

**REPUBLIC OF MOLDOVA**

**COLLECTION  
AND DISBURSEMENT OF FUNDS**

**Regulatory Development  
and Power Market Operations**

**Moldova Energy Sector Reform  
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*Final Report*

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## 1. EXECUTIVE SUMMARY

The electric industry in Moldova has undergone significant transition and will continue to do so in the near future. Entities within the electric industry have been corporatized and set up as separate businesses under State ownership. The Government has adopted a Privatization Plan to sell the generation and distribution entities to private investors in 1999.

Historically, Moldtranselectro, or its predecessor, purchased all Moldovan generation, imported net energy requirements and supplied power needed by the distribution entities for sales to consumers. However, once privatized, the new distribution entities will engage mostly in direct bilateral contracts for the purchase of generation as well as the purchase of all other goods and services. Moldtranselectro will remain a wholly-owned State company holding licenses for transmission system services and central dispatch functions<sup>1</sup> and, pursuant to Power Market Rules will administer a balancing market and the provision of ancillary services on behalf of market participants.

Within tariff, franchise and other specified limits imposed by the regulator of the electric utility industry (ANRE), the utilities, no longer creatures of government, will be wholly responsible for ensuring that they pay their suppliers and, in turn, that their customers pay them, which will permit them to achieve positive cash flows and operate at a profit.

It is a pervasive failure to impose financial discipline within the existing State-owned and managed utilities that prevents the existing companies from operating as profitable, healthy corporate entities and has led to the continuation of an acute accumulation of debts to system energy suppliers. The distributors continue to supply energy to consumers who do not pay for services, to accept what payments they do collect mostly in barter rather than cash and to pass on to their own creditors less than their “fair share” of settlements

Note: for purposes here, barter is defined as the direct exchange of goods between two parties while mutual offsets is the agreement to eliminate existing obligations between two or more parties, where the transfer of goods, if any, is not made to the original creditor. Currently the latter means of payment constitutes the largest portion of customer payments.

In 1998 cash did not appear to be allocated equitably from the distribution companies to Moldtranselectro and the CHP's. A governmental commission has issued new percentages to be used in 1999 to distribute cash to entities in the system. If the utility companies comply with these percentages, cash should be distributed more equitably than in the past.

This report focuses on methods to achieve a better distribution of revenues received from customers to the upstream suppliers of power, who collectively represent approximately 80% of the costs included in prices paid for electricity. This funds distribution mechanism is only a second best solution to the imposition of normal business practices where revenues received must exceed costs incurred if an entity is to avoid bankruptcy and only applies to State-owned

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<sup>1</sup> Moldtranselectro also holds a generation license for a small run-of-river hydroelectric plant.

entities. Subsequent to the imminent privatization of distributors in particular, the need for any centralized funds administration function should cease, except for the normal, and relatively minor, clearing operations which Moldtranselectro will continue to perform.

This report offers two alternative methods that could be adopted for allocating the limited funds received by the distribution companies to their power supply creditors: either Moldtranselectro or the generating companies. Both of these methods are transparent and equitable, and both adapt to changing patterns of energy purchases by the distribution companies. Neither of these methods should require a major implementation effort; nor should they, since it is expected that privatization of the distribution companies will commence in 1999 and, therefore, any method used is expected to have a relatively short life.

## 2. CURRENT SITUATION

As of November, 1997, the national electric company of Moldova was corporatized into five distribution companies, three CHP generation and heating companies, one transmission company, and other entities. The disaggregation of Moldenergo, the original national electric company, was intended to be one of the first steps leading to the privatization of some or all of the components of the electric system in Moldova. It is anticipated that investors who acquire these entities will have the capital, experience in a market business environment and management expertise to enhance the existing electric system's viability.

Since November, 1997, the electric system has had to deal with the issue of transferring portions of customer payments from the distribution companies, where the payments are received, to the other components of the electric system that have provided services to the system (for which they rightly expect to be compensated). The process would be relatively uncomplicated if essentially most of the electric service customers were paying all of their bills on time and in cash.

Unfortunately, that is not the case. Electricity consumers are not paying all of their electric bills and, when payment is made, it is often in some form of mutual offsets or barter. The result is that the electric companies have very high accounts receivable balances (As of October, 1998, average accounts receivable were outstanding for 230 days excluding Moldtranselectro; 566 days, including it, for reasons explained below.) Refer to Appendix A which shows the number of days that accounts receivable are outstanding for various companies.

