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Management Alert

Western Area Power Administration's Control and Administration of American Recovery and Reinvestment Act Borrowing Authority

OAS-RA-12-01 November 2011

Department of Energy
Washington, DC 20585

November 4, 2011

MEMORANDUM FOR THE ADMINISTRATOR, WESTERN AREA POWER ADMINISTRATION

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Management Alert on "The Western Area Power Administration's Control and Administration of American Recovery and Reinvestment Act Borrowing Authority"

IMMEDIATE CONCERN

Despite internal control and administration issues with its first project authorized under its $3.25 billion American Recovery and Reinvestment Act of 2009 (Recovery Act) borrowing authority, the Department of Energy's (Department) Western Area Power Administration (Western) is preparing to move forward with other transmission infrastructure projects. Western officials acknowledged that there were a number of lessons to be learned from its first project, the Montana Alberta Tie Line (MATL), a transmission line funded in large part by a $161 million Federal financing agreement. Because of a variety of problems, the project is estimated to be 2 years behind schedule and $70 million over budget; essentially out of funds; and, currently at a standstill, with no progress being made. Western officials expect construction to resume in the near future, as MATL's parent company has now been acquired by a reportedly well-capitalized Canadian company that has pledged to complete the project.

Western had not completed a formal root-cause analysis and corrective action plan designed to ensure more effective program safeguards are in place going forward. Because Western has committed $25 million in developmental funding to a potential $3 billion project that could ultimately require an investment of $1.5 billion in Recovery Act borrowing authority, we are issuing this report as a management alert. While Western officials told us they believed that sufficient protections were in place for its initial commitment in this new project, we noted that Western is also considering entering into other agreements that would require the commitment of substantial additional Federal funds. In light of these prospective commitments and to help reduce the risk of taxpayer exposure to significant project delays and potential losses, we concluded that Western should formally evaluate all the difficulties it experienced with its first Recovery Act-funded transmission infrastructure project before exercising additional borrowing authority. This will help ensure that corrective actions are sufficient to prevent recurrence of problems on future projects.

BACKGROUND

Under the Recovery Act, Western was granted $3.25 billion in borrowing authority to help build transmission infrastructure. Western is permitted to use its borrowing authority in perpetuity and may request forgiveness, if necessary, for amounts outstanding at the end of the useful life of a project. To meet the Recovery Act's goals of promoting job creation and economic recovery, Western's Transmission Infrastructure Program (Program) first used its borrowing authority to execute a financing agreement with Montana Alberta Tie Ltd. and MATL LLP (jointly referred to as MATL) in October 2009, to construct a "shovel-ready" 214-mile transmission line between Great Falls, Montana, and Lethbridge, Alberta, Canada. The line is intended to provide interconnection for proposed wind power generation farms in Montana. The MATL companies, wholly-owned subsidiaries of Tonbridge Power Inc., a Canadian transmission developer, contracted with an independent contractor to build the transmission line.

Western financed $161 million of the original $213 million transmission project's estimated cost, with $52 million contributed from other sources, including subordinated non-federal loans. MATL's repayment of the Western financing was to begin after the project became operational and was generating revenue.

OBSERVATIONS AND CONCLUSIONS

Western had not implemented the necessary safeguards to ensure its commitment of funding was optimally protected. Specifically, Western had not initially required MATL to establish:

- An earned value management system to provide timely, integrated cost and schedule information to allow Western to adequately monitor the progress of the project. In February 2010, Western informed MATL that it expected the company to use earned value management to report integrated budget and schedule information. However, MATL continued to provide inadequate information until March 2011, or over a year later. While Western worked aggressively with MATL in an attempt to understand and ameliorate the impact of delays, in the absence of useful earned value management data, it was not optimally positioned to determine the extent of the delays and the potential for cost overruns; and,

- A risk-based management reserve to fund unanticipated cost overruns. In fact, MATL did not establish a reserve until nearly a year after the start of the project. Western officials reported that MATL's reserve would soon be depleted.

Western became aware of these issues and engaged in extensive discussions with MATL and other project stakeholders to get the project back on track. However, it had not completed a formal root-cause analysis documenting the underlining reasons for project delays and a formal plan to ensure adequate internal controls are sufficient for this and future projects.

