# COST RECOVERY PLAN (CRP) ADDENDUM - DECEMBER 2025



Électricité Du Liban

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# 1. Objectives of the Addendum

This addendum updates the Original Cost Recovery Plan¹ (CRP) entitled "Lebanon's Electricity Sector Cost Recovery Plan" issued in July 2024, which was originally developed by Électricité Du Liban (EDL) in close coordination with the World Bank (WB) through technical assistance, and formally approved by both EDL's Board of Directors via Decision №. 340-18/2024 dated July 4<sup>th</sup>, 2024, and the Minster of Energy and Water Via his letter № 2465 dated July 23<sup>rd</sup>, 2024. This Addendum factors in significant changes since the release of the CRP in 2024. It integrates recent financial, operational, legislative, and security developments, recalibrates projections, updates analytical scenarios and financial models, and strengthens monitoring and evaluation mechanisms to ensure the continuous sustainability of EDL's cost recovery path under the new conditions prevailing as of 2025.

### 2. Rationale for the Addendum

#### 2.1 Combustibles Supply

The most significant and prominent amendment contributing to this addendum is the complete termination of the Iraqi fuel-for-service swap agreement, following the formal letters issued by the Ministry of Energy and Water (MoEW) to the Council of Ministers (CoM) Nº116/T/1895 dated July 9<sup>th</sup>, 2025, and Nº 116/T/1846-1934 dated August 25<sup>th</sup>, 2025, as well as the request of the Ministry of Finance (MoF), both announcing the termination of the agreement. This decision was also reinforced by the official communication from the Iraqi State Organization for Marketing of Oil (SOMO) addressed to the Minister of Energy and Water Nº 17848 dated August 4<sup>th</sup>, 2025, confirming the discontinuation of fuel allocations previously provided under the swap mechanism.

With the end of the Iraqi arrangement, EDL now has to self-finance the full cost of all combustibles needed for the generation of power. However, the corresponding legal and institutional responsibility for the supply of fuel has not changed. According to the Lebanese law, the Directorate General of Oil (DGO) under the MoEW is still the sole and exclusive entity with authority to procure, manage, and deliver combustibles to EDL, as it has always done. Over the past three years, the DGO met EDL's combustibles requirements through the Iraqi swap agreement; whereas today, in the absence of that mechanism, it has reverted to purchasing combustibles through spot cargo, as well as through occasional consensual supply agreements arranged by the donor countries, such as certain shipments that are being arranged with the Kuwait Petroleum Corporation Trading (KPCT).

<sup>&</sup>lt;sup>1</sup> http://www.edl.gov.lb/Lebanon%20Electricity%20Sector%20Cost%20Recovery%20Plan.pdf

Under this new framework, EDL is no longer supported by partial external funding of combustible allocations but rather is required to entirely cover the full cost of all fuel procurements managed by DGO out of its own revenues, including the cost of spot market cargoes and any negotiated donor-supported cargoes. The shift eliminates a major part of the stabilizing factor at the heart of the original CRP financial model and places the entire burden for securing, financing, and sustaining generation fuel exclusively on the utility's operational revenues. Because of this shift, the burden of achieving full cost recovery is now entirely dependent on the utility's own financial performance in terms of the ability to generate adequate cash inflows to meet ongoing fuel and operating expenditures. This is a structural change in the financial model of the CRP.

#### 2.1.1 Maintaining Social Support

Under the 2022 tariff reform framework, a mutual explicit agreement was established between the Lebanese Government and EDL, in which it was agreed that the Government would finance one million tons of Iraqi fuel annually in order to ensure stable generation and support the first stage of tariff restructuring. EDL, for its part, undertook not only to maintain a socially oriented tariff but also to bill the first 100 kWh consumed by each subscriber at 10 cents per kWh as a measure of targeted relief for low-income households and vulnerable consumers.

However, when the Iraqi fuel arrangement was terminated, the foundational element of the agreement was not upheld. But EDL has, nonetheless, maintained the social tariff that was originally agreed upon, even though EDL must now entirely self-fund all combustibles purchases from its own revenues. The low-consumption residential customer rate, for the first 100 kWh, has been kept, exactly as originally set, at the preferential 10¢/kWh rate.

### 2.2 Billing and Collection

At the same time, developments in billing and collection performance represent a significant achievement for EDL given the exceptionally challenging environment. Since the issuance of the original CRP in 2024, a substantial improvement has been recorded, driven by accelerated billing and collection processes implemented by the joint efforts of both EDL staff and management together with the Distribution Service Providers (DSP). Billing and Collection for private-sector subscribers have been protracted and have now neared an "à jour" state 2, reflecting steady progress despite years of accumulated backlogs and the disruptions caused by the recent conflict.

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<sup>&</sup>lt;sup>2</sup> For the case of EDL, "À jour" state" refers to the billing mechanism in which electricity bills are issued at best 2 to 4 months after the actual period of consumption.

Notably, EDL has maintained an average collection rate of about 87.5% across all service areas for closed emissions and is aiming to further improve this performance, towards a targeted average of 94.5%, either through initial direct collection or by enhancing arrears recovery.

Table 1: Billing Status

Service Area	Original CRP		CRP Ad	dendum	
(DSP)	LV & MV Emissions	LV Emission	Delay (months)	MV Emission	Delay (months)
1 (BUS)	06-08/2023	03-04/2025	2-4	09/2025	0
2 (KVA)	04-06/2023	05-06/2025	1-2	05-06/2025	1-2
3-A (NEUC)	04-06/2023	03-04/2025	2-4	07-08/2025	0-1
3-B (MRAD) <sup>3</sup>	04-06/2023	05-06/2024	12-14	09-10/2024	10-12

#### 2.2 1 Public Sector and Refugee Camps

Billing for public-sector entities has fully reached an "à jour" status as well where EDL has issued Emission 08/2025, even though cooperation on actual collection remains limited and continues to pose a structural challenge. As a result, public sector arrears since the adoption of the new tariff have accumulated to approximately USD 242 million and continue to increase.

The same applies to Palestinian refugee camps in terms of billing, but collection cooperation has yet to materialize noting that arrears since the new tariff adoption have accumulated to about USD 75 million EDL continues to engage with the relevant stakeholders, mainly the Lebanese-Palestinian Dialogue Committee (LPDC), and is consistently pushing to initiate the payment and collection mechanisms. Several formal communications have been issued in this regard, notably EDL letters to LPDC Nº 3154 dated June 6th, 2025, Nº 5787 dated October 22nd, 2025.

#### 2.2.2 Working Conditions

Enhanced Billing and Collection were realized despite the severe operational constraints resulting from the recent war (October 2023 – November 2024), including severe damage to the electricity networks at both Transmission and Distribution levels especially in the Southern Distribution Districts.

<sup>&</sup>lt;sup>3</sup>Service Area 3-B (MRAD) is currently subject to extended/halted billing and collection delays due to the recent war in Lebanon, which caused severe damage and disruption in the southern regions of Lebanon.

#### 2.2.3 Lost Revenues

Billing and Collection was further complicated by the promulgation of Law No. 22 dated 11 July 2025 by the Lebanese Parliament, which exempts subscribers in the most heavily affected areas from paying their utility bills including electricity bills without offering any compensation mechanism to EDL's lost revenues. The resulting revenue shortfall is estimated at about USD 30 million to date. In fiscal and regulatory terms, compensating for such a decision should constitute a Public Service Obligation (PSO) borne by the appropriate governmental entity (i.e. MoF), rather than a charge absorbed by EDL, so as to preserve the utility's financial neutrality.

Nevertheless, EDL's ability to maintain near-full billing coverage and significantly improve billing and collection performances under such conditions demonstrates substantial operational resilience. In the Original CRP, revenue streams exhibited a considerable shift due to delays in billing and collection; with this gap now nearing closure thanks to improved operational practices, the updated and forecasted revenue streams gains must now be fully reflected and incorporated into the updated cost-recovery outlook.

#### 2.3 Non-Technical Losses (NTLs)

The recent conflict also slowed EDL's non-technical loss (NTL) reduction campaigns. Under the original CRP baseline scenario, NTL losses were expected to decline to about 21.9% in 2025, yet due to the war-related interruption of field activities, widespread damage to meters, and ensuing significant increase in meter-less subscriptions, NTL levels have reverted to around 26.9%. These setbacks were further compounded by the ongoing economic and monetary crisis in Lebanon, which disrupted public procurement processes and discouraged suppliers from engaging with the public sector, thereby preventing EDL from sourcing sufficient meters for this purpose.

However, EDL has procured about 96,000 meters<sup>4</sup> and has reconfigured since September 2025 its centralized Inspector team which currently includes over 60 inspectors which could also be further increased after the end of 2025. This capacity should be sufficient to cover the priority areas and allows EDL to resume both its baseline and possibly a more ambitious loss-reduction plan. Success will depend on sustained support from the Ministry of Interior and Municipalities (MoIM), the Ministry of Defense(MoD), and the Ministry of Justice (MoJ), especially with respect to securing field access through security and military escorts in hot zones and facilitating judicial processing of violation tickets.

<sup>&</sup>lt;sup>4</sup> Meters have been procured in November 2025 through a successful public tender under the Public Procurement Law after six failed public bid attempts due to the economic crisis and security situation that Lebanon has went through recently.

#### 2.4 Debt Reimbursement

In parallel, it is relevant to underline one significant milestone that mirrors EDL's enhanced financial soundness and operational robustness: EDL is now debt-free<sup>5</sup>, with only the working-capital facility that is scheduled for reimbursement. In practical terms, this improvement is evidenced by the settlement of approximately USD 75 million in internal debts owed to power-plant operators, an additional USD 126 million in arrears owed to Distribution Service Providers (DSPs), and roughly USD 8.72 million in external financial obligations previously due to international financing agencies, including the Arab Fund for Economic and Social Development and Natixis Bank (France). In a context that has been characterized by years of fiscal strain, termination of subsidized combustibles arrangements, and extraordinary disruptions due to the recent war, becoming a utility with reduced liabilities is a substantial achievement in itself. It reflects EDL's ability to keep within its means, using its own-generated revenues for critical expenditures and avoiding the accumulation of fresh liabilities at a time when many state-owned enterprises (SOEs) have undergone extreme financial deterioration. This is quite a feat, considering that EDL is now required to finance its combustibles procurement completely out of collected revenues after the cessation of the Iraqi swap agreement

#### 2.4.1 Improved Liquidity

Being able to enhance ELD's liquidity position and remain unindebted under such conditions highlights the utility's improved financial governance, strengthened expenditure controls, and increased reliance on internally generated streams.

#### 2.4.2 Importance of Public Sector Commitment

The public-sector payment compliance is of central importance, since the ability to continue reimbursing the working-capital facility without incurring new debt depends directly on the timely settlement of electricity dues by all public entities.

### 2.5 Major Challenges

In the case of continued widespread non-payment by public institutions, EDL's financial stability will remain seriously at risk. While the utility has made significant progress toward restoring its billing discipline and strengthening its financial position, ongoing delinquency by key consuming segments, whose electricity bills amount to about USD 120 million annually, now places an unjustified and unsustainable burden on EDL's balance sheet.

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<sup>&</sup>lt;sup>5</sup> Except for a single operator whose dues have not been settled by EDL due to an ongoing legal claim before the Lebanese courts. This matter remains under legal and judicial deliberation, and EDL will not take any action, address, or disclose it further until a final verdict is issued. Upon issuance of a court order, EDL will take the appropriate measures strictly in line with the court's decision.

In effect, EDL has turned from a traditionally debt-laden utility into a crediting utility, providing implicit financing of financially troubled public administrations, public establishment, public utilities, and Refugee and Displaced Camps for their electricity consumption. EDL is forced to give involuntary credit rather than receive payments for the services it provides. This circumstance is undermining EDL's financial equilibrium exactly when it is expected to fully self-fund its operations, combustibles procurement, and investment programs.

EDL is currently carrying on its books the continuous unpaid obligations of:

- Financially distressed Public Administrations,
- Financially distressed Public Establishments with structural deficits,
- Public Utilities (including water authorities) unable or unwilling to settle their dues,
- All Palestinian Refugee Camps,
- Selected Syrian Displaced Camps in certain sensitive zones,
- Exempted Entities under law № 11 dated 11/07/2025,

This inversion, where EDL is effectively financing those it services rather than receiving revenues from them, constitutes a direct threat to the utility's liquidity, and the financial integrity of the entire Cost Recovery Plan. Absence of mandatory payment compliance across these categories will severely compromise EDL in terms of sustaining sector operations and maintaining cost recovery.

#### 2.6 Critical Risks

In updating EDL's cost recovery plan, it is important to identify and mitigate the most significant risks impacting EDL's financial stability, operational capacity, and cost structure. Whereas there are several risks previously tackled in the original CRP, three critical ones resurface from among them for their potentially high impacts, thus requiring targeted mitigation measures to ensure operations that are sustainable and financially resilient.

#### 2.6.1 Revenue Risk: Non-Payment by Subscribers

EDL's financial stability continues to be highly vulnerable to non-payment by subscribers, particularly public-sector entities, whose annual electricity bills reach about USD 120 million. Non-payment seriously erodes the utility's revenue stream and needs to be addressed based on two approaches. First, MoF should act, either by covering financially distressed public entities or appropriating, within the national budget, the required funds to cover the due payments. Arrangements must also be found and made to settle the accumulated arrears through installments or other agreed mechanisms. Secondly, if no solution is offered by the MoF, EDL will have no choice but to activate its bylaws by cutting electricity supplies where necessary and starting the judicial process for reclaiming accumulated arrears, which have now reached approximately USD 242 million.

#### 2.6.2 Cost Risk: Sudden Fluctuations in Combustible Prices

EDL is confronted by a major and pervasive cost risk due to abrupt changes in the international cost of crude oil, directly impacting combustibles costs and greatly pressuring the utility's finances. Mitigation includes a two-pronged approach:

- i. Incorporating appropriate contingencies during budget planning to accommodate a certain level of volatility in fuel prices; and
- ii. Finalizing and implementing a fuel indexation mechanism that enables the adjustment of tariff levels for changes in combustible costs, with protection against financial instability after the settlement of the Public Sector dues and finding a solution through LPDC for the Palestinian Refugee Camps.

#### 2.6.3 Operational Risk: Shrinking Workforce

The continued decline in the number of employees, mainly due to retirements and a prolonged hiring freeze by successive Lebanese governments, has increasingly threatened EDL's operational capacity. By law, EDL is supposed to have a staff of 5,020 employees, but it currently operates with only about 1,166 staff, thereby largely undermining its operational efficiency. The mitigation strategy includes coordination with the Civil Service Board (CSB) for the renewal and expansion of human resources to ensure that the utility has sufficient staffing to meet operational and maintenance needs.

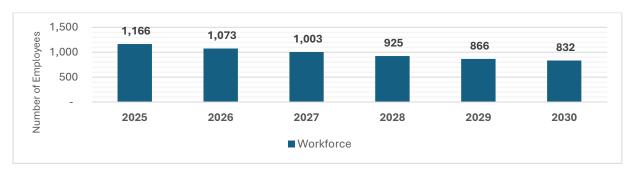


Figure 1: Shrinking Workforce

## 3. Scenarios Assessed

Given the profound changes in EDL's operating and financial environment, the scenario architecture used in the original CRP, built around "baseline" and "ambitious" versions under both full and gradual Iraqi fuel coverage schemes, has been fully revised. Indeed, with a fully terminated Iraqi swap agreement and EDL now required to self-fund the entire value chain, including combustible procurement, operations, maintenance, and capital expenditures, the former scenario structure no longer reflects the current operational realities or the financial constraints of the utility. Consequently, EDL, with technical assistance from the World Bank, has developed a new unified modeling framework that supersedes all previous scenarios with a single, integrated model aligned with the enhanced existing generation assets utilization plan and the revised loss-reduction strategy.

#### 3.1 Optimized Generation Assets Utilization Plan

This new model underpins the updated existing generation assets utilization plan, reflecting both the cessation of the Iraqi arrangement and the opportunities brought about by renewable energy deployment.

In the updated plan, available average generation from EDL's existing assets is expected to rise from 650 MW in 2025, ramping up further to 1,015 MW by 2027. All of this optimized utilization includes conventional generation and also the integration of utility-scale Solar PV projects developed by IPPs as well as a World Bank–funded project, all of which will progressively start to contribute to the generation mix within this period.

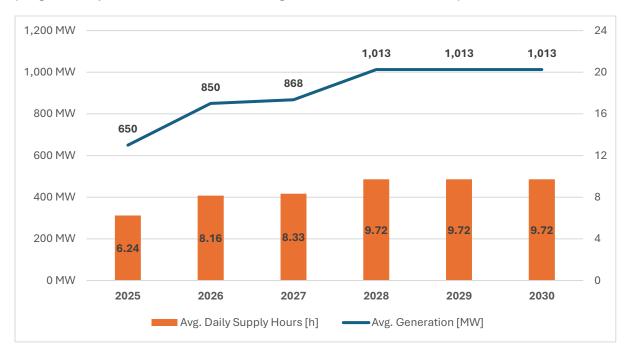


Figure 2: Generation & Supply

#### 3.1.1 Assessment of some Old Thermal Generation Assets

In parallel with the updated generation assets utilization framework, EDL embarked on a due diligence process for one of its oldest thermal generation assets, the Zouk thermal power plant. The objective of such an assessment would be to evaluate, from a technoeconomic feasibility viewpoint, selective rehabilitation options, limited refurbishment, or alternative utilization that may optimize the capacity usage from existing generation assets without compromising cost efficiency, environmental or social compliance. The results of this due diligence exercise, including any economically viable pathways that may have been identified for extending or optimizing the use of the mentioned asset, will be reflected within the second addendum to the Cost Recovery Plan scheduled for 2026, so that future planning decisions remain evidence-based and aligned with EDL's broader cost-recovery and sustainability objectives.

#### 3.2 Self-Sustained Operations

Another key aspect of the new modeling approach is that it now assumes the entire value chain in the electricity sector is fully self-sustained through EDL revenues, both Capital Expenditures (CAPEX) and Operational Expenditures (OPEX), unlike previous assumptions of subsidized combustibles or external financial support. The integrated model thus assesses the financial sustainability of EDL based exclusively on its own internally generated revenues, focusing on collection performance, tariff application, and the cost structure associated with the new generation sources and resulting investment needs.

#### 3.3 Losses Reduction

The revised NTL degradation scheme, reflecting the currently updated field conditions, the envisioned effect of the 96,000 newly procured meters<sup>6</sup>, and the expected technical and commercial loss reduction, given current security and logistical constraints, has also been factored into the model.

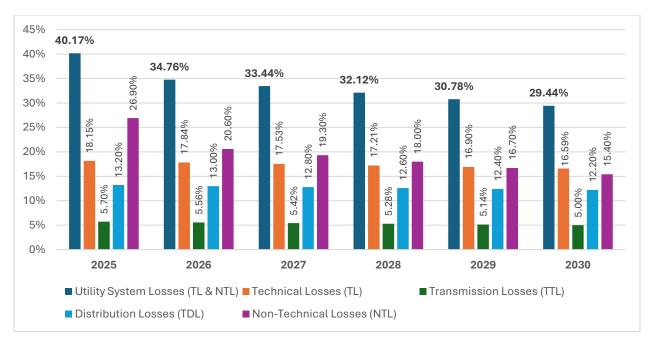


Figure 3: Losses Reduction Scheme

The degradation scheme considers a setback caused by the recent conflict and gradual recovery over time once full access to the field is regained and enforcement support from MoIM, MoD, and MoJ is steadily provided.

<sup>6</sup> These are electromechanical meters and not smart meters that are meant to be installed for meter-less subscribers whose consumptions are not being currently recorded.

Importantly, and based on performance that has and is being observed during the ongoing rollout, EDL intends, when operational, logistical, and security conditions on the ground permit, to pursue a more aggressive NTL-reduction trajectory on all Lebanese territories than the targets currently set in this addendum. The potential acceleration will be informed by field-based evidence. If conditions allow, this ambitious target aims to reduce NTL losses to no more than 9.85% by 2030.

Consolidating all previous scenario pathways into one coherent model directly linked to the updated generation assets utilization plan and the revised loss-reduction trajectory has given EDL a more accurate and realistic analytical framework that reflects new sectoral fundamentals. This unified approach provides a much clearer view of the financial risks and the sufficiency of revenues, the time of viability of full cost recovery, and its feasibility under prevailing conditions in 2025 and beyond.

# 4. Methodology

The analytical approach underlying this addendum retains the structural logic of the original CRP but incorporates an entirely updated set of assumptions to reflect the new operational and financial environment.

#### 4.1 Combustibles Pricing

Central to the revised modeling is the recalibration of Combustibles cost assumptions, which are now fully correlated with Brent crude oil prices. These prices follow the World Bank's commodity forecast<sup>7</sup> and are used to mathematically derive an estimated fuel-specific (Gas Oil, Fuel Oil) Platt's quotation adjusted for the appropriate conversion factors. To achieve more realistic unit prices an average supplier premium was added to the quotations in order to account for commercial mark-ups, as well as for the premia due to supply and geopolitical risks specific to Lebanon. To this value, EDL has further applied a 5% contingency margin to account for short-term fluctuations that could materially affect procurement costs, which EDL deemed reasonable and conservative based on the worst-case absolute price fluctuation observed within the five-year horizon of the World Bank commodity forecast (~6%). This approach enables a more realistic projection of EDL's exposure to international market volatility now that the Iraqi swap agreement is no longer available.

