

**Synapse**  
Energy Economics, Inc.

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**Fewer Jobs for Illinois:  
Employment and Other Impacts of Commonwealth  
Edison's Proposed Electricity Rate Increase**

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# Executive Summary

In October, 2003, Commonwealth Edison (ComEd) announced that it would seek to acquire Illinois Power, a subsidiary of Dynegy. ComEd also proposed that legislation be adopted enabling ComEd to request Illinois Commerce Commission approval of a four-year rate plan for the merged utilities. That plan (the ComEd Plan) has been described as increasing rates for the both Companies by 6% in 2007 and 2008, compared to 2006, and by another 3% for 2009-2010. This report presents the results of an economic impact study of the ComEd Plan compared to several alternative rate paths, including ones indicative of the retail rates that would likely prevail under a return to traditional ratemaking in 2007.

The study shows that the ComEd Plan would inflict significant harm on the Illinois economy. For example, compared to a 10% decrease in rates, the ComEd Plan would cost the state's economy an average of almost 9000 jobs in 2007 and even more during the remaining three years of the plan. The Gross State Product for Illinois, a broad measure of economic activity in the state, would fall by about \$2.9 billion over the four year projection, as well.

## 1. Introduction

In October, 2003, Commonwealth Edison (ComEd or the Company) proposed special legislation aimed at changing the process for approving the utility's merger with Illinois Power (IP) and, importantly, the regulatory process for setting rates for the merged companies.

Under the terms of the Electric Service Customer Choice and Rate Relief Law of 1997, retail electricity rates in Illinois are frozen through 2006. If ComEd were to acquire IP, that acquisition would require approval from the Illinois Commerce Commission (Commission). Should ComEd seek approval to acquire IP, the proposed legislation would allow the Company to seek, at the same time, Commission approval of a four-year rate plan that would set rates for both the combined companies. That rate plan would be effective for four years following the end of the existing mandatory transition period, specifically for 2007 through 2010.

ComEd has stated that if it acquires IP it intends to seek a rate plan under the proposed legislation, and that the plan would seek to increase rates for the combined Company by 6% in 2007 and 2008, compared to 2006, and by another 3% for the 2009-2010 period. (Daniels 2003)

Synapse Energy Economics has prepared a projection of the proposed rate plan's impacts on the Illinois economy. This report summarizes the methodology used for that projection and reports the results, comparing the ComEd Plan to three more reasonable alternatives. These projections show that the proposed ComEd rate plan would reduce economic growth substantially compared to any of those alternative rate paths. For example, compared to the 10% rate cut, the ComEd Plan would eliminate nearly 9000 jobs from

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the Illinois economy in 2007 and 2008, another 2400 jobs in 2009 and 2010, while impairing consumers' ability to pay their energy bills.

This report begins by reviewing the four projected rate paths under study. Section 2 explains how those scenarios are specified, describes the economic model used to project the impacts of the rate scenarios on the Illinois economy, and tells how the scenarios are represented in the model. Section 3 presents the results of the projections, contrasting the projected state of the Illinois economy in the years 2007 through 2010 under the ComEd Plan with the alternative scenarios. Section 4 briefly summarizes the conclusions of the study.

This study is not intended as a full analysis of the likely retail price tracks for the state. Rather, it is a global assessment of the overall impacts on the Illinois economy of two very different policy directions.

## **2. Methodology and Assumptions**

### **2.1 Scenarios**

In this study, four electric rate scenarios are considered. All four scenarios begin with a period of frozen rates for all Illinois electric utilities from the beginning of 2000 to the end of 2006. Table 2.1 provides a summary of the rate changes in these scenarios.

In the first scenario, called the "ComEd Plan," rates were increased 6% at the beginning of 2007, then held constant in 2008, increased by another 3% in 2009, and, finally, held constant in 2010, but these changes were applied only to the residential and commercial customers of ComEd and IP.

