1. Operation Information

**Operation ID**
P166752

**Operation Name**
Fiscal Sustainability and Energy DPO

**Country**
Madagascar

**Practice Area (Lead)**
Macroeconomics, Trade and Investment

**Non-Programmatic DPF**

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Financing (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA-D4540</td>
<td>31-Dec-2020</td>
<td>98,720,647.96</td>
</tr>
</tbody>
</table>

**Bank Approval Date**
30-Apr-2019

**Closing Date (Actual)**
31-Dec-2020

**IBRD/IDA (USD)**

- Original Commitment: 100,000,000.00
- Revised Commitment: 100,000,000.00
- Actual: 98,720,647.96

**Co-financing (USD)**

- 0.00

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Group
IEGEC

2. Program Objectives and Pillars/Policy Areas

a. Objectives

The program development objective of the Madagascar Fiscal Sustainability and Energy Development Policy Operation was to strengthen the quality and transparency of fiscal decision-making and improve the governance of the electricity sector.
For this ICR Review, the program development objective is parsed into:

1. To strengthen the quality and transparency of fiscal decision-making.
2. To improve the governance of the electricity sector.

b. Pillars/Policy Areas

This operation had two policy areas.

**Strengthening the Quality and Transparency of Fiscal Decision-Making** supported measures to: (a) institutionalize risk-based assessment for new financing modalities: direct government loans, loan guarantees, and on-lending arrangements; (b) enhance the assessment of public and publicly-guaranteed debt and contingent liabilities; and (c) improve the transparency of the financial operations of state-owned enterprises (SOEs).

**Supporting the Governance of the Electricity Sector** supported measures to: (a) improve the corporate governance of the state-owned electricity and water utility, *Jiro sy Rano Malagasy* (JIRAMA); (b) institutionalize least-cost investment planning and competitive procurement in the energy sector; and (c) reduce commercial losses at JIRAMA and incentivize energy efficiency.

c. Comments on Program Cost, Financing and Dates

**Program Cost and Financing.** The program was estimated to cost SDR 71.6 million (US$100 million equivalent) at appraisal and was financed by a development policy grant of the same amount, SDR71.6 million (US$100 million equivalent), from the International Development Association to the Republic of Madagascar.

**Dates.** The program was approved on April 30, 2019, became effective on July 2, 2019, and closed as scheduled on December 31, 2020.

3. Relevance of Design

a. Relevance of Objectives

**Binding Constraints.** This operation aimed to address constraints to growth, inclusiveness, and sustainability identified in the *Madagascar Systematic Country Diagnostic* of 2015 pertaining to public finances and electricity services.

- On public finances: (a) Madagascar had a relatively low public-debt-to-GDP ratio (37 percent in 2014), but two-thirds of the total was external public debt, raising risks of external debt sustainability and external debt distress should the currency weaken, fiscal deficits widen, exports drop, or interest rates rise; (b) little was known about contingent liabilities, especially those arising from extra-budgetary expenditures, liabilities of SOEs, public pension obligations, and informal debt of questionable legality; and (c) the poor operational and financial performance of SOEs, both wholly- or partially-owned by the state, including JIRAMA, Air Madagascar, and Madarail, raised questions about the state of their finances.
On electricity services: (a) access to electricity in Madagascar was among the lowest in the world (only 12 percent of the population had access to electricity in 2010, compared to 33 percent for Sub-Saharan Africa) and was expected to deteriorate with rising population; (b) electricity was the second-most-cited "major obstacle" to the operations of firms, according to the World Bank Enterprise Surveys of 2009 and 2013; (c) poor electricity service was the result of poor governance in the sector, reflecting the weak performance of JIRAMA and inadequate supervision by the government, compounded by powerful vested interests that exploited noncompetitive procurement practices; (d) JIRAMA's operational efficiency had declined and its financial position had deteriorated significantly over 2010-2013, dragged down by poor management of the utility's assets, high commercial losses (unbilled electricity services), and rising prices of imported fuel and other inputs; (e) the firm's poor finances led it to under-invest in the maintenance, rehabilitation, and upgrading of the electricity transmission and distribution network, resulting in technical losses, in addition to commercial losses; and (f) the country continued to depend on oil-based (mainly diesel) power generation, inconsistent with its resource endowments (of hydropower).

Government Priorities. Program objectives were consistent with the development priorities of the government.

- Prepared in 2016 and updated in 2018, the Strategic Plan for the Modernization of Public Finances prioritized five fiscal and public financial management reforms that were consistent with those supported by this operation: strengthening the regulatory environment for public enterprises, reporting transparently on projects financed by development partners, undertaking a comprehensive assessment of all contingent liabilities, implementing the public debt strategy, and implementing JIRAMA's business plan to improve operational performance.
- Informed by the Debt Sustainability Assessment of 2018, Madagascar’s Medium-Term Debt Strategy 2020-22 advocated maximizing the use of concessional financing in the external debt portfolio, shifting domestic debt from short-term high-interest-rate Treasury Bonds by Auctions to medium-term bonds, and instilling budgetary discipline to help keep state indebtedness at a sustainable level.
- Adopted in 2019, the General Policy of the State advanced the goal for Madagascar to achieve emerging economy status in the medium-term. The plan focused on 13 priorities, including "development of the energy sector for universal access," a priority supported by this operation.
- Adopted in 2015, the New Energy Policy aimed to increase access to electricity by households to 70 percent by 2030. The associated investment needs would be substantial: US$1.4 billion to meet demand from the existing consumer base beginning in 2017 as well as to transition to cleaner energy sources, and US$11 billion to achieve universal electricity access by 2030. Achieving the targets would require selecting projects using least-cost planning methodologies, improving JIRAMA’s finances to reduce the drain on the state budget and to lower risks for private investors, improving corporate financial governance at the state utility by establishing an auditing committee, reducing commercial losses, and improving energy efficiency.