<sup>&</sup>lt;sup>7</sup> https://www.worldbank.org/en/research/commodity-markets

#### 4.2 Generation Mix

Assumptions about the generation fleet have also been comprehensively updated to reflect the characteristics of the redesigned generation fleet utilization plan. The model now incorporates the most recent heat rates, capacity factors, and estimates of availability for each generating asset, including the expected additions of utility-scale Solar PV from the IPPs and the World Bank–supported solar project. These technical parameters drive both the cost and supply profiles in the model and ensure that projected generation is based on realistic expectations about how the future fleet will actually perform.

#### 4.3 Collections and Revenue Streams

In parallel, the unified model's revenue assumptions have been strengthened to reflect the sector-wide obligation that all subscribers are and must be under an obligation to pay for their electricity dues, with particular emphasis on the public sector and Palestinian refugee camps, whose payment compliance is necessary to maintain financial sustainability. The estimated uncollected rate included in the model is 5.5%, a reasonable estimate based on recent performance trends. To ensure financial discipline, the model has assumed a 30% recovery rate of outstanding arrears associated with this uncollected portion, along with a progressive improvement in arrears recovery of 2% per year, reflective of planned enhancements in field enforcement, billing accuracy, and collection mechanisms.

### 4.4 Contingency Budget

The assumptions also include a special allowance for emergency repairs related to sudden damage at any of the generation, transmission, or distribution levels. A contingency budget is thus provided in the operation cost structure of 10 million dollars per year to ensure that vital repair works can be conducted promptly without jeopardizing the overall cost recovery path or delaying the ongoing execution of the plan.

# 5. Key Results

A comprehensive review of EDL's updated financial model-in particular, the Income Statement, Cashflow Statement, and Cost Recovery ratios reveals that the revised Cost Recovery Plan puts the utility on a continuous path of sustained financial viability starting in 2025. The projections reflect the combined effects of optimized generation costs, improved revenue realization, total independence from government combustibles support, and a fully funded capital and operational expenditure program sourced directly from EDL's own revenues.

#### 5.1 Income Statement

This updated Income Statement shows that revenues are continuing to grow steadily across the planning horizon, driven by loss reduction, improved bill collection, expanding billed consumption as hours of supply increase notably after the integration of the new solar farms to the generation mix, and strengthening the enforcement of payment obligations on all categories of subscribers. Meanwhile, operating expenditures rise in parallel, mainly generation costs as EDL increases its production, but the model results suggest a stabilization of margins once the new generation assets utilization plan reaches full operational maturity. For the period starting in 2026, EDL consistently covers all operating expenses, combustibles costs, and amortization of internal obligations, marking the structural shift from its historical dependence on fiscal transfers.

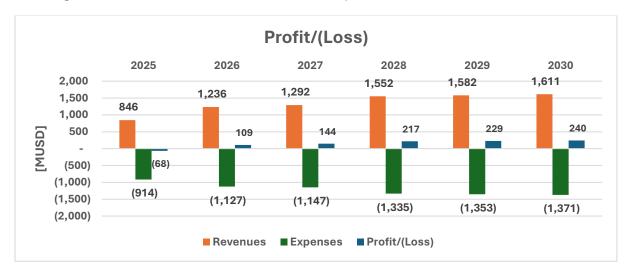


Figure 4: Income Statement

#### 5.2 Cashflow Statement

The Cashflow Statement further underlines this positive trend. From the start of 2025 and for the next five years, EDL's cash position evolves from deficit into surplus, and the model displays strong operating inflows compared to outflows. The net cash flows are acceptable for successive years, considering annual expenditures and depreciation adjustment.

The temporary deficit projected in 2026–2027 reflects the ramp-up of generation and the associated increase in generation costs, which must now be fully covered by EDL rather than subsidized. However, this coincides with accelerated loss-reduction measures and enhanced arrears recovery, both of which progressively improve revenue performance and begin to translate into sustained cash surpluses from 2029 onward. Crucially, the model shows that cash surpluses become strong enough to fully fund the required capital investment program, both OPEX and CAPEX, independently of government subsidies and external sources of finance.

This is a key milestone: EDL is now a self-sustaining utility, capable of funding network modernization and further optimizing its generation assets utilization. But this in turn strongly showcases the importance of Public-sector payment compliance as it is crucially essential for liquidity and for meeting the utility's financial obligations.

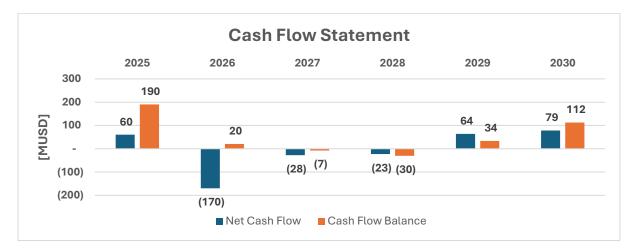


Figure 5: Cash Flow Statement

#### 5.3 Cost Recoverability

The Cost Recovery ratios analysis further underlines the structural enhancement in EDL's financial position. The cost recoverability ratio, which measures revenues relative to the full economic cost of service, reflects strong and improving congruence between tariff levels, production costs, and efficiency gains.

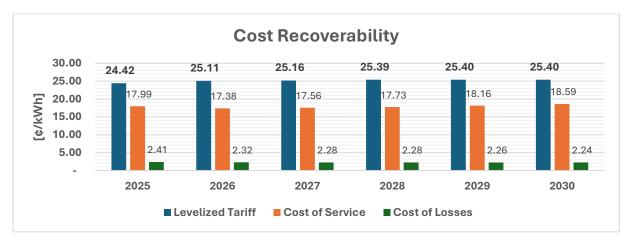


Figure 6: Tariff Cost Recoverability

As increased utilization of the existing generation fleet expands low-cost supply and losses further decline under the revised NTL reduction scheme, the combined cost of service and losses converges with actual revenues, thereby securing financial sustainability over the medium term. Full cost recovery by 2025 confirms that EDL has overcome this historic deficit that had previously impaired the utility's operational and financial capacity. Taken together, these findings validate that EDL's financial framework under the revised CRP is indeed viable and robust.

#### 5.4 Sensitivity Analysis

Within the context of EDL's cost recovery plan, sensitivity analyses are important tools to quantify the impact of operational and financial improvements on the utility's overall performance. It is in this regard that EDL systematically evaluates how incremental changes in key parameters affect revenue and cost outcomes, therefore showing the most effective levers to accelerate cost recovery. For example, a reduction in system losses by only 1% or an increase in the collection of revenues and arrears by 1% gives rise to meaningful additional cash flow.

The recovered funds can be strategically reinvested to enhance combustible supply, enabling higher fuel availability, hence supporting by extension an increase in the hours of electricity supply to customers. The below analyses not only highlight tangible benefits from targeted operational interventions but also spell out a clear evidence-based roadmap for prioritizing those that would strengthen EDL's financial sustainability while improving service reliability.

#### 5.4.1 Overall System Losses Reduction

This analysis quantifies for each year how a 1% decrease in overall system losses translates into additional revenue for both subsidized and regular blocks.

Table 2: System Losses Reduction Sensitivity

1% Reduction	Year	2025	2026	2027	2028	2029	2030
At Subsidized Block	MUSD	5.52	7.22	7.38	8.61	8.61	8.61
At Regular Block	MUSD	14.91	19.50	19.91	23.24	23.24	23.24

#### 5.4.2 Non-Technical Losses Reduction

This analysis further breaks down the Losses reduction impact and quantifies for each year how a 1% decrease in Non-Technical Losses specifically translates into additional revenue for both subsidized and regular blocks.

Table 3: Non-Technical Losses Reduction Sensitivity

1% Reduction	Year	2025	2026	2027	2028	2029	2030
At Subsidized Block	MUSD	4.52	5.93	6.08	7.12	7.15	7.18
At Regular Block	MUSD	12.21	16.02	16.42	19.24	19.31	19.38

#### 5.4.3 Collection Improvement

This analysis evaluates for each year the financial effect of improving revenue collection by 1%, demonstrating how enhanced collection efficiency directly strengthens EDL's cash flow and cost recovery potential.

Table 4: Collection Improvement Sensitivity

1% Increase	Year	2025	2026	2027	2028	2029	2030
Additional Revenue	MUSD	8.46	12.35	12.89	15.46	15.76	16.05

#### 5.4.4 Arrear Recovery Improvement

This analysis further examines for each year the financial impact of recovering an additional 1% of outstanding arrears, illustrating how improved arrears collection can provide additional liquidity.

Table 5: Arrear Recovery Improvement Sensitivity

1% Increase	Year	2025	2026	2027	2028	2029	2030
Additional Revenue	MUSD	0.49	0.72	0.75	0.90	0.92	0.94

# 6. Monitoring and Evaluation

EDL will reinforce and expand its monitoring and evaluation framework to ensure that progress under the revised Cost Recovery Plan remains measurable, credible, and in line with operational and financial targets established within the updated model.

#### 6.1 Technical and Financial Indicators

At the heart of this framework will be regular tracking and semi-annual reporting to EDL's Board of Directors, of key technical and financial indicators, such as generation efficiency, non-technical losses reductions, collection rates for all consumer categories, meter installation performance, and billing-cycle duration. These indicators shall be monitored through monthly performance reviews with Distribution Service Providers, enabling identification of emerging challenges at an early stage, and providing a basis for timely corrective action.

## 6.2 Infringement Removal Campaigns

Ongoing operational coordination with the Ministry of Interior and Municipalities (MoIM) and the Ministry of Defense (MoD) will continue to guide the planning and protection of NTL-reduction missions, especially in high-risk zones where enforcement is crucial for the success of field operations. Similarly, parallel coordination with the Ministry of Justice (MoJ) will support the fast-tracking of judicial proceedings related to violation tickets, reducing delays that have traditionally weakened enforcement and diminished deterrence.

The Ministry of Finance (MoF) will continue receiving reports on public-sector arrears on a quarterly basis, ensuring that transparency and accountability reach across government entities and not only internally within EDL.

#### 6.3 Governance and Transparency

In addition to technical and financial monitoring, EDL will reinforce governance and transparency throughout the utility. It is to this end that the utility will commit to continuous audits (both internal and external) to strengthen the accuracy of its financial management systems and also provide verifiable evidence of the utility's performance and compliance with sectoral standards.

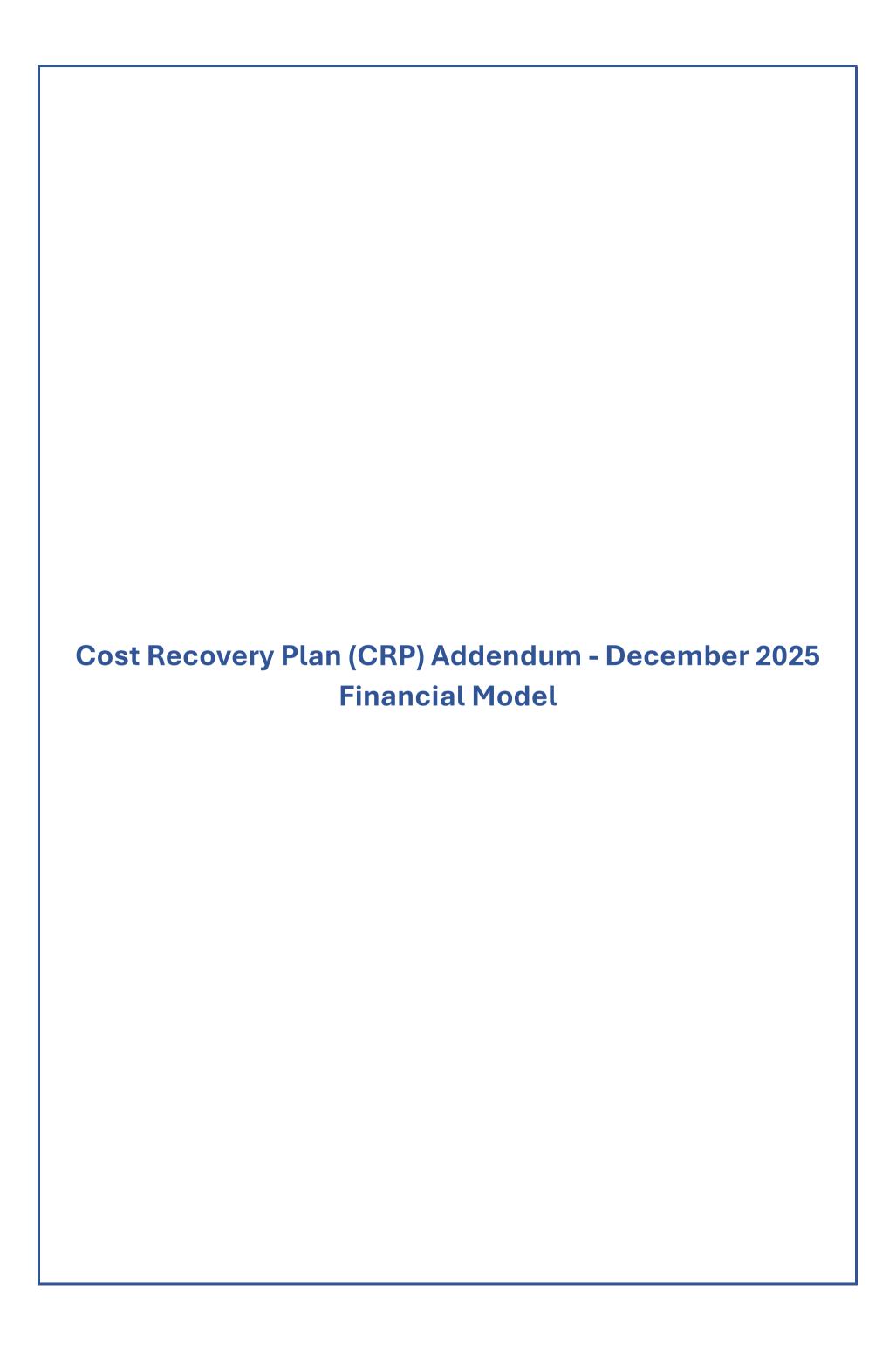
Further to that, EDL is committed to the regular publication of its financial statements, enabling stakeholders, policymakers, and the public to track progress toward agreed targets, assess financial sustainability, and maintain confidence in the reforms under way. This increased transparency is not only to instill trust but also to solidify mechanisms of accountability necessary for long-term financial discipline.

# 7. Key Conclusions

Success under this revised CRP is defined by EDL's ability to achieve and maintain full cost recovery, provide predictable improvements in supply hours, preserve its balanced financial status, and meet the revised NTL-reduction targets. The combined effect of strengthened monitoring, enhanced governance, and increased transparency ensures that EDL remains on a stable trajectory toward sustainable operations, sector credibility, and institutional resilience.

The consolidated financial projections reflect a utility that emerges from restructuring debt-free, covers its full cost of service, maintains positive cash balances, and has adequate financial capacity to ensure the maintenance, operation, and growth of its system-with no drain on the Treasury. This is one of the most important accomplishments in the modern timeline of EDL, marking a definitive departure from decades of structural deficits and laying the foundation for creditworthiness, operational independence, and long-term sector stability.

Lastly, the addendum concludes that the CRP is still viable but from now on rests on stronger institutional enforcement and coordination. The end of the Iraqi swap means the elimination of a huge buffer, putting the onus entirely on EDL's operational efficiency and the cooperation of state entities for full cost recovery. Public sector compliance, loss reduction enforcement, field security, and judicial efficiency are no more facilitating factors but conditions precedent. Subject to these preconditions, EDL can ensure financial sustainability, self-fund operations, and enforce the commitments of the original CRP.



wer plant status (1=active , 0=Inactive ) Electricity of Lebanon (EoL)	Туре	Tech	Fuel [	Dispatchable C	Capacity
Thermal Power Plants (TPP) Zouk	EDL	ST	HFO	1	953. 607.
Jieh Reciprocating Engine Power Plants (REPP)	EDL	ST	HFO	1	346. 276.
R.E Zouk R.E Jieh	EDL EDL	REPP REPP	HFO HFO	1 1	198. 78.
Combined Cycle Gas Turbine Power Plants (CCGTPP)  Deir Aammar	EDL	CCGT	Diesel	1	865. 465.
Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP)	EDL	CCGT	Diesel	1	400. 140.
Baalbek Tyr	EDL EDL	OCGT OCGT	Diesel Diesel	1 1	70. 70.
Renewable Energy Hydraulic Power Plants (HPP)					182. 30.
Safa Al Bared 1	EDL EDL	Hydro Hydro	RE RE		13. 13.
Al Bared 2 Solar	EDL	Hydro	RE		3. 151.
Beirut River Solar Snake (BRSS) Solar Farms (WB)	EDL EDL	Solar Solar	RE RE		1. 150.
Biogas Naahmeh Landfill	EDL	Biogas	RE	1	1. 1.
La Kadisha Thermal Power Plants (TPP)	Туре	Tech		Dispatch C	apacity 75.
Houreiche Hydraulic Power Plants (HPP)	EDL	ST	HFO	1	75. 12.
Becharre Mar Lichaa	EDL EDL	Hydro Hydro	RE RE		1.
Blaouza Abou Ali	EDL EDL	Hydro Hydro	RE RE		4.
Independent Power Producers Litani River Authority (LRA)	Туре	Tech		Dispatch C	Capacity 192
Litani River Authority (LRA) Hydraulic Power Plants (HPP) Markaba	PPA	Hydro	RE		192 192 36
markaba Awali Joune	PPA PPA PPA	Hydro Hydro Hydro	RE RE		108. 48.
The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim	FFA	riyuro	ne		32. 32.
Hydraulic Power Plants (HPP) Nahr Ibrahim 1 Nahr Ibrahim 2	PPA	Hydro	RE RE		32. 15. 12.
Nahr Ibrahim 3	PPA PPA	Hydro Hydro	RE RE		4.
Solar IPPs - Begaa	PPA	Solar	RE		90. 45.
Solar IPPs - Other Regions Electricity import	PPA Type	Solar Tech		Dispatch C	45. Capacity
Syria Egypt	PPA PPA	Elec. Import Elec. Import	Other Other		
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Electricity of Lebanon (EoL) Thermal Power Plants (TPP)					
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Solar Beirut River Solar Snake (BRSS) Solar Farms (WB) Blogas Naahmeh Landrill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPP) Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litan River Authority (LRA) Hydraulic Power Plants (HPP) Markaba Awali Joune The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP) Nahr Ibrahim 1 Nahr Ibrahim 2 Nahr Ibrahim 3 Solar IPPs Solar IPPs - Beqaa Solar IPPs - Other Regions Electricity import Syria Egypt Jordan strates Electricity of Lebanon (Ecl.) Thermal Power Plants (TPP) Zouk Jieh Reciprocating Engine Power Plants (REPP) R. E Zouk R. E Jeh Combined Cycle Gas Turbine Power Plants (CCGTPP) Deir Aammar Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP) Baalbek Tyr La Kadisha Thermal Power Plants (TPP) Houreiche el prices & Constraints Average Brent Crude Oil Unit Market Price Adopted Brent Crude Oil Unit Price F. O. Regression intercept HFO Premium Don. Regression coefficient F. O. Regression coefficient F. O. Regression intercept Diesel premium Done Rever Plants (TPP) Louel Costs Lieutricity of Lebanon (Ecl.) Thermal Power Plants (TPP) Thourische Louel Geoste Lectricity of Lebanon (Ecl.) Thermal Power Plants (TPP) Thourische Lectricity of Lebanon (Ecl.) Thermal Power Plants (TPP) Thourische Lectricity of Lebanon (Ecl.) Thermal Power Plants (TPP) Thourische Lectricity of Lebanon (Ecl.)	HFO	A - Ton	HFO HFO HFO HFO Diesel Diesel Diesel Fuel HFO  5%  HFO Diesel NG B	0	0.0260508 0.0260508 0.0260508
Solar Beirut River Solar Snake (BRSS) Solar Farms (WB) Blogas Naahmeh Landrill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPP) Becharre Mar Lichaa Blaouza Abou Ali Independent Power Poducers Litani River Authority (LRA) Hydraulic Power Plants (HPP) Markaba Awali Joune The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP) Nahr Ibrahim 1 Nahr Ibrahim 2 Nahr Ibrahim 3 Solar IPPs Solar IPPs - Bequa Solar IPPs - Other Regions Electricity import Syria Egypt Jordan Electricity of Lebanon (EoL) Thermal Power Plants (TPP) Zouk R.E Jeh Reciprocating Engine Power Plants (REPP) Baalbok Tyr La Kadisha Thermal Power Plants (TPP) Deir Aammar Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP) Baalbok Tyr La Kadisha Thermal Power Plants (TPP) Houreiche et prices & Constraints Average Brent Crude Oil Unit Market Price Adopted Brent Crude Oil Unit Market Price F. O. Regression coefficient D. O. Regression coefficient F. O. Regression coefficient Thermal Power Plants (TPP) Lourie Coets Lieuticity of Lebanon (EoL) Thermal Power Plants (TPP) Houreiche Average N. G. Unit Price Average O. O. Unit Price Average O. O. Unit Price Average O. O. Unit Price Average N. G. Unit Price Aver	HFO HFO HFO HFO	- Ton Ton - Ton - Ton - Ton	HFO HFO HFO HFO Diesel Diesel Diesel Fuel HFO  S%  HFO Diesel NG  B  MMBtu MMBtu MMBtu	C C	0.02605086 0.02605086 0.02605086 0.02605086
Solar Beirut River Solar Snake (BRSS) Solar Farms (WS) Biogas Naahmeh Landfüll La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPP) Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litan River Authority (IRA) Hydraulic Power Plants (HPP) Markaba Awaii Joune The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP) Nahr Ibrahim 1 Nahr Ibrahim 2 Nahr Ibrahim 3 Solar IPPs Solar IPPs - Bequa Solar IPPs - Bequa Solar IPPs - Solar FPs - Other Regions Electricity import Syria Egypt Jordan J	HFO HFO HFO	- Ton Ton - Ton	HFO HFO HFO HFO Diesel Diesel Diesel Fuel HFO  5%  HFO Diesel NG  B  MMBtu MMBtu	0 0 0	A Per B 0.02605088 0.02605080 0.02605080 0.02605080
Solar Beirut River Solar Snake (BRSS) Solar Farms (WB) Biogas Naahmen Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPP) Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPP) Markaba Awaii Joune The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP) Nahr Ibrahim 1 Nahr Ibrahim 2 Nahr Ibrahim 3 Solar IPPs Solar IPPs - Bequa Solar IPPs - Bequa Solar IPPs - Bequa Solar IPPs - Bequa Solar IPPs - Other Regions Electricity import Syria Egypt Jordan strates Electricity of Lebanon (EoL) Thermal Power Plants (TPP) R.E Zouk Jieh Combined Cycle Gas Turbine Power Plants (CCGTPP) Deir Arammar Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP) Baalbak Thermal Power Plants (TPP) Hoursiche Sol Prices & Constraints Average Brent Crude Oil Unit Market Price Adopted Brent Crude Oil Unit Price F. O. Regression intercept HFO Premium Don O. Regression intercept HFO Premium Demeurage* Average Co. Unit Price Average No. Unit Price Average No. Unit Price Average No. Unit Price Average Co. Unit Price Average Ro. O. Unit Price Tota fuel costs budget constraint Demeurage* Average Ro. O. Unit Price Tota fuel cost budget constraint Demeurage* Thermal Power Plants (TPP) Zouk Jieh Reciprocating Engine Power Plants (REPP) R.E Zouk R.E Jieh Combined Cycle Gas Turbine Power Plants (CCGTPP) Deir Ammar	HFO HFO HFO Diesel	Ton Ton Ton Ton Ton Ton Ton Ton	HFO HFO HFO HFO HFO HFO Diesel Diesel Diesel Fuel HFO  5%  HFO Diesel NG  B MMBtu MMBtu MMBtu MMBtu	0 0 0 0	0.02605086 0.02605086 0.02605086 0.02605086