In the second scenario, called "Frozen Rates," electric rates for all Illinois electric utilities were again frozen during 2000 to 2006. In 2007, however, instead of applying an increase, ComEd rates were kept at 2006 levels all the way through 2010.

In the third scenario, called "ComEd's Reduction Estimate," electric rates for all Illinois electric utilities were likewise frozen during 2000 to 2006, but in 2007, instead of applying an increase, rates were assumed to decrease by 17%, for all residential and commercial bundled service customers of ComEd. (Rowe 2003). Rates were held at that reduced level through 2010 for this scenario.

In the final scenario, called "Traditional Ratemaking," electric rates were once more frozen for all Illinois electric utilities during 2000 to 2006. In 2007, rates were assumed to decrease by 10%, for all residential and commercial bundled service customers of ComEd, and to remain at that level through 2010, values that are reasonable given available information on the cost factors expected to apply in Illinois power markets.

In each scenario, rates for other customer classes and other utilities were assumed to return to a level equal to the 2000 price, plus inflation, in the years 2007 through 2010.

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**Table 2.1 Scenario Descriptions: Percent Change from 2006 Rates**

<b>Calendar Year</b>	<b>Affected Customers</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
ComEd Plan	ComEd & IP, bundled residential & commercial	0.0	6.0	6.0	9.0	9.0
Frozen Rates	ComEd, all residential & commercial	0.0	0.0	0.0	0.0	0.0
ComEd Reduction Estimate	ComEd, all residential & commercial	0.0	-17.0	-17.0	-17.0	-17.0
Traditional Ratemaking	ComEd, all residential & commercial	0.0	-10.0	-10.0	-10.0	-10.0

## **2.2 The REMI Model**

The analysis for this project used the Regional Economic Models Inc. (REMI) economic simulation model. REMI is widely used and respected as a tool for regional economic simulation. (Treyz and Petraglia 1997; Treyz 1995; Weisbrod and Friedman 1996)

The REMI forecasting and policy analysis system includes key econometric estimates and integrates inter-industry transactions, long run equilibrium features, and economic geography. The model is calibrated to historical Illinois economic and demographic data at the county level up through the year 2000. It includes methods for tracking substitution among factors of production (such as shifting outlays from energy to capital and labor) in response to changes in relative factor costs; migration responses to changes in expected income; labor participation rate responses to changes in real wage and employment conditions; wage rate responses to labor market changes; consumer consumption responses to changes in real disposable income and commodity prices; and local and regional competitiveness via market share responses to changes in regional production costs and agglomeration economics. (REMI 2003; Treyz 1993)

By taking into account the impacts of higher electric prices on the cost of doing business for commercial customers, the effects of those price increases on competitiveness, employment, wages and consumer spending can be estimated. Similarly, higher electric rates reduce household disposable income and affect the demand for consumer goods and services of all types. These consumption changes also feed into further impacts on commercial activity, which are also accounted for in the model. (Treyz , Rickman and Shao 1992) Thus, the REMI model is well suited to estimate the impact of the rate increases on the Illinois economy.

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## 2.3 Representation of the Scenarios in the Model

For this analysis, the REMI model was first adjusted to maintain constant nominal dollar electric prices during the transition period price freeze from 2000 through 2006. From 2007 through 2010, REMI was used to model the ComEd Plan (a 6% increase in nominal price in 2007 versus 2006 with a further 3% increase in 2009) and each of the alternative rate scenarios.

The effects of these electric price changes are seen in variables such as production costs, consumer prices, household expenses, wage rates, and employment opportunities. Effects are felt throughout the model in variables such as exports, consumption, population growth (with economic migrants moving in or out of the state due to changes in employment opportunities), and changes in the market shares achieved by Illinois companies (due to changes in their cost of doing business).

