
GPU SHOULD JUST GO BANKRUPT IF IT CAN'T PAY COSTS	35	43	32	38	
NO OPINION	17	11	20	13	

LXIII. Attitudes toward a possible GPU bankruptcy

Respondents were asked whether they agreed or disagreed with four statements regarding the effects of a possible GPU bankruptcy. The results are rank ordered in Table 63 opposite according to the proportion of people who agrees with each statement.

Seven in ten Pennsylvanians statewide (70%) say they agree that if GPU went bankrupt that it would only create delays and worsen the cleanup problems. Greater than eight in ten residents of the TMI Area (83%) concur with this view.

About two-thirds of the residents in each of the regions agree that if GPU went bankrupt it would ultimately cost consumers more money to clean up the plant.

A somewhat smaller majority of residents in each region also concurs that if GPU went bankrupt the federal government would take over responsibility of cleaning up the plant and that all taxpayers would then have to pay for the cleanup costs.

On the other hand, only about one in five respondents in each of the regions agrees that if GPU went bankrupt it would be the best thing for everybody.

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ATTITUDES TOWARD A POSSIBLE GPU BANKRUPTCY

(PROPORTION WHO AGREE WITH EACH STATEMENT)

IF GPU WENT BANKRUPT	STATE- WIDE	TMI AREA	EASTERN PA	WESTERN PA	
IF OTO WENT BANKKUFT	%	%	%	%	
IT WOULD ONLY CREATE DELAYS AND WORSEN THE CLEANUP PROBLEMS	70	83	67	70	
IT WOULD ULTIMATELY COST CONSUMERS MORE MONEY TO CLEANUP THE PLANT	67	66	68	65	
THE FEDERAL GOVERNMENT WOULD TAKE OVER RESPONSIBILITY AND TAXPAYERS WOULD THEN HAVE TO PAY FOR THE CLEANUP	58	62	56	61	
IT WOULD BE THE BEST THING FOR EVERYBODY CONCERNED	19	24	20	14	

LXIV. Believability of twenty information sources

Respondents were asked to rate a list of various people and groups in terms of whether they felt each was a "very believable," "somewhat believable," or "not too believable" source of information. The results are rank ordered according to the proportion who describes each as "very believable" in Tables 64, 65, 66 and 67 on the following pages. .

A. Sources receiving 33% or more "very believable" ratings

Table 64 shows those information sources which receive the highest ratings statewide. These include: <u>a doctor who</u> <u>is a radiologist</u>; <u>scientists from universities and indepen-</u> <u>dent laboratories</u>; <u>scientists from the nuclear power</u> <u>industry</u>; <u>the Union of Concerned Scientists</u>; and <u>a doctor</u> who is a pediatrician.

Two of the five information sources which receive the highest level of mentions as being "very believable" also generate sizeable proportions of people who say they are "not too believable"--25% in the case of <u>a doctor who is a pediatrician</u> and 17% for <u>scientists from the nuclear power</u> industry.

Table 64 BELIEVABILITY OF TWENTY INFORMATION SOURCES

A. SOURCES RECEIVING 33% OR MORE "VERY BELIEVABLE" RATINGS

		STATEWIDE %	TMI AREA %	EASTERN PA %	WESTERN PA %
A DOCTOR WHO IS	VERY BELIEVABLE	57	54	61	51
A RADIOLOGIST	SOMEWHAT BELIEVABLE	33	39	26	41
	NOT TOO BELIEVABLE	7	6	8	7
	NO OPINION	3	1	5	•
SCIENTISTS FROM	VERY BELIEVABLE	50	49	52	49
UNIVERSITIES AND	SOMEWHAT BELIEVABLE	41	43	38	45
INDEPENDENT	NOT TOO BELIEVABLE	6	7	6	6
LABORATORIES	NO OPINION	3	1	5	1
SCIENTISTS FROM	VERY BELIEVABLE	45	48	35	56
NUCLEAR POWER	SOMEWHAT BELIEVABLE	35	38	36	33
INDUSTRY	NOT TOO BELIEVABLE	17	13	24	10
	NO OPINION	3	1	5	-
UNION OF CONCERNED	VERY BELIEVABLE	34	26	38	31
SCIENTISTS	SUMEWHAT BELIEVABLE	41	49	37	46
	NOT TOO BELIEVABLE	10	9	6	16
	NO OPINION	15	16	19	7
A DOCTOR WHO IS	VERY BELIEVABLE	33	17	44	23
A PEDIATRICIAN	SOMEWHAT BELIEVABLE	37	52	33	39
	NOT TOO BELIEVABLE	25	30	19	33
	NO OPINION	4	1	4	6

B. Sources receiving between 20% and 30% "very believable" ratings

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On a statewide basis, two sources listed on the opposite page, <u>nuclear scientists from Europe and Japan who have</u> <u>visited the plant</u> and <u>an environmental protection organiza-</u> <u>tion</u>, receive more "very believable" descriptions than "not too believable" descriptions.

Perceptions of the Federal Nuclear Regulatory Commission's believability status appear to be mixed. About as many people see this source as "very believable" (25%) as see it "not too believable" (24%). The chief nuclear engineer for GPU is viewed somewhat similarly--20% as "very believable" and 22% as "not too believable."

About half again as many people (37%) think <u>an organiza-</u> tion of residents who live near the TMI plant are "not too believable" as an information source as see it as being "very believable" (24%).

BELIEVABILITY OF TWENTY INFORMATION SOURCES

B. SOURCE	ES RECEIVING BETWEEN 20%	AND 30% "	VERY BEL	IEVABLE" RA	TINGS
		STATEWIDE	TM I AREA	EASTERN PA	WESTERN PA
		%	%	%	%
NUCLEAR SCIENTISTS	VERY BELIEVABLE	30	38	30	29
FROM EUROPE AND	SOMEWHAT BELIEVABLE	42	35	45	38
JAPAN WHO HAVE	NOT TOO BELIEVABLE	18	17	11	30
VISITED PLANT	NO OPINION	10	11	14	2
AN ENVIRONMENTAL	VERY BELIEVABLE	30	31	28	33
PROTECTION	SOMEWHAT BELIEVABLE	52	49	56	48
ORGANIZATION	NOT TOO BELIEVABLE	14	18	11	17
	NO OPINION	5	1	5	2
FEDERAL NUCLEAR	VERY BELIEVABLE	25	37	22	26
REGULATORY	SOMEWHAT BELIEVABLE	46	44	47	46
COMMISSION	NOT TOO BELIEVABLE	24	18	24	24
	NO OPINION	5	2	7	4
ORGANIZATION OF	VERY BELIEVABLE	24	13	26	25
RESIDENTS WHO LIVE	SOMEWHAT BELIEVABLE	34	39	33	35
NEAR TMI PLANT	NOT TOO BELIEVABLE	37	47	35	38
	NO OPINION	4	1	6	3
CHIEF NUCLEAR	VERY BELIEVABLE	20	25	23	28
ENGINEER FOR GPU	SOMEWHAT BELIEVABLE	49	49	45	54
	NOT TOO BELIEVABLE	22	27	20	26
	NO OPINION	9	10	13	3

C. Sources receiving between 10% and 19% "very believable" ratings

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<u>Staff members of commissions that investigated the</u> <u>accident</u> do not generate much polarized opinion as to their believability. Most of the statewide public (62%) see this group as "somewhat believable."

The Susquehannah Valley Alliance apparently is not too well-known and as a result, a very large proprotion (42%) is not able to rate this entity in terms of its believability.

Friends and Family of TMI and a <u>County commission from</u> the TMI area have much larger proportions of the public viewing these two groups as "not too believable" than as "very believable."

Officers of the utility company that owns the TMI plant are seen as "not too believable" by a very large proportion (46%) of the public. Table 66 BELIEVABILITY OF TWENTY INFORMATION SOURCES

C. SOUR	CES RECEIVING BETWEEN 10	AND 19% "	ERY BEL	IEVABLE" RAT	TINGS
		STATEWIDE	TMI AREA %	EASTERN PA %	WESTERN PA %
OFFICERS OF THE	VERY BELIEVABLE	16	5	22	7
UTILITY COMPANY	SOMEWHAT BELIEVABLE	33	30	29	39
THAT OWNS THI PLANT	NOT TOO BELIEVABLE	46	58	44	48
	NO OPINION	5	8	4	5
STAFF MEMBERS OF	VERY BELIEVABLE	16	16	18	14
COMMISSIONS THAT	SOMEWHAT BELIEVABLE	62	54	63	63
INVESTIGATED THE	NOT TOO BELIEVABLE	17	19	15	20
ACCIDENT	NO OPINION	4	11	4	3
A COUNTY COMMISSION	VERY BELIEVABLE	15	16	17	13
FROM THE IMI AREA	SOMEWHAT BELIEVABLE	41	41	42	39
	NOT TOO BELIEVABLE	38	40	34	43
	NO OPINION	6	3	8	5
SUSQUEHANNAH VALLEY	VERY BELIEVABLE	12	5	15	7
ALLIANCE	SOMEWHAT BELIEVABLE	29	21	30	29
	NOT TOO BELIEVABLE	17	23	12	24
	NO OPINION	42	51	43	39
FRIENDS AND	VERY BELIEVABLE	11	8	14	7
FAMILY OF TMI	SOMEWHAT BELIEVABLE	44	26	42	51
	NOT TOO BELIEVABLE	34	44	34	33
	NO OPINION	10	22	10	9

D. Sources receiving less than 10% "very believable" ratings

Pennsylvania State government officials, anti-nuclear groups, a Pennsylvania state legislator, and local government officials are viewed about as negatively as are officers of the utility company that owns the TMI plant. The "not too believable" perception of these sources ranges from 43% to 49%.