Bank Group Strategy. The program objectives were aligned with the Bank Group strategy in Madagascar.

- The Country Partnership Framework for the Republic of Madagascar for the Period FY17-FY21 (CPF) committed Bank Group support to the country's development strategy organized around two "focus areas": increase resilience and reduce fragility, and promote inclusive growth. The program objective to strengthen the quality and transparency of fiscal decision-making was aligned with the first CPF focus area, specifically with the objective of "enhanced transparency and accountability," and with the
second CPF focus area, specifically with the objective of "increased fiscal capacity to finance priority social and infrastructure spending." The program objective to improve the governance of the electricity sector was also aligned with the second CPF focus area, specifically with the objective of "improved access to energy and transport."

b. Relevance of Prior Actions

**Rationale**

<table>
<thead>
<tr>
<th>Objective 1 - Strengthen the Quality and Transparency of Fiscal Decision-Making</th>
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<tr>
<td><strong>PA1.</strong> The Recipient has, through its Ministry of Economy and Finance, issued: (a) Decret no 2018-589 fixant les modalités et procédures d'octroi de garantie sur emprunt du Gouvernement Central; and (b) Decret no 2018-590 portant sur les modalités et conditions d'octrois de prêts directs et de prêts ristocédés par le Gouvernement Central, said decrees establishing the institutional basis for assessing and awarding guarantees, and requiring that all requests for government loans, guarantees, and on-lending arrangements are objectively analyzed through a credit risk-based assessment.</td>
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<tr>
<td><strong>PA2.</strong> The Recipient has, through its Ministry of Economy and Finance: (a) issued an Arrête no1 7975/2018 MFB fixant la description des attributions et l'organisation des Services rattachis aux Dpartements du Ministre des Finances et du Budget, an Arrête that establishes a register to consolidate information on state majority-owned SOE liabilities, including debt, guarantees, and obligations for Public Private Partnership (PPP) projects; and (b) published, on the website of the Ministry of Economy and Finance, a debt sustainability analysis for FY2018, all to support improved decision-making processes on the management of debt and public sector liabilities.</td>
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<tr>
<td><strong>PA3.</strong> The Recipient has, through its Ministry of Economy and Finance: (a) published on the website of the Ministry of Economy and Finance the audited financial statements for all state majority-owned SOEs; and (b) issued Decret no 2018-689 portant obligation de publicite des comptes annuels des societes commerciales a participation majoritaire publique, requiring all state majority-owned SOEs to publish independently audited financial statements within six (6) months of the end of each FY, commencing in FY2019, all to increase transparency on the financial statements and performance of all state majority-owned SOEs.</td>
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<th>Objective 2 - Support the Governance of the Electricity Sector</th>
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<td><strong>PA4.</strong> The Recipient has, through the supervisory board of JIRAMA: (a) issued Resolution no. 23/2018 portant sur l'approbation des Termes de Reference concernant la mise en place du Comite d'Audit de la Societe au sein de son Conseil d'administration, said resolution approving the establishment of an audit committee to provide fiduciary oversight and regularly report to the board on JIRAMA's financial recovery; and (b) institutionalized the semi-annual publication of a detailed breakdown of JIRAMA's liabilities.</td>
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<td><strong>PA5.</strong> The Recipient has, through its Ministry of Energy, Water and Hydrocarbons, issued Decret no 2018-692 Portant modalités de passation de contrats pour les investissements dans la production d'énergie electrique supérieure a 5MW, a decree to restrict the award of concessions and power purchase agreements for private power generation with a capacity over 5 MW to projects that are ready for contract award and that are part of the Recipient's &quot;Master Plan for the Least Cost Development of the Power Sector.&quot;</td>
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<tr>
<td><strong>PA6.</strong> The Recipient has, through the supervisory board and the Chief Executive Officer of JIRAMA respectively, issued two letters no 002/PCA/18 and no 23/DG/2019 to institutionalize regular targeted metering audits of key customers, and has mandated JIRAMA to include targets for commercial loss</td>
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reduction in performance contracts for its regional director, in order to reduce commercial losses and incentivize energy efficiency.

Objective 1 - Strengthen the Quality and Transparency of Fiscal Decision-Making

- **PA1** aimed to improve the assessment and management of contingent liabilities. Although the government had tried to control its exposure to contingent liabilities, notably with the passage of the Debt Management Act in 2014, the state budget remained considerably exposed to liabilities arising from state companies. According to the World Bank *Madagascar Debt Management Performance Assessment* of 2017: (a) certain classes of state guarantees and loans were not governed by existing legal rules and administrative procedures; (b) it was not clear which department in the Ministry of Economy and Finance (MEF) was responsible for overseeing, or even collecting information about, contingent liabilities; (c) overall, state guarantees and retrocessions (transfers of risk from one reinsurer to another) posed a substantial threat to fiscal stability; (d) additionally, large amounts of government loans extended to state firms through direct lending or on-lending arrangements were in arrears, as JIRAMA's principal and interest arrears on state loans topped Malagasy ariary (MGA) 23 billion (US$6.5 million equivalent, 0.5 percent of 2017 GDP). This prior action, involving two decrees to implement the Public Debt Law of 2014, would establish the framework for assessing and awarding government guarantees and loans: (a) in-depth credit risk assessments would be required of all requests for government guarantees, guarantees would be capped at 75 percent of guaranteed loan amounts, and fees would be levied to incentivize guarantee applications only for viable projects; and (b) the process by which government loans were extended to SOEs, public institutions, sub-national entities, and commercial entities with public participation would be spelled out, including the process by which defaulted loans would be recovered. While these two decrees were valid measures to rationalize the process of granting government loans and guarantees, the crucial question remained whether the rules would be followed. The World Bank’s *Madagascar 2007-21 Country Program Evaluation* (CPE) of May 2022 found that “elite capture of state institutions and weak governance (including poor public financial management)” were core binding constraints to development in Madagascar. The report cited the fate of previous public financial reform efforts as a glaring example: “For example, several reforms supported by the Public Finance Sustainability DPOs were reversed.” The relevance of PA1 is rated *moderately satisfactory*.