For the years 2007–2010 of the ComEd Plan scenario, the effect of an increase in the retail price of residential and commercial service for customers of Commonwealth Edison and Illinois Power, both bundled and unbundled was reflected. Since the REMI model used for this study is a model of the entire state, not just the service territories of these two utilities, the price changes were diluted to reflect their application to only a portion of the residential and commercial ratepayers in the state. For commercial customers, the model provides an adjustment for electric prices directly, so rates were changed by applying the appropriately diluted percent change to REMI's commercial electric cost.<sup>1</sup> For the residential sector, the model supports adjustments to total housing cost, but not directly to electric costs. Therefore, in that sector, the increase was further diluted by the ratio of electricity costs to all housing expenses.

For the years 2007–2010 of the ComEd Reduction Estimate and the Traditional Ratemaking scenarios, the effect of a decrease in the retail price was applied to the rates of residential and commercial service for customers of Commonwealth Edison only and only to bundled service. Again, the price changes were diluted to reflect its application to only a portion of the state. The separate adjustments for commercial and residential customers was made in the same manner as for the ComEd Plan scenario.<sup>2</sup>

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<sup>1</sup> The REMI model classifies economic consumption into a residential sector, a commercial sector, and various industrial sectors. The ComEd proposal for a "rate plan" *may* be read to affect only bundled customers, and *possibly* only those bundled customers with loads less than 1 MW. Since many industrial customers may be expected to purchase power from competitive sources, it was assumed that the ComEd Plan does not affect the industrial sector. For purposes of this analysis, all residential and commercial customers were assumed to be covered by the rate plan. While some commercial loads are larger than 1 MW or may choose to shop, some industrial loads are smaller than 1 MW or might purchase bundled service, suggesting that the simplifying assumptions are reasonable.

<sup>2</sup> Additional revenues to ComEd in the ComEd Plan scenario would be expected to flow through to stockholders of Exelon, ComEd's parent company, in the form of dividends, raising their personal income, or to the economy as a whole in the form of expenditures or investments by Exelon. To the extent those proceeds might be distributed to shareholders of Exelon, only a portion would be received in Illinois and, of that amount, only a portion would reenter the local economy as consumption. This relatively diluted effect is not reflected in this analysis, nor are any unusual investments by Exelon in Illinois. This study also assumes that no cost cutting changes in operations will be made at the utility in

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## 3. Results

A comparison of the model results for the ComEd Plan versus the alternative scenarios is shown in following tables and figures. Clearly, the results indicate that the ComEd Plan would inflict significant harm on the Illinois economy.

### 3.1 ComEd Plan versus Frozen Rates

In this first economic impact comparison, the rates that would result from a 6% increase to the combined Companies in 2007, with an additional 3% increase in 2009, are matched against a scenario where ComEd rates are held steady for four years at the same level as in 2006.

During the first two years of the projection, the state is seen to lose over 2000 jobs and over 4000 jobs in the last two years of the projection, for average loss of over 3200 jobs in each of those four years. (See Table 3.1. and Figure 3.1.) Gross state product, the broadest measure of economic activity in the state, declines by over \$170 million dollars in the first year and a cumulative total of nearly a billion dollars over the four year projection. In connection with this hit to the economy, net out-migration among workers 65 years old or younger is almost 1000 workers in 2007 with varying additional losses over the remaining years of the study period.

The study projects that Personal Income of Illinois residents would decline by \$106 million in 2007 and over \$640 million during the study period. The drop in Real Disposable Personal Income is over \$200 million per year (1996 dollars) for 2007 and 2008, and nearly \$400 million per year in the remaining years of the study period for a total during the study period of over \$1.2 billion.

Certain key sectors of the state's economy were examined separately. These results are also shown in Table 3.1. The total value of construction declines by \$35 million dollars in the first year of the study and a total of \$169 million dollars over four years. Employment in the services sector (not including finance, insurance and real estate) drops by over 785 jobs in 2007 and over 4000 job-years during the study period. Finally, retail trade employment is almost as hard hit as the service industry, losing about 636 jobs in 2007 and over 3400 job-years during the study period. Employment in the Finance, Insurance and Real Estate sector and the construction sector are also seriously affected.