An organization called Critical Mass is not very well known--60% are not able to rate its believability as an information source.

Table 67 BELIEVABILITY OF TWENTY INFORMATION SOURCES

D. SOURCES	RECEIVING LESS THAN 10	<pre>% "VERY BEL STATEWIDE</pre>	IEVABLE" TMI <u>AREA</u>	RATINGS EASTERN PA	WESTERN PA
		%	76	%	%
PENNSYLVANIA STATE	VERY BELIEVABLE	8	5	6	13
GOVERNMENT OFFICIALS	SOMEWHAT BELIEVABLE	45	51	47	40
	NOT TOO BELIEVABLE	43	43	44	43
	NO OPINION	4	1	4	4
ANTI-NUCLEAR GROUPS	VERY BELIEVABLE	7	8	8	6
	SOMEWHAT BELIEVABLE	36	36	33	40
	NOT TOO BELIEVABLE	47	48	46	48
	NO OPINION	10	8	13	7
A PENNSYLVANIA	VERY BELIEVABLE	6	7	6	7
STATE LEGISLATOR	SOMEWHAT BELIEVABLE	44	47	44	44
FROM YOUR AREA	NOT TOO BELIEVABLE	43	35	44	44
	NO OPINION	6	11	6	5
LOCAL GOVERNMENT	VERY BELIEVABLE	4	8	4	3
OFFICIALS	SOMEWHAT BELIEVABLE	41	41	45	38
	NOT TOO BELIEVABLE	49	40	46	56
	NO OPINION	5	12	6	3
AN ORGANIZATION	VERY BELIEVABLE	4	1	2	7
CALLED CRITICAL MASS	SOMEWHAT BELIEVABLE	16	8	17	18
	NOT TOO BELIEVABLE	20	27	19	20
	NO OPINION	60	65	62	56

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APPENDIX A:

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SURVEY METHODOLOGY

SURVEY METHODOLOGY

General Approach

This survey was conducted by means of personal, faceto-face interviews among residents of the State of Pennsylvania between March 12 and March 25, 1981. Interviews were supervised and monitored throughout the data gathering period by full-time supervisors working under the direction of the FRC staff.

Sample Universe

The population universe for this survey is civilian men and women 18 years and older living in Pennsylvania.

Not included in this definition are persons residing in hotels or transient quarters, persons with no clearly defined place of residence, migrants, drifters, inmates of institutions or military personnel residing in government quarters.

Sample Design

One objective of the study was to compare public opinion among residents living close to the TMI plant with residents living in other parts of Pennsylvania. The sample was divided into the following three major geographic areas: the area within a general radius of twenty-five miles from the Three Mile Island nuclear power plant which includes large portions of Dauphin, Lebanon, York, Perry, Lancaster and Cumberland Counties.

Eastern Pennsylvania:

TMI Area:

that portion of Pennsylvania east of and including the following counties -- Tioga, Lycoming, Union, Juniata and Franklin but excluding the TMI area.

Western Pennsylvania:

that portion of Pennsylvania west of and including the following counties -- Potter, Clinton, Centre, Mifflin, Huntingdon and Fulton.

In order to produce adequate statistical bases for each region, sampling was done on a disproportionate basis; that is, the number of interviews allocated to each region was not proportionate to the statewide population. When the three regions were combined to produce the "statewide" base, appropriate statistical weighting was used to restore each area to its proper population proportion. A more detailed discussion of the weighting procedures used can be found in the "Sample Weighting" section of this appendix.

Sample Selection

The sample consisted of 219 primary sampling-point clusters. Interviewers were instructed to complete five (5) interviews within each of the assigned clusters.

The specific procedures for selecting households and respondents within households was as follows:

- Key address starting points are selected from telephone directories within each cluster area. Starting points are randomly selected by listing every nth address within each directory.
- Interviewers first list and make an interview attempt at the address adjacent to the "key address" and then following a prescribed pattern proceed around the block in a clock-wise direction, listing each household where an attempt is made.
- 3. To achieve a representative balance of men and women, a screening procedure is used at each household. The procedure specifies that when both a man and a woman are home that the man be interviewed. If more than one man is present the interviewer asks to interview the youngest man present. If no men are present but more than one woman is at home the interviewer asks to interview the oldest woman. This procedure attempts to bring into the sample the more difficult groups of respondents to reach; e.g. young men, by giving them a somewhat greater chance of being selected. Because the procedure is used in a strict, systematic manner, the interviewer exerts no personal discretion in the selection of who in a particular household will be interviewed.

Interviews were attempted between 2 p.m. and 8 p.m. on weekdays and between 10 a.m. and 8 p.m. on weekends. These times were chosen to insure the greatest chance of contacting the widest spectrum of individuals, male and female, working and non-working old and young.

Interviewers divided their working time into approximate two hour intervals (e.g. 2 p.m. - 4 p.m., 4 p.m. - 6 p.m.). Within each approximate two hour interval, call backs were attempted at those households in which an adult was found to have returned to a household. In so doing, interviews were attempted with any adult at home within each two hour period.

Interviewing Results

In the process of obtaining the designated number of completed interviews in each region (a minimum of 400 in the TMI Area, 300 in Eastern Pennsylvania and 300 in Western Pennsylvania) a total of 5566 attempts were made. Of these, 2538 contacts (46%) were made with eligible respondents. Of those eligible, 1085 interviews were completed, an overall completion rate of 43%. The dispolition of all attempts overall and within each of the three major geographic subregions is shown below.

RESULTS OF INTERVIEW ATTEMPTS

	Total		TMI Area	Eastern PA	Western PA
Total attempts made	5566	(100%)	1886 (100%)	1646 (100%)	2034 (100%)
No contact made	3028	(_54)	959 (_51)	866 (_53)	<u>1203</u> (<u>59</u>)
No one home	2667	(48)	880 (47)	777 (47)	1010 (50)
Adult not at home	227	(4)	65 (3)	51 (3)	111 (5)
Communications barrier	57	(1)	5 (*)	16 (1)	36 (2)
Inaccessible address	77	(1)	9 (*)	22 (1)	46 (2)
Contact made	2538	(_46)	927 (_49)	780 (_47)	<u>1203</u> (<u>50</u>)
		(100%)	(100%)	(100%)	(100%)
Refused	1425	(56)	478 (51)	444 (57)	503 (61)
Terminated	20	(1)	7 (1)	10 (1)	3 (*)
Other	8	(*)	2 (*)	1 (-)	5 (1)
Completed interview	1085	()	440 (_48)	325 (42)	320 (_38)

*Less than one-half of 1%.

Questionnaire design

Questionnaire design for this survey was the responsibility of Winner/Wagner and Associates. Field Research Corporation acted as questionnaire consultants.

The final questionnaire consisted of two forms -- Form A and Form B. Each form contained common questions and questions particular to that form. To cover a broad range of topics and still minimize possible respondent fatigue, only one of the two forms was administered to any one survey respondent.

During the questionnaire development phase, both forms were thoroughly tested to make certain that the final questions posed were clear and easily administerable. The administration of each form took, on the average, approximately one hour.

Interviewing procedures

The two questionnaire forms were rotated within each cluster so as to produce two approximately equal sized sub-samples for each region.

Each interviewer was required at the start of the interviewing period to attend a briefing session where supervisors reviewed each form of the questionnaire, and all necessary procedures to implement the sample.

At the conclusion of interviewing, supervisors in each region validated by telephone at least 20% of each interviewer's work to make certain that each was carried out honestly, courteously and in an unbiased manner.

Data Processing

Completed interviews were edited for completeness and open-end questions were coded by FRC's staff of professional coders. Questionnaire information was then keypunched to data cards for computer processing. The data deck was checked with a special card cleaning program to uncover incomplete, incorrect, or inconsistent data before processing. Discrepant cards were checked against the original questionnaire data and when necessary were corrected.