Un MW	it Commitment (1 = On 1,174		1,174	1,324	1,324	1,32
MW		1,174 - -				
MW	276	276	276	276	276	- 270
MW	1 1 865	1 1 865	1 1 865	1 1 865	1 1 865	86
	1 1	1 1	1 1	1 1	1 1	
MW					:	:
MW MW	32.6 31	32.6 31	32.6 31	<i>182.6</i> 31	<i>182</i> .6 31	182. 3
	1 1 1	1	1	1 1 1	1	
tw	1	1 1 1	1 1 1	151 1	1 151 1	15
w	1	1	1	1	1 1	
w	1 13	1 13 -	1 13	1 13 -	13	1
w	- 13 <i>1</i>	- 13 <i>1</i>	- 13 <i>1</i>	- 13 1	- 13 1	1:
	1 1	1 1	1 1 1	1 1 1	1 1	
ıw	1 224	1 224	1 314	1 314	1 314	31
w w	192 192 1	192 192 1	192 192 1	192 192 1	192 192 1	19: 19:
	1 1	1	1	1 1	1	1
v v	32 32 1	32 32 1	32 32 1	32 32 1	32 32	32 32
	1	1 1	1 1	1 1	1	1
,			90 1	90	90	90
<u>'</u>	-	-	-	-	-	-
	:	:	:			
	0.81 0.71	0.81 0.71	0.81 0.71	0.81 0.71	0.81 0.71	0.8 0.7
	0.43	0.66	0.66	0.82	0.82	0.82
	0.43	0.66	0.66	0.82	0.82	0.82
	0.26 0.26	0.26 0.26	0.26 0.26	0.26 0.26	0.26 0.26	0.26 0.26
	0.41	0.41	0.41	0.41	0.41	0.4
	0.19 -	0.19 -	0.19 -	0.19 -	0.19 -	0.15
	0.65	0.65	0.65	0.65	0.65	0.65
	0.58 0.25 0.49	0.58 0.25 0.49	0.58 0.25 0.49	0.58 0.25 0.49	0.58 0.25 0.49	0.58 0.28 0.48
	0.67	0.67	0.67	0.67	0.67	0.63
	0.23	0.23	0.23	0.23	0.23	0.23
	0.23 0.23	0.23 0.23	0.23 0.23	0.23 0.23	0.23 0.23	0.23
	0.23	0.23	0.23	0.23	0.23	0.23
	0.23 0.22 0.33	0.23 0.22 0.33	0.23 0.22 0.33	0.22 0.33	0.22 0.33	0.22
	0.21	0.21	0.21	0.21	0.21	0.21
	0.19	0.19	0.19	0.19	0.19	0.19
	0.80	0.80	0.80	0.80	0.80	0.80
ı/KWh ı/KWh	1.049E-02 1.712E-02	1.049E-02 1.712E-02	1.049E-02 1.712E-02	1.049E-02 1.712E-02	1.049E-02 1.712E-02	1.049E-0. 1.712E-0.
ı/KWh ı/KWh	7.677E-03 7.217E-03	7.677E-03 7.217E-03	7.677E-03 7.217E-03	7.677E-03 7.217E-03	7.677E-03 7.217E-03	7.677E-0. 7.217E-0.
ı/KWh	7.049E-03	7.049E-03	7.049E-03	7.049E-03	7.049E-03	7.049E-0
ı/KWh	7.384E-03 1.075E-02	7.384E-03 1.075E-02	7.384E-03 1.075E-02	7.384E-03 1.075E-02	7.384E-03 1.075E-02	7.384E-0.
/KWh	1.121E-02	1.121E-02	1.121E-02	1.121E-02	1.121E-02	1.121E-0.
ı/KWh	1.234E-02	1.234E-02	1.234E-02	1.234E-02	1.234E-02	1.234E-0.
bl bl	64.00 67.20	60.00 63.00	61.00 64.05	<b>62.00</b> 65.10	63.00 66.15	64.00 67.20
on	5.45 67.804 50	5.45 67.804 50	5.45 67.804 50	5.45 67.804 50	5.45 67.804 50	5.48 67.80 5
on .	6.86 177.27	6.86 177.27	6.86 177.27	6.86 177.27	6.86 177.27	6.86 177.27
on on	80 0.20% 485.0256	80 0.20% 462.0889	80 0.20% 467.8231	80 0.20% 473.5572	80 0.20% 479.2914	0.209 485.0256
on On 1btu	719.4023 11.0600	690.5511 10.0600	697.7639 10.0600	704.9767 10.0600	712.1895 10.0600	719.4023
4	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
 KWh	13.253	12.627	12.783	12.940	13.097	13.253
KWh	21.632	20.609	20.865	21.121	21.376	21.632
KWh KWh	9. <i>7</i> 01 9.118	9.242 8.687	9.356 8.795	9.471 8.903	9.586 9.011	9.70 9.118
KWh KWh	12.590 13.187	12.085 12.658	12.211 12.790	12.337 12.922	12.463 13.054	12.590 13.187
/KWh	19.195 20.018	18.426	18.618	18.810	19.003	19.195
(KW/h	∠0.018	19.215	19.416	19.617	19.817	20.018
C/KWh						

Variable Q&M Costs (Q&M Contracts for the Power Plants)							
Electricity of Lebanon (EoL) Thermal Power Plants (TPP) Zouk	USC/kWh						
Jieh Reciprocating Engine Power Plants (REPP) R.E Zouk	USC/kWh USC/kWh	1.09	1.09	1.09	1.09	1.09	1.09
R.E Jieh Combined Cycle Gas Turbine Power Plants (CCGTPP)	USC/kWh	1.09	1.09	1.09	1.09	1.09	1.09
Deir Aammar Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP)	USC/kWh USC/kWh	1.11 1.11	1.11 1.11	1.11 1.11	1.11 1.11	1.11 1.11	1.11 1.11
Baalbek Tyr	USC/kWh USC/kWh						
Renewable Energy Hydraulic Power Plants (HPP) Safa	USC/kWh						
Al Bared 1 Al Bared 2	USC/kWh USC/kWh						
Solar Beirut River Solar Snake (BRSS) Solar Farms (WB)	USC/kWh USC/kWh						
Suar Fairis (WD) Biogas Naahmeh Landfill	USC/kWh						
La Kadisha Thermal Power Plants (TPP) Houreiche	USC/kWh						
Hydraulic Power Plants (HPP) Becharre	USC/kWh						
Mar Lichaa Blaouza Abou Ali	USC/kWh USC/kWh USC/kWh						
Upkeep Costs (O&M Contracts for the Power Plants) Electricity of Lebanon (EoL)	USC/KWIII						
Thermal Power Plants (TPP) Zouk Jieh	\$M \$M	3.51 2.09	3.51 2.09	3.51 2.09	3.51 2.09	3.51 2.09	3.51 2.09
Reciprocating Engine Power Plants (REPP) R.E Zouk	\$M		-	-	-		
R.E Jieh Combined Cycle Gas Turbine Power Plants (CCGTPP) Deir Aammar	\$M \$M		•	•	•	•	•
Zahrani Open Cycle Gas Turbine Power Plants (OCGTPP)	\$M						
Baalbek Tyr Renewable Energy	\$M \$M	0.55 0.81	0.55 0.81	0.55 0.81	0.55 0.81	0.55 0.81	0.55 0.81
Hydraulic Power Plants (HPP) Safa	\$M	0.04	0.04	0.04	0.04	0.04	0.04
Al Bared 1 Al Bared 2 Solar	\$M \$M	0.04 0.04	0.04 0.04	0.04 0.04	0.04 0.04	0.04 0.04	0.04 0.04
Beirut River Solar Snake (BRSS) Solar Farms (WB)	\$M \$M	0.04	0.04	0.04	0.04 0.25	0.04 0.50	0.04 0.75
Biogas Nashmeh Landfill La Kadisha	\$M	0.04	0.04	0.04	0.04	0.04	0.04
Thermal Power Plants (TPP) Houreiche	\$M						
Hydraulic Power Plants (HPP) Becharre	\$M \$M						
Mar Lichaa Blaouza Abou Ali	\$M \$M \$M						
Power purchase costs Independent Power Producers Litani River Authority (LRA)							
Litan Kiver Authority (Lika) Hydraulic Power Plants (HPP) Markaba	USC/kWh	3.00	3.00	3.00	3.00	3.00	3.00
Awali Joune	USC/kWh USC/kWh	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00
The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP) Nahr Ibrahim 1	USC/kWh	3.00	3.00	3.00	3.00	3.00	3.00
Nahr Ibrahim 2 Nahr Ibrahim 3	USC/kWh USC/kWh	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00
Solar IPPs Solar IPPs - Bequa Solar IPPs - Other Regions	USC/kWh USC/kWh	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27
Electricity import Syria	USC/kWh	-	-	-		-	-
Egypt Jordan Transmission Cost	USC/kWh USC/kWh	9.92	9.50	9.61	- 9.71	9.82	9.92
Substations, Overhead Lines, Underground Cable, etc. O&M Transmission S/S, OHL, UGC, etc. Depreciation	\$M \$M	39 5	40 6	41 7	41 8	42 9	43 10
Distribution Cost Distribution O&M Distribution Substations, Poles, etc. Depreciation	\$M \$M	52.00 7	53.04 8	54.10 10	55.18 12	56.29 14	57.41 15
Distribution O&M Distribution Substations, Poles, etc. Depreciation Administrative Cost Salaries and Affiliates	\$M \$M	31.0	29.0	26.7	12 25.1	25.1	15 25.1
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates  Medical Care and Insurance National Social Security Fund (NSSF)	SM SM SM SM	7 31.0 7.8 3.6	29.0 7.3 3.3	26.7 6.7 3.1	12 25.1 6.3 2.9	25.1 6.3 2.9	25.1 6.3 2.9
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost	\$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1	29.0 7.3 3.3 2.6 1.1 22	26.7 6.7 3.1 2.4 1.0 22	25.1 6.3 2.9 2.2 0.9 22	25.1 6.3 2.9 2.2 0.9	25.1 6.3 2.9 2.2 0.9 23
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Debt	SM SM SM SM SM	7 31.0 7.8 3.6 2.7 1.1	29.0 7.3 3.3 2.6 1.1	26.7 6.7 3.1 2.4 1.0	25.1 6.3 2.9 2.2 0.9	25.1 6.3 2.9 2.2 0.9	25.1 6.3 2.9 2.2 0.9
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Obt  Outstanding debt Pricipal Payable to operators Generation	SM SM SM SM SM SM SM	7 31.0 7.8 3.6 2.7 1.1	29.0 7.3 3.3 2.6 1.1 22	26.7 6.7 3.1 2.4 1.0 22	25.1 6.3 2.9 2.2 0.9 22	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Debt Outstanding debt Pricipal Payable to operators Generation transmission distribution	SM SM SM SM SM SM SM	7 31.0 7.8 3.6 2.7 1.1	8 29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 3.1 2.4 1.0 22	25.1 6.3 2.9 2.2 0.9 22	25.1 6.3 2.9 2.2 0.9	25.1 6.3 2.9 2.2 0.9 23
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Pobt Outstanding debt Pricipal Payable to operators Generation transmission distribution Interest Payable to operators Generation transmission	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Debt Outstanding debt Pricipal Payable to operators Generation transmission distribution Interest Payable to operators Generation transmission distribution Generation distribution Ooverment Working capital loan	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	8 29.0 7.3 3.3 2.6 1.1 22 10	10 26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Debt Outstanding debt Pricipal Payable to operators Generation transmission distribution Interest Payable to operators Generation Overnment Working capital Loan principal Interest Mey Lebt Meth	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost  Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Debt  Outstanding debt  Pricipal Payable to operators Generation transmission distribution Interest Payable to operators Generation transmission distribution Generation fransmission distribution Interest Payable to operators Generation fransmission distribution Generation fransmission distribution Interest Payable to operators	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	8 29.0 7.3 3.3 2.6 1.1 22 10	10 26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost  Salaries and Affiliates  Medicat Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Post  Outstanding debt  Pricipal Payable to operators Generation Interest Payable to operators Generation Government Working capital loan principal Interest  New Debt debt  Balance (\$M) Amort. (From Amortization Schedule of WB)  Amort. (From Amortization Schedule of WB)  Amort. (From Amortization Schedule of WB)  Salary S	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	31.0 7.8 3.6 2.7 1.1 21 10	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10 
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost  Salaries and Affiliates Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Dobt  Outstanding debt  Pricipal Payable to operators  Generation transmission distribution Interest Payable to operators  Generation frunsmission distribution Government Working capital loan principal Interest  New Debt debt  Balance (\$M) Amort. (From Amortization Schedule of WB) Interest grace year  World Bank starting balance principal	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$	31.0 7.8 3.6 2.7 1.1 21 10	29.0 7.3 3.3 2.6 1.1 22 10 - - - 36.59	26.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (MSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Pobt Outstanding debt Pricipal Payable to operators Generation Interest Payable to operators Generation Oeverment Working capital loan principal Interest  World Bank Salary Amort. (From Amortzation Schedule of WB) Interest  World Bank Salary	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	29.0 7.3 3.3 2.6 1.1 22 10 36.59	26.7 6.7 3.1 2.4 1.0 22 10 - - - - - - - - - - - 22 20 22 20 10 22 10 22 10 22 10 22 10 22 10 22 10 22 10 22 10 22 10 20 20 20 20 20 20 20 20 20 20 20 20 20	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10 	25.1 6.3 2.9 2.2 0.9 23 10 
Distribution O&M Distribution Substations, Poles, etc. Depreciation  Administrative Cost  Salaries and Affiliates  Medical Care and Insurance National Social Security Fund (NSSF) End-of-Service Internity (EOSI) Salary Tax  Miscellaneous Cost Emergency repairs  Outstanding debt  Pricipal Payable to operators  Convariation Interest Payable to operators  Generation Government Working capital loan principal Interest  New Debt debt  Balance (\$M)  Mort. (From Amortization Schedule of WB)  from Amort. (From Amortization Schedule of WB)  starting balance principal closing balance Commitment Fees (0.25% on the undisbursed) Interest  Anticipated investments  Generation	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	220 - 220	29.0 7.3 3.3 2.6 1.1 22 10 - - - 36.59	26.7 6.7 3.1 2.4 1.0 22 10 	25.1 6.3 2.9 2.2 0.9 22 10	25.1 6.3 2.9 2.2 0.9 23 10	25.1 6.3 2.9 2.2 0.9 23 10 
Distribution OAM Distribution Distations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Fund (MSSF) End-of-Service Indemnity (EOSI) Salary Tax Miscellaneous Cost Emergency repairs  Dott  Outstanding debt  Pricipal Payable to operators Generation Interest Payable to operators Generation Oovernment Working capital toan principal Interest  New Debt debt  Salary Commitment Salary Commitment Generation Commitment Fee (0, 25% on the undiabursed) Interest Anticipated investments Generation Commitment Substations, Overhead Lines, Underground Cable, etc. Distribution Distribution Distribution Substations, Poles, etc.	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	220 220	29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 12 45 45 20 52	26.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution OAM Distribution Substations, Poles, etc. Depreciation  Administrative Gots  Salaries and Affiliates  Medicial Care and Insurance National Social Security Fund (NSSF) Est of Soci	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$M \$	220 220 220 20 3,00 3,00 3,00	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution OAM Distribution oBustations, Poles, etc. Depreciation  Administrative Cost Salaries and Affiliates Medical Care and Insurance National Social Security Prior (MSSF) End of Sorvice Informating (COS) Energency repairs  Date  Outstanding debt  Pricipal Papable to operators Generation Interest Payable to operators Occurrence Payable to	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	220 220 12 97.00 3.00 40.17 18.15	29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 220 12 45 45 20 52 97.00 3.00 34.76 17.84	26.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution OAM Ammistrative Cost  Salaries and Affiliates Medical Care and Insuran Medical Car	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	220 	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 3.1 2.4 1.0 22 10 36.59 220 220 12 45 45 21 21 53 97.00 3.00	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution OAM Distribution Substations, Poles, etc. Depreciation  Asiminstrative Cost Sanare and Affiliate Sanare and Affiliate Sanare and Affiliate National Social Security Fund (NSP) Fund of Service Indemnity Fund (NSP) Salary Tax Miscollaneous Cost Emergency repairs  Pull Transfer of Service Indemnity Fund (NSP) Interest Psychola to operators Generation distribution Interest Psychola to operators Generation Genea	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10 	29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution CMM Distribution Solution, Poles, etc. Depreciation  ### Commercial Solution Sol	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 220 220 12 220 12 220 12 220 40.17 18.15 5.70 13.20 26.90 7.00 5.50 40.17 5.70 12.45	29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 - 220 12 45 45 20 52 97.00 3.00 34.76 17.84 5.56 13.00 20.60 7.00 5.56 12.28	26.7 6.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 22 10 220 220 220 220 220	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution, Polita, set. Depociation  Minimizarion, Scriet  Minimizarion, Minimizarion, Minimizarion, Scriet  Minimizarion, Minimizarion, Minimizarion, Scriet  Minimizarion, Minimizario,	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	7 31.0 7.8 3.6 2.7 1.1 21 10	8 29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 6.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution CAM Distribution CAM Distribution CAM Distribution Captage Medical Care and Insurance National Social Sociality Fund (NSSF) Ener of General Insurance Miscribution Captage Miscribution C	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 220 220 12 220 12 220 12 220 40.17 18.15 5.70 13.20 26.90 7.00 5.50 40.17 5.70 12.45	29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 - 220 12 45 45 20 52 97.00 3.00 34.76 17.84 5.56 13.00 20.60 7.00 5.56 12.28	26.7 6.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 22 10 220 220 220 220 220	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distribution DAM Distribution Distribution Distribution Distribution Distribution Distribution Distribution Medical Care and insurance National Social Security Print (PSSP) Biol of Server Centermity (CDS) Historial Insurance Centermi	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	97.00 3.00 3.00 3.00 3.00 3.00 3.00 40.17 18.15 5.70 13.20 22.90 40.17 5.70 12.45 22.02 21.500,00,000 36,601,199,633	8 29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59 220 220 220 12 45 45 45 21 21 53 53 97.00 3.00 33.44 17.53 5.42 12.80 19.30 7.00 5.55 33.44 5.42 12.11 15.92 21,500 21,900,000 32,904,461,332	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distriction Distriction, Polist, etc. Depreciation  States and Affiliates  Motical Encora Scoral Recoration and Record Re	\$M \$M \$M \$M \$M \$M \$M \$M \$M \$M	97.00 3.00 220 220 220 12 220 12	8 29.0 7.3 3.3 2.6 1.1 22 10	10 26.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220 220 12 45 45 21 21 21 53 53 97.00 3.00 33.44 17.53 5.42 12.80 19.30 7.00 5.50 33.44 5.42 12.80 19.30 7.00 32.904,461,332 1,541,394 46,556,568 7.00 4,881	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distriction (DAM) Distriction (Delation Internation Control (Dam)  Caltries and Affiliation Helical Control Social Social Fred (MSSS) Helical Control (Dam) Helical Control Social Social Fred (MSSS) Helical Control (Dam)	\$M \$	7 31.0 7.8 3.6 2.7 1.1 21 10	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	10 26.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59 36.59 220 220 220 12 45 45 21 21 53 53 97.00 3.00 33.44 17.53 5.42 12.11 15.92 2,500 21,900,000,000 32,904,461,332 1,541,394 46,556,568	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distriction CAMP  Contraction Control	\$M \$	7 31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 21 10 220 220 220 12 220 12 220 12 220 220	8 29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 20 220 12 45 45 45 20 20 52 52 97.00 3.00 34.76 17.84 5.56 13.00 20.60 7.00 3.569,771,210 20.60 7.00 33,569,771,210 1,526,132 46,095,612 1,00 4,753 2,049,045 1,00 27.00 27.00	10 26.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220 220 220 12 45 45 21 27 53 53 97.00 3.00 33.44 17.53 5.42 12.80 19.30 7.00 5.50 33.44 5.42 12.80 11.50 21,900,000,000 32,904,461,332 1,541,394 46,556,568 7.00 4,801 2,069,535 1,000 22,000	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Construction CADIA  Transferred and Affiliation  Medical Care and Industry  Parameters  Anti-Care and Industry  Medical Care and Industry	\$M \$	7 31.0 7.8 3.6 2.7 1.1 21 10 21 10 220 220 220 12 220 12 220 12 220 220	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	10 26.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Destination COMP  Transition Statistics and Affiliates  Medical Care and Inflamental Company  End of Service Inflamental (1908)  Salary Tar  Household Service Inflamental (1908)  Salary Tar  Outstanding Gala  Conversation  Transition  Growthmost Working capital soan  placed Inflamental Company  Growthmost Working capital soan  placed Inflamental Company  Annual Company  Ann	\$M \$	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 21 10 220 220 220 12 220 12 220 12 220 220	8 29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 20 220 12 45 45 45 20 20 3.00 34.76 17.84 5.56 13.00 20.60 7.00 5.50 21,900,000,000 33,569,771,210  1,526,132 46,095,612 1.00 4,753 2,049,045 1.00 227,00 221,00 227,00 221,00 227,00 221,00 227,00 221,00 227,00 221,00 227,00 221,00 60,00	26.7 6.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220 220 220 12 45 45 21 21 21 21 53 53 97.00 3.00 33.44 17.53 53 97.00 3.00 33.44 17.53 542 12.80 19.30 7.00 5.50 19.30 7.00 5.50 19.30 7.00 15.42 12.80 19.30 7.00 19.30 19.30 19.30 19.30 19.30 10.00 21.00 22.00 21.00 21.00 21.00 21.00 21.00 21.00 21.00	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distriction CAMP  States and Affiliates  Hedian Care of distriction (CRISTI)  End of General Inference (CRISTI)  End of G	\$M \$	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 10 10 10 10 10 10 10 10 10 10 10 10	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	10  26.7 6.7 6.7 3.1 2.4 1.0 22 10  22 10	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Distriction Color And Color Actions to the Color And Col	\$M \$	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 21 10 220 220 220 12 220 12 220 220	8 29.0 7.3 3.3 2.6 1.1 22 10	10 26.7 6.7 3.1 2.4 1.0 22 10	25.1 6.3 2.9 2.2 0.9 2.2 10 36.59  220	25.1 6.3 2.9 2.2 0.9 2.2 10 36.59  220	25.1 6.3 2.9 2.2 0.9 2.2 10 2.3 10
Description CMM States and Affiliates States	\$M \$	97.00 220 220 220 220 12 12 10 97.00 3.00 40.17 18.15 5.70 13.20 26.90 7.00 21.900,000,000 36,601,199,633 1,511,022 45,639,220 4,706 2,028,757	8 29.0 7.3 3.3 2.6 1.1 22 10 36.59  220 220 220 12 45 45 45 20 52 97.00 3.00 34.76 17.84 5.56 13.00 20.60 7.00 34.76 5.56 12.28 16.93 2,500 21,900,000 33,569,771,210  1,526,132 46,095,612 1,000 4,753 2,049,045 1,000 27.00 27.00 27.00 27.00 27.00 27.00 28.50 21,500,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 22,000 21,000 21,000 22,000 21,000 22,000 21,000 22,000 23,000 24,005 25,000 26,000 21,000 27,000 28,000 28,544	26.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220 220 220 220 12 45 45 45 21 21 53 53 97.00 3.00 33.44 17.53 5.42 12.80 19.30 7.00 21.900,000 32.904,461,332 1,541,394 46,556,568 46,556,568 21,900,000 21,900,000 21,900,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 21,000 22,000 60,000 1,35 111.24	25.1 6.3 2.9 2.2 0.9 2.2 10 36.59  220	25.1 6.3 2.9 2.2 0.9 2.3 10	25.0 25.1 6.3 2.9 2.2 0.9 23 10 
Description Code Secure on Affiliance Secure on Secure on Affiliance Sec	\$M \$	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 10 220 220 220 12 220 12 220 12 3.00 40.17 18.15 5.70 13.20 26.90 7.00 5.50 40.17 95.70 12.45 22.02 21,900,000,000 36,601,199,633 1,511,022 45,639,220 4,766 2,028,757 10.00 27,00 21,00 25,00 60,00 0.22 18.54 30,00 6,00 1,09	8 29.0 7.3 3.3 2.6 1.1 22 10	26.7 6.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220 220 220 12 45 45 45 21 21 21 21 53 53 53 97.00 3.00 33.44 17.53 53 542 12.80 19.30 7.00 5.50 21,900,000,000 32,904,461,332 21 1,541,394 46,556,568 1.00 2,000 27,000 21,000 25,000 21,000 25,000 21,000 25,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 21,000 20,000 20,000 20,000 20,000 20,000 20,000 21,000 20,000	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10
Designation Colors Section and Affiliates Sec	\$M \$	31.0 7.8 31.0 7.8 3.6 2.7 1.1 21 10 21 10 220 220 220 12 220 12 220 12 220 220	8 29.0 7.3 3.3 2.6 1.1 22 10 10 10 10 10 10 10 10 10 10 10 10 10	10 26.7 6.7 3.1 2.4 1.0 22 10 22 10 36.59  220	25.1 6.3 2.9 2.2 0.9 2.2 10	25.1 6.3 2.9 2.2 0.9 2.3 10	25.1 6.3 2.9 2.2 0.9 2.3 10