The results of our work indicated that Western's lack of lending experience contributed to the issues we identified. Further, although we did not confirm their assertions, certain Western officials indicated that they encountered pressure from the Department to spend Recovery Act funds expeditiously. We could not establish these assertions as a direct cause of the MATL situation. However, Western officials acknowledged that there are lessons learned from their first lending experience, including the need for earned value management and establishment of an adequate management reserve at the beginning of a project.

In addition to these project management issues, we also noted an impending gap in funding available to operate the Program. Existing funding will be depleted in Fiscal Year (FY) 2012 and revenues from MATL and other new projects will not be available to fund ongoing costs of the Program for several years. Western is exploring alternatives for providing Program funding.

Project Management Issues

Not all of the issues causing delays and cost overruns were within Western's control. Since the beginning of the project, MATL had encountered legal difficulties securing rights-of-way for the land needed to construct the transmission line. In fact, as of October 2011, Tonbridge reported MATL had not yet secured the use of 79 parcels of land in Montana to complete the project. Officials told us the acquisition difficulties were primarily attributable to landowner lawsuits and a December 2010, Montana court decision that curtailed the rights of utilities to condemn property for development of transmission lines. However, identifying and correcting weaknesses in project management and schedule/budget reporting were within Western's purview.

We believe that the project would have benefited had Western required that an earned value management system be implemented by MATL at the beginning of the project to firmly establish expectations. Additionally, while Western subsequently insisted MATL implement earned value management, MATL continued to provide inadequate budget and schedule information for over a year. A rigorous earned value management system, while no panacea, would have provided additional information necessary to make mid-course corrections, allowing Western to impose timely remedies to get the project back on track or reduce the taxpayers' exposure. These remedies included withholding funds (which Western did to a limited extent) and declaring MATL in default of the agreement for performance deficiencies.

In addition to right-of-way issues, work quality, safety and contract interpretation issues negatively impacted progress. For example, MATL raised safety concerns regarding the improper installation of transmission poles by its contractor. In addition, differing interpretations of the contract between MATL and the construction contractor resulted in numerous and costly change orders. In May 2011, work on the project was stopped as MATL and its contractor entered binding arbitration to resolve their differences. Both parties subsequently agreed to terminate the contract in August 2011. Considering the significance of these issues, earned value management data would have contributed to Western's awareness of the extent of progress and difficulties encountered by MATL.

Further exacerbating weaknesses in project management, Western did not initially require in its financing agreement, and MATL had not established, a risk-based management reserve to fund cost overruns resulting from unanticipated events such as delays in the acquisition of rights-of-way and contractor performance issues. An industry standard practice, a management reserve is a set-aside in which a portion of a budget is withheld to address uncertainties in cost estimates. The Department emphasizes the importance of a management reserve in its loan guarantee programs, and Western's own guidance likewise provides for such a reserve. Western officials subsequently recognized the importance of establishing a reserve and in September 2010, nearly one year after the financing agreement was executed; Western suggested MATL set-aside an unanticipated vendor refund of $4.5 million in a management reserve. Coincidentally, in the same month, MATL indicated projected cost overruns of $1.5 million in a monthly status report.

As of October 2011, Western officials reported that the management reserve had been depleted and therefore would not be available to pay for project overruns currently estimated to be at least $70 million. While it is unlikely that any reserve would have fully covered overruns of this magnitude, an adequately funded risk-based reserve could have helped reduce the impact of the difficulties encountered during this project.

Program Funding Gap

In addition to specific project management issues disclosed during the audit, we noted that Western is likely to experience a gap in funding to operate the Program, including activities such as project selection and oversight. The Recovery Act initially provided Western with $10 million in appropriated funding to establish and operate the Program until it became self-financing. According to Western's estimates, the initial appropriation will be depleted sometime in FY 2012. Once depleted, Western was expected to finance Program costs through proceeds generated by funded projects. However, it is not clear when the MATL Project will be operational. Thus, it is difficult to determine when Western will achieve self-financing of further Program costs. Had the original completion date of May 2011 been met for the MATL Project, at least according to the plan, Western would have received revenue shortly thereafter, and used it to cover Program expenses.

If unable to obtain additional funding, Western may not be able to administer the Program which currently has over $3 billion in borrowing authority available. Western is considering various options including a supplemental appropriation request or additional borrowing, and told us it is working closely with Department officials to meet Program cost requirements.