Sample Weighting

When the questionnaire data were entered into the computer, the data set was subjected to a statistical weighting procedure in order to provide an unbiased, accurate sample projectable to the population involved.

The first weighting stage adjusts for telephone density bias. Since cluster starting points are chosen from current telephone directories, a bias exists giving areas with greater density of listed telephones a higher initial selection probability. Telephone density weighting attempts to remove this bias by giving each cluster a weight inversely proportional to the density of listed telephones in that cluster.

The second stage of wei; hting is an adjustment to bring the sample (weighted for telephone density) into conformity with census established population parameters of age, sex, and geographic area. Variations in interview completions and respondent availability can make the final survey sample slightly different than designated population distributions. Population weighting attends to these discrepancies.

Four categories of weighting are used in each region, 2 (sex) by 2 (age). The weighted sample proportions in each category is then calculated to bring it into conformity with established population figures for that category. Since there were 3 major sub-regions and 4 weights within each region, the statewide findings combined all twelve of these weights to restore each region's data into their proper statewide population proportions.

A third stage of weighting attempts to remove the bias of not reaching those who are not frequently at home. The rationale for this procedure requires that during the interview information be taken from respondents about the likelihood of their being at home at the time of the interview. Each respondent's data are then weighted by a multiple of the computational weight, which represents the reciprocal of the proportion of time he/she reports having been at home. Thus, those who are less often at home are assigned a greater weight then those who are more often at home.

The resultant weight, therefore, is the product of each of the successive weight assignments applied to it and can be represented as follows:

> $W_1 = W_1$ (telephone) x W_2 (age/sex within region) x W_3 (not at home)

Estimates of Sampling Error

In any survey based on a sample, some variance or "sampling error" is introduced into the data by the sampling process. If the sample has been drawn by a random process, the range of potential sampling error can be estimated to show the degree of precision which figures from the survey have as representations of, or projections to, the population from which the sample was drawn. The question that this procedure answers is:

If the survey finds that x% of the people interviewed hold a given opinion, what is the tolerance range of that figure as an estimate of the percentage of the total adult population holding that opinion?

Table A below shows how much sampling tolerance should be applied to any particular statistic of interest in order to have 95% confidence that it brackets the "true value" (i.e., the value which would have been obtained had the survey attempted to interview the whole population of interest.) For example, suppose 30% of the respondents in the TMI Area (sample size = 440) answered "yes" to a particular question. From Table A a statistic such as this has a plus/minus tolerance of about 4.8 percentage points. This means that the "true value" would have a 95% chance of being found between 25.2% and 34.8%. The same procedure can be used to estimate the sampling tolerance of any other data from the survey.

	rance (plus and min the 95% Confidence		
	Percentage	division	of replies
Sample base	50-50	70-30	90-10
100	9.8	9.0	5.9
300	6.5	6.2	4.4
400	5.0	4.8	3.2
600	4.0	3.7	2.4
1000	3.1	2.8	1.9
2000	2.2	2.0	1.3

171 -	Sec.	1 -	
Ta	D.	Te	14

Other Accuracy Considerations

Sampling error is not the only criterion in judging the validity and reliability of a survey's results and for that reason we caution against citing sampling error as the sole measure of this survey's accuracy. In addition to sampling error, there are other important sources of possible inaccuracies in the survey findings which are inherent in any survey. These relate to the phrasing of the questions, question sequence, and other aspects of the survey method.

Professional scrutiny was employed in formulating the questionnaire and supervising the data gathering and data processing phases. If there were some inadvertent errors committed in these areas there is no standard measure of these effects. APPENDIX B:

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SURVEY MATERIALS

The Questionnaire

There are two forms to the questionnaire, Form A and Form B. Each form contained common questions and questions particular to that form. Interviewers rotated their use of each form of the questionnaire within each cluster so as to produce two approximately equal sized sub-samples for each region.

The following pages contain a merged version of the questionnaire. The particular form is identified in the upper right-hand corner of each page. If no particular form is designated in the top right-hand corner of the page, then that page was common to both questionnaires.

For those questions in which a series of statements was posed to respondents, each of the items listed was rotated on each different questionnaire so as to avoid beginning with the same item for that series for every interview. This was accomplished by putting a randomized check mark next to the item which the interviewer was to begin with that particular questionnaire. An example of this rotation scheme can be found on pages 4,6,7,8,9, 10 and 13.

On some questions respondents were shown a card containing an array of possible answers. These are shown following the questionnaire. Field Research Corporation San Francisco/Los Angeles 465-009 031081 FINAL

A #1171278	FR TTASTTA	DITTTC	OPINION	STRUEY
PENNSI	ALL YOUN LOS	E WALLAW	AT 224 4 A14	~~~~~

--Personal Interview--

Time Started:

I'm working on a public opinion survey that is being conducted throughout Pennsylvania to find out how people feel about a number of issues facing the state today.

1a. First of all, how long have you lived in Pennsylvania? (RECORD UNDER Q.1a) 1b. How long have you lived in this general area of the state? (RECORD UNDER Q.1b)

	(Q.la) Pennsylvania	(Q.15) This general area
1 YEAR OR LESS OVER ONE YEAR - FIVE YEARS OVER FIVE YEARS - TEN YEARS OVER TEN YEARS - TWENTY YEARS OVER TWENTY YEARS	1 10 - 2 3 4 5	1 21 - 2 3 4 5

 What do you feel are some of the most serious problems facing people living in Pennsylvania today?

12/20

36/37

08/-1

 What do you feel are some of the most serious problems facing people today in this general area of the state.

5. There has been a lot of talk recently about the "energy crisis." When you hear the words "energy crisis." what does that mean to you?

-1-

3423 37/-5

6. What do you think is the cause of the energy crisis?

7. Who do you think is to blame for the energy crisis?

.

. .

9.

10.

.

+4+1

8. What do you think can be done to solve the energy crisis?

++/+5

		78 -
How important is it that business and industry	VERY IMPORTANT	1
in this area grow a lot in the next 10 years? Is	SOMEWHAT IMPORTANT	2
it very important, somewhat important, some-	SOMEWHAT UNIMPORTANT	3
what unimportant or not very important?	NOT VERY IMPORTANT	4
what unimportant is an in the	DON'T KNOW	8
		#9 -
Do you think there will be enough electric power	ENOUGH AVAILABLE	1
available for household needs in this area of	LIKELY TO BE A SHORTAGE	
Pennsylvania in the next few years, or is there likely to be a shortage of power?	NO OPINION	

11. What is the name of the company which supplies your electricity?

									5	0/51	
									5:	4.3	
										54 -	
12.	Overall what kind of a job do you think your	VERY GOOD .	*	×		×	×		ж.	1	
	electric utility has done in providing service?	GOOD		×	\mathbf{x}_{i}		*	*	*	2	
	Would you say that your electric service is	AVERAGE									
	very good, good, average, poor or very poor?	POOR	×	$\dot{\tau}$	\mathbf{x}	×				4	
		VERY POOR .	*	$\mathbf{\hat{z}}$	\mathbf{k}	(\mathbf{x})		14	к.	5	
		NO OPINION.	÷	÷	÷	÷		*	×	8	
										55-	e.
13.	Overall what kind of a job do you think your	VERY GOOD .	\mathbf{x}	$\sim 10^{-10}$	(\mathbf{x})		10.	\mathbf{r}_{i}	$\left \boldsymbol{x} \right $	1	
	electric utility has done in keeping the cost of	GOOD	\mathbf{x}		$\sim 10^{-10}$	*	${\mathcal T}_{i}^{(1)}$		\mathbf{x}	2	
	electricity at 3 reasonable level? Would you	AVERAGE	\mathcal{X}		.8	\mathbf{x}	.81	$\left \mathbf{x} \right $		3	
	say they have dong a very good, good, average,	POOR	*	\sim	×	×.	$ \mathbf{k} $	×	*	4	
	poor or very poor job?	VERY POOR .									
		NO OPINION.				*			* -	8	

14a. In the past year or so have the rates that your electric utility company charges you for electricity increased, decreased, or remained about the same? INCREASED 1 DECREASED 2 REMAINED THE SAME . . 3 DON'T KNOW. 8

0.15- 0.155 0.150

(IF "INCREASED OR DECREASED", ASK) :

14b. What do you think the reasons were that caused electric power rates (to go up) (to come down,

57/58

54 -

15a. A lot has been said recently about the dangers of over-dependence on foreign oil. Here is a card (HAND CARD A) with five different statements about the problems of relying on foreign oil. Please look over these and tell me the letter of the one which concerns you the most? (CIRCLE NUMBER OF STATEMENT CHOSEN BELOW)

15b. Which one is your next most serious concern?