- **PA2** aimed to improve debt sustainability assessments. Despite recent efforts to improve debt management, including with the regular preparation of the Medium-Term Debt Management Strategy (which sets the debt ceiling), several problems remained: (a) the government had limited capacity to assess fiscal risks and debt sustainability, and (b) the government lacked reliable, up-to-date, and consolidated information about the liabilities of the public sector, including public debt, on-lending arrangements to SOEs, and PPPs. This prior action was intended to raise the quality and transparency of debt sustainability assessments: (a) the government would consolidate all information on public sector liabilities in one registry, focus especially on the liabilities (tax, customs, pension, repayments on on-lending arrangements, obligations on PPPs) of majority-owned SOEs, and strengthen the institutional capacity of the SOE Oversight Unit; and (b) the Public Debt Directorate would prepare the government's first Debt Sustainability Analysis, covering fiscal year 2018 and following the new *Debt Sustainability Framework for Low Income Countries* adopted by the IMF and the World Bank in 2018, and publish it on the website of the MEF. This one-time requirement to prepare the Debt Sustainability Analysis for 2018 lacked permanence and reflected the challenges to governance as highlighted by
the CPE: “The Bank had some success in identifying and analyzing political and governance risks, but less in operationalizing its findings.” The relevance of PA2 is rated **moderately satisfactory**.

**PA3** aimed to modernize financial reporting by SOEs. Governed by the Commercial Law, SOEs were required to prepare their financial statements six months after the close of each fiscal year and have the financial statements independently audited. However: (a) several majority-owned SOEs never produced their accounts or had them audited; (b) while the Commercial Law mandated the preparation of SOE financial statements, it did not require their publication; (c) the Treasury did not systematically analyze the financial performance of SOEs; and (d) the government did not monitor or report on the liabilities presented by the SOEs to the state. This prior action aimed to enhance transparency about the financial performance of SOEs: (a) all majority-owned SOEs would have to publish their independently-audited financial statements six months after the end of each fiscal year, beginning in fiscal year 2019 (plugging the loophole in the Commercial Law); and (b) based on the published audited financial statements of all majority-owned SOEs, the government would prepare and publish a report on their financial performance. While these new directives would update the Commercial Law, they lacked enforcement sanctions and penalties for non-compliance. They were likely to be half-effective at best, according to the judgment by the CPE about previous SOE reform efforts: “Just 57 percent of the seven prior actions to the SOEs were sustained.” The relevance of PA3 is rated **moderately unsatisfactory**.

**Objective 2 - Support the Governance of the Electricity Sector**

**PA4** aimed to improve corporate finances at JIRAMA. Although the deterioration in the company's finances had partly eased following tariff rate adjustments and the installation of a new management team, problems remained challenging: (a) unpaid bills to suppliers topped 3.2 percent of GDP in 2017; (b) unpaid bills from customers were 1.1 percent of GDP in 2017; (c) the cash shortfall was forecast to reach 2 percent of GDP in 2018; (d) the company's solvency would likely remain precarious in the near term even as new solar and hydropower sources came online; (e) meanwhile, the lack of independently audited and publicly disclosed financial statements constrained the ability of the JIRAMA Board to make informed decisions about the utility's financial recovery. This prior action would set up the administrative arrangement for JIRAMA to prepare a Financial Recovery Plan: (a) the Board would create an audit committee to provide fiduciary oversight over corporate financial management and report to the Board on the preparation and execution of the utility's Financial Recovery Plan; and (b) following the completion and publication of the first independent audit of JIRAMA, the company would henceforth report and disclose its liabilities in detail semi-annually, helping inform recovery planning. However, this prior action fell short of actually requiring the preparation, completion, and adoption of a Financial Recovery Plan. Moreover, the capacity of the proposed audit committee and the Board to prepare, approve, and oversee the execution of such a plan raised credibility issues, considering the findings of the CPE about serious governance problems at JIRAMA: “Vested interests undermined progress towards improving financial and operation performance of key SOEs such as JIRAMA.” For these reasons, the relevance of PA4 is rated **moderately satisfactory**.