In 1998 the portion of the tariff which was associated with all entities other than the distribution companies (85.85%) was the portion of cash collections that each distribution company should forward to the dispatch and transmission company, Moldtranselectro. Refer to Appendix B for the tariff breakdown. The percentage that Moldtranselectro, in turn, forwarded to the CHP's and other power suppliers as well as other vendors was based largely on the tariff level of expense attributable to each supplier. The actual distribution of cash collections for the first seven months of 1998 is shown below (refer also to Appendix C):

<b>Company Category</b>	<b>Millions of Lei</b>	<b>Percentage of Total</b>	<b>Tariff Component %</b>
Distribution Companies	36.9	33.5 %	14.2%
Moldtranselectro	30.7	27.9 %	6.1%
Power Suppliers	42.6	38.6 %	79.7%
<b>Total</b>	<b>110.2</b>	<b>100.0 %</b>	<b>100.0%</b>

Review of the table shown above indicates that cash was not being distributed in accordance with the percentages consistent with the tariff cost components. In fact, instead of retaining only about 14% of the cash collected from customers, the distribution companies retained more than 33 %. (It's worth pointing out, however, that this level of cash only represents about 10 % of the *total* customer payments received, well within the 14% authorized level.) When non-cash payments are included, the picture looks much better; average transfer of cash and non-cash customer payments to the "upstream" entities is about 91% of customer payments received (which is also about 91 % of the amount due-that is, about 9% of the billed amount was not paid either in cash or non-cash).

Effective December 31, 1998, the governmental Commission for redressing the critical situation in the energy sector issued Resolution No. 2 that specified the percentage of cash that each entity within the system is required to transfer upstream. These percentages relate to the revised tariffs (total tariff is 42 bani-refer to Appendix B) which were issued on December 24, 1998. Per this Resolution, approximately 86 % of cash collected from customers should be transferred by the distribution companies upstream, assuming that all generation is purchased through Moldtranselectro (70% if energy is purchased directly from the CHPs). Whether or not this new regulation will be observed and , therefore, effective in altering the transfer of cash to upstream entities remains to be seen.

### **3. FINANCIAL PERFORMANCE AND LIQUIDITY**

The Moldovan electric system faces a problem in making the entities within the electric system financially-viable; that is, where revenues exceed expenses and there is sufficient cash to pay their creditors. Of the primary companies making up the electric system, only the Chisinau distribution company reflected a profit in the first nine months of 1998. (Refer to Appendix A for more information.) Even so, the financial performance of the companies probably is not as favorable as portrayed in the financial statements.

As noted above, accounts receivable reflected an average of 230 days outstanding (excluding Moldtranselectro). These balances include amounts of bad debts which should be written off to expense since they likely will not be collected or realized. Per discussions with the distribution companies, only the receivables from bankrupt companies can be written off immediately; otherwise, companies must wait until one year expires for state enterprise uncollected balances and three years for private enterprises before the receivable balances are eligible for being

written-off, and then only with court approval. If expenses routinely included bad debt expense, a more realistic financial performance would be reflected. Additionally, companies should consider routinely charging their income statements with the estimated expense of bad debt, and establishing reserves for expected future write-offs of uncollectible accounts receivable amounts.

Possibly other assets are overstated as well, given the imprecision of value associated with the widespread use of barter and the absence of regular and rigorous audits of financial data (discussions with some chief accountants indicated that audits have been done in some years but not in others, and audit results have been of questionable value).

In addition to the problem of the overall financial performance of the entities is the issue of liquidity. There is a shortage of cash in the electric system. Cash that has been collected amounted to only about 30 % of collections in the first seven months of 1998, and, as noted above, that cash has not in the past been allocated proportionately to each entity's expenses incurred on behalf of the system. Refer to Appendix C for more information.

#### **4. ALTERNATIVE METHODS TO DISTRIBUTE CUSTOMER PAYMENTS**

In addition to the use of fixed percentages as a means to equitably distribute cash payments upstream to all electric system participants, there are other alternative methodologies that could be used. The purpose of exploring some of these alternatives was to try to strengthen the process of allocating funds upstream so that all of the entities in the electric system would receive their pro rata share of funds, while using a process that was equitable and understood by all. Although there are many possible alternatives, we developed and reviewed the application of two. One of these we called the Energy Settlement Method and the other we called the Liability Method. Examples of each of these are shown in Appendices D and E, respectively.