Generation (Max amount assuming al	
	l fuel can be made avalable)
Electricity of Lebanon (EoL) Thermal Power Plants (TPP)	
Zouk Jieh	
Reciprocating Engine Power Pla	ints (REPP)
R.E Jieh	
Combined Cycle Gas Turbine Po Deir Aammar	ower Plants (CCGTPP)
Zahrani Open Cycle Gas Turbine Power	Plants (OCGTPP)
Baalbek	Tallia (SSSTT)
Tyr Renewable Energy	
Hydraulic Power Plants (HPI Safa	<b>2</b> )
Al Bared 1	
Al Bared 2 Solar	
Beirut River Solar Snake (E Solar Farms (WB)	IRSS)
Biogas Naahmeh Landfill	
La Kadisha	
<b>Thermal Power Plants (TPP)</b> Houreiche	
Hydraulic Power Plants (HPI Becharre	9)
Mar Lichaa	
Blaouza Abou Ali	
Independent Power Producers Litani River Authority (LRA)	
Hydraulic Power Plants (HP)	P)
Markaba Awali	
Joune The Phoenician Society of Hydro	pelectric Forces of Nahr Ibrahim
Hydraulic Power Plants (HPI	
Nahr Ibrahim 1 Nahr Ibrahim 2	
Nahr Ibrahim 3 Solar IPPs	
Solar IPPs - Beqaa	
Solar IPPs - Other Regions Electricity import	
Syria Egypt	
Jordan fossil fuel costs	
Electricity of Lebanon (EoL)	
Thermal Power Plants (TPP)  Zouk	
Jieh	(PERI)
Reciprocating Engine Power Pla R.E Zouk	nts (KEPP)
R.E Jieh  Combined Cycle Gas Turbine Po	ower Plants (CCGTPP)
Deir Aammar	
Zahrani <b>Open Cycle Gas Turbine Power</b> :	Plants (OCGTPP)
Baalbek Tyr	
Renewable Energy Hydraulic Power Plants (HPI	
Safa	1
Al Bared 1 Al Bared 2	
Solar	
Beirut River Solar Snake (E Solar Farms (WB)	IRSS)
Biogas Naahmeh Landfill	
La Kadisha	
<b>Thermal Power Plants (TPP)</b> Houreiche	
Hydraulic Power Plants (HPI Becharre	9)
Mar Lichaa	
Blaouza Abou Ali	
Independent Power Producers Litani River Authority (LRA)	
Hydraulic Power Plants (HP)	P)
Markaba Awali	
Joune The Phoenician Society of Hydro	pelectric Forces of Nahr Ibrahim
Hydraulic Power Plants (HP)	
Nahr Ibrahim 1 Nahr Ibrahim 2	
Nahr Ibrahim 3 Solar IPPs	
Solar IPPs - Beqaa	
Solar IPPs - Other Regions Electricity import	
Syria	
Egypt Jordan	
eneration marginal cost  Electricity of Lebanon (EoL)	
Thermal Power Plants (TPP)  Zouk	
Jieh	
Death	nts (REPP)
Reciprocating Engine Power Pla R.E Zouk	
R.E Zouk R.E Jieh	wer Plants (CCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar	ower Plants (CCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani	
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek	
R.E Zouk R.E Jiah Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baatbek Tyr Renewable Energy	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baatbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power. Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahtani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas	Plants (OCGTPP)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha	Plants (OCGTPP) P) SRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill	Plants (OCGTPP) P) SRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI	Plants (OCGTPP) P) PRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa	Plants (OCGTPP) P) PRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power. Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza	Plants (OCGTPP) P) PRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (IPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers	Plants (OCGTPP) P) PRSS)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Biaouza Abou Ali	Plants (OCGTPP)  P)  P)  P)
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Po Deir Aammar Zahrani Open Cycle Gas Turbine Power. Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (HPI Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichoa Blaouza Abou Ali Independent Power Poducers Litani River Authority (LRA) Hydraulic Power Plants (HPI Becharre Ali Choa	Plants (OCGTPP)  P)  P)  P)
R.E Jouk R.E Jieh Combined Cycle Gas Turbine Pote Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awali Joune	Plants (OCGTPP)  P)  P)  P)
R.E Jouk R.E Jieh Combined Cycle Gas Turbine Pote Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awali Joune	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Poc Deir Aammar Zahrani Open Cycle Gas Turbine Power. Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (HPI Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Plants (HPI Markaba Awaii Joune The Phoenician Society of Hydre Hydraulic Power Plants (HPI Markaba Company The Phoenician Society of Hydre Hydraulic Power Plants (HPI Markaba Company The Phoenician Society of Hydre Hydraulic Power Plants (HPI Markaba Company The Phoenician Society of Hydre Hydraulic Power Plants (HPI Nahr Ibrahim 1	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim
R.E Jouk R.E Jieh Combined Cycle Gas Turbine Poleir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awali Joune The Phoenician Society of Hydre Hydraulic Power Plants (HPI Nahr Ibrahim 1 Nahr Ibrahim 1 Nahr Ibrahim 1	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Pot Deir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awaii Joune The Phoenician Society of Hydr Hydraulic Power Plants (HPI Nahr Ibrahim 1 Nahr Ibrahim 1	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim
R.E Zouk R.E Jieh Combined Cycle Gas Turbine Poleir Aammar Zahranii Open Cycle Gas Turbine Power. Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Biogas Naahmeh Landfill La Kadisha Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awali Joune The Phoenician Society of Hydre Hydraulic Power Plants (HPI Markaba Awali Joune The Phoenician Society of Hydre Hydraulic Power Plants (HPI Nahr Ibrahim 1 Nahr Ibrahim 1 Nahr Ibrahim 3 Solar IPPs - Beqaa Solar IPPs - Beqaa	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim
R.E Jouk R.E Jieh Combined Cycle Gas Turbine Poleir Aammar Zahrani Open Cycle Gas Turbine Power Baalbek Tyr Renewable Energy Hydraulic Power Plants (HPI Safa Al Bared 1 Al Bared 2 Solar Beirut River Solar Snake (E Solar Farms (WB) Blogas Thermal Power Plants (TPP) Houreiche Hydraulic Power Plants (HPI Becharre Mar Lichaa Blaouza Abou Ali Independent Power Producers Litani River Authority (LRA) Hydraulic Power Plants (HPI Markaba Awaii Joune The Phoenician Society of Hydrr Hydraulic Power Plants (HPI Nahr Ibrahim 1 Nahr Ibrahim 2 Nahr Ibrahim 3 Solar IPPs - Beqaa	Plants (OCGTPP)  P)  P)  P)  Delectric Forces of Nahr Ibrahim

2025 2026 2027 2028 2029 2030

	2025	2026	2027	2028	2029	2030
KWh	5,694,000,000	7,446,000,000	7,603,680,000	8,872,084,227	8,872,084,227	8,872,084,227
KWh KWh	5,194,216,235 -	6,946,216,235 -	6,946,216,235 -	8,214,620,462 -	8,214,620,462 -	8,214,620,462 -
KWh KWh	:	-	:			
KWh KWh	<b>1,883,400,000</b> 1,401,600,000	<b>1,883,400,000</b> 1,401,600,000	<b>1,883,400,000</b> 1,401,600,000	<b>1,883,400,000</b> 1,401,600,000	<b>1,883,400,000</b> 1,401,600,000	<b>1,883,400,000</b> <i>1,401,600,000</i>
KWh KWh	481,800,000 <b>3,228,997,835</b>	481,800,000 <b>4,980,997,835</b>	481,800,000 <b>4,980,997,835</b>	481,800,000 <b>6,249,402,062</b>	481,800,000 <b>6,249,402,062</b>	481,800,000 <b>6,249,402,062</b>
KWh KWh	1,735,819,646 1,493,178,190	2,677,646,235 2,303,351,600	2,677,646,235 2,303,351,600	3,359,505,155 2,889,896,907	3,359,505,155 2,889,896,907	3,359,505,155 2,889,896,907
KWh KWh	-	-	-	-	•	-
KWh KWh	- 81,818,400	- 81,818,400	- 81,818,400	- 81,818,400	- 81,818,400	- 81,818,400
KWh KWh	<b>74,460,000</b> 30,660,000	<b>74,460,000</b> 30,660,000	<b>74,460,000</b> 30,660,000	<b>74,460,000</b> 30,660,000	<b>74,460,000</b> 30,660,000	<b>74,460,000</b> 30,660,000
KWh KWh	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000
KWh KWh	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400
KWh	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400
KWh KWh	<b>5,694,000</b> 5,694,000	<b>5,694,000</b> 5,694,000	<b>5,694,000</b> 5,694,000	<b>5,694,000</b> 5,694,000	<b>5,694,000</b> 5,694,000	<b>5,694,000</b> 5,694,000
KWh KWh	52,560,000	52,560,000 -	52,560,000 -	52,560,000 -	52,560,000 -	52,560,000
KWh KWh	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
KWh KWh	8,059,200 7,270,800	8,059,200 7,270,800	8,059,200 7,270,800	8,059,200 7,270,800	8,059,200 7,270,800	8,059,200 7,270,800
KWh KWh	19,710,000 17,520,000	19,710,000 17,520,000	19,710,000 17,520,000	19,710,000 17,520,000	19,710,000 17,520,000	19,710,000 17,520,000
KWh KWh	447,223,765 379,771,765	447,223,765 379,771,765	604,903,765 379,771,765	604,903,765 379,771,765	604,903,765 379,771,765	604,903,765 379,771,765
KWh	379,771,765	379,771,765	379,771,765	379,771,765	379,771,765	379,771,765
KWh KWh	71,419,765 213,744,000	71,419,765 213,744,000	71,419,765 213,744,000	71,419,765 213,744,000	71,419,765 213,744,000	71,419,765 213,744,000
KWh KWh	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>
KWh KWh	<b>67,452,000</b> 29,784,000	<b>67,452,000</b> 29,784,000	<b>67,452,000</b> 29,784,000	<b>67,452,000</b> 29,784,000	<b>67,452,000</b> 29,784,000	<b>67,452,000</b> 29,784,000
KWh KWh	24,528,000 13,140,000	24,528,000 13,140,000	24,528,000 13,140,000	24,528,000 13,140,000	24,528,000 13,140,000	24,528,000 13,140,000
KWh KWh	-	-	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000
KWh KWh	-	-	74,898,000	74,898,000	74,898,000	74,898,000
KWh KWh	:	:	:	:	:	:
KWh	-		- :	- :	- :	:
	:	:	:	:	:	:
	135,962,364	129,532,770	131,140,168	132,747,567	134,354,965	135,962,364
	43,932,839	41,855,276	42,374,667	42,894,057	43,413,448	43,932,839
	218,531,699 196,900,082	323,584,043 291,553,696	326,963,864 294,598,962	414,465,250 373,438,920	418,705,738 377,259,658	422,946,226 381,080,397
	130,300,002	231,333,030	234,030,302	373,438,320	377,233,030	361,060,337
	:	:	:	:	:	
			-		-	
USC/KWh	13.25	12.63	12.78	12.94	13.10	13.25
USC/KWh	21.63	20.61	20.86	21.12	21.38	21.63
USC/KWh USC/KWh	10.79 10.21	10.33 9.78	10.45 9.89	10.56 9.99	10.68 10.10	10.79 10.21
USC/KWh	13.70	13.19	13.32	13.45	13.57	13.70
USC/KWh	14.30	13.77	13.90	14.03	14.16	14.30
USC/KWh USC/KWh	19.20 20.02	18.43 19.22	18.62 19.42	18.81 19.62	19.00 19.82	19.20 20.02
USC/KWh USC/KWh	:		-		-	
USC/KWh		-	-	-	-	
USC/KWh			-	-	-	
USC/KWh		-	-	-	-	
USC/KWh	-			-	-	-
USC/KWh	15.59	14.85	15.04	15.22	15.41	15.59
USC/KWh						
USC/KWh USC/KWh		-	-	-		
USC/KWh						-
USC/KWh USC/KWh	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00
USC/KWh	3.00	3.00	3.00	3.00	3.00	3.00
USC/KWh USC/KWh	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00 3.00	3.00
USC/KWh	3.00	3.00	3.00	3.00	3.00	3.00
USC/KWh USC/KWh	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27	5.70 6.27
USC/KWh						