**PA5** aimed to institutionalize “least-cost investment planning” and “competitive procurement” in the power sector. Madagascar's energy development was sub-optimal: (a) to revert the energy mix away from thermal sources and toward hydropower (in line with the country’s endowment of an estimated 8,400 MW of hydropower), some US$1.5 billion of capital investment would be needed; (b) however, the Ministry of Energy, Water, and Hydrocarbons (MEWH) and JIRAMA lacked the technical and institutional capacity to prioritize projects among different renewable energy generation options; and (c) procurement policies and practices were uncompetitive. This prior action aimed to help Madagascar to improve the national power supply by adopting the “least-cost planning methodology” for project planning and selection and “competitive procurement” for project execution: (a) new power
generation projects (of over 5 MW capacity) by the private sector would be awarded concessions and power purchase agreements (PPAs) only if they were part of the Master Plan for the Least Cost Development of the Power Sector (PDMC) – essentially if they were selected using the "least cost planning principle," the evaluative framework for infrastructure projects that considers demand management solutions equally with strategies to increase capacity, assesses all significant impacts (costs and benefits), including non-market impacts, and involves the public in developing and evaluating alternatives; (b) the projects would have to be competitively procured; and (c) they were ready for contract award, defined by a ministerial decree to mean that feasibility and detailed design studies, environmental and social impact assessments, financial and budgetary sustainability analyses, and risk and cost (to the state) calculations had been completed. However, the prior action suffered from two technical deficiencies: it applied only to new projects, exempting capacity additions to existing plants, and it did not cover projects rated 5 MW and under. Moreover, as with PA4, governance issues at JIRAMA and problems with public procurement raised issues about the credibility of this prior action. Specifically, according to the CPE, "elites have captured public procurement and, due to the blurring between political and economic interests as well as the phenomenon whereby economic elites 'sponsor' politicians (political financing remains highly opaque in Madagascar), are able to operate above the law." Therefore, the relevance of PA5 is rated **moderately satisfactory**.

- **PA6** aimed to reduce commercial losses at JIRAMA and incentivize energy efficiency. Total systems losses (the sum of technical and commercial losses) were high by international standards, reaching 33 percent in 2017; (b) for commercial losses, JIRAMA did not have any procedure to systematically audit customers' meters to detect fraud; yet (c) auditing high- and medium-voltage consumers, which accounted for 39 percent of sales, could reduce commercial losses significantly. This prior action aimed to reduce commercial losses at JIRAMA and foster energy efficiency system-wide: (a) targeted audits of key customers would be made regularly – the target would be 16,000 audits in 2019, in addition to the 16,486 completed in 2018; (b) improper connections (tampered or otherwise irregular) would be made regular; and (c) the Board would mandate JIRAMA to include targets for commercial loss reduction in the performance contracts for regional directors, as the regional offices were best positioned to reduce theft and other commercial losses. While customer audits, "regularization" of irregular accounts, and performance contracting could, in theory, help to reduce commercial losses, governance issues at JIRAMA raised questions about the credibility of this prior action. Specifically, according to the CPE, “Madagascar has one of the lowest rates of electrification in the world, with three out of four households having no access to electricity (driven in part by the high cost and poor quality of electricity services supplied by state-owned JIRAMA).” Therefore, relevance of PA6 is rated **moderately unsatisfactory**.

**Rating**

**Moderately Satisfactory**

### 4. Relevance of Results Indicators

**Rationale**
<table>
<thead>
<tr>
<th>Results Indicator</th>
<th>Associated Prior Action</th>
<th>Relevance Rating</th>
<th>Baseline</th>
<th>Target</th>
<th>Actual Value</th>
<th>Actual Change in Results Indicator Relative to Targeted Change</th>
<th>Achievement Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1 - Strengthen the Quality and Transparency of Fiscal Decision-Making</strong></td>
<td></td>
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<tr>
<td><strong>RI1</strong> - Percentage of government loan guarantees and on-lending agreements which are: (a) subject to a credit risk assessment and published; and (b) comply with the guarantee limit.</td>
<td>PA1 Satisfactory</td>
<td>(a) Zero (2017) (b) Not applicable (2017)</td>
<td>(a) 100 percent (2020) (b) 100 percent (2020)</td>
<td>(a) 100 percent (2020) (b) 100 percent (2020)</td>
<td>(a) 100 percent of targeted change (b) 100 percent of targeted change</td>
<td>Substantial</td>
<td></td>
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<tr>
<td><strong>RI2</strong> - (a) Consolidated SOE contingent liabilities register produced with inputs from the SOE oversight unit, the Department of Budget, the Public Debt Directorate, and the PPP unit; (b) Level of risk of debt distress.</td>
<td>PA2 Unsatisfactory</td>
<td>(a) Register does not exist (b) Moderate (2017)</td>
<td>(a) Register established and updated on an annual basis (b) Moderate (2020)</td>
<td>(a) Register established but not operational (b) Moderate (2021)</td>
<td>(a) Target not fully achieved (b) Target fully achieved, but results indicator not relevant</td>
<td>Negligible</td>
<td></td>
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<tr>
<td><strong>RI3</strong> - Improved fiscal reporting on contingent liabilities.</td>
<td>PA3 Moderately Satisfactory</td>
<td>No publication or assessment of contingent liabilities</td>
<td>Some significant contingent liabilities are</td>
<td>The contingent liabilities of most SOEs</td>
<td>Target not fully achieved</td>
<td>Modest</td>
<td></td>
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</table>
### Objective 2 - Support the Governance of the Electricity Sector

| RI4 - Improved corporate financial governance of JIRAMA. | PA4 | Moderately Satisfactory | The Recipient’s Government, JIRAMA’s Board, and the public have limited insight into the implementation of the utility’s fiduciary performance and financial recovery. (2018) | (a) A Financial Recovery Plan for JIRAMA has been approved by its Board (b) JIRAMA’s financial statements are being independently audited and published with the auditor’s opinion (2020) | (a) The JIRAMA Financial Recovery Plan for has not yet been approved by JIRAMA’s Board (b) The JIRAMA financial statements for 2018 and 2019 have been published in the MEF website in May 2021, but without the auditor’s opinion and with substantial delay (2021) | (a) Target not achieved (b) Target not fully achieved |

| RI5 - Institutionalized least-cost planning and competitive procurement of generation investments in | PA5 | Moderately Satisfactory | Contracts are being awarded for concessions and power purchase agreements for private power generation with any projects awarded with concessions and power purchase agreements for private power generation 7 projects above 5 MW in capacity awarded power purchase agreements, but: (a) | (a) 0 percent of targeted change (b) 0 percent of targeted | Negligible |
the power sector.