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the Traditional Ratemaking scenario, because if there were any such cuts, rates in that scenario (being cost based) would be further reduced, increasing the benefits shown in this report. Neither does the study account for potential cost savings from a merger which could occur in either scenario.

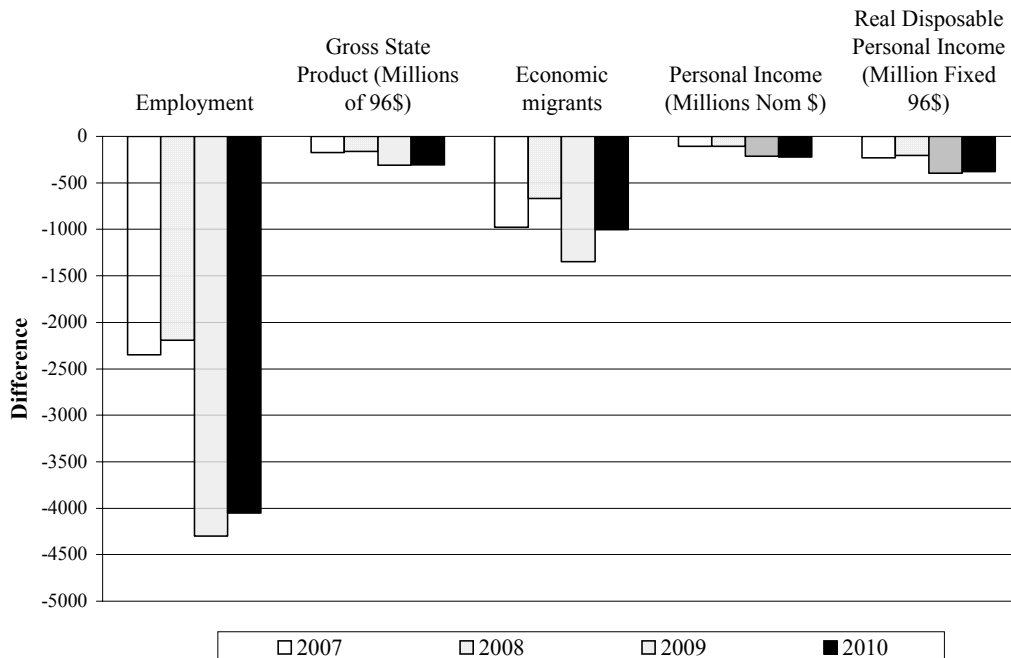
**Table 3.1 Scenario Results: ComEd Plan versus Frozen Rates Scenario**

Calendar Year	2007	2008	2009	2010	Cumulative**
Employment (Jobs)	-2348	-2194	-4299	-4052	-13,028
Gross State Product (Millions 96\$)	-174	-160	-312	-304	-950
Net economic out migration (Persons)	-977	-669	-1,347	-1,001	-3,994
Personal Income (Millions of Nominal \$)	-106	-106	-211	-220	-643
Real Disposable Personal Income (Millions of 96\$)	-228	-205	-397	-380	-1,210
Manufacturing Output (Million 96\$)	-57	-50	-103	-97	-307
Construction Output (Million 96\$)	-35	-29	-56	-49	-169
Manufacturing Employment	-164	-138	-274	-248	-824
Non-manufacturing Employment	-2,262	-1,959	-3,848	-3,563	-11,632
Services Employment (excl. FIRE*)	-785	-669	-1,356	-1,242	-4,052
Retail Trade Employment	-636	-571	-1,123	-1,073	-3,402
FIRE Employment*	-312	-280	-518	-490	-1,601
Construction Employment	-328	-263	-507	-437	-1,534

\* Finance, insurance and real estate

\*\* Cumulative results for employment variables are job-years.