15c.	Which one is your <u>least</u> serious concern?			MO			NEXT MOST SERIOUS CONCERN	LEAST SERIOUS CONCERN
	 a. It increases the cost of electricity here in Pennsylvania					4 1	•* 1	* دو 1
	b. It endangers our national security						2	2
	c. It damages our entire national economy	÷		ł	1	3	3	3
	d. It is creating a worldwide scramble for oil and a vew cold war between Russia and the U.S	1	*		1	4	4	4
	e. It will create crippling shortages of energy in the future			ļ,	×	5	5	5
	NO OPINION						8	8

16. Do you agree or disagree with the following statement: America would be better off if we used our limited oil resources for things like cars, heat, medicine and plastics instead of burning it to generate electric power. Do you (agree) (disagree) strongly or just somewhat?

AGREE	STR	ON	GL	Y		х:	÷.	÷.	×.		ŝ	1
AGREE	SOM	EW	HA'	r	20			$\overline{\mathcal{H}}$	\mathbf{x}_{i}		*	2
DISAGR	EE	50	ME	WH.	AT	ι.		ы.	*	*	×.	3
DISAGE												
NO OPI												

67-

17. I am going to read some proposals for dealing with the energy crisis and I would like you to tell me whether you favor or oppose each one. (BEGIN WITH ITEM CHECKED AND READ STATEMENT) "Do you favor strongly, favor somewhat, oppose somewhat, or oppose strongly? (CONTINUE UNTIL ALL ITEMS HAVE BEEN READ.)

			Fav	or	gly	7	Fay	nev	vha	t	Op Sc	po	se	at	Or St	po	se ng	1 <u>y</u>	No	in	ion	
	1	Increase our use of coal																				+×
	аа. 1 b.	Increase our use of nuclear energy .	• •	. 1		1	•	2	*	*	•		3	ł	ŧ,	. 4			•	•	8	••-
		Increase our exploration for oil in the U.S																				67-
3	⊐d.	A combination of the increased use of coal and nuclear energy		. 1	į.		į	2	į	1	ł	ł	3	i	ł	. 4	•		•		8	•* - 59-
	18.	One available alternative to foreign produce electricity is nuclear energy favor or oppose the use of nuclear replace foreign oil for producing el Do you (favor)(oppose) strongly or	gy. ener lect	w rgy tri	loui te	ld po	we	r?			1	PI	08 05	E	OM SOI ST	EWH MEW RON	AT HA	т. т.	•	* * *	* *	. 1 . 2 . 3 . 4 . 8

19. What do you think are the advantages of nuclear energy?

۰.

70/11

20. What do you think are the disadvantages of nuclear energy?

21.

states St		
Next 1 am going to ask you you and you operating? Please use already built and operating? Please use this card with a scale of 1 to 7 to select your answer. (HAND CARD B) A "1" means that you strongly favor continuing the operations of plants that are already built and a "7" means that you strongly favor shutting down these plants. Where on this scale would you place yourself SD	TRONGLY FAVOR CONTINUED PERATIONS	 2 3 4 5 6 7

Now I'd like you to think back about two years ago when the accident occurred in the nuclear energy plant at Three Mile Island or as it has become known TMI.

. . .

 \mathbf{x}

.

22. As I describe some different reactions that people had to the accident, I'd like you to tell me whether you falt any of these feelings at the time or not. Here is the first one. (READ Q.22a. IF RESPONDENT ANSWERS "YES" ASK): Were you very, or somewhat ______? CONTINUE WITH Q.22b THROUGH Q.22f.

Reg	arding the TMI accident:			s		Ye			at			• A					ver	
	Were you FRIGHTENED for your safety	÷		1				2		ĺ,		3	į		k	8		12-
	Were you ANGRY at the officials or other people?																	15-
	Were you CONFIDENT that you would come out OK?			1	į,			2	×.			3	ł	ż		8		14-
d.	Were you CONFUSED by what was happening .		×	1	ł	÷	÷	2	ŝ	×	ŕ	3	×	×	1	8	0	1.0
e.	Did you feel HELPLESS about what was happening?	ļ	١.	1		2		2	×	×	ie:	3		ł	X	8	ć.	16-
f.	Were you SATISFIED that everything possible was being done?																	17-

23. Now I'd like you to tell me how you feel about the TMI plant at the present time. As I describe some different reactions, I'd like you to tell me whether any of these fit your own feelings now. Here's the first one. (READ Q.22a. IF RESPONDENT ANSWERS "YES" ASK): Are you very, or somewhat _____? CONTINUE WITH Q.23b THROUGH Q.23f.

Reg	arding the TMI accident:		ery		Ye		wh	at				No 11		N A		ver	
	Are you FRIGHTENED for you safety		1		*		2	•			3		÷	,	8		18-
b.	Are you ANGRY at the officials or other people?																14-
с.	Are you CONFIDENT that you will come out OK?		1	×	÷	×	2	×	1		3	×	1	1	0		20-
d.	coursers by what is hangening?	×	1	*	×	*	2	*	*	×	3	*	÷	×	8		11-
е.	Do you feel HELPLESS about what is happening?		1		×	•	2	×	÷	*	3		×	1	8	į	22-
f.	Are you SATISFIED that everything possible is being done?		1		. *	*	2		÷		3		×	ŝ	8		25

24. What do you think frightens people about TMI now?

25. H

26.

27. 1

	2*/25 26/27	
	29-	
How many nuclear energy plants are there on Three Mile Island as far as you know - one, two, three, four, five or more?	ONE	
It happens that TMI is comprised of two plants. To the best of your knowledge, did the 1979 accident damage one plant and not the other, or did the accident damage both	DAMAGED ONE NOT THE OTHER 1 DAMAGED BOTH	
plants?	- 0-	
To the best of your knowledge, are either of the TMI plants operating now?	NONE OPERATING	

(CO2)

,

FORM A

It happens that the 1979 accident damaged only one of the two plants at TMI. I would like to get some of your views regarding the undamaged plant at TMI.

٢.

28. First do you think that the TMI plant which	ALLOWED TO OPERATE 1
was not damaged should be allowed to operate	NOT ALLOWED TO OPERATE 2
or not?	DON'T KNOW 8

29. Currently the federal government has not permitted the undamaged plant. Unit 1, to resume operations. I'm going to read a list of possible reasons why the government has not permitted the undamaged plant to re-start. As I read each one please tell me whether you think it is a very likely, somewhat likely or not a likely reason for the government not permitting the plant to re-start. (BEGIN WITH ITEM CHECKED, READ STATE-MENT) "Do you think this is a very likely, somewhat likely or not a likely reason? (CONTINUE UNTILL ALL ITEMS HAVE BEEN READ.)

		LIKELY I		LI	KE	WH		1	KE	A LY ON				ON	1'T W		
□ a.	The utility company that owns the plant is not competent to operate it	. 1				2				 3						8	32-
□ b.	The undamaged plant is nearly identical to the damaged plant and therefore the basic design has serious flaws in it					2	1	1		3						8	33-
□ c.	There is so much political pressure against restarting the undamaged $\bar{\rho}lant$.	. 1				2		÷		3	ł					8	34 -
□ d.	It would be too difficult to evacuate the surrounding area in case of another accident	. 1				2				3		*				8	35-
de.	Because the two plants are so close to each other, it is not safe to operate one plant until the other plant is cleane up	rd . 1			1	2				3						8	36 -
											((,	KP.	: 5	K 1	• •	37-4.)

	ts 1 and 2 are currently not	More Expensive							+2-
	icement electricity for the i by the TMI plants is being	GREAT DEAL						1	
	er utilities. Do you think	SOMEWHAT	*		÷	*		2	
this electricity	y is more, about the same or	ABOUT THE SAME				÷		3	
would be produce	than the electricity that ed by the TMI units if they	Less Expensive							
	(IF MORE OR LFSS, ASK:)	SOMEWHAT		×				4	
expensive?	eal or somewhat (more)(less)	GREAT DEAL							
expensive:		DON'T KNOW			1	*	14	8	

FORM B

It happens that the 1979 accident damaged only one of the two plants at TMI. I would like to get some of your views regarding the undamaged plant at TMI.

.

(KP: SKIP +32-36)

29. Currently the federal government has not permitted the undamaged plant, Unit 1, to resume operations. I'm going to read a list of possible reasons why the government has not permitted the undamaged plant to re-start. As I read each one please tell me whether you think it is a very likely, somewhat likely or not a likely reason for the government not permitting the plant to re-start. (BEGIN WITH ITEM CHECKED, READ STATE-MENT) "Do you think this is a very likely, somewhat likely or not a likely reason? (CONTINUE UNTILL ALL ITEMS HAVE BEEN READ.)