In their current form, these methods do not require the use of a single group to administer the distribution of funds for the entire electric system; instead, either of these methods could be administered from each of the five distribution companies and Moldtranselectro as they are now. ANRE would still have oversight of the process, and reports are required (see Appendices D and E) which identify the amount of funds to be distributed to each participant and the basis for the distribution. If it appears to ANRE from the actual reported data that an equitable distribution of funds to all system participants is not being achieved, a market fund administration group to receive and distribute the payments received from customers throughout the electric system can be implemented, as needed. Guidelines for the operation of such a group are contained in previous reports.

It is anticipated that cash would be transferred at least weekly according to a schedule known to all the participants. Per a discussion with one distribution company, mutual offset settlements are done daily while cash is transferred one or two times per week. Due to a recent change in the law, companies are no longer restricted to having just one bank account. Within the capabilities of the banking system, companies can therefore consider setting up deposit accounts which may be used to receive fund transfers and disbursement accounts.

#### **4.1 Energy Settlement Method To Distribute Customer Payments**

This method of distributing funds to the participants in the electric system uses the current expenses of the power suppliers as the basis for fund distribution and the tariff level of expenses for entities which provide other services to the system; namely, the dispatch and transmission services provided by Moldtranselectro and the billing, collection and other services provided by the distribution companies.

The level of expenses for the power suppliers varies with the level of kilowatt-hours generated, while the level of expenses for Moldtranselectro varies with the level of generation dispatched and transmitted; and the level of expenses for the distribution companies will vary with the level of kilowatt-hours sold to customers. Because the total amounts owed to Moldtranselectro by each distribution company are known, but the portion that each distribution company owes to each supplier of Moldtranselectro is not, the distribution of funds will take place in two stages. The first is the allocation of funds received by each distribution company to its known creditors, including Moldtranselectro. The second stage is the allocation of funds by Moldtranselectro to its creditors. Unlike the fixed percentage method of distributing incoming cash now in effect, this method records the total accounts receivable (i.e., accounts payable by the distribution companies) for current transactions. If and when payments from customers in the future exceed the level of current expenses, the excess could reasonably be allocated to system participants based on their portion of the cumulative accounts receivable for all of the entities.

While the focus is on improving the distribution of cash to upstream system entities, it is important also to monitor the non-cash customer payments, especially since they currently constitute the larger portion of customer payments. Included in Appendix D is a schedule which provides an example of the calculation of both cash and total settlement rates. ANRE may want to consider setting target levels for each of the entities to attain, with an increasing bias toward cash over time. Also included in this Appendix is a schedule which demonstrates how the accounts payable balances for each distribution company can be maintained. These balances will provide recognition of the effects of the deficiency of customer payments on each entity, and provide a basis in the future for distribution of payments that may exceed the current amount due. Such balances may be useful particularly where the mix of costs by supplier changes often, as is the case with the CHP's and power supplied from external sources.

This method may also be employed on a system-wide basis, with cash payments being received by an independent market funds administrator.

#### **4.2 Liability Method**

This method of distributing cash to the upstream entities uses as its basis the cumulative liability balances of the distribution companies to the entities within the electric system that provide services to it. Like the previous method, this one assumes that each distribution company will distribute the cash without the use of an independent market fund administrator; but the latter could be used if that should subsequently appear to be preferable.

An example of this method is shown in Appendix E. Under this method, the amount of the current period liability incurred by each entity in providing services to the distribution company is added to the prior cumulative liability balance to form the basis for the distribution of cash received in the current period. Cash is then distributed to the participating entities on the basis of their total cumulative liability balances (versus the current period expenses basis used in the prior alternative). In other respects, this method is the same as the previous one.

## 5. COMPARISON OF ALTERNATIVE METHODS

A comparative summary of the cash distribution methods described above and the one currently in place is shown below. As noted, the primary reason to change methods is that the proposed methods offer an opportunity to adapt to a changing mix of suppliers and related expenses.

