



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

July 24, 2000

### **S. 2071**

### **Electric Reliability 2000 Act**

*As passed by the Senate on June 30, 2000*

#### **SUMMARY**

S. 2071 would establish new standards and procedures for regulating the reliability of the nation's electricity transmission system. It would authorize the Federal Energy Regulatory Commission (FERC) to adopt and enforce reliability standards that would apply to all users of bulk power, including federal agencies. The bill also would establish the terms and conditions under which those regulatory functions could be delegated to a private electric reliability organization (ERO) and its regional affiliates. Rules adopted by the ERO regarding reliability, governance, and funding would be subject to FERC approval, and would be enforceable by both the ERO and FERC.

S. 2071 would require membership in the ERO and the appropriate regional affiliate for any company that operates any part of the bulk power system in the United States. Finally, costs incurred by the ERO and its regional affiliates would have to be recovered by assessments that CBO assumes would ultimately be paid by electricity consumers.

In CBO's view, the cash flows of the ERO and its regional affiliates should appear in the federal budget because their regulatory, enforcement, and assessment authorities would stem from the exercise of the sovereign power of the federal government. We expect that it would take about one year for those cash flows to begin. Under S. 2071, CBO estimates that over the 2002-2005 period, direct spending would total \$420 million and governmental receipts (revenues) would total \$309 million, net of income and payroll tax offsets. Because the bill would affect direct spending and receipts, pay-as-you-go procedures would apply.

In addition, we estimate that implementing this bill would cost \$2 million annually, starting in 2002, subject to the availability of appropriated funds. Those costs would be incurred by the governments' three power marketing administrations (PMAs) that are funded by annual appropriations.

S. 2071 contains three mandates that would affect both intergovernmental and private-sector entities and an additional intergovernmental mandate as defined in the Unfunded Mandates Reform Act (UMRA). While there is some uncertainty about how fees will be assessed, CBO estimates that the costs of those mandates would begin in 2002 but would not exceed the thresholds established in UMRA. (The thresholds are \$55 million for intergovernmental mandates and \$109 million for private-sector mandates in 2000, and are adjusted annually for inflation).

## ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of S. 2071 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

	By Fiscal Year, in Millions of Dollars					
	2000	2001	2002	2003	2004	2005
<b>CHANGES IN DIRECT SPENDING</b>						
Estimated Budget Authority	0	0	102	104	106	108
Estimated Outlays	0	0	102	104	106	108
<b>CHANGES IN REVENUES</b>						
Estimated Revenues	0	0	75	77	78	79
<b>SPENDING SUBJECT TO APPROPRIATION</b>						
PMA Spending Under Current Law						
Estimated Authorization Level <sup>a</sup>	187	193	198	204	209	213
Estimated Outlays	214	206	198	201	206	210
Proposed Changes <sup>b</sup>						
Estimated Authorization Level	0	0	2	2	2	2
Estimated Outlays	0	0	2	2	2	2
PMA Spending Under S. 2071						
Estimated Authorization Level	187	193	200	206	211	215
Estimated Outlays	214	206	200	203	208	212

a. The 2000 level is the amount appropriated for that year. The 2001-2005 levels reflect anticipated inflation.

b. The increase in PMA spending would be offset by increased collections, following PMA rate increases.

## **BASIS OF THE ESTIMATE**

For this estimate, CBO assumes that S. 2071 will be enacted by the beginning of fiscal year 2001 and that a private organization will be designated as the ERO by the beginning of fiscal year 2002. We also assume that the cash flows of the ERO and its regional affiliates would appear on the federal budget because of the governmental nature of its activities and the degree of governmental control over the ERO.

### **Direct Spending**

CBO estimates that implementing S. 2071 would result in new direct spending by the ERO and its affiliates, and also would affect the net outlays and receipts of the Tennessee Valley Authority (TVA) and the Bonneville Power Administration (BPA).

**Electric Reliability Organization.** S. 2071 would direct the ERO and its affiliates to levy assessments to cover the cost of their activities. Such assessments would be classified as revenues (as explained below). Funds collected through such assessments could be spent without further appropriation. Hence, such outlays would be classified as direct spending.

Based on information from the North American Electric Reliability Council (NERC), CBO estimates that the newly formed ERO and its regional affiliates would spend between \$75 million and \$150 million a year. For this estimate, CBO assumes that spending by the ERO and its regional affiliates would start at \$100 million a year and increase by the rate of anticipated inflation. NERC and its regional councils currently spend about \$45 million annually for voluntary measures related to reliability in the United States, all of which is covered by fees paid by most users of the bulk power system. According to NERC, spending by the new ERO and its affiliates would more than double because of the additional workload associated with implementing mandatory reliability standards, such as developing software, monitoring the transmission grid, auditing companies, and writing and enforcing standards. Costs also are expected to increase because of the additional building space needed to accommodate increases in staff.