		1	LIKELY I		LI	KE	LY				NO LI RE	KE	LY	_		1.25	ON NO	'T W			
Of.	Because the plants have interconnecting systems, one can't operate without the the other			1	•		,	2	•					3						8	37 -
□ g.	Since the two plants are so close to- gether another accident could occur if Unit 1 is allowed to operate			1			•	2					ļ	3						8	38-
0 h.	It is not economically feasible to operate one plant and not the other			1				2				į	,	3	•					8	39 -
1.	Unit 1 won't be allowed to operate until the radioactive waste from the accident has been removed																				¥o -
a j.	Government red tape and bureaucratic delays are holding up the re-start approval			1			ľ	2	•				•	3	•					8	41-
30.	Because TMI Units 1 and 2 are currently operating, replacement electricity for customers served by the TMI plants is b provided by other utilities. Do you th this electricity is more, about the sam	ei in	ng ng	5			GR	EA ME	T	DE	AL		•	:	*		ł	•	1 2		-
	less expensive than the electricity that	t		5																	

this electricity is more, about the same or	About the share i i i i i
less expensive than the electricity that would be produced by the TMI units if they	Less Expensive
were operating? (IF MORE OR LESS, ASK:)	SOMEWHAT 4
Is it a great deal or somewhat (more)(less)	GREAT DEAL
expensive?	DON'T KNOW 8

FORM A

31. There have been a lot of opinions put forth on the re-start of TMI Unit 1, the undamaged plant. I'm going to read some of these opinions. (BEGIN WITH ITEM CHECKED AND READ STATEMENT.) "Do you agree strongly, agree somewhat, disagree somewhat or disagree strongly? (CONTINUE UNTIL ALL ITEMS ARE READ).

1

.

					LEE				EWH						SAG				PIN	IC	DN
0	a.	Because all the other nuclear energy plants around the country which are similar to the one at TMI have been allowed to return to operation, Unit 1, the undamaged plant at TMI, should be allowed to operate	•	•	1	•		•	2			3	•			4			. *		13
0	b.	Government safety hearings on the re-start of Unit 1 are now in progress. Restarting Unit 1 before these hearings are completed will make a mockery of the hearings		•	1		•		2		•	3				4			. 1	3	++
0	1 c.	Unit 1, the undamaged plant, has benefited from all of the research and study brought about by the accident at Unit 2 and should therefore be permitted to operate	•	•	1	•			2			3				4	•	•	. 1	3	¥-
¢	d.	The only reason the Company wants to re- start Unit 1 is so that it can make more money		•	1	ļ			2			3	ļ			4				в *	
c	3 e.	Restarting Unit 1 will help to strengthen our economy			1				2			3			×	4				8	47 -
3	1:.	No matter what the government, scientists and company executives say, re-starting any unit at TMI would not be a safe thing to do																		8*	×-
] g.	The way in which the utility company in the past two years has handled the problems resulting from the accident demonstrates that the Company is competent to operate the undamaged plant at TML.			1				2			3				4	*			8	n -
		영화 성격하는 것 것 같은 것이다.															34			x -	57)

31. There have been a lot of opinions put forth on the rz-start of TMI Unit 1, the undamaged plant. I'm going to read some of these opinions. (BEGIN WITH ITEM CHECKED AND READ STATEMENT.) "Do you agree strongly, agree somewhat, disagree somewhat or disagree strongly? (CONTINUE UNTIL ALL ITEMS ARE READ). (XP: SKIP '43-44)

.

1

					· · · · · · ·	
		AGREE STRONGLY	AGREE SOMEWHAT	DISAGREE SOMEWHAT	DISAGREE STRONGLY	DON'T KNOW
	The company is anxious to restart Unit 1 not only to generate revenue for itself but also out of a desire to save its customers money	. 1	2	3 .	4	. 8 50-
	As long as there is any problem with one of the plants, the other one shouldn't be allowed to operate					
αj,	Now when we're trying to relieve our dependence on foreign oil, it doesn't make sense to keep Unit 1, which doesn't use foreign oil, from operating.					1.0
0 k.	The Company wants to restart Unit 1 regard- less of what impact it will have on the health and safety of people living in this area.					(-,+)
01.	The undamaged plant should be allowed to operate so that the revenue from that plant can be used to pay for the cleanup of the damaged plant.					
C 8.	The way in which the utility company in the past two years has handled the problems resulting from the accident demonstrates that the company is incompetent to operate the undamaged plant at TMI		2	3 .	4	. 8 55-
×.	It's not fair to consumers to pay higher rates for electricity because a licensed and undamaged nuclear power plant which could provide cheaper electricity sits idle	. 1	2 .	3 .	4 . ,	. 8 56 -
00	Government safety hearings on the re-start of Unit 1 are now in progress. It makes no sense to re-start Unit 1 before the decision from these hearings is made	, , 1	2 .	3 .	4 .	s 57-

FORM A

32. Now I am going to read you some other statements that have been made about restarting the undamaged TMI Unit 1 plant.

Here is the first statement (BEGIN WITH ITEM CHECKED AND READ STATEMENT)

- a. Do you think this statement is very much true, somewhat true, or not true at all? (RECORD BELOW UNDER Q.32a)
- b. Next using this card (HAND CARD C) I would like you to tell me whether that statement, <u>assuming it were true</u>, would make you more or less inclined to support the re-start of Unit 1. Which category on that card (C) best describes how this would influence your opinion. (RECORD BELOW UNDER Q.32b)

(CONTINUE IN SEQUENCE UNTIL ALL STATEMENTS ARE READ.)

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	0.32a					_			2.3	2Ъ			11			
	VERY SOME-	NOT				OR	ENED		NÖ				SS	D		_
	MUCH WHAT		<u>/K</u>	A LOT		ME	A	TTL	ENCI		A		<u>so</u>	ME	LOT	:
a. The restart of Unit 1, 1 plant, would mean a sub- financial savings for cr who are serviced by the which operates TMI	stantial istomers company		58-	1	••	2 .		з.	 . 4			5		6		59- 7
b. All studies conducted st accident at TMI show the undamaged Unit 1 plant of operated safely	at the can be	3	8	1		2 .		3.	 . 4			5		6	* *	61- 7
X . The Union of Concerned has raised many challen objections to the re-st Unit 1, the undamaged p	ges and	, 3	8	1		2	• • •	3	 . 4			5		6	••	6 3 - 7
d. The plants at TMI since accident have had more study and research than other plants in the course	safety any	3	8	1		2		3	 	÷		5		6	*.*	65- 7
c e. Since the accident the operating the plant has new and highly qualifier management.	obtained	3	4- 8	1		2		3	 	•		5		6	• •	67- 7
f. Restarting the undamage plant will save over 5 barrels of oil each year	million		8	1		2	* * *	3	 	•		. 5	***	6		67- 7
									(KP	31	e.	• 70	- 71)	
					2						(-	d	CD	2)	

32. Now I am going to read you some other statements that have been made about restarting the undamaged TMI Unit 1 plant.

Here is the first statement (BEGIN WITH ITEM CHECKED AND READ STATEMENT)

- a. Do you think this statement is very much true, somewhat true, or not true at all? (RECORD BELOW UNDER Q.32a)
- b. Next using this card (HAND CARD C) I would like you to tell me whether that statement, <u>assuming it were true</u>, would make you more or less inclined to support the re-start of Unit 1. Which category on that card (C) best describes how this would influence your opinion. (RECORD BELOW UNDER Q.32b)

(CONTINUE IN SEQUENCE UNTIL ALL STATEMENTS ARE READ.)

۰.

(KP: SAIP \$58-67)