<b>Method</b>	<b>Status</b>	<b>Ease of Verification</b>	<b>Addresses Changes in Mix of Costs</b>	<b>Equitable</b>	<b>Transparent</b>
Fixed Percentage	Implemented	High	No	Yes	Yes
Energy Settlement	Proposed	Medium	Yes	Yes	Yes
Liability	Proposed	Medium	Yes	Yes	Yes

## 6. ACCOUNTING ISSUES

In attempting to obtain actual data to use with these methods, we found that existing distribution company reports do not show the amounts owed to each system participant. Amounts due for the supply of power are paid to Moldtraselectro, which in turn pays the suppliers for amounts due on behalf of all the distribution companies. Moldtraselectro's liability reports which detail amounts owed to suppliers are on an aggregate basis and not available by each distribution company's share.

A second issue worthy of note is that Moldtraselectro shows a zero balance for amounts owed to the CHP's. The CHP's (per review of CHP 1 account detail) show a zero balance for accounts receivable from Moldtraselectro. We understand that at the time that Moldenenergo was disaggregated into the corporate components that exist today, each entity was allocated a portion of the Moldenenergo debt. Of the original accounts receivable recorded on its books in 1997, at the end of 1998 Moldtraselectro still recorded in its accounts receivable balance approximately 724 million lei (85 million USD) due from the distribution companies, and 122 million lei (14 million USD) due from the CHP's. The CHP's recorded their share of this debt as a liability and the value of power supplied to the system is used to reduce this liability balance; that is, the

current value of their services is netted against the inherited liability balance, instead of being recorded as an accounts receivable. While it would seem preferable to record accounts payable and accounts receivable separately and avoid netting the two balances, a brief review of International Accounting Standards # 32 seems to indicate that this method of presentation on the companies' balance sheets is an acceptable financial statement method of presentation.

## 7. THE FUTURE

The electric industry is anticipating that privatization will be realized beginning in 1999. Bilateral contracts between suppliers and distribution companies are being initiated. Market Rules for operation of a power market are being developed. A new law has been drafted by the electric industry which includes provisions for electric entities that are to be privatized to be freed of most debt that is 60 days or more old. Many other changes have been and likely will be introduced in the future.

Once privatization occurs, Moldtranselectro will no longer be an intermediary for funds transfer between the distribution companies and the CHP's and other suppliers. It will be paid only for services rendered, such as dispatch and transmission activities, and possibly for services as agent for one or more of the enterprises in cooperative purchases of power.

Also, when privatization occurs, and a new power market is implemented, there will be a need for a Market Funds Administrator. This function will issue bills to energy recipients for balancing power, to meet load that is in excess of that satisfied through bilateral contracts, and ancillary services pursuant to Market Rules administered by the System Operator (Moldtranselectro). The market funds administrator can be a department within the newly-defined Moldtranselectro transmission and dispatch company, or it could also be an independent entity, perhaps a bank. In either case, it will serve as the clearinghouse for residual (i.e., not bilateral) power market transactions. The cost of power supplied will be derived hourly and billed weekly or at some other frequency to be agreed upon by the parties. A sample summary of the distribution of cash receipts by an independent funds administrator is shown on page four of Appendix D.

It is very important that each entity in the electric system obtain the cash needed to operate its business. Without it, tactical and strategic plans for improvement cannot reasonably be made, opportunities for cost-effective operations will be forgone, and facilities and staff resources will deteriorate. Equitable cash distribution and increased cash collections are vital for a strong utility infrastructure.

While there have been some problems with the transfer of cash from the distribution companies to the other entities in the electric system, the recent issuance of Resolution No.2 which specifies percentages of cash to be transferred to each entity in the system may have a positive effect on this problem area. The alternative methodologies offered in this report should also be considered. Due to the many changes that continue to face the electric industry and the advent of privatization, however, the electric industry will no doubt want to use its resources primarily to address significant long-term issues.