**Fig. 3.1. ComEd Plan versus Frozen Rates Scenario**





### 3.2 ComEd Plan versus ComEd Reduction Estimate

In this second comparison, the rates that would result from a 6% increase to the combined Companies in 2007 with an additional 3% increase in 2009 are matched against a decrease of 17% in 2007 (for ComEd only) that is held steady for four years. The impacts on the Illinois economy are considerable more severe than in the previous comparison.

During the first two years of the projection, the state is seen to loose over 13,000 jobs and over 16,000 jobs in the last two years of the projection, for a four year average job loss of over 15,000 jobs. (See Table 3.2 and Figure 3.2.) Gross state product declines by nearly a billion dollars in the first year and a cumulative total of about \$4.3 billion during the four year projection. The resulting net out-migration among workers 65 years old or younger is over 5000 workers in 2007, declining somewhat over the remaining years of the study period.

Personal Income of Illinois residents is projected to drop by some \$578 million in 2007 and over \$3 billion during the study period. The drop in Real Disposable Personal Income is about \$1.2 billion per year (1996 dollars) for 2007 and 2008, and over \$1.4 billion per year in the remaining years of the study period for a total during the study period of over \$5.3 billion.

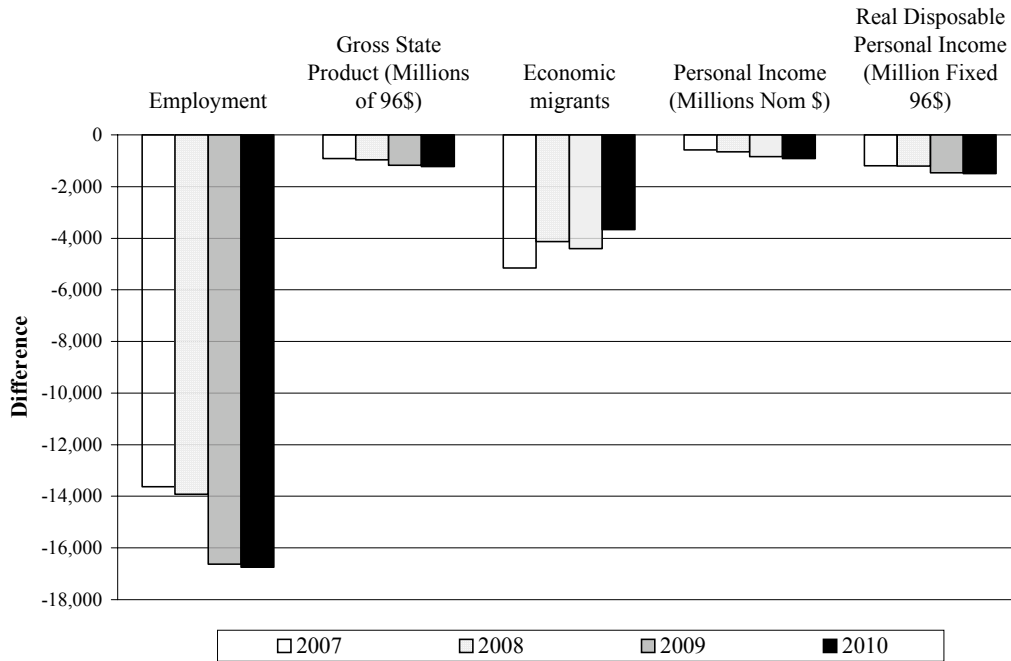
**Table 3.2 Scenario Results: ComEd Plan versus ComEd Rate Reduction**