| RI6 - Decline in total system losses (as a percentage of total electricity produced) through the reduction of non-technical losses. | PA6 | Modestly Satisfactory | Total system losses at 33 percent (2020) | Total system losses no higher than 29 percent (2020) | Total system losses equal to 27.38 percent (2020). | Greater than 100 percent of targeted change | Substantial |

Objective 1 - Strengthen the Quality and Transparency of Fiscal Decision-Making

- **RI1** was fully adequate to measure the impact of PA1 (subjecting applications for government loans, guarantees, and on-lending arrangements to systematic credit risk assessments and limiting guarantees to three-quarters of the covered loan amounts). The credit risk assessments would better inform lending decisions, while the guarantee limits would introduce some measure of prudence to guarantee operations. Moreover, the publication of the loan and guarantee applications and the associated credit risk assessments would enhance the transparency of these financial transactions. The relevance of RI1 is rated **satisfactory**.

- **RI2a** (a Consolidated SOE Contingent Liabilities Register) was adequate to measure the result of PA2a (consolidation of information on SOE liabilities and institutional and technical capacity building at the SOE Oversight Unit). The full accounting and disclosure of SOE liabilities, including those associated with guarantees and obligations on PPPs, would help inform and improve the management of public sector liabilities. **RI2b** (a “moderate” level risk of debt distress) was not the result of PA2b (conduct and publication by the Public Debt Directorate of a debt sustainability analysis). The output of PA2b would be a Debt Sustainability Analysis, not necessarily a debt distress risk rating of “moderate,” which would be the outcome of a range of factors including a
judicious public debt strategy, improved public debt management practices, and favorable external and domestic economic and financial conditions. The relevance of RI2 is rated unsatisfactory.

- **RI3** (improved fiscal reporting on contingent liabilities) was strictly not a results indicator and should have been re-stated as “fiscal report on contingent liabilities.” A fiscal report on contingent liabilities would be the output of PA3 (requiring all SOEs majority owned by the government to publish their independently audited financial statements annually). The analysis of SOE contingent liabilities by the MEF, made possible by the availability of audited financial statements of the SOEs as well as by a newly-created Register of SOE Contingent Liabilities, would enable the government to better manage public debt, reflecting improvements both in the quality and transparency of fiscal operations. The target that the fiscal report show "some significant" contingent liabilities that are quantified, however, lacked specificity. The relevance of RI3 is rated moderately satisfactory.

**Objective 2 - Support the Governance of the Electricity Sector**

- **RI4** (improved corporate financial governance of JIRAMA) was strictly not a results indicator and would have been best replaced by “JIRAMA Financial Recovery Plan” as RI4a, with the target that the plan be approved by the JIRAMA Board, and “JIRAMA financial statements for 2018 and 2019” as RI4b. Restated in this manner, the results indicators would be adequate to measure the impact of PA4 (establishing the JIRAMA Board of Directors Audit Committee and regularizing the semi-annual publication of JIRAMA's liabilities). The Audit Committee was tasked to precisely advise and report to the Board on the preparation and implementation of the utility's financial recovery plan. Hence, approval of the recovery plan would reflect the effectiveness of the Audit Committee. Meanwhile, the regular disclosure of the firm's liabilities would follow from PA4. Both results would provide evidence of improved governance at JIRAMA. The relevance of RI4 is rated moderately satisfactory.

- **RI5** (institutionalized least-cost planning and competitive procurement of generation investments in the power sector) was strictly not a results indicator and should have been replaced by “number of projects awarded concessions that were in the PDMC” as RI5a, “number of projects awarded concessions that were competitively bid” as RI5b, and “number of projects awarded concessions that are ready for contracting” as RI5c. In all cases, the target would be seven projects. Restated in this manner, the results indicators would be adequate to measure the impact of PA5 (adopting least-cost planning and competitive procurement in the award of concessions and PPAs for private power projects). Projects in PDMC's list were to have been prepared and selected using least-cost planning principles. Additionally, requiring competitive procurement and award readiness would further reflect the integrity and efficiency of project selection and concession awards. The relevance of RI5 is rated moderately satisfactory.

- **RI6** was not fully adequate to measure the impact of PA6 (targeting commercial loss reductions in JIRAMA's regional performance contracts and regularizing metering audits of key customers). A decline in total systems losses – the sum of technical and commercial losses – would reflect the extent to which the governance of the electricity sector would have been enhanced through both upgrades in the infrastructure (the transmission and distribution network) and improvements in the operations (performance contracting and metering) of JIRAMA. Evidently, while meter audits and performance contracts would be important interventions, they could not be the sole drivers of any reduction in total systems losses. A narrower results indicator, such as revenue gains from restoring improper connections, would have been more appropriate. The relevance of RI6 is rated moderately satisfactory.
Rating

Moderately Satisfactory

5. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
To strengthen the quality and transparency of fiscal decision-making

Rationale

- RI1: The percentage of government loan guarantees and on-lending agreements that were subject to a credit risk assessment and published was 100 percent, achieving the target. Only one application for a loan guarantee was received by the government during the duration of this operation. The government conducted a credit risk assessment of the guarantee application and published the assessment, although it did not include details about the government’s exposure to the risk. There were no applications received for on-lending. The percentage of government loan guarantees and on-lending agreements that complied with the guarantee limit was 100 percent, achieving the target. The sole loan guarantee that was awarded complied with the guarantee limit. The achievement is rated substantial.

