## Contents

Chap	ter	Page
1.	Executive Summary	1
	Panel Findings	2
	Supply Impacts	3
	Demand Impacts	4
	Societal Impacts	5
II.	Overview and Perspective—Policy Panel	9
	Policy Panel Overview	9
	Policy Panel Perspectives	12
III.	Cross-index To Issues Raised by Major Energy Proposals	21
	1. Coal Utilization	21
	2. Domestic Crude Oil Tax and Regulations	22
	3. Natural Gas Pricing and Regulation	22
	4. Nuclear Development	23
	5. Oil and Gas Consumption Taxes	23
	6. Utility Regulation	24
	7. Buildings Conservation	24
	8. Transportation	25
Iv.	Supply Impacts	29
	Supply Overview and Findings	29
	Oil and Gas Introduction.	33
	Issue 1: Oil and Gas Production	35
	Issue 2: Oil and Gas Pricing	39
	Issue 3: Liquefied Natural Gas	42
	Issue 4: Synthetic Natural Gas	44
	Coal Introduction	45
	Issue 5: Coal Production and Demand	46 48
	Issue 6: Accelerated Eastern Coal Production	48 49
	Issue 7: Coal Mining Research and Development	49 50
	Issue 8: Accelerated Production of Synthetic Gas From Coal	50 51
	Nuclear Introduction	51 53
	Issue 9: Licensing Reactors	53 57
	Issue 10: Public Acceptance of Nuclear Expansion	57 59
	Nonconventional Sources Introduction	59 64
	Issue 12: Nonconventional Energy Goals	66
	Issue 13: Solar Incentives	69
	Issue 14: Long-Term Planning	72

## Contents

Cha	Demand Overview and Findings.  Issue 1: Expected Energy Use to 1985 Issue 2: Replacement Cost Pricing Issue 3: The Automobile Excise and Standby Gasoline Taxes Issue 4: The Impact of Truck Fuel Consumption on Meeting the Gasoline Consumption Goal Issue 5: State, County, and Local Government Transportation Fuel Conservation. Issue 6: The Role of Mass Transit in Transportation Energy Conservation Issue 7: Transportation Regulation and Energy Conservation Issue 8: Scope of Buildings Conservation Programs, Issue 9: Materials Availability for Building Conservation, Issue 10: Tax Credits for Energy Conservation in Buildings Issue 11: Mandatory Standards for Major Appliances	
<i>V</i> .	Demand Impacts	77
		77
		81
	Issue 2: Replacement Cost Pricing	84
		88
	Issue 4: The Impact of Truck Fuel Consumption on Meeting the Gasoline	92
	Issue 5: State, County, and Local Government Transportation Fuel Conser-	
		94
		95
		99
		<b>100</b> 103
		103
		105
	Issue 12: Communication of Conservation Information	108
	Issue 13: Crude Oil Equalization Tax and Heating Use	109
	Issue 14: The Role of Financial Institutions	111
	Issue 15: Conversion of Electric Utilities From Natural Gas	113
	Issue 16: Electric and Natural Gas Utility Rate Reform	115
	Issue 17: The Impact of the Plan's Tax Proposals on Electric Utilities	119
	Issue 18: Impacts of the Plan on the Gas Utility Industry .,,	121
	Issue 19: Electric and Natural Gas Utility Conservation Programs	123
	Issue 20: The Research and Development Role of the Electric Utilities	126
	Issue 21: Cogeneration by Industry	127
	Issue 22: Industrial Conversion From Oil and Gas	131
	Issue 23: The Industrial Conservation Investment Tax Credit	134
	Issue 24: Oil and Natural Gas Price and User Tax Provisions	136
	Issue 25: The Effect of the Oil and Gas Use Tax on Petrochemical Feedstocks	
	Issue 26: Federal Leadership in Industrial Energy Conservation	140 142

Cha	VI. Societal Impacts Societal Impacts Overview and Findings Issue 1: Macroeconomic Impacts Issue 2: Distributional Impacts Issue 3: Air Quality Impacts of Increased Combustion of Coal Issue 4: Other Environmental Impacts of Coal Utilization Issue 5: Health Impacts Issue 6: Impacts of Nuclear Power. Issue 7: Alternative Technology—Solar Issue 8: Indoor Environments Issue 9: Health Effects of Diesel-Powered Automobiles. Issue 10: The Role of State and Local Governments Issue 11: The Impact of Utility Rate Reform on Federal-State Relations Issue 13: Public Participation in Energy Decisionmaking. Issue 14: Regional Impacts	
VI.	Societal Impacts	147
		147
		150
		153
		157
	· ·	160
	·	163
		165
		168
		171
		172
	Issue 10: The Role of State and Local Governments	174
	Issue 11: The Impact of Utility Rate Reform on Federal-State Relations	177
	Issue 12: Information Systems	179
	Issue 13: Public Participation in Energy Decisionmaking	180
	Issue 14: Regional Impacts	182
	Issue 15: Energy Resource Development on Federal Lands	185
	Issue 16: Coordination of Energy-Related Programs	188
	Issue 17: Adequacy of the Plan's Oil Import Goals	190
	Issue 18: The Question of Growth	192
	Issue 19: The Population Factor and Energy Planning	194
	Issue 20: Impact of a Petroleum-Scarce Future on the Automobile Industry	196
	Issue 21: Land-Use Patterns	197
	Issue 22: In Defense of Amenities	201
App	endix I-OTA Background Perspective of Energy Forecasts	204
aggA	endix n-The Presidential Energy Initiatives: Some Policy Considerations	216