9.71

9.92

USC/KWh USC/KWh USC/KWh

Thermal Power Plants (TPP)	Dispatchable	9		
Zouk Jieh		00		
nen Reciprocating Engine Power Plants (REPP) R.E Zouk	-			
R.E Jieh Combined Cycle Gas Turbine Power Plants (CCGTPP)	1.	.00		
Deir Aammar Zahrani		.00		
Open Cycle Gas Turbine Power Plants (OCGTPP) Baalbek	-	.00		
Tyr Renewable Energy		00		
Hydraulic Power Plants (HPP)				
Safa Al Bared 1				
Al Bared 2 Solar				
Beirut River Solar Snake (BRSS) Solar Farms (WB)				
Biogas Naahmeh Landfill		.00		
La Kadisha Thermal Power Plants (TPP)	Dispatch			
Houreiche <b>Hydraulic Power Plants (HPP)</b>	1.	.00		
Becharre Mar Lichaa				
Blaouza Abou Ali				
Independent Power Producers Litani River Authority (LRA)	Dispatch			
Hydraulic Power Plants (HPP) Markaba				
Awali Joune				
The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP)				
Nahr Ibrahim 1 Nahr Ibrahim 2				
Nahr Ibrahim 3 Solar IPPs				
Solar IPPs - Beqaa Solar IPPs - Other Regions				
Solar Pres Other Regions Electricity import Syria	Dispatch			
Egypt				
Jordan Stoots generation Flootsight of Johanna (Fol.)	T.,	Tank	Eurol	fuel constraint
Electricity of Lebanon (EoL) Thermal Power Plants (TPP)	Type -	Tech -	Fuel -	fuel constraint
Zouk Jieh	EDL EDL	ST ST	HFO HFO	1
Reciprocating Engine Power Plants (REPP) R.E Zouk	EDL -	REPP	HFO	1
R.E Jieh  Combined Cycle Gas Turbine Power Plants (CCGTPP)	EDL -	REPP -	HFO -	
Deir Aammar Zahrani	EDL EDL	CCGT CCGT	Diesel Diesel	1 1
Open Cycle Gas Turbine Power Plants (OCGTPP) Baalbek	EDL -	OCGT	- Diesel	1
Tyr Renewable Energy	EDL -	OCGT -	Diesel -	1
Hydraulic Power Plants (HPP) Safa	EDL -	- Hydro	- RE	
Al Bared 1 Al Bared 2	EDL EDL	Hydro Hydro	RE RE	
Solar  Beirut River Solar Snake (BRSS)	EDL -	Solar	- RE	
Solar Farms (WB) Biogas	EDL	Solar	RE	-
Naahmeh Landfill La Kadisha	EDL Type	Biogas Tech	RE Fuel	-
Thermal Power Plants (TPP)	Type -	ST	-	1.00
Houreiche Hydraulic Power Plants (HPP) Becharre	EDL - EDL	 Hydro	HFO - RE	7.00
Mar Lichaa	EDL	Hydro	RE	:
Blaouza Abou Ali	EDL EDL	Hydro Hydro	RE RE	-
Independent Power Producers Litani River Authority (LRA)	Туре -	Tech -	Fuel -	
<b>Hydraulic Power Plants (HPP)</b> Markaba	PPA -	- Hydro	- RE	
Awali Joune	PPA PPA	Hydro Hydro	RE RE	:
The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim Hydraulic Power Plants (HPP)		· -	:	
Nahr Ibrahim 1 Nahr Ibrahim 2	PPA PPA	Hydro Hydro	RE RE	-
Nahr Ibrahim 3 Solar IPPs	PPA	Hydro	RE -	-
Solar IPPs - Beqaa Solar IPPs - Other Regions	PPA PPA	Solar Solar	RE RE	
<b>Electricity import</b>	Type PPA	Tech Elec. Import	Fuel Other	-
	PPA	Elec. Import	Other	:
Syria Egypt				
Syria Egypt Jordan neration summary	PPA PPA	Elec. Import	Other	
Syria Egypt Jordan neration summary Ceneration by source Electricity of Lebanon (EoL)			Other	
Syria Egypt Jordan neration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha			Other	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (ECL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers			Other	
Syria Egypt Jordan Poration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import			Other	
Syria Egypt Jordan neration summary Generation by source  Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type  Generation by type	PPA		Other	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply	PPA  EDL		Other	
Syria Egypt Jordan neration summary Generation by source Electricity of Lebanon (EcL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Power purchase agreements Proportion of supply	PPA		Other	
Syria Egypt Jordan  norration summary  Generation by source  Electricity of Lebanon (ECL) Proportion of supply  La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Proportion of supply Generation by Technology Steam turbines power plants	PPA  EDL		Other	
Syria Egypt Jordan neration summary Generation by source  Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology	PPA  EDL	Elec. Import	Other	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Generation by type Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply	PPA  EDL	Elec. Import	Other	
Syria Egypt Jordan  Incration summary  Generation by source  Electricity of Lebanon (ECL) Proportion of supply  La Kadisha Proportion of supply  Independent Power Producers Proportion of supply  Electricity import Proportion of supply  Generation by type  Own generation Proportion of supply  Power purchase agreements Proportion of supply  Generation by Technology  Steam turbines power plants Proportion of supply  Reciprocating Engine Power Plants (REPP) Proportion of supply  Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply	PPA  EDL	ST REPP OCGT	Other	
Syria Egypt Jordan  neration summary  Generation by source  Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type  Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply	PPA  EDL	ST REPP OCGT CCGT	Other	
Syria Egypt Jordan  netration summary  Generation by source  Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Generation by type Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro	Other	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Steam turbines power plants Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Proportion of supply Solar power Plants (HPP) Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar	Other	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (ECL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Solar power plant Proportion of supply Solar power plant Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	Other	
Syria Egypt Jordan  Interation summary  Generation by source  Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Generation by type Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Proportion of supply Proportion of supply Solar power Plants (HPP) Proportion of supply Solar power Plants Proportion of supply Solar power Plant Proportion of supply Solar power plant Proportion of supply Solar power plant Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar	Other	
Syria Egypt Jordan Interation summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Proportion of supply Solar power Plant (HPP) Proportion of supply Solar power Plant Proportion of supply Biogas	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (ECL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Solar power plant Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Generation fuel mix Heavy fuel oil Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas		
Syria Egypt Jordan  Intriction summary  Generation by source  Electricity of Lebanon (ECL) Proportion of supply  La Kadisha Proportion of supply  Independent Power Producers Proportion of supply  Electricity import Proportion of supply  Generation by type  Own generation Proportion of supply  Power purchase agreements Proportion of supply  Generation by Technology  Steam turbines power plants Proportion of supply  Reciprocating Engine Power Plants (REPP) Proportion of supply  Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply  Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply  Hydraulic Power Plants (HPP) Proportion of supply  Solar power plant Proportion of supply  Elec. Import Proportion of supply  Elec. Import Proportion of supply  Elec. Import Proportion of supply  Generation fuel mix Heavy fuel oil Proportion of supply  Dieset oil Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO	
Syria Egypt Jordan Doration summary Generation by source Electricity of Lebanon (ECL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Open Cycle Gas Turbine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Diesel oil Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan netration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Generation by Technology Steam turbines power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Solar power plant Proportion of supply Biogas Proportion of supply Elec. Import Proportion of supply	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Formal Sylvanous Plants Proportion of supply Elec. Import Proportion of supply Generation fuel mix Heavy fuel oil Proportion of supply Diesel oil Proportion of supply Eleclency Cenerated Energy Allocation	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Solar power Plants Proportion of supply Elec. Import Proportion of supply Diesel oil Proportion of supply Natural gas Proportion of supply Natural gas Proportion of supply Filled Energy Proportion of supply Elled Energy Concessions (Bell & Zahle)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summory Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Biogas Proportion of supply Elec. Import Proportion of supply Diesel oil Proportion of supply Natural gas Proportion of supply Renewable energy Proportion of supply Elited Energy Generated Energy Allocation Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Utilities System Losses (TL. & NTL) Technical Losses (TL) Technical Losses (TL)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Own purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Formal supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Elec. Import Proportion of supply Biogas Proportion of supply Elec. Import Proportion of supply Generation fuel mix Heavy fuel oil Proportion of supply Diesel oil Proportion of supply Electinesy Proportion of supply Elited Energy Proportion of supply Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Utilities System Losses (TL, Transmission Losses (TL) Transmission Losses (TL)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply La Kadisha Proportion of supply Electricity import Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Reciprocating Engine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Diesel oil Proportion of supply Natural gas Proportion of supply Polities Ecl. & La Kadisha) Connessions (Ibeli & Zahle) Utilities System Losses (TL) Irensmission Losses (TDL) Distribution Losses (TDL) Distribution Losses (TDL) Distribution Losses (TDL) Non-Technical Losses (TL) Distribution Losses (TDL) Non-Technical Losses (TL) Distribution Losses (TDL)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summory Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Reciprocating Engine Power Plants (CCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Biogas Proportion of supply Biogas Proportion of supply Ceneration fuel mix Proportion of supply Natural gas Proportion of supply Renewable energy Proportion of Supply Technical Losses (TL & NTL) Distribution Losses (TLL) Non-Technical Losses (TLL) Billide energy	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan  Norration summary  Generation by source  Electricity of Lebanon (EcL) Proportion of supply  La Kadisha Proportion of supply  Independent Power Producers Proportion of supply  Electricity import Proportion of supply  Generation by type  Own generation Proportion of supply  Power purchase agreements Proportion of supply  Generation by Technology  Steam turbines power plants Proportion of supply  Generation by Technology  Steam turbines power plants Proportion of supply  Proportion of supply  Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply  Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply  Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply  Hydraulic Power Plants (HPP) Proportion of supply  Solar power plant Proportion of supply  Elec. Import Proportion of supply  Elec. Import Proportion of supply  Generation fuel mix Heavy fuel oil Proportion of supply  Renewable energy Proportion of supply  Renewable energy Proportion of supply  Ellied Energy  Generated Energy Allocation  Utilities (Col. & La Kadisha)  Concessions (Ibeli & Zahle)  Utilities (Col. & La Kadisha)  Concessions System Losses (TL) Distribution Losses (TL) Billed energy  Billed by Utilities (Ecl. & La Kadisha)  Concessions (Beli & Zahle)  Billed by Utilities (Ecl. & La Kadisha)  Concessions (Beli & Zahle)  Billed by Utilities (Ecl. & La Kadisha)  Concessions (Beli & Zahle)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (EoL) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Power purchase agreements Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Open Cycle Gas Turbine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Elec. Emport Proportion of supply Diesel oil Proportion of supply Elec. Emport Proportion of supply Diesel oil Proportion of supply Elitited Energy Proportion of supply Elitited Energy Proportion Losses (TL) Transmission Losses (TL) Transmission Losses (TL) Distribution Losses (TL) Utilities System Losses (TL) Proportion System Losses (TL) Billed energy Billed by Utilities (Eol. & La Kadisha) Concessions (Ubeil & Zahle) Utilities Generated Emerated Energy Supply Erden demand	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	
Syria Egypt Jordan noration summary Generation by source Electricity of Lebanon (Ecl.) Proportion of supply La Kadisha Proportion of supply Independent Power Producers Proportion of supply Electricity import Proportion of supply Generation by type Own generation Proportion of supply Own generation Proportion of supply Generation by Technology Steam turbines power plants Proportion of supply Reciprocating Engine Power Plants (REPP) Proportion of supply Reciprocating Engine Power Plants (OCGTPP) Proportion of supply Combined Cycle Gas Turbine Power Plants (CCGTPP) Proportion of supply Hydraulic Power Plants (HPP) Proportion of supply Solar power plant Proportion of supply Elec. Import Proportion of supply Elec. Import Proportion of supply Diesel oil Proportion of supply Diesel oil Proportion of supply Proportion of supply Electing the mix Heavy fuel oil Proportion of supply Natural gas Proportion of supply Elled Energy Generated Energy Allocation Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Utilities System Losses (TL) Distribution Losses (TDL) Non-Technical Losses (TL) Irensmission Losses (TDL) Distribution Losses (TL) NIL) Elled Denergy Billed by Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Utilities (Ecl & La Kadisha) Concessions (Ibeli & Zahle) Elited Energy Billed by Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Elited Energy Billed by Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Elited Energy Billed by Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Elited Energy Billed by Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle) Elited Energy Billed the Utilities (Ecl. & La Kadisha) Concessions (Ibeli & Zahle)	PPA  EDL	ST REPP OCGT CCGT Hydro Solar Biogas	HFO Diesel NG	