## 8. RECOMMENDATIONS

- a) Consider the alternative methods of distributing cash in 1999. Select the one that is simplest to use and is most reasonable given the level of volatility of expense levels, mix of power suppliers and the time until privatization occurs.
- b) Once privatization occurs, use a market fund administrator to manage the billing of amounts due only for residual energy market transactions: collection of cash from energy recipients and its disbursement to suppliers.
- c) In order for financial statements to more accurately reflect a company's financial position, consider initiating changes in the laws to allow and, in fact, encourage companies to write-off accounts receivable that appear to be uncollectible.
- d) ANRE should consider adopting a rule that would require utility companies on a regular basis to charge an expense account on their income statement (and credit a corresponding reserve account as contra asset to accounts receivable) for estimated uncollected accounts receivable amounts that exceed a specified number of days in age. This will result in a more accurate picture of the companies' accounts receivable balances, expenses and profit or loss.
- e) Initiate routine audits of the entities by qualified external auditors.
- f) Consider adding one or more full time auditors to the ANRE staff. The latter could assist companies to implement changes in regulations, especially those that affect accounting, and provide assistance with general accounting training and advice on the proper treatment of unusual accounting transactions.
- g) Consider establishing an association of utility accountants which could meet to discuss accounting issues of common concern. New national accounting standards, proposed new utility sub-accounts and reports, the complexities of accounting caused by the use of non-cash transactions, and the normal accounting issues faced by any accounting department are all good reasons to encourage communication among the utility accounting departments and training in areas of common concern. During discussions with two utility chief accountants on separate occasions, both indicated an interest in such an organization.

## **APPENDICES**

## Appendix A

### Moldova Electric System

#### Selected Financial Ratios January - September, 1998

(Currency In Moldovan Lei)

Company	Profit		Accounts Receivable (Short Term)		Inventory		Current Assets / Current Liabilities
	Amount	As a % of Revenue	Amount	Average # Days Outstanding	Amount	As a % of Revenue	
Chisinau	7,498,115	3.2%	88,043,398	139	3,984,251	1.7%	0.62
Central	(37,771,995)	-42.1%	43,894,025	179	4,200,789	4.7%	0.23
North	(26,296,823)	-26.4%	74,389,023	272	2,738,566	2.7%	0.30
North West	(21,694,134)	-34.5%	38,904,641	226	1,717,810	2.7%	0.27
South	(31,832,257)	-59.1%	31,077,532	211	2,276,721	4.2%	0.28
CHP 1	(17,944,263)	-36.3%	47,512,619	351	9,058,189	18.3%	0.48
CHP 2	(43,562,510)	-33.4%	108,669,895	304	22,340,426	17.1%	0.76
CHP North	(49,934,424)	-217.0%	34,020,988	540	9,580,837	41.6%	0.35
Moldtansselectro	(8,944,094)	-2.2%	1,314,174,899	1,174	19,654,151	4.8%	0.95
<b>Total</b>	<b>(230,482,385)</b>	<b>-20.1%</b>	<b>1,780,687,020</b>	<b>566</b>	<b>75,551,740</b>	<b>6.6%</b>	<b>0.69</b>
Total, Excluding Moldtranselectro	(221,538,291)	-19.3%	466,512,121	230	55,897,589	4.9%	0.40

**Notes:** 1. Revenue includes National Account numbers 611, 612, 621, 622, 721 and 722.

2. Moldtranselectro accounts receivable balance includes amounts of debt owed by the CHP's and the distribution companies for expenses incurred by Moldenergo prior to corporatization of the entities in the electric system.

3. Financial data was derived from company financial statements as of October 1, 1998

## Appendix B

### Moldovan Electric System 1998-9 Retail Tariff by Functional Components As of 1/28/99

(In Banis)

	<u>Effective 1/1/98</u>	<u>Effective 9/17/98</u>	<u>Effective 12/24/98</u>
Power Supply	18.96	18.15	34.11
Transmission	1.46	1.85	1.89
Distribution	3.37	5.28	5.28
Average Retail Tariff Charged	<u>23.79</u>	<u>25.28</u>	<u>41.28</u>

## Appendix C

### Analysis of Cash/Non-cash Flow By Entity From Data Prepared By Moldtranselectro For Period January - July, 1998

In Millions of Lei

Service Provider	Service Purchaser	Category	Total	Cash	% Cash	Cash Retained at Each Location	%	Tariff Detail	% of Total
CHP's and Other Suppliers	MTE	Value rec'd from suppliers	310.05	-					
		Amt paid to suppliers	407.39	42.63	10.5%	42.63	38.7%	18.96	79.7%
MTE	Disco's	Value rec'd from MTE	435.9	-					
		Amt paid to MTE	358.5	73.3	20.4%	30.67	27.8%	1.46	6.1%
Disco's	Customers	Value rec'd from Disco's	411.5	-					
		Amt paid to Disco's	373.4	110.2	29.5%	36.9	33.5%	3.37	14.2%
		Total				110.2	100.0%	23.79	100.0%

Points of interest:

- 1 Beginning at the Disco level, the further upstream the cash flow, the lower is the percentage of payments in cash.
- 2 amount of cash as allocated to generation suppliers.