- RI2a: The Consolidated SOE Contingent Liabilities Register was established but was still not operational by closing, partially achieving the target that the Register be established and updated annually. The Register was produced with contributions from the SOE Oversight Unit, the Department of Budget, the Public Debt Directorate, and the PPP Unit. While not completed, the process to have the Register operational was fairly advanced by closing, according to the ICR. The achievement of the target for RI2a is rated modest. RI2b: The risk of debt distress was assessed as "moderate." The risk rating was determined by the Debt Sustainability Analysis produced by the International Monetary Fund (IMF) and the Bank in June 2018, which projected that public and publicly-guaranteed external debt would fall from 26.7 percent of GDP in 2016 to an estimated 25.5 percent of GDP in 2018 (the debt of JIRAMA which was directly guaranteed by the government was included in the calculation and assessment). The analysis and rating were included as a supplement to the IMF Staff Report Republic of Madagascar - Request for Disbursement under the Rapid Credit Facility of July 17, 2020. While the risk of debt distress was indeed assessed to be “moderate,” this indicator could not be the result of the prior actions to improve debt reporting (see Section 4). The achievement of the target for RI2b is rated negligible.

- RI3: There was a fiscal report of content liabilities, reflecting some degree of improvement from the baseline where there was no report of contingent liabilities. According to the ICR, the majority of SOEs submitted their financial statements to the MEF, albeit with notable exceptions: JIRAMA submitted its financial statements for 2018 and 2019 only in May 2021, five months after the closing date. The MEF conducted a quantitative analysis of the contingent liabilities reported by the SOEs. Although it
disclosed information about the SOE liabilities in various periodicals, the MEF did not publish its analysis as a separate report. The achievement is rated **modest**.

**Rating**

Moderately Unsatisfactory

**OBJECTIVE 2**

**Objective**

To improve the governance of the electricity sector

**Rationale**

- **RI4:** JIRAMA's Financial Recovery Plan was not approved by the JIRAMA Board by closing, failing to achieve the target that the plan be approved by the Board. JIRAMA's financial statements for 2018 and 2019 were published on the website of the MEF in May 2021, after a long delay and past the closing date, and lacked the auditor's opinion, not achieving the target that the financial statements be independently audited and published with the auditor's opinion. The achievement is rated **negligible**.

- **RI5:** Seven projects of over 5 MW each were awarded PPAs beginning in July 2018. However, it could not be determined that the results target was met, namely that any private power generation project awarded concessions and PPAs after July 2018 be: (a) part of the PDMC, (b) competitively procured, and (c) ready for contract award. Neither the MEWH nor JIRAMA provided data about the original signing dates of the contracts to determine that they pertained to new projects or were merely contract renewals involving additions to existing thermal capacity. If these projects were entirely new, proof of compliance with the PDMC, the competitive procurement provision, and the readiness for contract award was not provided to the Bank, according to the ICR. For example, one contract extension adding 20 MW of solar power capacity was signed in July 2020 but was not considered part of the achievement for this operation because the original contract (that preceding this contract extension) was signed before July 2018. The achievement is rated **negligible**.

- **RI6:** Total system losses were cut from 33 percent in the baseline to 27.38 percent by closing, exceeding the target that total system losses do not exceed 29 percent. However, it could not be determined that the total system loss reductions would have been entirely or largely due to the metering audits and the performance contracting supported by this operation (see Section 4). Hence, the achievement is rated **substantial**.

**Rating**

Unsatisfactory

**Overall Achievement of Objectives (Efficacy)**

**Rationale**
Achievement of the objective to strengthen the quality and transparency of fiscal decision-making is rated moderately unsatisfactory. Achievement of the objective to improve the governance of the electricity sector is rated unsatisfactory. The overall efficacy of this operation is rated moderately unsatisfactory.

Overall Efficacy Rating
Moderately Unsatisfactory

6. Outcome
Rationale
The relevance of the prior actions is rated moderately satisfactory. Achievement of the program objectives is rated moderately unsatisfactory. The outcome of this operation is rated moderately unsatisfactory.

a. Rating
Moderately Unsatisfactory

7. Risk to Development Outcome

Political Economy Risk. Elite capture of state institutions, as highlighted by the World Bank’s Madagascar CPE of 2022, continues to pose substantial risks to the achievement of the objectives of this operation. The selection of energy projects based on least cost planning principles, the introduction of competitive procurement in energy projects, the credit risk assessment of government lending, and the capping of government loan guarantees would be particularly susceptible to risks of elite capture, vested interests, and rent seeking.

Governance Risk. The decline in the quality of governance in Madagascar, as documented by the CPE, exerts substantial risks to the objective to improve the quality and transparency of fiscal policy making and public financial management. As the experience with this operation has since shown, publishing financial statements and obtaining independent auditors’ opinions for the two years covered by this operation have been problematic both at JIRMA and at other SOEs. Carrying the transparency objective forward can be expected to be similarly difficult.

8. Assessment of Bank Performance

a. Bank Performance – Design
Rationale
Analytical Foundations. The design of this operation was underpinned by analytical work produced by the Bank, the government, and consultants providing advisory services and technical assistance to Madagascar under projects financed by the Bank.