Overall Impacts

Although it had the means to do so, Western chose not to take action to delay or terminate the flow of funds to MATL. Contrary to its own risk mitigation plan that identified withholding payment as an acceptable option should conditions warrant, Western officials initially told us that pursuing this might further hinder the project's progress or lead to a bankruptcy filing by MATL. But, by not aggressively exercising its available options, in our opinion, Western may have increased taxpayers' financial exposure to this troubled project. Subsequently, in July 2011, Western curtailed payments. As the project continues to accrue interest during the construction phase, there is a risk that the total amount owed by MATL, including accrued interest, may exceed the $161 million commitment.

The MATL experience to date raises questions about the sufficiency and effectiveness of internal controls that Western had in place. The stalled wind power transmission project is clearly at risk with the outcome uncertain. In the event of a project failure, Western and ultimately the U.S. taxpayer could bear a large financial burden. While we acknowledge that Western officials were actively engaged with MATL during the life of the project, we believe that more aggressive up front efforts to monitor project performance and control use of Federal funds may have served to better protect taxpayer interests.

Western has significant financial exposure on the project, having permitted MATL to expend $152 million of the total $161 million as of July 2011, on a project encountering significant delays and cost overruns. Since May 2011 the project has been at a standstill, is estimated to be 2 years behind schedule and may be as much as $70 million over budget. After reaching an agreement to terminate its construction contract, MATL is now considering replacement contractors. In June 2011, lacking adequate resources to cover projected cost overruns, Tonbridge, MATL's parent company, disclosed a potential "going concern issue" in its Interim Consolidated Financial Statements. In August 2011, Tonbridge announced it had entered into an agreement to be acquired by Enbridge Inc. (Enbridge), a Canadian company involved in energy delivery.

Under the agreement, approved by Tonbridge shareholders in September 2011 and by Canadian regulators in October 2011, Enbridge is to acquire all of Tonbridge's outstanding common shares and debt, and, provide the additional capital required for completion of the MATL Project. Western officials told us that, due to performance issues, they could have declared the project in default. Yet, MATL, Tonbridge and Enbridge had requested that Western not exercise its financing agreement default options. And, Western officials agreed not to exercise its default options during the pending acquisition. During a meeting to discuss a preliminary draft of our report, Western officials noted they believed declaring MATL in default (certainly the most aggressive option available at the time) would have put the taxpayers at greater financial risk. They also noted that failing to fund material purchases like steel poles would have unalterably impacted the project by removing MATL from the manufacturing queue.

Path Forward

Going forward, Western will need to reach agreement with Enbridge on the terms and conditions necessary to allow it to replace Tonbridge as the guarantor on MATL's financing agreement. For example, to protect the taxpayer's interest, Western should ensure its interest in the MATL project is not subordinated in any way to that of Enbridge's new ownership position. Further, it is imperative that Western work with MATL and Enbridge to ensure implementation of project management safeguards when project construction resumes.

Of perhaps greater importance, Western is currently working on financing projects which dwarf MATL. For example, Western could invest as much as $1.5 billion in a potential $3 billion transmission line project that would cross several states and hundreds of miles. To ensure it provides adequate oversight, limits taxpayer risk and exposure, and successfully meets the intent of its Recovery Act borrowing authority, Western should build upon the MATL experience and apply the lessons learned going forward.

To Western's credit, officials indicated they were already integrating comprehensive internal controls on two new projects, and has been receptive to suggestions made during the review. Western officials also indicated that they believed that Enbridge was a very well capitalized company and could easily fulfill the role of guarantor. In addition, the same officials noted that "all the other security instruments in the original financing agreement remain in place (i.e., Western's security interest in the project's physical assets)." Western also views the experience and resources that Enbridge brings to the table to be a very positive development for completing the project in an expeditious manner.