Annual spending could exceed the \$100-million level assumed in this estimate, especially if the regional affiliates used assessments to facilitate investments in facilities needed to implement the reliability standards. For this estimate, however, CBO assumes that infrastructure investments would be made by the private sector without the involvement of the ERO or its affiliates.

**Federal Power Agencies.** CBO estimates that S. 2071 would increase direct spending by TVA and BPA by \$2 million a year over the 2002-2005 period, but would eventually result

in higher offsetting receipts once those federal agencies adjust their electricity prices to reflect any increase in fees charged by an ERO or its affiliates.

Requiring TVA and BPA to pay higher assessments should have no net effect on direct spending over time, but is likely to increase spending in the near term because of the timing of planned rate adjustments. Together, these two agencies currently pay a total of about \$1 million to NERC and its regional affiliates. CBO assumes that, under this bill, the agencies would pay fees to the ERO and its affiliates instead of NERC and that the net increase in assessments would be about \$2 million a year, starting in 2002. Based on the agencies' current plans, we expect that these added expenses would not be reflected in TVA's or BPA's electricity prices until the next cycle of rate adjustments, which are expected to occur after 2005.

Repayments of amounts appropriated for ERO fees paid by the Western, Southwestern, and Southeastern PMAs should increase offsetting receipts relative to current law, but those changes are not included in this estimate because they would be contingent upon an increase in discretionary spending.

## **Revenues**

The bill would affect revenues by authorizing the ERO to collect mandatory assessments from the electricity industry to pay for activities related to the bill and by authorizing the ERO and FERC to collect penalties for noncompliance with reliability standards.

**Mandatory Assessments.** S. 2071 would require the ERO and its regional affiliates to fund reasonable costs related to implementation or enforcement of reliability standards through assessments. CBO estimates that these organizations would collect about \$100 million in 2002, and similar inflation-adjusted amounts in subsequent years. FERC would be required to review the costs and allocation of such assessments.

The amount of the assessments, however, do not represent the total change to government receipts that would occur as a result of the legislation. The assessments add to the costs of the electricity industry, which is expected to pass them forward to consumers in prices. But as long as the nation's total output (gross domestic product, or GDP) remains at the levels assumed in the budget resolution, consumers would have to absorb the additional costs by spending less on other goods and services in the economy. As less is spent in other sectors of the economy, the overall effect would be a reduction in the level of profits and wages paid relative to total GDP. Corporate and individual income taxes and payroll taxes would shrink accordingly. CBO estimates that the decline in income and payroll tax receipts would equal 25 percent of the total amount of the ERO assessments. Hence, the net impact on receipts to the government from this change would only be 75 percent of the amount.

**Penalties.** The bill would allow both the electric reliability organization and FERC to charge civil penalties for noncompliance with the new reliability standards. CBO expects that the ERO and its regional affiliates would retain and spend any penalties it collects and that any amounts collected would be classified as governmental receipts. CBO estimates that any increase in revenues resulting from these civil penalties would not be significant.

### **Spending Subject to Appropriation**

The bill would impose new discretionary costs on FERC and three of the Department of Energy's power marketing administrations. The impact on FERC, however, would have no budgetary impact because it collects fees to offset its costs. CBO estimates that implementing S. 2071 would cost \$2 million a year, starting in 2002, for payments by the PMAs to the ERO.

**FERC.** CBO expects that S. 2071 would increase FERC's workload because of the additional regulatory and oversight activities required by the bill. We also expect that FERC would adopt and enforce interim reliability standards before the ERO is established. Once the ERO is established, FERC would have to review all proposed rules and changes to the entity's governance and budget, and help enforce its actions on users of the bulk power system. Based on information from FERC, CBO estimates these new responsibilities would cost about \$5 million per year. Because FERC recovers 100 percent of its costs through user fees, any change in its administrative costs would be offset by an equal change in the fees that the commission charges. Hence, we estimate that the provisions affecting FERC's workload would have no net budgetary impact. Because FERC's administrative costs are limited in annual appropriations, changes to FERC's budget under S. 2071 would not affect direct spending or receipts.

**Federal Power Marketing Administrations.** CBO expects that all of the federal power agencies would pay assessments levied by the ERO and its affiliates. For three of the PMAs—Western, Southwestern, and Southeastern—such payments would be funded by appropriations, but under current law those costs would have to be repaid by the PMAs' proceeds from the sale of electricity. Hence, such discretionary expenditures would be offset, over time, by an increase in offsetting receipts, which are classified as direct spending. Currently, the three PMAs are members of NERC, the industry organization that sets voluntary standards for reliability of the bulk power system, and its regional councils. Fees paid by the three PMAs to NERC and its regional councils currently total about \$1 million a year. CBO expects that, under this bill, the PMAs would no longer pay those fees to NERC, but instead would pay new higher fees to the ERO and its regional affiliates. CBO estimates that implementing S. 2071 would increase the net cost of those fees by about \$2 million a year, starting in 2002.