- The Debt Management Performance Assessment (World Bank, 2017), the Public Expenditure and Financial Accountability (Government of Madagascar, 2018), and the Advisory Services and Analytics for the Management of SOEs in Madagascar informed PA1, PA2, and PA3. According to the Program Document (pages 27-29): (a) the Debt Management Performance Assessment found the management of guarantees to be weak, with no objective criteria for assessment; (b) the Debt Management Performance Assessment and the Public Debt and Financial Accountability found the disclosure of debt to Parliament to be limited and lacking information on risks related to SOEs; and (c) the Public Debt and Financial Accountability and the Advisory Services and Analytics for the Management of SOEs in Madagascar concluded that the non-disclosure of financial statements hampered efforts to improve corporate governance at SOEs.

- The La Situation Economique et Financière du Secteur Electrique du Madagascar: Eléments Clé d’une Feuille de Route vers la Reduction du Déficit Budgétaire (World Bank), the Elaboration du Plan de Développement de l’Electricité au Moindre Cout (Artelia, the French consulting firm), and the Technical Assistance for the Electricity Sector Operations and Governance Project (P151785 and P164318) informed PA4, PA5, and PA6. According to the Program Document (pages 27-29): (a) La Situation Economique et Financière du Secteur Electrique du Madagascar: Eléments Clé d’une Feuille de Route vers la Reduction du Déficit Budgétaire documented financial difficulties at JIRAMA, including large arrears to suppliers and insufficient financial transparency, and (b) Elaboration du Plan de Développement de l’Electricité au Moindre Cout laid out the elements of PA5.

Linkages with Other Bank Operations.

- This operation complemented other Bank operations aiming to strengthen fiscal management in Madagascar, including the Donor Coordination for Results Advisory Services and Analytics (P164136) that supported the improvement of public investment management practices, and the Madagascar Support to the Governance of State-Owned Enterprises Technical Assistance (P160306) that aimed to inform and facilitate policy making on SOE reforms.

- This operation was also well integrated with other Bank projects in Madagascar’s energy sector, including the Electricity Sector Operations and Governance Project (P151785 and P164318) that aimed to improve the operational performance of JIRAMA and the reliability of electricity supply, the Least-Cost Electricity Access Development Project (P163870) that aimed to increase access to electricity services for households and enterprises, the Support for the Development of Hydropower IPP Development (P153220) that assisted with the preparation and tendering of small hydropower projects, and the Scaling Solar Guarantee Project (P166925) that aimed to increase solar power generation.

Donor Coordination. The Bank and Madagascar’s other development partners agreed that the reforms supported by this operation were essential to the country’s development goals, according to the ICR. Consultations among the Bank, the other donors, and the government were conducted through the Cadre de Partenariat, the forum for collaboration among Madagascar’s development partners, co-chaired by the European Union and the MEF, and including the Bank, the African Development Bank, and the French Agency for Development. Other non-Cadre donors also participated in policy dialogue with
the government, including the IMF, the United Nations Development Programme, and the U.S. Agency for International Development. Importantly, the Bank collaborated with the IMF to ensure the alignment of the fiscal reforms supported by this operation with those supported by the three-year arrangement under the Extended Credit Facility approved by the IMF in 2016. Among other priorities, the IMF program aimed to improve revenue generation and spending prioritization and strengthen public financial management. The Debt Sustainability Analysis of June 2018, to be prepared by the IMF and the Bank and slated as part of the Third Review of the Extended Credit Facility, would provide an assessment of the country’s "risk of external debt distress"; the rating would become the actual value for Results Indicator 2b.

**Shortcomings.** The Bank correctly assessed the overall operational risk to be substantial. However, the Bank was unable to pin down the root causes of the substantial operational risk: elite capture and poor governance, as documented in the CPE.

**Rating**

Moderately Satisfactory

b. Bank Performance – Implementation

**Rationale**

**Implementation.** Four task team leaders headed the Bank team over 2019-2020, and the team included a counsel, financial management specialist, procurement specialist, and 13 other team members. The team conducted meetings with the MEF to track the progress of reforms under the first pillar, with the MEWH and JIRAMA on reforms under the second pillar, and with the Economic Council (of high-level government officials overseeing this reform program) on the overall reform agenda. In addition, the team conducted joint monitoring meetings with the supervision teams of related Bank projects in Madagascar and with representatives of the *Cadre de Partenariat*.

Data gathered from the implementation of fiscal reforms were included in the MEF’s semi-annual Public Financial Management Monitoring Report prepared following the MEF’s *Stratégie de Modernisation de la Gestion des Finances Publiques*. Meanwhile, implementation of the energy reforms benefitted from procedures established for the Electricity Sector Operations and Governance Project (P151785 and P164318), also implemented by the JIRAMA. However, the ICR (page 24) reported that collecting detailed data and documents from the MEWH and JIRAMA proved more difficult than collecting the same from the MEF.

**Effort at Adaptation.** The Bank confronted two problems at implementation and sought to assist the government to address the issues.