VERY SOME- NOT MUCH WAILT TRUE TRUE TRUE AT ALL D/X MORE A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A DIFFER- A A A DIFFER- A A A DIFFER- A A A DIFFER- A A A DIFFER- A A A DIFFER- A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A DIFFER- A A A A A DIFFER- A A A A A DIFFER- A A A A A DIFFER- A A A A A DIFFER- A A A A A DIFFER- A A A A A A A A A A A A A A A A A A A		Q.32a								2.326					-
MUCH WHAT TRUE TRUE TRUE AT ALL D/R TRUE TRUE AT ALL D/R LOT SOME LITTLE BACE LITTLE SOME LOT A A A LOT SOME LITTLE BACE LITTLE SOME LOT A A A LOT SOME LITTLE SOME LOT A A A D LITTLE SOME LITTLE SOME LOT A A A D LITTLE SOME LITTLE SOME LOT A A A A D LITTLE SOME LITTLE SOME LOT A A A A A A A DIFFER-A A A LOT SOME LITTLE SOME LOT A A A A DIFFER-A A A A DIFFER-A A A A DIFFER-A A A A DIFFER-A A A A DIFFER-A A A A DIFFER-A A A A DIFFER-A A A DIFFER-A A A DIFFER-A A A DIFFER-A A A DIFFER-A A A DIFFER-A A A DIFFER-A A A A DIFFER-A A A DIF		VERY SOME-	NOT	1				D		NO					
<pre>plant will save over 3 million barrels of 01 each year 1 2 3 8 1 2 3 4 5 6 7 2 S. Since the accident the company operating the plant has add- ed technical personnel and now the staff has over 3000 years of combined experience in nuclear operations 1 2 3 8 1 2 3 4 5 6 7 7 0 h. It is not safety considerations but only bureaucratic delays that have kept Unit 1, the un- damaged plant, from re-starting.1 2 3 8 1 2 3 4 5 6 7 7 1 2 3 4 5 6 7 .</pre>				D/K		<u>so</u>			LE				LE :	SOME	A LOT
<pre>plant vill save over 5 million barrels of oil each year 1 2 3 8 1 2 3 4 5 6 7 7 8. Since the accident the company operating the plant has add- ed technical personnel and now the staff has over 3000 years of combined experience in nuclear operations</pre>				64-											69-
<pre>operating the plant has add- ed technical personnel and now the staff has over 3000 years of combined experience in nuclear operations</pre>			. 3	8	1	. 3	2	. 3	• • •	4	***	:	5	. 6	7
<pre>operating the plant has add- ed technical personnel and now the staff has over 3000 years of combined experience in nuclear operations</pre>	/														
 b. It is not safety considerations but only bureaucratic delays 73-that have kept Unit 1, the un-damaged plant, from re-starting.1238 i. The damaged unit at TMI is 74-only 100 yards away from the undamaged plant	operating the plant has add- ed technical personnel and no the staff has over 3000 years combined experience in nuclea	of In			1	. 2								. 6	
but only bureaucratic delays that have kept Unit 1, the un- damaged plant, from re-starting.1238 73- 73- 73- 73- 73- 73- 73- 73- 73- 73-															
damaged plant, from re-starting.1238 1234567 I. The damaged unit at TMI is only 100 yards away from the undamaged plant	but only bureaucratic delays			12-											73-
only 100 yards away from the undamaged plant	damaged plant, from re-starts	lng.12		. 8	1.	. 2		. 3	* * *	4	* * *	i er 5		. 6	7
only 100 yards away from the undamaged plant				74-											
the government had information that would have prevented the accident, but neglected to inform the operator about this information	only 100 yards away from the undamaged plant	e 12			1.	. 2	• • •	3		. 4	• • •	3		. 6	
accident, but neglected to 74 inform the operator about this information1.2	the government had informati	on													
this information	accident, but neglected to			76-											11-
is not re-started the shortage of electricity will create rolling "brown-outs" and "black-outs"12	inform the operator about this information	1 2 .	3	. 8	1.	. 2	• • •	3		. 4		5	**	. 6	7
of electricity will create rolling "brown-outs" and "black-outs"															N-
	of electricity will create rolling "brown-outs" and		146	18				1		. 4				. 6	7
(end CD2)	"black-outs"	••1 •• 2 ••	3		1										
												(c	_ d	CD	2)

		(603)
33a.	Some say that the Nuclear Regulatory Commission (the NRC) with its political haggling and bureaucratic red tape is causing unnecessary delays in re-starting Unit 1, the undamaged plant. Others say that the NRC is simply proceeding cautiously and protecting the	NRC RED TAPE CAUSING DELAYS 1 NRC PROCEEDING CAUTIOUSLY 2 NO OPINION
	proceeding cautiously and proceeding the public. Which of these statements is closer to your own view?	(KP: 3KIY "13)
Now,	let's talk about the clean-up operations of TM	I Unit #2, the damaged plant.
34.	Some say that there is a great safety risk if Unit 2, the damaged plant, is left as it is, an nothing else is done to clean it up. Others say that there is little or no safety risk if the damaged plant is simply left as is. Which is closer to your opinion?	GREATER RISK IF LEFT AS IS 1 LITTLE RISK IF LEFT AS IS 2 DON'T KNOW
35a.	Are you satisfied or dissatisfied with how the problems of cleaning up TMI are being handled so far? Would you say you are strongly (satisfied)(dissatisfied) or just somewhat(satisifed)(dissatisfied)?	STRONGLY SATISFIED 1 SOMEWHAT SATISFIED 2 SOMEWHAT DISSATISFIED 3 STRONGLY DISSATISIFED 4 DON'T KNOW
	(IF SATISIFED OR DISSATISIFED, ASK):	
	35b. Who, or what organization, do you belie	ve (is)(is not) doing a proper job?
		10/17
		18/14
36.	How confident are you that the problems of cleaning up TMI will be solvedvery confident somewhat confident, not too confident, or not at all confident?	VERY CONFIDENT 1
37.	Have you heard or read anything about a large amount of water that is inside the damaged reactor at TMI?	YES
	3 : 26 · 27 · 27 · 2 · 2 · 2 · 2	22-
38.	It happens that the water inside the damaged reactor is radioactive. How important do you feel it is that this radioactive water inside the damaged reactor be removed as soon as possibleextremely important, somewhat important, not too important or not at all important?	EXTREMELY IMPORTANT 1 SOMEWHAI IMPORTANT
39.	I am going to read a set of statements and I w you agree or disagree with each one. (BEGIN (agree)(disagree) strongly or just somewhat? ITEMS ARE READ)	WITH STATEMENT CHECKED) Do you
		AGREE AGREE DISAGREE DISAGREE NO STRONGLY SOMEWHAT SOMEWHAT STRONGLY OPINION
	It is possible in a relatively short period of time to decontaminate the radioactive water in the damaged TMI Unit 2 plant.	12348
	b. Once the radioactive water in the damaged TMI Unit 2 plant is decontaminated it can be safely discharged into the Susquehanna River.	-74
	c. The longer that the radioactive water is 1	
	d. The damaged plant can't be cleaned up unti the radioactive water is removed	1

		FORM B (3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
its p red t re-st Other proce publi to yo	solitical magging and oureaucratic cape is causing unnecessary delays in carting Unit 1, the undamaged plant. rs say that the government is simply seding cautiously and protecting the ic. Which of these statements is closer our own view?	GOV'T RED TAPE CAUSING DELAYS 1 GOV'T PROCEEDING CAUTIOUSLY 2 NO OPINION
Now, let	t's talk about the clean-up operations of TM	I Unit #2, the damaged plant.
Uni not say if	me say that there is a great safety risk if it 2, the damaged plant, is left as it is, and thing else is done to clean it up. Others y that there is little or no safety risk the damaged plant is simply left as is. ich is closer to your opinion?	GREATER RISK IF LEFT AS IS 1
the	e you satisfied or dissatisfied with how c problems of cleaning up TMI are being ndled so far? Would you say you are <u>rongly</u> (satisfied)(dissatisfied) or just <u>mewhat</u> (satisifed)(dissatisfied)?	STRONGLY SATISFIED 1 SOMEWHAT SATISFIED 2 SOMEWHAT DISSATISFIED 3 STRONGLY DISSATISIFED 4 DON'T KNOW
3	(IF SATISIFED OR DISSATISIFED, ASK): 356. Who, or what organization, do you bell	eve (is)(is not) doing a proper job?
		10/17
c. se	ow confident are you that the problems of leaning up TMI will be solvedvery confiden omewhat confident, not too confident, or not t all confident?	NOT AT ALL CONFIDENT 4 NO OPINION 8
1	lave you heard or read anything about a arge amount of water that is inside the amaged reactor at TMI?	YES
5 5 1 1	It happens that the water inside the damaged reactor is radioactive. How important do you feel it is that this radioactive water inside the damaged reactor be removed as soon as possibleextremely important, somewhat important, not too important or not at all important?	COMPUTAT IMPORTANT 2
	I am going to read a set of statements and I you agree or disagree with each one. (BEGIN (agree)(disagree) strongly or just somewhat? ITEMS ARE READ)	N WITH STATEMENT CHECKED) Do you
		AGREE AGREE DISAGREE DISAGREE NO STRONGLY SOMEWHAT SOMEWHAT STRONGLY OPINIC
	a. It is possible in a relatively short period of time to decontaminate the radioactive water in the damaged TMI Unit 2 plant.	-در • • • • • • • • • • • • • • • • • • •
۵	b. Once the radioactive water in the damaged TMI Unit 2 plant is decontaminated it can be safely discharged into the Susquehanna River	n
ſ		1 2 3 4 8
٥	d. The damaged plant can't be cleaned up un the radioac*ive water is removed ~98-	ntil

5 Y.C

FORM A

40. Now I am going to read another set of statements. Please tell me whether you would agree or disagree with each one. (READ ITEM CHECKED) "Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly? (CONTINUE UNTIL ALL ITEMS ARE READ).