RECOMMENDATIONS

Given the challenges in managing its potential $3.25 billion project portfolio, we recommend that the Administrator, Western Area Power Administration:

1. Suspend investment of additional Recovery Act funds in transmission infrastructure projects until a root-cause analysis regarding the MATL Project is completed and corrective action plans for the Program are developed and implemented;

2. Ensure that MATL implements the necessary project safeguards before construction resumes, including:

    - Earned value management to allow Western to monitor project progress against an updated integrated budget and schedule; and,

    - An adequate management reserve or equivalent to fund potential cost overruns;

3. Require, as part of its future financing agreements the use of an earned value management system and a management reserve; and,

4. In coordination with the Department, expedite resolution of long-term funding sources for the Program.

MANAGEMENT AND AUDITOR COMMENTS

The Department concurred with our recommendations and informed us of plans to improve its oversight of Western's project management. Specifically, the Department plans to: (1) create a monitoring capability to ensure Western is appropriately managing Program projects; and, (2) create a structure to ensure direct and regular reporting from Western to the Deputy Secretary. Department officials stated they would work with Western to complete the recommended root-cause analysis and that Western would not initiate new loans until the analysis was completed and corrective action plans for the Program were developed and implemented. The Department also noted that it would confirm that actions had been completed for our second and third recommendations. Finally, Department officials stated they would adopt a plan for funding the Program no later than January 1, 2012.

Management's comments, attached in their entirety, were responsive to our recommendations.

Attachment

cc: Deputy Secretary
Associate Deputy Secretary
Chief of Staff

MANAGEMENT COMMENTS

The Deputy Secretary of Energy
Washington, DC 20585

October 28, 2011

MEMORANDUM FOR GREGORY H. FRIEDMAN
INSPECTOR GENERAL

FROM: DANIEL B. PONEMAN

SUBJECT: DOE's Management Response to the Inspector General's Draft Management Alert, *The Western Area Power Administration's Control and Administration of American Recovery and Reinvestment Act Borrowing Authority*

The Department and the Western Area Power Administration (collectively, "Management") sincerely thank the DOE Office of Inspector General (IG) for the Management Alert (Alert) referenced above. This is Management's response to that Alert.

Management's General Comments:

Due in part to the efforts of the Western Area Power Administration (Western), construction on the Montana Alberta Tie Line Project (MATL) will soon resume and proceed toward commercial operations. The Department is encouraged that Western sought new private equity for this project and notes that Western's efforts led Enbridge (a New York Stock Exchange-listed company) to infuse capital into the project; the company plans for the line to enter into service by mid-2012. Enbridge's subsidiaries assumed the obligations under the loan issued by Western, which remains in first position. The generator who contracted to pay for use of the line is moving forward with construction of its wind generation facility.

Western's actions limited the taxpayers' financial exposure while simultaneously helping to build transmission infrastructure needed to carry power generated by wind farms located in northern Montana. While the recent capital infusion has reduced the completion risk to the project, both Western and the Department have learned important lessons from this process.

Western's Transmission Infrastructure Program (TIP) activities can be divided into three distinct categories:

1. Application Evaluations: Obtaining and evaluating applications for TIP projects, which culminates in selecting which projects will enter due diligence for formal credit review;

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2. Deal Negotiations: Once a decision has been made to seek to finance a project, conducting due diligence and negotiating the deal terms and the transactional documents for that financing, aimed at reaching financial closure;

3. Project Management: After the financing has been closed, managing the project to assure its completion on time and on budget, while taking timely action as necessary for any corrective or other actions necessary to protect the taxpayers' interest.

The Alert focuses primarily on deficiencies in the third category, Project Management.[1]

Prior to receiving the IG Alert, Western and the Department had been working to assure TIP is administered effectively. While Western has been working to improve the TIP standard operating procedures including ongoing efforts to supplement Western's standing project management order and other applicable Western orders to address TIP-specific needs and requirements, the Department has taken a number of specific steps including, but not limited to, the following:

(1) Working with Western to improve its application evaluation processes, *e.g.*, advising Western to take the following actions:

- develop additional criteria for prioritization of its TIP projects;
- increase the transparency of administering TIP; and
- improve communications with applicants and the Department.

(2) Working with Western to improve its transactional processes, *e.g.*, advising Western to obtain additional expertise in project finance and transactional law. This resulted in Western hiring Deloitte Corporate Finance, LLC, as well as Kutak Rock LLP.

(3) Creating a new Departmental review process for the review of TIP applications submitted by Western and working with Western to improve the applications it sends to the Department for review; and

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1 The Alert concludes that the difficulties encountered in MATL arose from "Western's lack of lending experience, combined with the urgency to expedite a 'shovel ready' project." Certainly a lack of lending experience could contribute to shortcomings in the underwriting and negotiation of a loan transaction, which could increase challenges to project management. However, with the information currently available, it is unclear how any sense of urgency to close the MATL financing caused any subsequent failures in project management.