- There was little progress with Board approval of JIRAMA's Financial Recovery Plan and the publication of JIRAMA's audited financial statements for 2018 and 2019. To help address the problem, the Bank: (a) extended the service contract with the consulting firm Castalia to update JIRAMA's Business Plan and financial model, and (b) engaged two management firms to support JIRAMA to implement its program commitments. Notwithstanding the assistance, the JIRAMA Board was unable to approve the utility’s Financial Recovery Plan by the operation’s closing date. The financial statements were published but without the auditor’s opinion (see Section 5 - Objective 2)
• There was also a lack of information on new PPA contracts and their status relative to the PDMC and a lack of clarity on competitive procurement processes. To help address the problem, the Bank supported: (a) the update of the PDMC, and (b) the preparation of a decree on contract award procedures in the electricity sector. The decree would clarify contract award procedures (including for unsolicited bids and ambiguities with the application of the PPP Law), establish the legal basis for JIRAMA to sign PPAs (including for the Sahofika, Volobe, Scaling Solar Projects), and resolve inconsistencies in conditions that were set for participation in government tenders. Notwithstanding the assistance, the MEWH and JIRAMA were unable to furnish information about seven PPAs awarded for private power generation that would have determined the eligibility of these PPAs to be counted as achievements under the program (see Section 5 - Objective 2).

Shortcomings. To the extent that the core binding constraints to program implementation were elite capture and weak governance (see Section 7), the Bank’s “technical” adaptations proved inadequate to the challenge.

Rating

Moderately Unsatisfactory

c. Overall Bank Performance

Rationale

The Bank performance at design is rated moderately satisfactory. The Bank performance during implementation is also rated moderately unsatisfactory. Overall Bank performance is rated moderately unsatisfactory

Overall Bank Performance Rating

Moderately Unsatisfactory

9. Other Impacts

a. Social and Poverty

The ICR did not cite any actual social and poverty impacts, reiterating the outlook expressed at appraisal that there were not likely to be significant gains in poverty reduction in the short run (page 20).

b. Environmental
The ICR did not cite any actual environmental impacts.

c. Gender

The ICR did not cite any actual gender impacts.

d. Other

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10. Quality of ICR

Rationale

Consistency with Guidelines. The ICR is consistent with OPCS guidelines on ICRs for development financing operations and includes sections on the relevance of prior actions and the relevance of results indicators.

Conciseness. The account of the project's performance is well informed and concisely presented.

Results Orientation. The efficacy assessment is outcome-oriented and based on the degree of achievement of the results targets.

Quality of Evidence. The ICR presents ample evidence to support its assessment of the Bank's performance at design and at implementation. Strengths and weaknesses with the Bank's assessment at appraisal of operational risks are clearly delineated.

Quality of Analysis. The assessment of the efficacy of the program is candid. While the government fulfilled all prior actions, the program failed to deliver on two results that would have advanced the governance of the electricity sector, with uncertain prospects about the financial recovery of JIRAMA and about the compliance by new power projects with least-cost planning principles and competitive procurement mandates.

Lessons. The ICR draws lessons that would be valuable to reform programs that are difficult to implement, in part because of stakeholder risks and weaknesses in the institutional and technical capacity of implementing agencies. The ICR also offers a useful lesson on the choice and definition of results indicators for a transparency objective.

a. Rating

Substantial
11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreement/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Moderately Unsatisfactory</td>
<td>Moderately Unsatisfactory</td>
<td>Technical solutions in the design stage and technical adaptations during implementation were inadequate to address the core development constraints posed by elite capture and weak governance.</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
<td></td>
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<tr>
<td>Relevance of Results Indicators</td>
<td>---</td>
<td>Moderately Satisfactory</td>
<td></td>
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<tr>
<td>Quality of ICR</td>
<td>---</td>
<td>Substantial</td>
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</tbody>
</table>

12. Lessons

Three lessons are drawn from the ICR (pages 26-27), with some adaptation.

**Targeted advisory services and technical assistance, including those provided though other operations if not by other donors, are crucial to the efficacy of a reform program.** In this operation, each of the prior actions benefitted from analytic work and technical support extended under related ASA and TA operations. Decrees setting the institutional framework for the assessment and award of government loans, loan guarantees, and on-lending arrangements were designed with technical assistance from the Bank. Capacity building at the Department of the Budget to enable it to produce fiscal risk assessments was aided by technical assistance provided by the IMF. Actions to achieve the results targets following these and other prior actions were similarly facilitated by other technical assistance and advisory services.

**Requiring the publication of results indicators enhances the transparency of development policy operations.** In this operation, four of the six results indicators were precisely written to include the publication of the achievement of the results targets as part of the results indicator themselves. For example, RI1 was defined as "the percentage of government loan guarantees and on-lending agreements which are: (a) subject to a credit risk assessment and published; and (b) comply with the guarantee limit." The same disclosure and publication clause was made part of RI2, RI3, and RI4. The benefit of embedding the disclosure requirement in a results indicator itself is that it enhances the transparency of the output or outcome, the associated prior action, and the development policy operation. The underlying assumption, evidently, is that all implementing entities are able to supply the data for the results indicators. Otherwise, more binding reporting requirements may have to be inserted in financing agreements.

**Tranche disbursements of development policy loans or grants, conditional on progress with results targets, may make for a better arrangement for difficult reform programs.** In this operation, although the government fulfilled all three prior actions for the objective to support the governance of the electricity sector, it failed to deliver on two results targets: improved corporate governance for JIRAMA and institutionalized least-cost planning and competitive procurement of generation investments in the power sector. Since the results targets consisted of multiple parts, the attainment of which could have been staged sequentially, conditioning
the disbursement of the grant proceeds on the achievement of partial targets on a set schedule would have helped prevent the stalling and backtracking of reforms. Where monitoring and evaluation systems are weak and transparency objectives are paramount, tranche disbursements may even be made conditional on the release and publication of official program data.

13. Project Performance Assessment Report (PPAR) Recommended?

No