## Appendix D

### Energy Settlement Method Before Implementation of Power Market

#### Cash Distribution Report Step One: Allocation of Cash Received By Distribution Companies

For Period: 01-Mar-99  
Currency: Lei  
Distribution Company: Chisinau

Market Participant	Memo		Amount Due To System Participants	% Of Cash To Be Allocated	Cash Receipts	Cash Distribution
	KWH Delivered (Or Sold) To System	Applicable Rate (In Banis)				
For Moldtranelectro Expenses			47,080.00	85.60%		17,120.00
For Distribution Company Expenses	150,000	5.28	7,920.00	14.40%		2,880.00
Grand Total-All System Expenses			<u>55,000.00</u>	<u>100.00%</u>	<u>20,000.00</u>	<u>20,000.00</u>

## Appendix D

### Energy Settlement Method Before Implementation of Power Market

#### Cash Distribution Report

#### Step Two: Allocation of Cash Received By Moldtranselectro From Distribution Companies

For Period: 01-Mar-99  
 Currency: Lei  
 Company: Moldtranselectro

Creditors	Memo				Cash Receipts	Cash Distribution
	KWH Delivered (Or Sold) To System	Applicable Rate (In Banis)	Amount Due To Creditors	% Of Cash To Be Allocated		
CHP 1	10,000	34.11	3,411.00	7.2%		1,240.36
CHP 2	10,000	34.11	3,411.00	7.2%		1,240.36
CHP - North	10,000	34.11	3,411.00	7.2%		1,240.36
Sub-total	30,000	34.11	10,233.00	21.7%		3,721.09
Costesti	10,000	34.11	3,411.00	7.2%		1,240.36
<b>Total CHP's and Hydro</b>	<b>40,000</b>	<b>34.11</b>	<b>13,644.00</b>	<b>29.0%</b>		<b>4,961.45</b>
Ukraine System Power	10,000	34.11	3,411.00	7.2%		1,240.36
Romania System Power	10,000	34.11	3,411.00	7.2%		1,240.36
Moldavskaya GRES	10,000	34.11	3,411.00	7.2%		1,240.36
Sugar Plants	10,000	34.11	3,411.00	7.2%		1,240.36
Other IPP's	10,000	34.11	3,411.00	7.2%		1,240.36
<b>Total External Power Supply</b>	<b>50,000</b>	<b>34.11</b>	<b>17,055.00</b>	<b>36.2%</b>		<b>6,201.82</b>
Fuel			14,381.00	30.5%		5,229.45
Other			2,000.00	4.2%		727.27
<b>Total-Moldtranselectro Direct Expenses</b>			<b>16,381.00</b>	<b>34.8%</b>		<b>5,956.73</b>
<b>Grand Total-All Moldtranselectro Expenses</b>			<b>47,080.00</b>	<b>100.0%</b>	<b>17,120.00</b>	<b>17,120.00</b>

## Appendix D

### Energy Settlement Method Accounts Payable Balances Example For Distribution Company and Related Balances at Moldtranselectro