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				EE	LY		GR			 						REE			NIC	<u>ON</u>
Ca.	The longer they take to clean up the damage at the damaged plant the more dangerous the plant becomes	*		1	*			2		3	*	*			4				8	.7 -
α Ъ.	The Utility Company's main concern with the clean-up is saving money																			3-
α ε.	Anti-nuclear activists are largely responsi for the delays in cleaning up the damaged plant	ыı.	e	1		*		2		3			*		4				, 8	29-
Xd.	If it weren't for the government watch-dogs one utility company would simply dump the untreated radioactive water into the Susquehannah River.		,	1				2		 3			,		4				. 8	30 -
0 e.	Federal bureaucratic and political haggling is the major reason why the clean-up at the damaged plant is not proceeding more rapidly			1	,			2		 3	*				4		*	•	. 8	31-
Of.	Since the utility company was responsible f the accident in the first place, they are obviously not competent to handle the clean-up.			1				2		 3					4		*		. 8	<u>9</u> 1-
□ g.	Because of inflation the longer we wait to clean up the damaged plant the more it will cost us in the long run			1	*			2		 3					4				. 8	33-
□ h.	Until the federal government approves a permanent place to store nuclear waste, there is no sense in moving forward with the clean-up of the damaged plant			1	×			2		 3			*,	•	4	•			. 8	37 -
□ i.	Until the damaged plant is cleaned up and t accident is put behind us, economic growth in this area will be stifled	the		1				2	,	 3					4		ļ		. 8	15 -
																				+3)

FORM B

*C. Now I am going to read another set of statements. Please tell me whether you would agree or disagree with each one. (READ ITEM CHECKED) "Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly? (CONTINUE UNTIL ALL ITEMS ARE STAD) READ).

×.

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×

									-			·27-2-)
		AGREE STRONGLY	REE MEWHA						REE			
	The longer we wait for the federal government to solve the problem of permanent nuclear was storage, the more the risk of equipment failure and radioactive leaks from the damage plant	ste	 2 .			3		4			8	34-
	Instead of spending time and money to clean-u and salvage the damaged plant, the plant should simply be encased in concrete and covered with dirt		 2	×	•	3 .		4		ł	8	37-
	If they let the damaged plant sit there on t island without cleaning it up, they have in effect created a major nuclear waste storage site in Pennsylvania	he										-82
C n.	Even though it might cost more to quarantine isolate the plant than it would to clean it up, it's worth the extra money to make sure that the plant never operates again		 2.			3	* •	. 4			8	59-
□ n.	The utility that owns the damaged plant is justif	as 1 .	 2.			3		. 4			8	7 0 -
□ o.	An accident as bad as the one at TMI Unit 2 proves that the plant is too dangerous to be permitted to operate again.	1 .	 2.			3		4		*	8	41-
□ p.	The opinions of the people living near the TMI plant should be given more weight on questions concerning TMI than the opinions of people living farther away	1 .	 2 .			3		4			8	12-
□ q.	A rapid clean-up of the damaged plant will in the real estate values and business prospects in the area near the plant		 2.			3		4			8	43 -

Because of the nuclear energy plaats at TMI, there is a lot of talk about radiation. I'd like to ask you now some questions about radiation.

41. Could you describe briefly what is the danger of radiation?

ONLY FROM NUCLEAR ENERGY 42a. As far as you know, does radiation come only from nuclear energy plants or are there

(IF "OTHER SOURCES", ASK):

other sources?

.

.

42b. What are some of the other sources you can think of?

47/48

44/45

43a. Here is a list of sources of radiation (HAND RESPONDENT CARD D).

a. Which one of these sources do you think exposes a person to the most radiation?

b. Which one do you think exposes a person the next most radiation?

c. Which one of these sources do you think exposes a person to the least radiation?

		Q.43a	Q.43b	Q.43c
		MOST RADIATION	SECOND MOST RADIATION	LEAST RADIATION
	a. A cross country flight in a jet airplane .	1	1	1
	b. Living in the State of Colorado for a year	2	2	2
	c. Living next door to an operating nuclear energy plant for one year	3	3	3
	d. Medical and dental examinations of a typical person during a year		4	4
	e. Living in a brick building for a year	5	5	5
	NO OPINION	8	8	8
43Ъ.	Suppose it were a fact that the amount of radi you would receive from living next door to an nuclear energy plant for one year exposed you	operating LE	RE CONCERNE	D2
	radiation than any of the other four sources 1	isted NO	KE NO DIFFE OPINION .	

on the card. If you knew this, would you be more or less concerned about the danger of radiation from an operating nuclear energy plant or wouldn't this

make any difference?

As you know General Public Utilities, or GPU as it is called, is the parent company of Metropolitan Edison, the company which owns and operates TML.

- 44. Have you seen or heard anything about General Public Utilities -- GPU -- filing a claim against the Federal Government for four billion dollars for the federal government's role in the TMI accident?
- 45. Do you approve or disapprove of GPU's suing the government?
- 46. If you knew that it was a fact that eighteen months before the accident the government had information that could have prevented the accident but neglected to tell GPU this information, would you be more inclined or less inclined to approve of GPU's suing the government or won't this make any difference?
- 47. Some people say that GPU in this lawsuit is just trying to blame the government for the company's mistakes. Others say that the lawsuit is a legitimate way to force the government to bear its fair share of the cost of the accident. Which of these two is closer to your own view?
- 48. Who would you like to see have the overall responsibility for managing the clean-up of the damaged TMI plant --- GPU or the Federal Government?
- 49. After the plant is cleaned up and assuming it was re-started who would you like to see have the overall responsibility for operating the plant---GPU or the Federal Government?
- 50. Some people say that rate payers of GPU should help to pay for the costs of the clean-up of the damaged plant. Others say that these rate payers shouldn't have to pay even if it means that the plant won't get cleaned up. Which of these statements is closer to your own view?
- As you know the cost of cleaning up the accident is extremely high, perhaps as much as 1 billion dollars.

Some people say that in order to avoid bankruptcy GPU stockholders, rate payers and the government should all pay for the clean-up. Others say that the company should just go bankrupt if it can't pay for the costs of the clean-up itself. Which of these statements is closer to your own view?

52. Some people say that the government should not let GPU go bankrupt and should pay for a substantial part of the clean-up costs. Others say that the company should just go bankrupt if it can't pay for the costs of the clean-up itself. Which of these statements is closer to your own view?

YES 1 DON'T KNOW. . . . 8 54-APPROVE 1 DISAPPROVE. 2 DON'T KNOW. . . . 8 55-MORE INCLINED . . . 1 NO DIFFERENCE . . . 2 LESS INCLINED . . . 3 NO OPINION. . . . 8

53-

JUST TRYING TO BLAME GOVERNMENT. . . 1 GOVERNMENT SHOULD BEAR ITS FAIR SHARE. . . . 2 NO OPINION. 8

FORM A

53. I am going to read you two statements and I would like you to tell me whether you agree or disagree. (READ FIRST STATEMENT) "Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly? (READ NEXT STATEMENT)

.

		AGREE. STRONGLY	ACT SE	DISAGREE SOMEWHAT	DISAGREE STRONGLY	DON'T KNOW
а.	If GPU were to go bankrupt it would be the best thing for everybody concerned	1	2	1	4	6 2- 8
ь.	If GPU were to go bankrupt it would mean that the Federal government wou take over the responsibility of cleaning-up the plant and that all taxpayers would then have to pay for the clean-up costs.		2	3	4	8 63-
						(NP Shir LA 45)

54. As you know, various people and groups have spoken up about the issues we have been discussing here. I'm going to name some of these people and groups and I would like you to tell me how believable you think each one would be as a source of information. As I name each one please tell me whether you think they would be very believable, somewhat believable or not too believable as a source of information. Here is the first one: (START WITH ITEM MARKED WITH "X")(CONTINUE UNTIL ALL ITEMS ARE READ.)

				ER		EVA	BL		~		WH/					TO		LE		IO PI	INI	ON
ø	à.	Susquehannah Valley Alliance	,	÷	÷	1	*		÷		2.,	×	÷	+	÷	3			ł.		8	w6 -
a	b.	Friends and family of TMI	×		A.	1	į,		*		2.			÷	2	3	į,	i.	į,	÷.	8	67 -
0	с.,	Union of Concerned Scientists																				•1
a	d.	A Pennsylvania State legislator from your area	÷	*	×	1	*	×	i M	,	2.		*	, *		3			1	,	8	69-
0	æ.,	Staff members of commissions that investigated the TMI accident	,	×	×	1	*	,	×		2.		*.		*	3		×	×.	i X	8	70 -
a	ť.	Nuclear scientists from Europe and Japa who have visited the TMI plant		,		1	,		+	X	2.		i A	,	,	3		×	*	×	8	11 -
0	g.	Officers of the Utility Company that owns the TMI plans	*		,	1	á.				2,	×	×.	÷	×	3	*	×			8	12
7	/h.	Anti-nuclear groups	×	÷		1					2.	÷,	+			3		*		A	8	73
a	j.	Local government officials		×	×	1	*			к.	2.	,	ź	ų		3	ł		×		8	7+ -
0	k.	The chief nuclear engineer for GPU	ж,	×	ł	1	×.		*	×	2.			*	×	3	×	i.			8	75 -
																			(e.	.1	(603)
																((*				P ((* *

FORM B

53. I am going to read you two statements and I would like you to tell me whether you agree or disagree. (READ FIRST STATEMENT) "Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly? (READ NEXT STATEMENT)

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					(KP SAIP TOLES)	
		AGREE STRONGLY	AGREE SOMEWHAT	DISAGREE SOMEWHAT	DISAGREE STRONGLY	DON'T KNOW	
ċ.	If GPU were to go bankrupt it would ultimately cost consumers more money to clean-up the plant	1	2	3	4	6 4 - 8	
d.	If GPU were to go bankrupt it would only create delays and worsen the clean-up problems						
						(and CD 3)	

54. As you know, various people and groups have spoken up about the issues we have been discussing here. I'm going to name some of these people and groups and I would like you to tell me how believable you think each one would be as a source of information. As I name each one please tell me whether you think they would be very believable, somewhat believable or not too believable as a source of information. Here is the first one: (START WITH ITEM MARKED WITH "X")(CONTINUE UNTIL ALL ITEMS ARE READ.)