(4) Investigating options for additional oversight at the Western offices.

The Alert has also prompted the Department to focus on improving oversight of Western's project management. Consequently, the Department commits to creating an oversight structure that will, among other things, achieve the following:

- Create a monitoring capability at the Department to ensure Western is appropriately managing TIP projects and is actively taking timely steps when problems are encountered; and

- Create additional direct and regular reporting from the Western offices to the Deputy Secretary.

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IG RECOMMENDATION NO. 1. *Suspend investment of additional Recovery Act funds in transmission infrastructure projects until a root cause analysis regarding the MATL Project is completed and corrective action plans for the Program are developed and implemented.*

Management Response to IG Recommendation No. 1:

The Department concurs with the recommendation to complete a formal root cause analysis on the MATL project. Western is already compiling the documentation of the review it conducted earlier this year when it evaluated the available options to get the MATL project back on track. The Department will work with Western to complete Western's root cause analysis on Western's project management of MATL no later than January 1, 2012. This analysis will inform the corrective action plan that will guide Western's future actions.

As to the suspension of future investments in TIP projects, Management concurs that Western will not initiate any new loans in TIP until the MATL root cause analysis is completed and the corrective action plans for the program are developed and implemented.

The Department understands that the IG Energy Audits Division advised Western that the suspension of investment only applied to new projects, and not to funding of the existing projects, MATL, TransWest Express, and Electrical District No. 5-Palo Verde. Nevertheless, Management commits to the following in relation to these three existing projects:

1. MATL: Absent contractual obligations, Western commits not to make any additional payments under the MATL project until the formal root cause analysis is completed. If such contractual obligations are present, Western will obtain Departmental consent prior to making any additional payments.

2. TransWest Express: Western has made no payments for the TransWest Express Project. Under existing contracts, the first payment must be made on or before December 5, 2011, but all payments are reimbursable if Western chooses not to proceed into the construction phase. Western commits to making its first payment on December 5 and to finish the root cause analysis as quickly as possible. Because TransWest Express is still in the development phase, there is no need for an immediate commitment on earned value management (EVM) and a management reserve.

3. Electrical District No. 5-PaloVerde: Unlike MATL and TransWest Express, Western is developing this project itself. Since 2006, Western has utilized EVM. Nevertheless, Western will review if there are any additional mechanisms that can be applied that would enhance management of the project.

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IG RECOMMENDATION 2: *Ensure that MATL implements the necessary project safeguards before construction resumes, including:*

- *Earned value management to allow Western to monitor project progress against an updated integrated budget and schedule; and*
- *An adequate management reserve or equivalent to fund potential cost overruns.*

Management Response to IG Recommendation No. 2: Management concurs and the Department has been advised that Western has already complied with IG Recommendation No. 2. Prior to the issuance of the Alert, Western reports that it had already independently identified and implemented these corrective measures as a result of its internal evaluation. Western has affirmed that Enbridge is re-baselining the MATL project with integrated project costs and schedule consistent with EVM principles. Western has also consulted with Enbridge to confirm that Enbridge is developing a budget that includes an adequate management reserve to cover cost or schedule risks. . As part of its supplementary monitoring group, the Department will confirm these measures are in place and are effective.

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IG RECOMMENDATION 3: *Require as part of its future financing agreements the use of an earned value management system and a management reserve;*

Management Response: Management concurs and the Department has been advised that Western has already complied with IG Recommendation No. 3. Western reports that it has independently identified and implemented these corrective measures as a result of its internal evaluation. Western Order 413.3B provides specific guidelines for implementation of EVM on Western projects in conjunction with the principles set forth in DOE Order 413.3. Western reports that it has also included contingency budget reserve requirements (such as a letter of credit, parental guarantee or a percentage of the total project cost) in prospective agreements with developers. As part of its supplementary monitoring group, the Department will confirm these measures are in place and are effective.

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<u>IG RECOMMENDATION 4:</u> *In coordination with the Department, expedite resolution of long-term funding sources for the Program.*

Management Response: Management concurs. The Department requested and received from Western a list of options for long-term funding of TIP. Management will adopt a plan no later than January 1, 2012.

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IG Report No. OAS-RA-12-01

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