For Period: 01-Mar-99  
 Currency: Lei  
 Distribution Company: Chisinau

Market Participant	Prior Accounts Payable Balance	Current Period Activity				End of Current Period Accounts Payable	Current Period	
		New Accounts Payable	Total Cash Received	Barter + Mutual Offsets	Total Settlements		Settlement Rate	Cash Rate
CHP 1	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
CHP 2	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
CHP - North	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
Sub-Total CHP's	105,000.00	10,233.00	3,721.09	6,000.00	9,721.09	105,511.91	95.0%	36.4%
Costesti	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
<b>Total CHP's and Hydro</b>	<b>140,000.00</b>	<b>13,644.00</b>	<b>4,961.45</b>	<b>8,000.00</b>	<b>12,961.45</b>	<b>140,682.55</b>	<b>190.0%</b>	<b>72.7%</b>
Ukraine System Power	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
Romania System Power	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
Moldavskaya GRES	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
Sugar Plants	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
Other IPP's	35,000.00	3,411.00	1,240.36	2,000.00	3,240.36	35,170.64	95.0%	36.4%
<b>Total External Power Supply</b>	<b>175,000.00</b>	<b>17,055.00</b>	<b>6,201.82</b>	<b>10,000.00</b>	<b>16,201.82</b>	<b>175,853.18</b>	<b>95.0%</b>	<b>36.4%</b>
Fuel	10,000.00	14,381.00	5,229.45		5,229.45	19,151.55	36.4%	36.4%
Other	10,000.00	2,000.00	727.27		727.27	11,272.73	36.4%	36.4%
<b>Total-Moldtranselectro Direct Expenses</b>	<b>20,000.00</b>	<b>16,381.00</b>	<b>5,956.73</b>	<b>0.00</b>	<b>5,956.73</b>	<b>30,424.27</b>	<b>36.4%</b>	<b>36.4%</b>
<b>Distribution Company Direct Expenses</b>	<b>34,000.00</b>	<b>7,920.00</b>	<b>2,880.00</b>	<b>0.00</b>	<b>2,880.00</b>	<b>39,040.00</b>	<b>36.4%</b>	<b>36.4%</b>
<b>Grand Total-All System Expenses</b>	<b>369,000.00</b>	<b>55,000.00</b>	<b>20,000.00</b>	<b>18,000.00</b>	<b>38,000.00</b>	<b>386,000.00</b>	<b>69.1%</b>	<b>36.4%</b>

## Appendix D

### Energy Settlement Method Current Period Cash Allocation

#### Alternative For Use After Implementation of Power Market Administered By An Independent Fund Administrator

For Period: 01-Mar-99  
 Currency: Lei  
 Distribution Company: All Five Companies

Market Participant	Memo		Amount Due To System Participants Per Dispatcher (A)	% Of Cash To Be Allocated To Each Participant	Cash Receipts	Cash Distribution
	KWH Delivered (Or Sold) To System	Applicable Rate (In Basis)				
CHP 1	900,000	34.11	306,990.00	9.65%		111,131.23
CHP 2	1,000,000	34.11	341,100.00	10.72%		123,479.14
CHP - North	900,000	34.11	306,990.00	9.65%		111,131.23
Sub-Total CHP's	2,800,000	34.11	955,080.00	30.03%		345,741.59
Costesti	100,000	34.11	34,110.00	1.07%		12,347.91
<b>Total CHP's and Hydro</b>	<b>2,900,000</b>	<b>34.11</b>	<b>989,190.00</b>	<b>31.10%</b>		<b>358,089.51</b>
Ukraine System Power	2,000,000	34.11	682,200.00	21.45%		246,958.28
Romania System Power	250,000	34.11	85,275.00	2.68%		30,869.79
Moldavskaya GRES	1,000,000	34.11	341,100.00	10.72%		123,479.14
Sugar Plants	1,000,000	34.11	341,100.00	10.72%		123,479.14
Other IPP's	200,000	34.11	68,220.00	2.14%		24,695.83
<b>Total External Power Supply</b>	<b>4,450,000</b>	<b>34.11</b>	<b>1,517,895.00</b>	<b>47.72%</b>		<b>549,482.17</b>
Dispatch Center	7,350,000	1.89	138,915.00	4.37%		50,287.61
Transmission Services	7,350,000	1.89	138,915.00	4.37%		50,287.61
<b>Total Services</b>			<b>277,830.00</b>	<b>8.73%</b>		<b>100,575.23</b>
Chisinau	1,500,000	5.28	79,200	2.49%		28,670.62
Central	1,500,000	5.28	79,200	2.49%		28,670.62
North West	1,500,000	5.28	79,200	2.49%		28,670.62
North	1,500,000	5.28	79,200	2.49%		28,670.62
South	1,500,000	5.28	79,200	2.49%		28,670.62
<b>Total Distribution Companies</b>	<b>7,500,000</b>	<b>5.28</b>	<b>396,000.00</b>	<b>12.45%</b>		<b>143,353.09</b>
<b>Grand Total-All System Expenses</b>			<b>3,180,915.00</b>	<b>100.00%</b>	<b>1,151,500.00</b>	<b>1,151,500.00</b>