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	12	12	12	12	12	12
	18	18	18	18	18	18
	11	11	11	11	11	11
	10	10	10	10	10	10
	13	13	13	13	13	13
	14	14	14	14	14	14
	16	16	16	16	16	16
	17	17	17	17	17	17
	:			-	:	-
					-	-
						-
	6	6	6	6	6	6
	15	15	15	15	15	15
		:	:	:		
	-	-	-	-	-	-
	-	-	-		-	-
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						-
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	5,694,000,000 5,194,216,235	7,446,000,000 6,946,216,235	7,603,680,000 6,946,216,235	8,872,084,227 8,214,620,462	8,872,084,227 8,214,620,462	8,872,084,227 8,214,620,462
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	1,883,400,000	1,883,400,000	1,883,400,000	1,883,400,000	1,883,400,000	1,883,400,000
	1,401,600,000 481,800,000	1,401,600,000 481,800,000	1,401,600,000 481,800,000	1,401,600,000 481,800,000	1,401,600,000 481,800,000	1,401,600,000 481,800,000
	3,228,997,835	4,980,997,835	4,980,997,835	6,249,402,062	6,249,402,062	6,249,402,062
	1,735,819,646 1,493,178,190	2,677,646,235 2,303,351,600	2,677,646,235 2,303,351,600	3,359,505,155 2,889,896,907	3,359,505,155 2,889,896,907	3,359,505,155 2,889,896,907
	•		-	-	-	-
	81,818,400 74,460,000	81,818,400 74,460,000	81,818,400 74,460,000	81,818,400 74,460,000	81,818,400 74,460,000	81,818,400 74,460,000
	30,660,000	30,660,000	30,660,000	30,660,000	30,660,000	30,660,000
	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000	30,660,000 13,140,000
	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400
	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400	1,664,400
	5,694,000	5,694,000	5,694,000	5,694,000	5,694,000	5,694,000
	5,694,000 <b>52,560,000</b>	5,694,000 <b>52,560,000</b>	5,694,000 <b>52,560,000</b>	5,694,000 <b>52,560,000</b>	5,694,000 <b>52,560,000</b>	5,694,000 <b>52,560,000</b>
••••••	-	-	-	-	-	-
	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
	8,059,200	8,059,200 7,270,800	8,059,200 7,270,800	8,059,200	8,059,200	8,059,200 7,270,800
	7,270,800 19,710,000	19,710,000	19,710,000	7,270,800 19,710,000	7,270,800 19,710,000	19,710,000
	17,520,000 <b>447,223,765</b>	17,520,000 <b>447,223,765</b>	17,520,000 <b>604,903,765</b>	17,520,000 <b>604,903,765</b>	17,520,000 <b>604,903,765</b>	17,520,000 <b>604,903,765</b>
••••••	379,771,765	379,771,765	379,771,765	379,771,765	379,771,765	379,771,765
	<b>379,771,765</b> 71,419,765	<b>379,771,765</b> 71,419,765	<b>379,771,765</b> 71,419,765	<b>379,771,765</b> 71,419,765	<b>379,771,765</b> 71,419,765	<b>379,771,765</b> 71,419,765
	213,744,000	213,744,000	213,744,000	213,744,000	213,744,000	213,744,000
	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>	94,608,000 <b>67,452,000</b>
	67,452,000	67,452,000	67,452,000	67,452,000	67,452,000	67,452,000
	29,784,000 24,528,000	29,784,000 24,528,000	29,784,000 24,528,000	29,784,000 24,528,000	29,784,000 24,528,000	29,784,000 24,528,000
	13,140,000	13,140,000	13,140,000	13,140,000	13,140,000	13,140,000
	:	:	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000	<b>157,680,000</b> 82,782,000
	-	-	74,898,000	74,898,000	74,898,000	74,898,000
						-
				8,872,084,227	8,872,084,227	
	5,694,000,000	7,446,000,000	7,603,680,000			8,872,084,227
	5,694,000,000 5,694,000,000 5,194,216,235	7,446,000,000 7,446,000,000 6,946,216,235	7,603,680,000 7,603,680,000 6,946,216,235	8,872,084,227 8,214,620,462	8,872,084,227 8,214,620,462	8,872,084,227
	5,694,000,000 5,194,216,235 91.22%	<b>7,446,000,000</b> <b>6,946,216,235</b> 93.29%	<b>7,603,680,000</b> <b>6,946,216,235</b> 91.35%	<b>8,214,620,462</b> 92.59%	<b>8,214,620,462</b> 92.59%	8,872,084,227 8,214,620,462 92.59%
	5,694,000,000 5,194,216,235 91.22% 52,560,000 0.92%	7,446,000,000 6,946,216,235 93.29% 52,560,000 0.71%	7,603,680,000 6,946,216,235 91.35% 52,560,000 0.69%	8,214,620,462 92.59% 52,560,000 0.59%	<b>8,214,620,462</b> 92.59% <b>52,560,000</b> 0.59%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59%
	5,694,000,000 5,194,216,235 91.22% 52,560,000	7,446,000,000 6,946,216,235 93.29% 52,560,000	7,603,680,000 6,946,216,235 91.35% 52,560,000	<b>8,214,620,462</b> 92.59% <b>52,560,000</b>	<b>8,214,620,462</b> 92.59% <b>52,560,000</b>	8,872,084,227 8,214,620,462 92.59% 52,560,000
	5,694,000,000 5,194,216,235 91.22% 52,560,000 0.92% 447,223,765 7.85%	7,446,000,000 6,946,216,235 93.29% 52,560,000 0.71% 447,223,765 6.01%	7,603,680,000 6,946,216,235 91.35% 52,560,000 0.69% 604,903,765 7.96%	8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82%	8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82%
	5,694,000,000 5,194,216,235 91,22% 52,560,000 0.92% 447,223,765 7.85% - 0.00%	7,446,000,000 6,946,216,235 93,29% 52,560,000 0.71% 447,223,765 6.01% - 0.00%	7,603,680,000 6,946,216,235 91,35% 52,560,000 0.69% 604,903,765 7.96% - 0.00%	8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% - 0.00%	8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% - 0.00%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% - 0.00%
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7,85% 0,0096 5,694,000,000 5,246,776,235	7,446,000,000 6,946,216,235 93,2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% - 0,00% 7,603,680,000 6,998,776,235	8,214,620,462 92.5996 52,560,000 0.5996 604,903,765 6.8296 0.0096 8,872,084,227 8,267,180,462	8,214,620,462 92,5996 52,560,000 0.5996 604,903,765 6.8296 - 0.0096 8,872,084,227 8,267,180,462	8,872,084,227 8,214,620,462 52,560,000 0,59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 - 0,0096 5,694,000,000	7,446,000,000 6,946,216,235 93,2996 52,560,000 0.7176 447,223,765 6.01% - 0.0096 7,446,000,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0.69% 604,903,765 7,96% - - 0.00% 7,603,680,000	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% - 0,00% 8,872,084,227	8,214,620,462 92,5996 52,560,000 0,5996 604,903,765 6.8296 - 0.0096 8,872,084,227	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 0.00% 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,994,000,000 5,246,776,235 92,1596 447,223,765 7,8596	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 6,939,776,235 6,93,765 6,0196	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,829% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,059% 604,903,765 6.82% 0,00% 8,872,084,26 9,31,89% 604,903,765 6.82%
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000	8,214,620,462 92.5996 52,560,000 0.5996 604,903,765 6.8296 0.0096 8,872,084,227 8,267,180,462 93,1896 604,903,765 6.8296 8,872,084,227	8,214,620,462 92,5996 52,560,000 0,5996 604,903,765 6,8296 0,0096 8,872,084,227 8,267,180,462 93,1896 604,903,765 6,8296 8,872,084,227	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,94,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,594,000,000 0 0,0006	7,446,000,000 6,946,216,235 93,2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6.0196 7,446,000,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,069% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000	8,214,620,462 92:59% 52,560,000 0.59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462 93.18% 604,903,765 6.82% 8,872,084,227	8,214,620,462 92,59% 52,560,000 0,5996 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,8296 8,872,084,227 - 0,00%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,059% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,8% 604,903,8% 6,82% 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000	8,214,620,462 92.5996 52,560,000 0.5996 604,903,765 6.8296 0.0096 8,872,084,227 8,267,180,462 93,1896 604,903,765 6.8296 8,872,084,227	8,214,620,462 92,5996 52,560,000 0,5996 604,903,765 6,8296 0,0096 8,872,084,227 8,267,180,462 93,1896 604,903,765 6,8296 8,872,084,227	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0.9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92.1596 447,223,765 7.8596 5,694,000,000 0.0096 1,883,400,000 33.0896	7,446,000,000 6,946,216,235 93,2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,778,235 93,9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996	7,603,680,000 6,946,216,235 91,35% 52,660,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 2,04% 604,903,765 7,96% 7,603,680,000 6,948,776,235 0,00% 1,883,400,000 24,77%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 2,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% -0,00% 8,872,084,227 5,267,180,462 93,189% 604,903,765 6,829% 8,872,084,227 -0,00% 1,883,400,000 21,23%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23%
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 0.0096 5,944,000,000 5,246,776,235 92,1596 447,223,765 7.8596 1,859,000,000 0.0096 1,883,400,000 33.0896 0.0096 3,226,997,835	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6.0196 7,446,000,000 0,000 1,883,400,000 25,2996 4,980,997,835	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 0,00% 1,883,400,000 24,77% 4,980,997,835	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,662	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0.00% 1,883,400,000 21,23% 6,249,402,662
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,594,000,000 1,883,400,000 33,0896 - 0,0096 3,228,997,835 5,57196	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 0,00% 4,980,97,835 65,51%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% - 0,00% 6,249,402,062 70,44%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44%
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,946,070,000 5,246,776,235 92,1596 447,223,765 7,8596 5,994,000,000 0,0096 1,883,400,000 33,0896 0,0096 3,228,997,835 5,67196 574,243,765 10,0996	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 6,0196 7,446,000,000 1,883,400,000 25,296 0,00% 4,980,997,835 66,8996 574,243,765 7,7196	7,603,680,000 6,946,216,235 91,35% 52,660,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 1,883,400,000 24,77% 6,000 6,999,78,35 6,51% 65,51% 65,51% 65,51% 65,51%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0.00% 1,883,400,000 21,23% 0.00% 6,249,402,662 70,44% 574,243,765 6.47%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,169% 604,903,765 6,829% 8,872,084,227 - 0,00% 1,883,400,000 21,23% - 0,00% 6,249,402,062 70,449% 574,243,765 6,479%	8,872,084,227 8,214,620,462 92,599 52,560,000 0,059% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,43% 574,243,765 6.47%
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 1,883,400,000 3,0896 - 0.0096 3,228,997,835 56,7196 574,243,765	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000 1,883,400,000 25,2996 - 0,0096 4,980,997,835 66,89% 574,243,765	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,6,996 604,903,765 7,96% 7,603,680,000 6,996,776,235 92,0496 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 4,980,997,835 65,5196 574,243,765	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 33,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,443,765	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 1,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% - 0,00% 6,249,402,062 70,44% 574,243,765
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 -0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,594,000,000 33,0896 -0.0096 3,228,997,835 55,7196 574,243,765 10,0996 1,664,400 0,0396 5,564,000 0,0396	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 0.0096 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0296 5,599,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 0,00% 4,980,97,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 5,694,000	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0.00% 1,883,400,000 21,23% 0.00% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,594,000	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% -0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,829% 8,872,084,227 -0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,479% 159,344,400 1,80% 5,694,000	8,872,084,227 8,214,629,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 1,883,400,000 21,23% 6,249,402,662 70,43% 574,243,765 6,47% 159,344,400 1,893,44,400 1,893,44,400 1,894,400
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 0.0096 1,883,400,000 33.0896 0.0096 3,228,997,835 55,7196 574,243,765 10.0996 1,864,400 0.0396	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000 25,2996 1,883,400,000 25,2996 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 2,00% 1,883,400,000 24,77% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 2,10%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80%	8,872,084,227 8,214,620,462 92,599 52,560,000 0,599 604,903,765 6,829 0,009 8,872,084,227 8,267,180,462 93,189 604,903,765 6,829 1,883,400,000 21,239 1,009 6,249,402,062 70,439 574,243,765 6,479 159,344,3765 6,479 159,344,300
	5,694,000,000 5,194,216,235 91,62,235 91,62,236 0,9296 447,223,765 7,8596 0,0096 5,5694,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0,896 0,0096 3,28,997,835 5,67196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,996,776,235 93,9996 447,223,765 6,0196 7,446,000,000 1,883,400,000 25,2996 0,0096 4,980,997,835 68,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,0396	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 44,77% - 0,00% 4,980,997,835 65,51% 574,243,765 7,55% 7,55% 159,344,500 2,10% 5,694,000 0,07% - 0,00%	8,214,620,462 92,59% 52,560,000 0.5996 604,903,765 6.8,22% 0.00% 8,872,084,227 8,267,180,462 93,1896 604,903,765 6.8,22% 8,872,084,227 0.00% 1,883,400,000 21,23% 0.00% 6,249,402,662 70,44% 574,243,765 6.4,796 159,344,400 1,80% 5,684,000 0.06% 6,584,000 0.06% 6,584,000 0.06% 6,000%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% - 0,00% 6,249,402,062 70,44% 574,243,765 6,47% 155,344,400 1,80% 5,684,000 0,06% - 0,00%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 6,00% 8,872,084,227 8,267,180,462 93,189 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,062 0,00% 6,249,402,062 6,249,402,662 1,80% 574,243,765 6,47% 159,344,400 1,80% 5,684,000 0,06% -0,00%
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 -0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,785 7,8596 5,694,000,000 33,0896 -0.0096 3,228,997,835 56,7196 574,243,785 10,0996 1,664,400 0,0396 5,694,000 0,1096	7,446,000,000 6,946,216,235 93.29% 52,560,000 0.71% 447,223,765 6.01% 7,446,000,000 6,998,776,235 93,99% 447,223,765 6.01% 7,446,000,000 25,29% -0.00% 4,980,997,835 66.89% 574,243,765 7,7196 1,664,400 0.02% 5,694,000 0.08%	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 10,00% 4,980,907,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 5,694,000 0,07% 7,603,680,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,16% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06%	8,872,084,227 8,214,629,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 1,883,400,000 21,23% 1,23% 1,244,400 574,243,765 6.47% 159,344,400 0.06% 5,694,000 0.06%
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 1,883,400,000 3,228,997,835 5,746,765 10.0996 3,228,997,835 10.0996 1,863,400,000 0,0396 5,694,000 0,0396 5,694,000 0,1096 -0.0096 5,694,000 0,1096 -0.0096 5,694,000 0,1096 -0.0096 5,694,000 0,1096 -0.0096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,0096 5,694,000 0,0096 5,694,000,000 1,883,400,000 1,883,400,000 1,883,400,000	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,996,776,235 93,9996 447,223,765 6,0196 7,446,000,000 1,883,400,000 25,2996 - 0,0096 4,980,997,835 6,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,0896 - 0,0096 7,446,000,000 1,883,400,000 0,0896 - 0,0096 7,446,000,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% - 0,00% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 5,694,000 0,07% - 0,00% 7,603,680,000 1,883,400,000 24,77%	8,214,620,462 92,59% 52,560,000 0.5996 604,903,765 6.8296 0.0096 8,872,084,227 8,267,180,462 93,1896 604,903,765 6.8296 1,883,400,000 21,2396 1,883,400,000 1,8096 5,44,440 1,8096 5,64,796 159,344,400 1,8096 5,694,000 0.0696 0.0096 8,872,084,227 1,883,400,000 21,2396	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 33,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 574,243,765 6,47% 159,44,400 1,80% 5,644,000 0,00% 8,872,084,227 1,883,400,000 21,23%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 574,243,765 6,47% 5,649,402,662 1,80% 5,649,400 0,06% 5,649,400 0,06% 6,249,400,000 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 0,06%
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 -0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,594,000,000 33,0896 -0,0096 3,228,997,835 55,7196 574,243,765 10,0996 1,664,400 0,0396 5,594,000 0,1096 -0,0096 5,594,000 0,1096 -0,0096 5,594,000 0,1096 -0,0096 5,594,000 0,1096 -0,0096 5,594,000 0,1096 -0,0096 5,594,000 0,1096 -0,0096 5,594,000,000 1,883,400,000	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6.0196 7,446,000,000 25,2996 0.0096 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0296 5,694,000 0.0896 - 0.0096 7,446,000,000 1,883,400,000 1,883,400,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 10,00% 4,980,907,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 5,694,000 0,07% 7,603,680,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0.00% 1,883,400,000 21,23% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0.06% 5,694,000 0.06% 6,694,000 0.06% 8,872,084,227	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% -0,00% 8,872,084,227 8,267,180,462 93,169% 604,903,765 6,829% 8,972,084,227 -0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,479% 159,344,400 0,06% 5,694,000 0,06% -0,00% 8,872,084,227	8,872,084,227 8,214,629,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,682 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7,8596 0,0096 5,694,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 - 0,0096 3,228,997,835 56,7196 5,694,000 0,0396 5,694,000 0,0396 5,694,000 0,0396 5,694,000 0,0396 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000,000 1,883,400,000 1,883,400,000 1,883,400,000 3,0896 3,228,997,835 56,7196	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000 1,883,400,000 25,2996 1,983,400,000 25,2986 1,664,400 0,0296 5,694,000 0,0896 7,446,000,000 1,883,400,997,835 66.89%	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,6,996 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,0496 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 4,980,997,835 65,5196 574,243,765 7,55% 159,344,400 0,10% 7,603,680,000 1,883,400,000 0,07% 7,603,680,000 1,883,400,97,835 65,5196	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 159,344,400 1,80% 5,694,000 0,06% 0,00% 8,872,084,227 1,883,400,000 2,22,23% 159,344,400 1,80% 5,694,000 0,06% 6,249,402,062 70,44% 5,694,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,44%	8,214,620,462 92,53% 52,560,000 0,539% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,829% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 8,872,084,227 1,883,400,000 1,80% 6,249,402,062 70,44% 5,694,000 0,06% 6,270,84,227 1,883,400,000 1,21,23% 6,249,402,062 70,44% 6,249,402,062 70,44%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 5,594,000 0,06% 8,872,084,227 1,883,400,000 0,06% 8,872,084,227 1,883,400,000 2,00%
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 -0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,785 7,8596 5,694,000,000 33,0896 -0.0096 3,228,997,835 5,694,000 0,1096 5,994,000 0,0096	7,446,000,000 6,946,216,235 93.29% 52,560,000 0.71% 447,223,765 6.01% 7,446,000,000 6,998,776,235 93,99% 447,223,765 6.01% 7,446,000,000 25,29% - 0.00% 4,980,997,835 66.89% 574,243,765 7,71% 1,664,400 0.02% 5,694,000 0.08% - 0.00% 7,446,000,000 1,883,400,000 25,29% - 1,00% 1,883,400,000 25,29% - 1,443,765 7,7196 1,664,400 0.02% 5,694,000 0.08% - 0.00% 7,446,000,000 1,883,400,000 25,29% 4,980,997,835	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 24,77% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 0,07% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44% 574,243,765 6,47% 155,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23%	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 9,267,180,462 93,189 604,993,765 6,82% 8,872,084,227 0,00% 6,249,402,062 0,00% 5,64,796 1,883,400 1,80% 5,64,000 0,06% 5,64,000 0,06% 6,249,402,062 70,44% 739,282,165
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 -0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,785 7,8596 5,694,000,000 33,0896 -0,0096 3,228,997,835 56,7196 5,694,000 0,1096 1,684,400 0,0396 1,664,400 0,1096 5,694,000 0,1096	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6.0196 7,446,000,000 25,2996 - 0.0096 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0296 5,694,000 0.0996 7,446,000,000 0.0996 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0996 7,446,000,000 1,883,400,000 25,2996 - 0.0096 5,694,000 0.0996 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66.8996 - 0.0096 581,602,165 7,8196	7,603,680,000 6,946,216,235 91,35% 52,660,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,049% 604,903,765 7,96% 7,603,680,000 24,7796 - 0,00% 4,980,907,835 65,51% 574,243,765 7,55% 159,344,400 0,07% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 5,603,6000 1,883,400,000 24,77% 4,980,997,835 65,51% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 7,603,680,000 1,883,400,000 24,77% 7,603,680,000 1,883,400,000 24,77% 7,603,680,000 1,883,400,000 24,77% 7,903,880,000 1,883,400,000 24,77% 7,903,680,000	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 5,694,000 0,06% 6,249,402,662 70,44% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 6,249,402,062 70,44% 739,282,165 8,339%	8,214,620,462 92,59% 52,560,000 0,599% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44% 574,243,765 6,47% 155,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 7,044% 574,243,765 6,47% 155,344,400 1,80% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 739,282,765 8,339%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 0.06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 0.06% 6,249,402,062 70,40% 73,824,407 0.00% 739,282,665 8,33%
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 1,883,400,000 33,0896 - 0.0096 3,228,997,835 56,7196 574,243,785 10,0996 1,684,400 0,0396 5,694,000 0,1096 1,683,400,000 3,30,0996 1,684,400 0,0096 5,694,000,000 1,883,400,000 3,30,0996 5,694,000,000 1,883,400,000 3,30,0996 5,694,000,000 1,883,400,000 1,883,400,000 3,0096 5,694,000,000 1,883,400,000 1,883,400,000 3,0096 5,694,000,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,600,000 1,883,600,000 1,883,600,000 1,883,600,000 1,883,600,000 1,883,600,000	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,998,776,235 93,9996 447,223,765 6,0196 7,446,000,000 25,2996 1,883,400,000 25,2996 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296 5,944,000,000 1,883,400,000 0,0996 7,446,000,000 1,883,400,000 1,883,400,000 2,52,296 4,980,997,835 66,8996 7,446,000,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,600,000 1,983,800,997,835 66,8996 1,919,505,010	7,603,680,000 6,946,216,235 91,359 52,560,000 0,6996 604,903,765 7,9696 7,603,680,000 6,993,776,235 92,0496 604,903,765 7,9696 7,603,680,000 24,7796 0,0096 4,980,997,835 65,5196 574,243,765 7,5596 159,344,400 2,1096 5,694,000 0,0796 0,0096 7,603,680,000 1,883,400,000 24,7796 4,980,997,835 65,5196 5,519	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44% 55,694,000 0,06% 1,80% 5,694,000 0,06% 8,872,084,227 1,883,400,000 2,1,23% 6,249,402,062 70,44% 5,594,000 0,06% 8,872,084,227 1,883,400,000 2,1,23% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,39,563,577 8,872,084,227	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 6,249,402,062 8,33% 6,249,402,062	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 5,64,79% 5,64,79% 5,64,79% 5,64,79% 6,249,402,062 0,06% 6,279,44,400 1,883,400,000 0,06% 6,249,402,062 70,44% 7,448,400 0,06% 6,249,402,062 70,44% 7,39,282,270,44% 7,39,282,270,44% 7,39,282,165 8,33% 6,320,237,749
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 -0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 33,0896 -0.0096 3,228,997,835 55,7196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 25,2996 0.0096 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0296 5,699,600 0.0896 7,446,000,000 1,883,400,000 2,5,2996 4,980,997,835 66.8996 0.0996 7,446,000,000 1,883,400,000 2,5,2996 4,980,997,835 66.8996 0.0096 5,6996 66.8996 0.0096 5,6996 5,6996 0.0096 5,6996 0.0096 5,6996 0.0096 7,446,000,000 1,883,400,000 2,5,2996 4,980,997,835 66.8996 0.0096 5,81,602,165 7,8196	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 4,980,907,835 65,51% 55,94,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 5,94,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51%	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6.82% 0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6.82% 8,872,084,227 0.00% 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6.47% 159,344,400 1,80% 5,694,000 0,06% 6,888,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 5,694,000 0,06% 6,249,402,662 70,44% 0,00% 739,282,165 8,33% 6,089,563,976 8,872,084,227 8,605,921,700	8,214,620,462 92,53% 52,560,000 0,53% 604,903,765 6,82% -0,00% 8,872,084,227 8,267,180,462 93,16% 604,903,765 6,82% 8,872,084,227 -0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 155,344,400 0,06% 5,694,000 0,06% 6,249,402,70,40% 5,694,000 0,06% 6,249,402,40% 1,883,400,000 21,23% 6,249,402,40% 0,00% 739,282,165 8,33% 6,204,558,832 8,872,084,227 8,605,921,700	8,872,084,227 8,214,622,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 6,83% 6,83% 6,32% 6,32% 6,33% 6,32% 6,327,704 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 -0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,785 7,8596 5,694,000,000 33,0896 -0,0096 1,883,400,000 33,228,997,835 56,7196 574,243,785 10,0996 3,228,997,835 56,7196 574,243,785 10,0996 3,228,997,835 56,7196 -0,0096 5,594,000 0,1096	7,446,000,000 6,946,216,235 93.29% 52,560,000 0.71% 447,223,765 6.01% 7,446,000,000 6,998,778,235 93,99% 447,223,765 6.01% 7,446,000,000 25,29% 7,446,000,000 25,29% 6.09% 7,446,000,000 25,29% 7,446,000,000 25,29% 7,446,000,000 25,29% 7,446,000,000 25,29% 4,980,997,835 66.89% 574,243,765 7,71% 1,664,400 0,02% 5,694,000 0,03% 7,446,000,000 1,883,400,000 25,29% 4,980,997,835 66.89% 7,446,000,000 1,883,400,000 25,29% 4,980,997,835 66.89% 57,2486,000 1,883,400,000 25,29% 4,980,997,835 66.89% 7,446,000,000 1,883,400,000 25,29% 4,980,987,835 66.89% 581,602,165 7,81% 4,915,583,019 7,446,000,000 7,222,620,000 22,3380,000 22,3380,000 2,510,780,381	7,603,680,000 6,946,216,235 91,35% 52,660,000 0,69% 604,903,765 7,96% 7,96% 604,903,765 7,96% 604,903,765 7,96% 7,003,680,000 24,7796 1,883,400,000 24,7796 1,883,400,000 24,7796 1,883,400,000 24,7796 7,603,680,000 0,00% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 0,00% 4,980,997,835 65,51% 5,10% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 6,51% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 6,51% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 6,51% 7,603,680,000 1,883,400,000 24,77% 5,121,050,695 7,72% 5,121,050,695 7,72% 5,121,050,695 7,7568,6000 228,110,4000 24,465,661,577	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,684,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 5,684,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 6,249,402	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% - 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 159,344,400 0,00% 5,694,000 0,00% 8,872,084,227 1,883,400,000 1,80% 6,249,402,062 70,44% 5,694,000 0,00% 8,872,084,227 1,883,400,000 1,21,23% 6,249,402,062 70,44% 5,00% 5,00% 8,872,084,227 1,883,400,000 1,23% 6,249,402,062 70,44% 5,00% 739,282,165 8,33% 6,204,558,852 8,872,084,227 8,605,921,700 266,162,527 2,648,894,018	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 6,82% 6,82% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06% 6,249,402,622 70,45% 5,694,000 0,06% 6,249,402,082 70,40% 73,284,427 1,883,400,000 21,23% 6,249,402,082 70,40% 739,282,748 6,239,402,082 70,43% 6,249,402,082 70,43% 6,249,402,082 6,249,402,082 6,249,402,082 6,249,402,082 6,249,402,082 6,249,402,082 6,249,402,082 70,44% 8,872,084,227 8,605,921,700 266,162,984,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,594,000,000 1,883,400,000 33,0896	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 -0,00% 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,03% 7,446,000,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,515,100 1,983,515,100 1,983,515,100 1,222,620,000 223,380,000 2,53,380,000 2,53,380,000 2,510,780,381 1,288,513,175	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 7,603,680,000 1,883,400,000 1,883,400,000 1,883,400,000 2,10% 7,55% 159,344,400 2,10% 5,694,000 0,07% 1,603,680,000 1,883,400,000 1,883,400,000 1,883,400,000 7,75% 65,51% 65,51% 65,51% 65,51% 65,51% 65,51% 65,51% 65,694,000 7,603,680,000 7,833,680,000 7,835,656,600 2,10% 7,75% 65,51% 65,61%	8,214,620,462 92,59% 52,560,000 0.59% 604,903,765 6.8,29% 0.00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6.8,29% 8,872,084,227 0.00% 1,883,400,000 21,23% 6,249,402,662 70,449% 574,243,765 6.4,79% 159,344,400 1,8,9% 5,694,000 0,06% 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,449% 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,449% 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,449% 6,249,402,662 70,449% 6,289,663,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227 8,665,978 8,872,084,227	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 33,189% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% - 0,00% 6,249,402,062 70,44% 574,243,765 6,47% 155,344,400 1,80% 5,694,000 0,06% - 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 70,40% 739,282,165 8,33% 6,249,402,062 70,44% 70,44% 739,282,165 8,33% 6,249,402,062 70,44% 70,49% 739,282,165 8,33% 6,249,402,062 70,44% 739,282,165 8,33% 6,249,402,062 70,49% 739,282,165 8,33% 8,872,084,227 8,605,921,700 8,605,921,700	8,872,084,227 8,214,622,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,1896 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 70,44% 574,243,765 5,694,000 0,06% 1,883,400,000 21,23% 6,249,402,662 70,44% 71,883,400,000 1,80% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 5,694,000 0,06% 70,44% 5,694,000 21,23% 6,249,402,062 70,44% 5,884,207 1,883,400,000 21,23% 6,249,402,062 70,44% 5,694,000 21,23% 6,252,252,252,252,252,252,252,252,252,25
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 5,694,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 33,0896 - 0,0096 3,228,997,835 55,7196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,694,000 0,1096 5,594,000 1,2196 3,463,400,000 1,2196 3,463,400,000 1,2196 3,463,400,000 1,2196 3,463,400,000 1,210,210,600	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 25,2996 0.0096 4,980,997,835 66.8996 574,243,765 7,7196 1,664,400 0.0296 4,980,997,835 66.8996 0.0996 7,446,000,000 1,883,400,000 2,52,2996 4,980,997,835 66,8996 0.0996 7,446,000,000 7,486,000,000 7,486,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,222,620,000 7,222,620,000 7,222,620,000 7,222,620,000 7,222,620,000 7,223,380,000 2,510,780,381 1,288,313,175 401,577,672 886,735,503	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 4,980,907,835 65,51% 55,51% 55,94,000 0,07% 4,980,907,835 65,51% 5,94,000 0,07% 7,603,680,000 1,883,400,000 1,883,400,000 24,77% 4,980,997,835 65,51% 5,94,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 0,00% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 0,00% 7,75,56,60,000 2,4,77% 5,121,050,995 7,603,680,000 7,775,569,600 228,110,400 2,466,661,577 1,292,660,029 399,755,672 892,904,157	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 0,06% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 5,249,402,662 6,249,402,662 70,44% 739,282,165 8,33% 6,089,563,978 8,872,084,227 8,605,921,700 266,162,527 2,763,883,872	8,214,620,462 92,59% 52,560,000 0,5996 604,903,765 6,82% -0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,8296 8,872,084,227 -0.00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 1553,344,400 0,06% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 6,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% -0.00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% -0.00% 739,282,165 8,33% 6,203,558,832 8,872,084,227 8,605,921,700 266,162,527 2,648,894,018 1,454,527,964 442,344,375 1,112,283,588	8,872,084,227 8,214,629,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 70,44% 159,344,400 1,80% 6,249,402,662 70,45% 159,344,400 21,23% 6,249,402,662 70,46% 73,282,165 8,37% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 5,5994,000 21,23% 6,249,402,662 70,44% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 10,00% 739,282,165 8,33% 6,320,297,749 8,872,084,227 2,583,165,101 1,427,722,410 430,296,085 997,426,6325
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,5694,000,000 5,246,776,235 92,15796 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,226,997,835 56,7196 574,243,765 10,0996 5,694,000 0,0396 5,694,000 0,1096 0,0396 5,694,000 0,1096	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,996,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 0.0096 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,0296 5,694,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 25,2996 4,980,997,835 66,8996 574,243,765 7,7196 1,964,400 0,0096 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 581,602,165 7,8196 4,918,353,019 7,446,000,000 7,222,620,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,5503 1,228,2467,206	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 6574,243,765 7,55% 7,55% 65,4000 2,10% 5,694,000 0,07% 1,883,400,000 1,883,400,000 24,77% 4,980,997,835 65,51% 6574,243,765 7,55% 7,55% 65,4000 0,07% 1,603,680,000 1,883,400,000 1,883,400,000 24,77% 4,980,997,835 65,51% 673,282,165 9,72% 5,5121,050,695 7,603,680,000 7,375,569,600 228,110,400 2,466,661,577 1,122,660,029 399,758,72 892,904,157 1,174,001,547	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,829% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,344,400 159,348,600 21,23% 6,249,402,662 70,44% 6,249,402,662 70,45% 8,33% 6,089,569,978 8,872,084,227 8,605,921,700 266,162,527 2,763,883,872 1,481,485,324 454,392,666 1,027,092,658 1,185,396,666 1,027,092,658 1,185,396,666 1,027,092,658 1,185,396,658	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 33,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 62,49,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 739,282,166 8,33% 6,204,563,832 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,49% 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,49% 0,00% 6,249,402,662 70,49% 1,90%	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93.18% 604,903,765 6.82% 8,872,084,227 0.00% 6,249,402,062 0.00% 6,249,402,062 6,249,402,062 0.06% 5,584,000 0.66% 0.00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,602 70,44% 739,282,655 8,33% 6,249,402,662 70,44% 739,282,749 8,872,084,227 8,605,921,700 266,162,527 2,533,165,101 1,427,722,410 430,296,085 997,426,325
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 5,694,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,228,997,835 56,7196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096 0,1096 0,1096 5,594,000 1,883,400,000 1,883,400,000 1,883,400,000 5,5623,1665 0,0096 5,594,000,000 1,883,41,00000 1,883,41,00000 1,883,41,000000 1,883,41,0000000 1,883,41,00000000000000000000000000000000000	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 -0,00% 4,980,997,835 66,89% 574,243,765 7,7196 1,664,400 0,02% 5,694,000 0,03% 7,446,000,000 1,883,400,000	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 24,77% 0,00% 4,980,907,835 65,51% 55,51% 55,94,000 0,07% 4,980,907,835 65,51% 5,94,000 0,07% 7,603,680,000 1,883,400,000 1,883,400,000 24,77% 4,980,997,835 65,51% 5,94,000 0,07% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 0,00% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 0,00% 7,75,56,60,000 2,4,77% 5,121,050,995 7,603,680,000 7,775,569,600 228,110,400 2,466,661,577 1,292,660,029 399,755,672 892,904,157	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 66,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 73,28,665 8,33% 6,093,658,978 8,605,921,700 266,162,627 2,763,883,672 2,763,883,672 1,481,485,324 454,392,666 1,027,092,658 1,282,398,548 118,631,397 6,089,5658,377 6,089,5658,377	8,214,620,462 92,59% 52,560,000 0,5996 604,903,765 6,82% -0.00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,8296 8,872,084,227 -0.00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 1553,344,400 0,06% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 6,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% -0.00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% -0.00% 739,282,165 8,33% 6,203,558,832 8,872,084,227 8,605,921,700 266,162,527 2,648,894,018 1,454,527,964 442,344,375 1,112,283,588	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,1896 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 70,44% 574,243,765 5,694,000 0,06% 1,883,400,000 21,23% 6,249,402,662 70,44% 71,883,400,000 1,80% 8,872,084,227 1,883,40,000 21,23% 6,249,402,662 70,44% 5,694,000 21,23% 6,249,402,062 70,44% 5,694,000 21,23% 6,249,402,062 70,44% 159,344,600 1,883,402,000 21,23% 6,249,402,062 70,44% 1,883,40,000 1,883,40,000 21,23% 6,252,252,252,253,165,101 1,427,722,410 430,296,085 997,426,325 1,105,442,631 1,883,13,377 6,320,287,749
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7,8596 0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,228,997,835 56,7196 574,243,765 10,0996 1,863,400 0,0396 5,694,000 0,1096 0,0396 5,694,000 0,1096 1,883,400,000 1,983,403,607,887 1,983,403,607,887	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,996,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 0.0096 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0.0296 5,694,000 0.0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,498,400 0.0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,446,000,000 7,246,000,000 7,246,000,000 7,246,000,000 7,248,000,000 25,2996 4,980,997,835 66,8996 97,446,000,000 7,248,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,456,000,000 7,466,000,000 7,476,000,00	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 15,943,400 2,10% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 0,00% 7,603,680,000 1,883,400,000 24,77% 15,944,400 2,10% 5,694,000 0,07% 1,603,680,000 1,883,400,000 24,77% 4,980,997,935 65,51% 739,282,165 9,72% 5,110,00,695 7,603,680,000 7,375,569,600 228,110,400 2,466,661,577 1,292,660,029 399,755,872 892,904,157 1,174,015,47 15,967,728 5,121,050,695 1,1174,015,47	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44% 5,594,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,666 1,027,092,658 8,33% 6,089,568,927,700 266,162,527 2,763,883,872 1,481,485,324 454,392,666 1,1027,092,658 1,182,398,548 18,631,377 6,089,568,978 5,842,037,828	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 6,249,402,062 70,44% 5,694,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,46% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,46% 6,2527 8,605,921,700 266,162,527 2,648,894,018 1,454,627,964 442,344,375 1,012,283,588 1,194,266,054 18,831,377 6,204,558,832 5,957,027,682	8,872,084,227 8,214,629,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 0,00% 6,249,402,662 1,883,400 1,883,400 1,893,665 6,47% 6,47% 6,47% 6,47% 6,47% 6,249,402,662 70,44% 739,282,65 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,320,287,749 8,872,084,227 8,605,927,700 266,162,527 2,533,165,101 1,427,722,410 430,296,085 997,426,359 1,105,425,599 1,831,377,245 1,102,245,599 1,105,425,599 1,105,425,599 1,105,425,599
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,228,997,835 56,7196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096 5,694,0	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 7,446,000,000 6,996,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 0,00% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 0,00% 4,980,997,835 65,51% 6574,243,765 7,55% 159,344,400 2,10% 5,694,000 0,07% 1,883,400,000 1,883,400,000 1,883,400,000 1,883,600,	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 5,694,000 0,06% 6,249,402,062 70,40% 6,249,402,062 70,40% 6,249,402,062 70,40% 6,589,663,978 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,44% 739,284,605 8,33% 6,989,568,978 8,872,084,227 1,686,89,768,978 8,872,084,227 1,481,485,324 4,402,662 70,44% 739,282,666 1,027,092,658 1,282,298,588 1,883,872 1,481,485,324 454,392,666 1,027,092,658 1,282,398,588 1,883,377 6,089,568,978 1,883,377 6,089,568,978 1,883,377 6,089,568,978 1,883,377 6,089,568,978 1,883,377 6,089,568,978 5,842,037,828 247,531,150	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 70,44% 574,243,765 6,47% 1593,44,400 1,80% 5,694,000 0,00% 8,872,084,227 1,883,400,000 21,23% 6,47% 6,47% 1593,44,400 1,80% 5,694,000 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 739,282,165 8,33% 6,204,558,832 8,872,084,227 8,605,921,700 266,162,527 2,648,894,018 1,454,627,964 442,344,375 1,101,283,588 1,194,266,054 18,631,377 6,204,558,832 5,957,027,682 247,531,150	8,872,084,227 8,214,620,462 92.59% 52,560,000 0.59% 604,903,765 6.82% 604,903,765 6.82% 8,872,084,227 8,267,180,462 93.18% 604,903,765 6.82% 8,872,084,227 0.00% 6,249,402,062 6,249,402,062 6,47% 159,344,400 1,80% 5,694,000 0.06% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 0.00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 0.00% 739,282,165 8,33% 6,320,287,749 8,872,084,227 1,863,400,000 11,427,722,410 430,296,085 997,426,325 1,105,442,691 18,631,377 6,320,287,749 6,072,766,599 247,531,150
	5,694,000,000 5,194,216,235 91,2296 52,660,000 0,9296 447,223,765 7,8596 0,0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,228,997,835 56,7196 574,243,765 10,0996 1,863,400 0,0396 5,694,000 0,1096 0,0396 5,694,000 0,1096 1,883,400,000 1,983,403,607,887 1,983,403,607,887	7,446,000,000 6,946,216,235 93.2996 52,560,000 0.7196 447,223,765 6.0196 7,446,000,000 6,996,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 0.0096 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0.0296 5,694,000 0.0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,498,400 0.0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,446,000,000 7,246,000,000 7,246,000,000 7,246,000,000 7,248,000,000 25,2996 4,980,997,835 66,8996 97,446,000,000 7,248,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,446,000,000 7,456,000,000 7,466,000,000 7,476,000,00	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 15,943,400 2,10% 5,694,000 0,07% 7,603,680,000 1,883,400,000 24,77% 0,00% 7,603,680,000 1,883,400,000 24,77% 15,944,400 2,10% 5,694,000 0,07% 1,603,680,000 1,883,400,000 24,77% 4,980,997,935 65,51% 739,282,165 9,72% 5,110,00,695 7,603,680,000 7,375,569,600 228,110,400 2,466,661,577 1,292,660,029 399,755,872 892,904,157 1,174,015,47 15,967,728 5,121,050,695 1,1174,015,47	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 6,249,402,062 70,44% 5,594,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,666 1,027,092,658 8,33% 6,089,568,927,700 266,162,527 2,763,883,872 1,481,485,324 454,392,666 1,1027,092,658 1,182,398,548 18,631,377 6,089,568,978 5,842,037,828	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 6,249,402,062 70,44% 5,694,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,46% 8,872,084,227 1,883,400,000 21,23% 6,249,402,062 70,46% 6,2527 8,605,921,700 266,162,527 2,648,894,018 1,454,627,964 442,344,375 1,012,283,588 1,194,266,054 18,831,377 6,204,558,832 5,957,027,682	8,872,084,227 8,214,629,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 0,00% 6,249,402,662 1,883,400 1,883,400 1,893,665 6,47% 6,47% 6,47% 6,47% 6,47% 6,249,402,662 70,44% 739,282,65 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,320,287,749 8,872,084,227 8,605,927,700 266,162,527 2,533,165,101 1,427,722,410 430,296,085 997,426,359 1,105,425,599 1,831,377,245 1,102,245,599 1,105,425,599 1,105,425,599 1,105,425,599
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7.8596 0.0096 5,594,000,000 5,246,776,235 92,1596 447,223,765 7.8596 5,694,000,000 1,883,400,000 33,0896 0.0096 3,228,997,835 56,7196 574,243,765 10.0996 1,863,400 0.0396 5,694,000 0.1096 0.0096 5,694,000 0.1096 0.0096 5,694,000 0.1096 0	7,446,000,000 6,946,216,235 93,2996 52,560,000 0,7196 447,223,765 6,0196 7,446,000,000 6,996,776,235 93,9996 447,223,765 6,0196 7,446,000,000 1,883,400,000 25,2996 0,0096 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,496,400 0,0296 5,694,000 0,0396 7,446,000,000 1,883,400,000 25,2996 4,980,997,835 66,8996 7,446,000,000 7,222,620,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 223,380,000 24,195,853,019 7,446,000,000 7,422,620,000 23,536,000 4,919,583,019 4,711,835,619 207,743,400 2,500 7,446,000,000 4,919,583,019	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 15,943,400 2,10% 5,694,000 0,00% 7,603,680,000 1,883,400,000 24,77% 0,00% 7,603,680,000 1,883,400,000 24,77% 15,944,400 2,10% 5,694,000 0,07% 1,603,680,000 1,883,400,000 24,77% 4,980,997,935 65,51% 739,282,165 9,72% 5,110,00,695 7,603,680,000 7,375,565,600 228,110,400 2,466,661,577 1,292,660,029 399,755,872 892,904,157 1,174,015,47 15,967,728 5,121,050,695 1,1174,015,47 15,967,728 5,121,050,695 1,1174,050,905 1,1174,015,47 15,967,728 5,121,050,695 1,103,680,000 7,303,908,023 212,142,672	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,810,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 5,594,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,062 70,44% 6,249,402,666 1,000% 6,8872,084,227 8,605,921,700 266,162,527 2,763,883,872 1,481,485,324 454,392,666 1,102,938,548 18,631,377 6,089,568,978 5,842,037,828 247,531,150 2,500 8,872,084,227	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,785 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,249,402,062 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,694,000 0,06% 6,249,402,062 70,44% 5,694,000 0,06% 6,249,402,062 70,44% 6,249,402,062 70,44% 5,694,000 0,06% 6,20,568,333% 6,204,558,832 8,872,084,227 8,605,921,700 266,162,527 2,648,894,018 1,454,627,964 442,344,375 1,012,283,588 1,194,266,054 18,631,377 6,204,558,832 2,47,531,150 2,500 8,872,084,227	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 0,00% 6,249,402,662 1,883,400 1,883,400 1,893,665 6,47% 6,57% 6,530,287,749 8,672,084,227 8,605,927,740 9,746,265 1,105,46% 1,427,722,410 430,296,085 997,426,359 1,105,42,577 1,520,287,749 6,672,756,599 2,47,531,150 8,872,084,227
	5,694,000,000 5,194,216,235 91,2296 52,560,000 0,9296 447,223,765 7,8596 5,694,000,000 5,246,776,235 92,1596 447,223,765 7,8596 5,694,000,000 1,883,400,000 33,0896 0,0096 3,228,997,835 56,7196 574,243,765 10,0996 1,664,400 0,0396 5,694,000 0,1096 0,1096 0,1096 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 5,694,000,000 1,883,400,000 1,883,400,000 5,5631,800,000 1,883,41,000 1,8	7,446,000,000 6,946,216,235 93.2996 52,560,000 0,7196 447,223,765 6.0196 0,0096 7,446,000,000 6,998,776,235 93.9996 447,223,765 6.0196 7,446,000,000 1,883,400,000 25,2996 0,0096 4,980,997,835 66,8996 574,243,765 7,7196 1,664,400 0,0296 5,694,000 0,0296 5,694,000 0,0396 7,446,000,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,400,000 1,883,600 1,919,583,619 1,714,839,619 207,743,400	7,603,680,000 6,946,216,235 91,35% 52,560,000 0,69% 604,903,765 7,96% 7,603,680,000 6,998,776,235 92,04% 604,903,765 7,96% 7,603,680,000 1,883,400,000 24,77% 4,980,997,835 65,51% 574,243,765 7,55% 159,344,400 2,10% 7,603,680,000 1,883,400,000 1,883,400,000 1,883,400,000 2,10% 7,55% 159,344,400 2,10% 5,694,000 0,07% 1,00% 7,55% 159,344,600 2,10% 5,694,000 0,07% 7,55% 159,344,600 2,10% 5,694,000 0,07% 1,803,680,000 1,883,400,000 1,883,600,000 24,77% 4,980,997,835 65,51% 65,51	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,18% 604,903,765 6,82% 8,872,084,227 0,00% 1,883,400,000 21,23% 6,47% 159,344,400 1,80% 5,64,000 0,06% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,80% 5,684,000 0,06% 0,00% 8,872,084,227 1,883,4400,000 21,23% 6,249,402,662 70,44% 739,281,65 8,339% 6,249,402,662 70,44% 739,281,65 8,339% 6,181,9583,978 8,872,084,227 1,861,485,324 454,392,666 1,027,032,658,372 1,481,485,324 454,392,666 1,027,092,658 1,282,398,548 18,631,377 6,089,568,978 5,842,037,828 247,531,150	8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 0,00% 8,872,084,227 8,267,180,462 93,189% 604,903,765 6,82% 8,872,084,227 - 0,00% 1,883,400,000 21,23% 5,424,400 1,883,400,000 21,23% 5,684,000 0,00% 8,872,084,227 1,883,400,000 21,23% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,062 70,44% 739,282,165 8,33% 6,249,402,062 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,402,662 70,44% 739,282,165 8,33% 6,249,403,605 8,33% 6,249,403,605 8,33% 6,249,403,605 8,33% 6,249,403,605 8,33% 6,249,558,832 8,557,068,227 8,605,588,33	8,872,084,227 8,214,620,462 92,59% 52,560,000 0,59% 604,903,765 6,82% 8,872,084,227 8,267,180,462 93,1896 604,903,765 6,82% 8,872,084,227 0,00% 6,249,402,662 70,44% 574,243,765 6,47% 159,344,400 1,883,400,000 21,23% 6,249,402,662 70,44% 73,282,165 70,49% 73,282,165 70,49% 739,282,165 70,49% 739,282,165 1,105,442,691 1,827,722,410 430,296,085 997,426,325 1,105,442,691 1,863,13,77 6,320,287,749 6,072,756,599 247,531,150