## PAY-AS-YOU-GO CONSIDERATIONS

The Balanced Budget and Emergency Deficit Control Act sets up pay-as-you-go procedures for legislation affecting direct spending or receipts. CBO estimates that S. 2071 would affect both direct spending and receipts; therefore, pay-as-you-go procedures would apply. The estimated changes in outlays and governmental receipts that are subject to pay-as-you-go procedures are shown in the following table. For the purposes of enforcing pay-as-you-go procedures, only the effects in the current year, the budget year, and the succeeding four years are counted.

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	By Fiscal Year, in Millions of Dollars										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Changes in outlays	0	0	102	104	106	108	110	110	114	116	118
Changes in receipts	0	0	75	77	78	79	81	82	84	85	87

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## INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

S. 2071 contains three mandates that affect both intergovernmental and private-sector entities and an additional intergovernmental mandate as defined in UMRA. CBO estimates that the costs of those mandates would be incurred beginning in 2002 but would not exceed the thresholds established in UMRA. (The thresholds are \$55 million for intergovernmental mandates and \$109 million for private-sector mandates in 2000, and are adjusted annually for inflation).

First, the bill would require all users of the bulk power system to abide by standards set by the ERO, or, until the ERO is designated, by standards approved by FERC. The bill defines ‘bulk power system user’ as an entity that sells, purchases, or transmits electric energy over the bulk power system (i.e., the electric transmission grid); that owns, operates, or maintains facilities or control systems within that bulk power system; or that is a system operator. Users of the bulk power system include intergovernmental entities such as municipally owned utilities as well as private-sector entities such as utilities, nonutility generators, and marketers. Users who violate ERO standards would be subject to financial penalties.

Currently, reliability is promoted through NERC, a voluntary organization. According to the American Public Power Association (APA), Edison Electric Institute, and the Electric Power Supply Association, virtually all state and local government entities and private-sector users of the bulk power system included under the bill’s definition of ‘bulk power system user’

voluntarily comply with NERC standards. For those entities, the mandate to comply with FERC or ERO standards would impose no significant additional costs in the short term relative to current practice because neither FERC nor the ERO is expected to significantly change current standards. In the future, market conditions may prompt the ERO to impose stricter standards to maintain reliability. In that case, costs for entities that could otherwise elect to disregard NERC standards could increase. CBO cannot predict how or when the ERO might change its standards.

Second, the bill would require each system operator (which NERC interprets to be a transmission owner or an independent controller of transmission) to become a member of the ERO and any regional affiliate to which the ERO delegates its authority. The mandate on the system operators to become a member of the ERO and its regional affiliate would impose no significant costs.

Third, the bill would direct the ERO and each regional affiliate to assess fees sufficient to cover the costs of implementing and enforcing ERO standards. Those fees would be considered a mandate under UMRA. According to NERC and the 10 current regional reliability councils, NERC and the regional councils collected approximately \$45 million in 2000 from U.S. entities for reliability. (Their current budget, including Canadian utilities, is \$48 million.) Based on information from NERC, CBO estimates that the newly formed ERO and its regional affiliates would spend anywhere from \$75 million to \$150 million a year. CBO estimates that the combined annual budget for the ERO and the new regional affiliates would be about \$100 million in 2002 (and would grow with inflation), to cover the additional responsibilities created by the bill for compliance, monitoring, and enforcement. However, the bill does not specify who would pay these fees, only that the fees should take into account the relationship of costs to each region and reflect an equitable sharing of those costs among all electric energy consumers.

While there is some uncertainty about how fees would be assessed, the most likely scenario is that the ERO and its regional affiliates would assess fees only on its members. This is the current practice of NERC and the regional councils, and NERC expects that the ERO would assess fees only on members under S. 2071. In that case, depending on how fees are allocated among members, CBO estimates that of the additional costs of the ERO and regional affiliates (\$55 million each year), roughly 80 percent to 85 percent would be paid by entities in the private sector and another 10 percent to 14 percent would be paid by state and local government entities. (The remainder would be paid by federally owned entities.)

Finally, the bill would preempt the authority of any state to take action to ensure the safety, adequacy, and reliability of electric service if NERC determines that action to be inconsistent with ERO standards. To the extent that states currently have jurisdiction to regulate electric service, the preemption in S. 2071 would be a mandate under UMRA. Based on information

from APA and the National Association of Regulatory Utility Commissioners, CBO estimates that this preemption would impose no significant costs on state, local, or tribal governments.

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