<b>Calendar Year</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Cumulative**</b>
Employment (Jobs)	-13,620	-13,910	-16,620	-16,740	-60,890
Gross State Product (Millions 96\$)	-923	-969	-1,185	-1,227	-4,304
Net economic out migration (Persons)	-5,148	-4,125	-4,407	-3,673	-17,353
Personal Income (Millions of Nominal \$)	-578	-664	-849	-922	-3,013
Real Disposable Personal Income (Millions of 96\$)	-1,195	-1,212	-1,463	-1,493	-5,363
Manufacturing Output (Million 96\$)	-318	-327	-396	-400	-1,441
Construction Output (Million 96\$)	-573	-553	-648	-621	-2,396
Manufacturing Employment	-913	-900	-1,050	-1,025	-3,888
Non-manufacturing Employment	-12,410	-12,460	-14,760	-14,660	-54,290
Services Employment (excl. FIRE*)	-4,404	-4,410	-5,242	-5,193	-19,249
Retail Trade Employment	-3,565	-3,723	-4,478	-4,554	-16,320
FIRE Employment*	-1,594	-1,607	-1,895	-1,898	-6,994
Construction Employment	-1,738	-1,600	-1,812	-1,693	-6,843

\* Finance, insurance and real estate

\*\* Cumulative results for employment variables are job-years.

**Fig. 3.2. ComEd Plan versus ComEd Reduction Estimate**



The total value of construction in the state declines by over half a million dollars in the first year of the study and a total of almost \$2.4 billion dollars over four years. Service sector employment (excluding finance, insurance and real estate) drops by over 4000 jobs in 2007 and almost 20,000 job-years during the study period. Retail trade employment is almost as hard hit as the service industry, losing over 3500 jobs in 2007 and over 16,000 job-years during the study period. As in the first scenario, employment in the Finance, Insurance and Real Estate sector and the construction sector are also seriously affected, but on a much larger scale in this case, with each sector losing about 6900 job-years during the projection period.

### 3.3 ComEd Plan versus Traditional Ratemaking

In this comparison, the rates that would result from a 6% increase to the combined Companies in 2007 with an additional 3% increase in 2009 were matched with a decrease of 10% in 2007 (for ComEd only) that is held steady for four years. Not surprisingly, its results are intermediate between the first two scenario comparisons.

During the first two years of the projection, the state is seen to lose over 8900 jobs and over 11,000 jobs in the last two years of the projection, for a four year average loss of over 10,000 jobs. (See Table 3.3 and Figure 3.3.) Gross state product declines by over \$600 million dollars in the first year two years and a cumulative total of almost \$2.9 billion over the four year projection. Net out-migration among Illinois workers 65 years

old or younger is almost 3400 workers in 2007 with varying losses over the remaining years of the study period.

The study also projects that, under the ComEd Plan, Personal Income of Illinois residents would decline by \$378 million in 2007, compared to the Traditional Ratemaking scenario, and over \$2 billion over the study period. Real Disposable Personal Income of Illinois residents drops \$788 million (1996 dollars) for 2007 and 2008, and over \$1 billion in the remaining years of the study period for a total loss during the study period of over \$3.6 billion.

The total value of construction declines by nearly \$600 million dollars in the first year of the study and a total of almost \$2.6 billion dollars over four years. Service sector employment (not including finance, insurance and real estate) drops by over 2300 jobs in 2007 and nearly 13,000 job-years during the study period. The Finance, Insurance and Real Estate sector and the retail trade sector each lose about 1100 jobs in 2007 and over 4600 job-years during the study period, while the construction industry loses about 500 jobs in the first year and 2600 job-years during the projection period.