Electricity of Lebanon (EoL)	Fuel		А В	A/B
Thermal Power Plants (TPP)				
Zouk	HFO	Ton	MMBtu	0.026050864
Jieh	HFO	Ton	MMBtu	0.026050864
Reciprocating Engine Power Plants (REPP)	-			
R.E Zouk	HFO	Ton	MMBtu	0.026050864
R.E Jieh	HFO	Ton	MMBtu	0.026050864
Combined Cycle Gas Turbine Power Plants (CCGTPP)	-			
Deir Aammar	Diesel	Ton	MMBtu	0.024824941
Zahrani	Diesel	Ton	MMBtu	0.024824941
Open Cycle Gas Turbine Power Plants (OCGTPP)	-			
Baalbek	Diesel	Ton	MMBtu	0.024824941
Tyr	Diesel	Ton	MMBtu	0.024824941
La Kadisha				
Thermal Power Plants (TPP)				
Houreiche	HFO	Ton	MMBtu	0.026050864
linistry of Energy and Water SPOT Contracts (MoEW - SPOT)				
Fuel Oil (F.O.)	HFO			
Fuel Oil - Grade A (F.O.A)				
F.O.A Proportion of F.O.				
Fuel Oil - Grade B (F.O.B)				
F.O.B Proportion of F.O.				
Gas Oil (G.O.)	Diese	l		
Total Cost of Combustibles				
Combustibles - Pricing				
Average Brent Crude Oil Unit Price				
verage F.O. Unit Price				
verage G.O. Unit Price				
Average N.G. Unit Price				
Cost of Fuel Oil				_
Cost of Fuel Oil - Grade A				

Cost of Fuel Oil - Grade B

Cost of Gas Oil

Ton	948,366	1,261,691	1,261,691	1,488,530	1,488,530	1,488,530
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	370,898	370,898	370,898	370,898	370,898	370,898
Ton	280,320	280,320	280,320	280,320	280,320	280,320
Ton	90,578	90,578	90,578	90,578	90,578	90,578
Ton	577,468	890,792	890,792	1,117,632	1,117,632	1,117,632
Ton	303,768	468,588	468,588	587,913	587,913	587,913
Ton	273,700	422,204	422,204	529,718	529,718	529,718
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	-	-	-	-	-	-
Ton	948,366	1,261,691	1,261,691	1,488,530	1,488,530	1,488,53
Ton	370,898	370,898	370,898	370,898	370,898	370,89
Ton	207,645	207,645	207,645	207,645	207,645	207,64
Ton	55.98	55.98	55.98	55.98	55.98	55.9
Ton	163,253	163,253	163,253	163,253	163,253	163,25
Ton	44.02	44.02	44.02	44.02	44.02	44.0
Ton	577,468	890,792	890,792	1,117,632	1,117,632	1,117,63
\$M	595	787	795	964	974	984
\$/bbl	67.20	63.00	64.05	65.10	66.15	67.2
\$/Ton	485.0256	462.0889	467.8231	473.5572	479.2914	485.025
\$/Ton	719.4023	690.5511	697.7639	704.9767	712.1895	719.402
/MMbtu	11.0600	10.0600	10.0600	10.0600	10.0600	10.060
\$M	180	171	174	176	178	18
\$M	100.71	95.95	97.14	98.33	99.52	100.7
\$M	79.18	75.44	76.37	77.31	78.25	79.1
\$M	415.43	615.14	621.56	787.90	795.97	804.0

March   Marc	Generation Cost	\$M	701	911	929	1,114	1,127	1,139
	Fuel costs  Variable O&M costs	\$M \$M	595 56	787 76	795 76	964 90	974 90	984 90
Martin		\$M	56.37		75.82	89.90	89.90	
March   Marc	Zouk							
Part	Reciprocating Engine Power Plants (REPP)							
Part								
Marie   Mari	Combined Cycle Gas Turbine Power Plants (CCGTPP)							
March   Marc	Zahrani							
March   Marc		\$M						
March   Marc		\$M						
March   Marc	Hydraulic Power Plants (HPP)							
March   Marc	Al Bared 1							
## 1981		\$M						
Part	Beirut River Solar Snake (BRSS)							
Part	Biogas	\$M						
Marcoland   Marc			-	-	-	-	-	-
Part	• •	\$M						
Marcham   Marc	Hydraulic Power Plants (HPP)							
Part		\$M						
Page								
Part	Upkeep Costs (O&M Contracts for the Power Plants)							
AMO 19 10 20 20 20 20 20 20 20 20 20 20 20 20 20	Thermal Power Plants (TPP)							
Part								
## 15-20		\$M						
Columnity   Colu	R.E Jieh		-	-	-	-	-	-
Property of the property of		\$M						
## Probability ## 1998   1908		\$M						
### Part	Baalbek							
Sign         10         10         0.0		\$М	0.81	0.81	0.81	0.81	0.81	0.81
All Alland I		\$M	0.04	0.04	0.04	0.04	0.04	0.04
Solid   Soli	Al Bared 1	\$M	0.04	0.04	0.04	0.04	0.04	0.04
Sole form (mpt)   March   Marc	Solar	Ψ, ,						
Marian   1988	· · ·							
Membrane Plants Plants (PPP)	Biogas		0.04	0.04	0.04			
Monotonic prime	La Kadisha	ΦI <sup>41</sup>						
### Purpose   Pu		\$M						
Mar Leithors (1967) 1971 1971 1971 1971 1971 1971 1971 19	Hydraulic Power Plants (HPP)							
Marchine Cartist	Mar Lichaa	\$M	-	-	-	-	-	-
Missesserian   Prover Produces   Missesserian   M			-	-	-	-	-	-
Until Norw Authors (JRA)								
Markaba	Litani River Authority (LRA)	ψ, ,	10.42	10.42	22.00	22.00	22.00	22.00
The Protection Society of Hydroelectric Forces of Nahr Ibrahim Furbility		\$M	2.14	2.14	2.14	2.14	2.14	2.14
The Processicy of Hydroclectric Force of Nahr Iterahm								
Name the shahin	The Phoenician Society of Hydroelectric Forces of Nahr Ibrahim	Ψ	2.04	2.04	2.04	2.04	2.04	2.04
Note Production		\$M	0.89	0.89	0.89	0.89	0.89	0.89
Solar IPPs - Stopa         %         0         0         50								
Solar IPPs - Other Ragions	Solar IPPs		0.00	0.00				
Syria   Syri		\$M						
Fight   Sport   Spor								<u> </u>
Popreciation	Egypt -	\$M	-	-		-		-
Jinh	Depreciation	\$M						
R.E Jule				-		-		
Deir Aanmar	R.E Zouk	\$M						
Baalbek   SM			•			4 7		7
Tyr   SM   SM   -   -   -   -   -   -   -   -   -			7	7	7	7	7	7
All Bared 1   SM   -   -   -   -   -   -   -   -   -	Туг	\$M	-	-	-	-	-	-
Beirut River Solar Snake			-					-
Solar Farms         \$M         -         -         -         2.0         4.0         6.0           Nameh Landfill         \$M         0.3 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>- 0.1</td><td>- 0.1</td><td>- 0.1</td></t<>						- 0.1	- 0.1	- 0.1
Transmission Cost	Solar Farms	\$M	-	-	-	2.0	4.0	6.0
Transmission S/S, OHL, UGC, etc. Depreciation         \$M         5.2         6.1         7.1         8.1         9.1         10.0           Distribution Cost         \$M         59         61         64         67         70         73           Distribution O&M         \$M         52.0         53.0         54.1         55.2         56.3         57.4           Distribution Substations, Poles, etc. Depreciation         \$M         6.7         8.4         10.2         11.9         15.2         15.4           Administrative Cost         \$M         6.7         8.4         10.2         11.9         15.4         15.4           Salaries and Affiliates         \$M         31.0         29.0         26.7         25.1	Transmission Cost	\$M	44	46	48	49	51	53
Distribution Cost         \$M         59         61         64         67         70         73           Distribution O&M         \$M         52.0         53.0         54.1         55.2         56.3         57.4           Distribution Substations, Poles, etc. Depreciation         \$M         6.7         8.4         10.2         11.9         13.6         15.4           Administrative Cost         \$M         77         75         72         70         70         71           Salaries and Affiliates         \$M         31.0         29.0         26.7         25.1         25.1         25.1           Medical Care and Insurance         \$M         7.8         7.3         6.7         6.3         6.3         6.3         6.3         8.4           National Social Security Fund (NSSF)         \$M         7.8         7.3         6.7         6.3         6.2         6.2         2.2         2.2								
Distribution Substations, Poles, etc. Depreciation         \$M         6.7         8.4         10.2         11.9         13.6         15.4           Administrative Cost         \$M         77         75         72         70         70         71           Salaries and Affiliates         \$M         31.0         29.0         26.7         25.1         25.1         25.1           Medical Care and Insurance         \$M         7.8         7.3         6.7         6.3         6.2         6.2         2.2         2.2         5.2         5.2         5.2         2.2         2.2         2.2         5.3         6.3         6.3         6.3         6.3         6.3         6.3         6.3         6.3         6.3         6.3	Distribution Cost	\$M	59	61	64	67	70	73
Salaries and Affiliates       \$M       31.0       29.0       26.7       25.1       25.1       25.1         Medical Care and Insurance       \$M       7.8       7.3       6.7       6.3       6.3       6.3         National Social Security Fund (NSSF)       \$M       3.6       3.3       3.1       2.9       2.9       2.9         End-of-Service Indemnity (EOSI)       \$M       2.7       2.6       2.4       2.2       2.2         Salary Tax       \$M       1.1       1.1       1.0       0.9       0.9       0.9         Miscellaneous Cost       \$M       21.1       21.5       22.0       22.4       22.8       23.3	Distribution Substations, Poles, etc. Depreciation	\$M		8.4	10.2	11.9		15.4
Medical Care and Insurance       \$M       7.8       7.3       6.7       6.3       6.3       6.3         National Social Security Fund (NSSF)       \$M       3.6       3.3       3.1       2.9       2.9       2.9         End-of-Service Indemnity (EOSI)       \$M       2.7       2.6       2.4       2.2       2.2       2.2         Salary Tax       \$M       1.1       1.1       1.0       0.9       0.9       0.9         Miscellaneous Cost       \$M       21.1       21.5       22.0       22.4       22.8       23.3								
End-of-Service Indemnity (EOSI)       \$M       2.7       2.6       2.4       2.2       2.2       2.2         Salary Tax       \$M       1.1       1.1       1.0       0.9       0.9       0.9         Miscellaneous Cost       \$M       21.1       21.5       22.0       22.4       22.8       23.3	Medical Care and Insurance	\$M	7.8	7.3	6.7	6.3	6.3	6.3
Miscellaneous Cost \$M 21.1 21.5 22.0 22.4 22.8 23.3	End-of-Service Indemnity (EOSI)	\$M				2.2		