			VERY BELI	EVA	BL		SO				LE	NO				E	NO		(co 1)	
	1.	A county commissioner from the TMI area		1			j.		2				3	1			÷	8	12-	
	m .	A doctor who is a pediatrician																	13 -	
		Pennsylvania State government officials																	14 -	
0	٥.	A dector who is a radiologist		. 1	*	×	Ļ		2		*	*	3		1	÷		8	15-	
0	p.	An environmental protection organization	on.	. 1	*		÷		2	÷		•	. 3	5	•		Ż	8	16-	
	q.	Scientists from the nuclear power indu	stry	. 1	*	×	×		2	۰.	×		. 3	3			1	8	17-	
0	r.	Scientists from universities and independent laboratories		. 1				,	2		,	÷		3	. ,			8	18 -	
0	s.	The Federal Nuclear Regulatory Commiss	ion	. 1				×	2	*	,		• 1	3				8	19 -	
a	t.	An organization of residents who live near the TMI plant		. 1			.,		2		,		. 1	3	×		ķ	8	20-	
•	×.	An organization called Critical Mass.																	#1-	

Now, just so we can be sure we're getting a good cross-section. I'd like to ask you a few background questions --

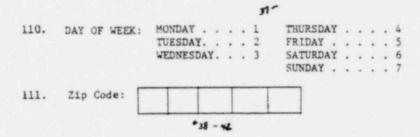
102. What is the occupation of the head of the household? What does that person do?

٠

												23-
	(occupation)					-			(industry	()	
										24		
103.	What is your approximate age?	18 -										
		21 -	24	$\star \times$	*	+ 3		*	÷	. 2		
		25 -										
		30 -										
	16 C	35 - 40 -										
		50 -										
		60 -	69							. 8		
		70 A										
		REFU	SED	× .•	*		*	*		. Y		
104	Including yourself, how many peopl	e in t	119	hou	set	olo						
104.	are adults over 18?											25
ь.	How many are teenagers between 13	and 18	? .			κ. 1	í.	*				26
с.	How many are children between 6 ar	nd 12?		. ,					÷ la	· · ·		21
d.	How many are children under 6?				÷,			į.	÷ 4	1.1		~**
	Let's see, that totals	livin	0 (r	th	14					11.17		
					IN	TE	TVE	FWF	R :		NUMBER I	N EACH
				- 1	1.000						IN HOUSEH	and the second se
105.	Now, we don't care to know your e and tell me the letter into whic of all people who live in this ho	h your	tot	al	inc	ome	e É	a11	s?	Include		d
									30 -			
	A. UNDER	\$10,000	ο.					1				
	B. \$10,00	0 - \$14	4.99	9 .				2				
	C. \$15,00	0 - \$19	9,99	9.				3				
	D. \$20,00 E. \$25.00	0 - \$24	, 99	9.	*		С×.	4				
	REFU	O OR MC	AL.	• •		•••	ŝ	8				
106	In politics do you consider yourse	lf more	e					STR	ONG	-	RVATIVE.	
	a conservative or more as a libera VATIVE OR LIBERAL, ASK:) Are you s (conservative)(liberal) or moderat (liberal)?	1? (I trongl	F CO y	NSE		e)		MOD NEI MOD STR	ERA THE ERA ONG	TELY CON R, MIDDI TELY LIE LY LIBER	ISERVATIV LE-OF-THE BERAL	E -ROAD.

31-

107.	Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?	REPUBLICAN 1 DEMOCRAT 2 INDEPENDENT
108.	Sex of Respondent: MALE 1 FEMALE 2	
109a	. Is there a telephone in this residence? YES NO.	37-
	TH WHO LOV.	
	IF YES, ASK: 109b. Is you telephone number listed in the current directory?	YES
	109b. Is you telephone number listed in the	YES



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112. In order to be sure we have a representative sample of adults, I'd like to ask you one more question. First, thinking about all the things people do around this time of day ... that is, between (10 a.m.-12) (12-2 p.m.) (2 p.m-4 p.m.) (4 p.m.-6 p.m.) (6 p.m.-8 p.m.) like going shopping, visiting friends, or going out to do something.

How often would I be likely to find you here at home on a (DAY OF WEEK) like today at this time. Would you estimate that you personally are at home almost always, more than half the time, about half the time, less than half the time, or hardly ever?

ALMOST A	LWAY	S			*				×			÷.		1
MORE THA	N HA	LF	1	THE	1	IM	E	×	ж.	×	*	*	\mathbf{x}	2
ABOUT HA	LF 1	THE		TIM	E	*	*		*		×	×	*	3
LESS THA														
HARDLY E														
REFL	ISED				*				*		×		\mathbf{x}	8

13-

That's all the questions I have. Thank you very much for your cooperation. So that my supervisor can verify this interview, may I please have your name and address? (IF NECESSARY, SAY): This information will be removed from the questionnaire and discarded after the interviews have been validated. This insures that my work was done honestly and accurately.

RESPONDENT NAME:	
ADDRESS:	
TOWN OR CITY:	
TELEPHONE NO.:	
INTERVIEWER NAME:	
DATE:	TIME ENDED:
LENGTH OF INTERVIEW:	
CLUSTER NUMBER:	

Thank you very much for your cooperation.

46-48

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VERIFICATION -- For Office Use Only

NUMBER OF LISTINGS PER CLUSTER	
	49/50
Verified by:	
Date:	
Remarks:	

DANGERS OF OVER-DEPENDENCE ON FOREIGN OIL

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- A. IT INCREASES THE COST OF ELECTRICITY HERE IN PENNSYLVANIA
- B. IT ENDANGERS OUR NATIONAL SECURITY
- C. IT DAMAGES OUR ENTIRE NATIONAL ECONOMY
- D. IT IS CREATING A WORLDWIDE SCRAMBLE FOR OIL AND A NEW COLD WAR BETWEEN RUSSIA AND THE U.S.
- E. IT WILL CREATE CRIPPLING SHORTAGES OF ENERGY IN THE FUTURE

CARD B

NUCLEAR ENERGY PLANTS THAT ARE ALREADY BUILT

· ·

STRONGLY	FAVOR	CONTINUED	OPER	ATIONS -	\rightarrow	1	
						2	
						3	
						4	
						5	
						6	
STRONGLY	FAVOR	SHUTTING	DOWN	PLANTS-	 \rightarrow	7	

CARD C

ASSUMING THIS STAT ONT WERE TRUE, HOW WOULD THIS INFLUENCE YOUR OPICION AS TO THE RE-STARTING OF THE UNDAMAGED THI PLANT

IT WOULD MAKE ME A LOT MORE INCLINED _____ 1

SOMEWHAT MORE INCLINED TO SUPPORT IT _____ 2

IT WOULD MAKE NO DIFFERENCE TO ME _____ 4

A LITTLE LESS INCLINED TO SUPPORT IT _____ 5

A LOT LESS INCLINED TO SUPPORT IT _____ 7

CARD D

SOURCES OF RADIATION

• • • •

A. A CROSS COUNTRY FLIGHT IN A JET AIRPLANE

- B. LIVING IN THE STATE OF COLORADO FOR A YEAR
- C. LIVING NEXT DOOR TO AN OPERATING NUCLEAR ENERGY PLANT FOR A YEAR
- D. MEDICAL AND DENTAL EXAMINATIONS OF A TYPICAL PERSON DURING A YEAR
- E. LIVING IN A BRICK BUILDING FOR A YEAR

CARD E

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ANNUAL HOUSEHOLD INCOME

- A. UNDER \$10,000
- B. \$10,000 \$14,999
- C. \$15,000 \$19,999
- D. \$20,000 \$24,999
- E. \$25,000 or more