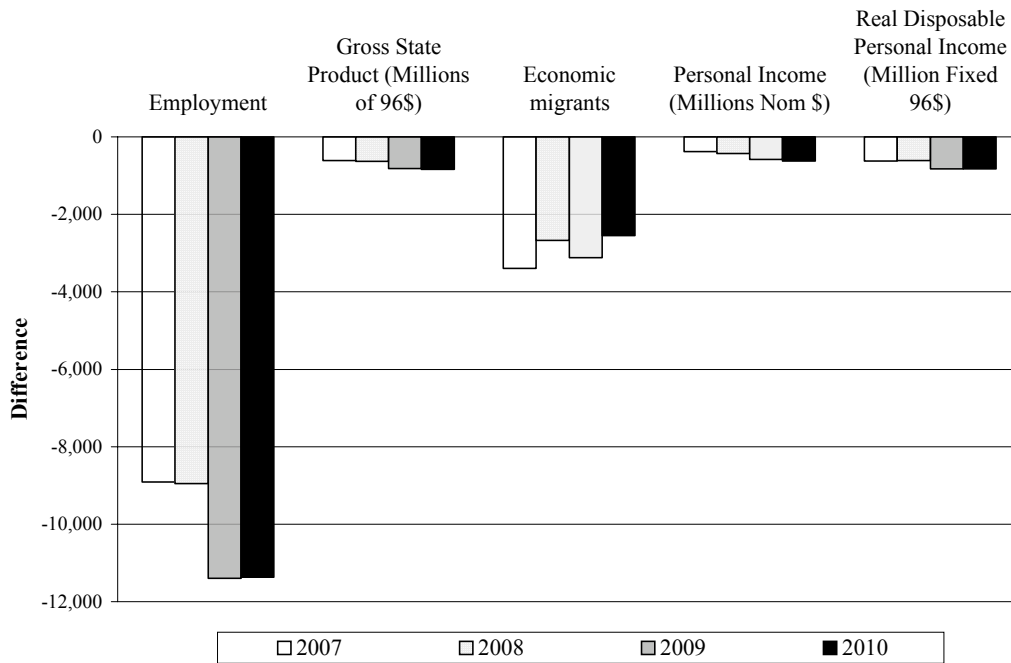
**Table 3.3 Scenario Results: ComEd Plan versus Traditional Ratemaking Scenario**

<b>Calendar Year</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Cumulative**</b>
Employment (Jobs)	-8,912	-8,951	-11,400	-11,370	-40,633
Gross State Product (Millions of 96\$)	-607	-628	-817	-837	-2,888
Net economic out migration (Persons)	-3,393	-2,669	-3,118	-2,547	-11,727
Personal Income (Millions of Nominal \$)	-378	-428	-579	-625	-2,010
Real Disposable Personal Income (Millions of Fixed 96\$)	-788	-788	-1,014	-1,024	-3614
Manufacturing Output (Million 96\$)	-122	-113	-140	-131	-505
Construction Output (Million 96\$)	-596	-577	-721	-695	-2,589
Manufacturing Employment	-8,120	-8,017	-10,140	-9,961	-36,238
Non-manufacturing Employment	-2,870	-2,823	-3,593	-3,516	-12,802
Services Employment (excl. FIRE*)	-2,324	-2,386	-3,054	-3,076	-10,840
Retail Trade Employment	-1,056	-1,049	-1,316	-1,306	-4,727
FIRE Employment*	-1,144	-1,036	-1,261	-1,163	-4,604
Construction Employment	-596	-577	-721	-695	-2,589

\* Finance, insurance and real estate

\*\* Cumulative results for employment variables are job-years.

**Fig. 3.3. ComEd Plan versus Traditional Ratemaking Scenario**



## 4. Conclusion

The proposed Commonwealth Edison "rate plan" is likely to inflict significant harm on the Illinois state economy compared to a policy of reverting to traditional cost-based ratemaking. This conclusion holds for a wide range of alternative rate scenarios. For example, when compared to the Traditional Ratemaking scenario, the ComEd Plan costs Illinois nearly 9000 jobs in the first year of the ComEd Plan, the overall state economy shrinks by nearly 2.9 billion dollars over four years, almost twelve thousand workers leave the state looking for jobs, and personal income for those who remain drops by over \$2 billion during the four year projection. Negative impacts on the economy continue for the duration of the proposed "rate plan." In addition, it is highly likely that there would be a negative impact on state and local tax revenues.

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