Capital investments	
Generation	
Transmission	
Distribution	
Cumulative Capital Investments Asset value	
Generation	
Transmission	
Distribution	
Undepreciated asset Value of new Capex	
Generation	
Transmission	
Distribution	
Interest Repayment	
Internal Debts (Operators)	
Generation	
Transmission	
Distribution	
Governmental Loan - Working Capital	
External Debts - International Financing Agenci	ies (IFA)
World Bank (WB)	
Total OPEX	
Total CAPEX	
Total Cost	

	-	117	119	120	122	125
1	-	45.0	45.0	-	-	-
1	-	20.4	20.8	21.3	21.7	22.1
1	-	52.0	53.1	98.7	100.7	102.7
		117	236	356	479	603
1	-	45.0	90.0	90.0	90.0	90.0
1	-	20.4	41.3	62.5	84.2	106.3
1	-	52.0	105.1	203.8	304.5	407.2
		112	225	338	455	573
1	-	42.8	85.5	85.5	85.5	85.5
	-	19.4	39.2	59.4	80.0	101.0
1	-	49.4	99.8	193.6	289.3	386.8
	12	12	12	12	12	12
1	-	-	-	-	-	-
'	-	-	-	-	-	-
1	-	-	-	-	-	-
1	-	-	-	-	-	-
1	-	-	-	-	-	-
1	12	12	12	12	12	12
,	12	12	12	12	12	12
	914	1,127	1,147	1,335	1,353	1,371
	-	117	119	120	122	125
	914	1,245	1,266	1,455	1,475	1,496

Grid Size	
Utilities (EoL & La Kadisha) Propoi	tion
Concessions (Jbeil & Zahle) Propo	
Equivalent Energy	
Utilities (EoL & La Kadisha)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Concessions (Jbeil & Zahle)	
Total Subscribers	
Total Customers (Low Voltage)	
Total Power Rating (LV)	
Customers' forecasted Increas	e e
Private Substations - (Medium & F	ligh Voltage)
Total Power Rating (MV & HV)	
Private Substations' forecasted	1 Increase
Jtilities System Losses (TL & NTL)	
Concessions System Losses (TL & NTI	
Commercial Losses (Uncollected Bills	s)
Billed Energy	
Billed Energy - Utilities	
Subsidized Block [≤100 kWh]	
Regular Block [>100 kWh]	
Billed Energy - Concessions	
Tariff Revenues	
Billed Revenue	
Variable Charges	
Subsidized Consumption [≤100	•
Regular Consumption [>100 kV	Vh]
Concessions Consumption	
Fixed Charges	
Customers (Low Voltage)	
Private Substations (Mediur	n & High Voltage)

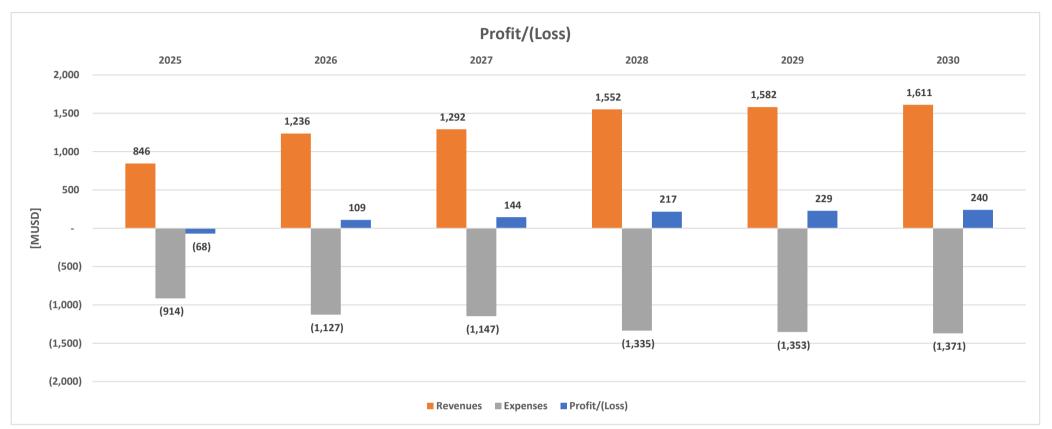
_						
:Wh	5,694,000,000	7,446,000,000	7,603,680,000	8,872,084,227	8,872,084,227	8,872,084,227
%	100	100	100	100	100	100
%	97.00	97.00	97.00	97.00	97.00	97.00
%	3.00	3.00	3.00	3.00	3.00	3.00
Nh	5,694,000,000	7,446,000,000	7,603,680,000	8,872,084,227	8,872,084,227	8,872,084,227
Nh	5,523,180,000	7,222,620,000	7,375,569,600	8,605,921,700	8,605,921,700	8,605,921,700
Nh	170,820,000	223,380,000	228,110,400	266,162,527	266,162,527	266,162,527
#	1,515,728	1,530,885	1,546,194	1,577,118	1,608,660	1,640,834
#	1,511,022.00	1,526,132.22	1,541,393.54	1,572,221.41	1,603,665.84	1,635,739.16
	45,639,220	46,095,612	46,556,568	47,487,700	48,437,454	49,406,203
, ,	-	1.00	1.00	2.00	2.00	2.00
	4,706	4,753	4,801	4,897	4,995	5,094
VA	2,028,757	2,049,045	2,069,535	2,110,926	2,153,144	2,196,207
· _	-	1.00	1.00	2.00	2.00	2.00
%	40	35	33	32	31	29
%	7	7	7	7	7	7
%	6	6	6	6	6	6
Nh	3,463,607,887	4,919,583,019	5,121,050,695	6,089,568,978	6,204,558,832	6,320,287,749
Vh	3,304,745,287	4,711,839,619	4,908,908,023	5,842,037,828	5,957,027,682	6,072,756,599
Vh	1,359,919,800	1,373,518,998	1,387,254,188	1,414,999,272	1,443,299,257	1,472,165,242
Vh	1,944,825,487	3,338,320,621	3,521,653,835	4,427,038,556	4,513,728,425	4,600,591,357
Nh _	158,862,600	207,743,400	212,142,672	247,531,150	247,531,150	247,531,150
M	846	1,235	1,289	1,546	1,576	1,605
M	846	1,235	1,289	1,546	1,576	1,605
M	694	1,082	1,134	1,389	1,415	1,441
M	136	137	139	141	144	147
M	525	901	951	1,195	1,219	1,242
М	33	44	45	52	52	52
M	152	153	155	158	161	164
M	137	138	140	142	145	148
М	15	15	15	15	16	16
M	47	68	71	85	87	88

Generation and losses							
Energy at transmission entry	KWh	5,694,000,000	7,446,000,000	7,603,680,000	8,872,084,227	8,872,084,227	8,872,084,227
Transmission technical losses	KWh	314,821,260	401,577,672	399,755,872	454,392,666	442,344,375	430,296,085
Distribution technical losses	KWh	687,503,354	886,735,503	892,904,157	1,027,092,658	1,012,283,588	997,426,325
Non technical losses	KWh	1,228,067,499	1,238,103,806	1,189,969,275	1,301,029,925	1,212,897,431	1,124,074,068
Utility costs breakdown							
Generation fuel costs	\$M	595	787	795	964	974	984
Generation nonfuel costs	\$M	77	96	106	120	120	121
Transmission O&M costs	\$M	39	40	41	41	42	43
Distribution O&M costs	\$M	52	53	54	55	56	57
Admin costs	\$M	77	75	72	70	70	71
Сарех	\$M	-	117	119	120	122	125
Levelized OPEX	USC/kWh	17.29	16.54	16.45	16.50	16.65	16.80
Generation costs	USC/kWh	11.81	11.86	11.85	12.21	12.33	12.45
Fuel	USC/kWh	10.46	10.56	10.46	10.86	10.98	11.09
Non-fuel	USC/kWh	1.35	1.29	1.39	1.35	1.36	1.36
Transmission costs	USC/kWh	1.37	1.20	1.18	1.12	1.11	1.11
Transmission O&M	USC/kWh	0.68	0.53	0.53	0.47	0.48	0.48
Transmission Technical losses	USC/kWh	0.69	0.67	0.65	0.65	0.64	0.63
Distribution costs	USC/kWh	2.75	2.48	2.47	2.39	2.41	2.44
Distribution O&M	USC/kWh	1.03	0.83	0.85	0.76	0.79	0.82
Distribution Technical losses	USC/kWh	1.72	1.65	1.63	1.63	1.62	1.62
Admin costs	USC/kWh	1.36	1.00	0.94	0.79	0.79	0.80
Levelized CAPEX	USC/kWh	0.71	0.84	1.11	1.23	1.51	1.79
Existing assets depreciation		40.26	42.96	45.67	50.38	55.08	59.79
Generation	\$M	28.38	28.38	28.38	30.38	32.38	34.38
Transmission	\$M	5.17	6.15	7.12	8.09	9.07	10.04
Distribution	\$M	6.70	8.43	10.17	11.90	13.63	15.37
New assets depreciation	\$M	-	5.87	11.82	17.82	23.93	30.17
Generation	\$M	-	2.25	4.50	4.50	4.50	4.50
Transmission	\$M	-	1.02	2.06	3.13	4.21	5.32
Distribution	\$M	-	2.60	5.25	10.19	15.22	20.36
Cost of invested (tied up) capital (12% WACC)	\$M	-	13.39	26.94	40.62	54.57	68.80
Utility levelized cost of delivery (per KWh generated)	USC/kWh	17.99	17.38	17.56	17.73	18.16	18.59
Utility Revenue per KWh generated	USC/kWh	14.86	16.59	16.95	17.43	17.76	18.09
Utility cost recovery	%	83%	95%	97%	98%	98%	97%
Levelized tariff paid by the consumer (per KWh billed)	USC/kWh	24.425	25.111	25.165	25.395	25.398	25.401
Tariff cost recovery	%	136%	144%	143%	143%	140%	137%

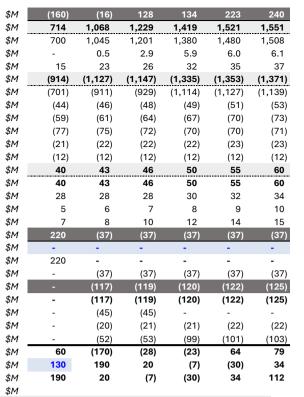
2025	2026	2027	2028	2029	2030
2023	2020	2021	2020	2023	2030

Revenues
Electricity Sales
Electricity New Subscriptions
Expenses
Generation Cost (incl. Dep.)
Transmission Cost (incl. Dep.)
Distribution Cost (incl. Dep.)
Administrative Cost
Miscellaneous Cost
Loan Interests
Profit/(Loss)

_						
	846	1,236	1,292	1,552	1,582	1,611
	846	1,235	1,289	1,546	1,576	1,605
	-	0.5	2.9	5.9	6.0	6.1
	(914)	(1,127)	(1,147)	(1,335)	(1,353)	(1,371)
	(701)	(911)	(929)	(1,114)	(1,127)	(1,139)
	(44)	(46)	(48)	(49)	(51)	(53)
	(59)	(61)	(64)	(67)	(70)	(73)
	(77)	(75)	(72)	(70)	(70)	(71)
	(21)	(22)	(22)	(22)	(23)	(23)
	(12)	(12)	(12)	(12)	(12)	(12)
	(68)	109	144	217	229	240



Cash flow from Operations
Revenues
Electricity Sales
Electricity New Subscriptions
Arrears & Orders for Collections (this assumes that EDL will collect 30% of late invoiced bills plus 6% fines)
Expenses
Generation Cost (incl. Dep.)
Transmission Cost (incl. Dep.)
Distribution Cost (incl. Dep.)
Administrative Cost
Miscellaneous Cost
Loan Interests
Adjustments
Depreciation
Generation
Transmission
Distribution
Cash flow from Financing
Grants
Loan disbursements
Principal repayment
Cash flow from Investment
Capital Investments
Generation
Transmission
Distribution
Net Cash Flow
Cash Balance at Beginning of Period
Cash Balance at End of Period





Conversion leger		
From Unit	To Unit	Conversion Factor
MWh	kWh	1000
MWh	MJ	3600
MWh	GJ	3.6
MWh	J	3600000000
MWh	MMBtu	3.41214163
kWh	MJ	3.6
kWh	J	3600000
kWh	MMBtu	0.003412
MJ	kWh	0.2778
MJ	J	1000000
MJ	MMBtu	0.000947817
J	MJ	0.000001
J	kWh	2.7778E-07
J	MMBtu	9.4782E-07
GJ	MWh	0.2778
GJ	MMBtu	0.947817
MMBtu	MJ	1055.06
MMBtu	kWh	293.071
MMBtu	MWh	0.293071
MMBtu	1	1055060000
	-	100000000

Low heating valu					
Туре	LHV	HHV	Average		Unit
Diesel	42.5	45.5		44	MJ/kg
HFO	40.5	42.5		41.5	MJ/kg
Gasoline	44	47		45.5	MJ/kg
NG	0.0332	0.037		0.0351	mmbtu/m3
NG	0.0455	0.0521		0.0488	mmbtu/kg

Туре	A	В	A per B
HFO	MJ	MMBtu	1055.06 MJ/MMBtu
Diesel	MMBtu	g	4.02821E-05 MMBtu/g
NG	KJ	MMBtu	1055060 KJ/MMBtu
	MWh	KWh	0.001 MWh/KWh
	VI.	VI.	1 KI/KI

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Drop down values								
Fuel	Constraints	Units	Tech	Y/N	Units	Merit order	Merit order number	Jurisdiction
Diesel	Quantity	J	ST	Yes	\$	Fuel cost		1 EDL
HFO	Other	KJ	REPP	No	\$M	Fuel + O&M		2 Concession
NG	\$	MJ	OCGT	N/A	\$/L			PPA
Gasoline		KWh	CCGT		\$/bbl			
LNG		MWh	Hydro		USC/KWh			
Biogas		MMBtu	Solar		Mmbtu/KWh			
Crude Oil		m3	Wind		\$/KWh			
RE		g	Biogas		\$/MWh			
Other		Kg	Elec. Import		\$/KVA			
		Ton	N/A		\$/MMbtu			
		L			\$/Ton			
					\$/Kg			
					\$/m3			
					\$/A			
					\$/KVA			
					USC/KVA			
					USC/A			
					EUR/\$			
					%			
					#			
					hr			
					KW			
					MW			
					A			
					KVA			
					J			
					KJ			
					MJ			
					KWh			
					MWh			
					MMBtu			
					m3			
					g			
					Kg			
					Ton			

HFO Conversions	1	KJ	MJ	KWh	MWh	MMBtu	m3	g	Kg	Ton
I Conversions					3.60E+09		1113		4.05E+07	
KJ	1.00F-03				3.60E+06				4.05E+04	
MJ	1.00E-06		1.002+03		3.60E+03			4.05E-02		4.05E+0
KWh	2.78E-07		2.78E-01		1.00E+03				1.13E+01	
MWh	2.78E-10			1.00E-03	1.002.703	2.93E-01		1.13E-05	1.13E-02	
MMBtu	9.48E-10		9.48E-04		3.41E+00	1		3.84E-05	3.84E-02	
m3	0.402.10	0.402 07	0.402 04	0.412.00	0.412.00					O.O.T.
g	2.47E-05	2.47E-02	2.47E+01	8.89E+01	8.89E+04	2.61E+04		1	1.00E+03	1.00E+0
Kg	2.47F-08	2.47F-05	2.47F-02	8.89F-02	8.89F+01	2.61E+01		1.00E-03	1	1.00E+0
Ton					8.89E-02				1.00E-03	
Diesel Conversions	1	KJ	MJ	KWh	MWh	MMBtu	m3	g	Kg	Ton
J					3.60E+09		1110		4.25E+07	
, KJ	1.00E-03				3.60E+06				4.25E+07 4.25E+04	
NJ MJ		1.00E-03			3.60E+03			4.25E-01	4.255+04	
KWh		2.78E-04			1.00E+03				1.18E+01	
MWh			2.78E-01 2.78E-04			2.93E+02 2.93E-01			1.18E+01 1.18E-02	
		9.48E-07			3.41E+00			4.03E-05		
MMBtu m3	9.48E-10	9.48E-07	9.48E-04	3.41E-03	3.41E+00	1		4.03E-05	4.03E-02	4.03E+0
	0.055.05	0.055.00	0.055.04	0.475.04	0.475.04	2.48E+04			1.00E+03	1.005.0
g										
Kg						2.48E+01			1 005 00	
Ton	2.35E-11	2.35E-08	2.35E-05	8.47E-05	8.47E-02	2.48E-02		1.00E-06	1.00E-03	
NG Conversions	J	KJ	MJ	KWh	MWh	MMBtu	m3	g	Kg	Ton
J	1	1.00E+03	1.00E+06	3.60E+06	3.60E+09	1.06E+09	3.50E+07	4.80E+04	4.80E+07	4.80E+1
KJ	1.00E-03	1	1.00E+03	3.60E+03	3.60E+06	1.06E+06	3.50E+04	4.80E+01	4.80E+04	4.80E+0
MJ	1.00E-06	1.00E-03	1	3.60E+00	3.60E+03	1.06E+03	3.50E+01	4.80E-02	4.80E+01	4.80E+0
KWh	2.78E-07	2.78E-04	2.78E-01	1	1.00E+03	2.93E+02	9.73E+00	1.33E-02	1.33E+01	1.33E+0
MWh	2.78E-10	2.78E-07	2.78E-04	1.00E-03	1	2.93E-01	9.73E-03	1.33E-05	1.33E-02	1.33E+0
	9.48E-10	9.48E-07	9.48E-04	3.41E-03	3.41E+00	1	3.32E-02	4.55E-05	4.55E-02	4.55E+0
MMBtu		0.055.05	2.85E-02	1.03E-01	1.03E+02	3.01E+01	1	1.37E-03	1.37E+00	1.37E+0
MMBtu m3	2.85E-08	2.85E-05								
m3	2.85E-08 2.08E-05				7.50E+04	2.20E-02	7.30E+02	1	1.00E+03	1.00E+0
		2.08E-02		7.50E+01	7.50E+04 7.50E+01		7.30E+02 7.30E-01			1.00E+0