A. Includes bi-lateral contracts.

## Appendix E

### Liability Method Cash Distribution Report

For Period: 01-Mar-99  
 Currency: Lei  
 Distribution Company: Chisinau

<u>Market Participant</u>	<u>Accounts Payable Balances</u>							
	<u>Current Period Activiity</u>							
	Prior Liability Balance	Less: Barter + Mutal Offsets Payment	Add: New Liabilities This Period	Total Liability at End of Period, Before Cash Disbursement	% Distributed To Creditors	Cash To be Distributed For Current Period	Lei Distributed To Creditors	Ending Balance
Moldtranselectro-Total	138,757.50	5,000.00	50,000.00	183,757.50	74.25%		14,850.38	168,907.12
Distribution Company-Total	48,116.50	3,000.00	5,000.00	50,116.50	25.75%		5,149.62	44,966.88
<b>Grand Total-All Disco Liabilities</b>	<b>186,874.00</b>	<b>8,000.00</b>	<b>55,000.00</b>	<b>233,874.00</b>	<b>100.00%</b>	<b>20,000.00</b>	<b>20,000.00</b>	<b>213,874.00</b>

## Appendix E

### Liability Method Cash Distribution Report

For Period: 01-Mar-99  
 Currency: Lei  
 Company: Moldtranselectro

Creditor	Accounts Payable Balances							
	Current Period Activity							
	Prior Liability Balance	Less: Barter + Mutal Offsets Payment	Add: New Liabilities This Period	Total Liability at End of Period, Before Cash Disbursement	% Distributed To Creditors	Cash To be Distributed For Current Period	Lei Distributed To Creditors	Ending Balance
CHP 1	10,000.00	0.00	5,000.00	15,000.00	7.21%		1,070.01	13,929.99
CHP 2	10,000.00	0.00	5,000.00	15,000.00	7.21%		1,070.01	13,929.99
CHP - North	10,000.00	0.00	5,000.00	15,000.00	7.21%		1,070.01	13,929.99
Sub-Total CHP's	30,000.00	0.00	15,000.00	45,000.00	21.62%		3,210.03	41,789.97
Costesti	10,000.00	0.00	5,000.00	15,000.00	7.21%		1,070.01	13,929.99
<b>Total CHP's and Hydro</b>	<b>40,000.00</b>	<b>0.00</b>	<b>20,000.00</b>	<b>60,000.00</b>	<b>28.82%</b>		<b>4,280.03</b>	<b>55,719.97</b>
Ukraine Dispatch Center	10,000.00	0.00	4,000.00	14,000.00	7.21%		1,070.01	12,929.99
Romania System Power	10,000.00	0.00	4,000.00	14,000.00	7.21%		1,070.01	12,929.99
Moldavskaya GRES	10,000.00	0.00	4,000.00	14,000.00	7.21%		1,070.01	12,929.99
Sugar Plants	10,000.00	0.00	4,000.00	14,000.00	7.21%		1,070.01	12,929.99
Other IPP's	10,000.00	0.00	4,000.00	14,000.00	7.21%		1,070.01	12,929.99
<b>Total External Power Supply</b>	<b>50,000.00</b>	<b>0.00</b>	<b>20,000.00</b>	<b>70,000.00</b>	<b>36.03%</b>		<b>5,350.04</b>	<b>64,649.96</b>
Fuel	43,787.50	0.00	9,000.00	52,787.50	31.55%		4,685.30	48,102.20
Other	5,000.00	5,000.00	1,000.00	1,000.00	3.60%		535.00	465.00
<b>Moldtranselectro Direct Expenses-Total</b>	<b>48,787.50</b>	<b>5,000.00</b>	<b>10,000.00</b>	<b>53,787.50</b>	<b>35.15%</b>		<b>5,220.30</b>	<b>48,567.20</b>
<b>Grand Total-Moldtranselectro Liabilities</b>	<b>138,787.50</b>	<b>5,000.00</b>	<b>50,000.00</b>	<b>183,787.50</b>	<b>100.00%</b>	<b>14,850.38</b>	<b>14,850.38</b>	<b>168,937.12</b>